Table of Contents

Home 23

Introduction 24

Academic Programs 27

Colleges & Schools 31

- Arts and Sciences, College of 31
  - Departments and Programs 32
    - Architecture, Urban Planning and Design 32
      - Architectural Studies Major 34
      - B.A. (Urban Studies) - M.P.A. Program 34
      - Bachelor of Arts in Urban Planning and Design 34
      - Bachelor of Arts: Urban Studies 36
      - Minor in Urban Studies 39
    - Art and Art History 41
      - Bachelor of Arts: Art History 44
      - Bachelor of Arts: Studio Art 45
      - Master of Arts: Art History 47
      - Master of Arts: Studio Art 48
      - Minor in Art History 50
      - Minor in Studio Art 50
    - Bioethics 50
      - Graduate Certificate in Bioethics 51
    - Black Studies 51
      - Bachelor of Liberal Arts: Black Studies Emphasis 53
      - Graduate Certificate in Black Studies 55
      - Master of Arts in Liberal Studies: Black Studies Informal Emphasis 56
      - Minor in Black Studies 58
    - Chemistry 59
      - Bachelor of Arts: Chemistry 64
      - Bachelor of Science: Chemistry 65
      - Master of Science: Chemistry 67
        - Non-Thesis Master of Science in Chemistry 68
        - Thesis-Based Master of Science in Chemistry 70
      - Minor in Chemistry 71
    - Classical and Ancient Studies 71
      - English Department: Emphasis in Classical, Medieval, and Early Modern Literature 72
      - Foreign Languages and Literatures Department: Emphasis in Greek and Latin 73
      - History Department: Antiquity and Medieval History Concentration 73
      - Minor in Classical and Ancient Studies 73
    - Communication Studies 73

Bachelor of Arts: Communication Studies ... 77
Bachelor of Arts: Communication Studies - Film and Media Arts Emphasis ... 78
Bachelor of Arts: Communication Studies - Interpersonal and Public Communication Emphasis ... 79
Bachelor of Arts: Communication Studies - Journalism and Mass Communications Emphasis ... 81
Minor in Communication Studies ... 82
Minor in Film Studies ... 83
Online Minor in Communication Studies ... 84
Criminal Justice and Criminology ... 85
BA in Criminal Justice and Criminology ... 87
Master of Science: Criminal Justice and Criminology ... 89
Minor in Criminal Justice and Criminology ... 90
Economics ... 91
Bachelor of Arts: Economics ... 94
Interdisciplinary Ph.D. ... 98
Master of Arts: Economics ... 98
Minor in Economics ... 99
English Language and Literature ... 100
Bachelor of Arts: English ... 105
Bachelor of Arts: English Emphasis in Creative Writing ... 108
Bachelor of Arts: Classical, Medieval, & Early Modern Literature Track ... 111
Bachelor of Arts: Language and Rhetoric Track ... 114
Teacher Certification in English ... 117
Minor in Creative Writing ... 117
Minor in Language and Literature ... 119
Minor in Manuscript, Print Culture, and Editing ... 121
Minor in Writing ... 122
Master of Arts: English ... 123
Master of Fine Arts: Creative Writing and Media Arts ... 127
Graduate Certificate in the Teaching of Writing ... 129
Interdisciplinary Ph.D in English ... 130
Environmental Studies Program ... 130
Family Studies ... 131
Family Studies Minor ... 131
Foreign Languages and Literatures ... 132
Bachelor of Arts: Languages and Literatures ... 135
German Studies Minor ... 138
Minor: French, German, Spanish, Classics ... 140
Master of Arts: Romance Languages ... 141
Geosciences ... 143
Environmental Studies Program ... 147
Bachelor of Arts: Environmental Studies ... 147
Bachelor of Science: Environmental Science ... 150

Environmental Studies Minor ... 153
Environmental Sustainability Minor ... 155
Geography and Geology Programs ... 156
Bachelor of Science/Bachelor of Arts: Geography ... 156
Bachelor of Science/Bachelor of Arts: Geology ... 159
Geography and Geology Minors ... 161
Undergraduate Certificate Program in GIS ... 161
Graduate Certificate Program in GIS ... 162
Graduate Certificate in Waste Management ... 163
Master of Science: Environmental and Urban Geosciences ... 163
Gerontology ... 165
Graduate Certificate in Gerontology ... 166
Minor in Gerontology ... 166
Healing and Humanities ... 167
History ... 169
Bachelor of Arts: History ... 172
Minor in History ... 174
Master of Arts: History ... 174
Interdisciplinary Ph.D. in History ... 181
Honors Program ... 181
Latina/Latino Studies ... 183
Latino/Latina Studies Minor ... 184
Judaic Studies ... 185
Liberal Studies Program ... 185
Bachelor of Liberal Arts ... 186
Master of Arts in Liberal Studies ... 187
Relationship of the MALS to Interdisciplinary Doctoral Degrees ... 189
Student Learning Outcomes ... 189
Mathematics and Statistics ... 189
Bachelor of Arts: Mathematics and Statistics ... 191
Bachelor of Science: Mathematics and Statistics ... 192
Minor in Mathematics ... 193
Teacher Certification in Mathematics ... 193
Master of Science: Mathematics ... 194
Interdiciplinary Ph.D. in Mathematics ... 195
Medieval and Early Modern Studies ... 195
Graduate Certificate in Medieval and Early Modern Studies ... 195
Military Science ... 197
Two-Year Instruction ... 198
PACE/Program for Adult College Education ... 198
Philosophy ... 199
Bachelor of Arts: Philosophy ... 201

Minor Bioethics and Medical Humanities 202
Minor in Philosophy 202
Physics and Astronomy 203
Bachelor of Science: Physics 206
Bachelor of Science: Emphasis in Astronomy 207
Bachelor of Science: Physics and Electrical & Computer Engineering 208
Bachelor of Arts: Physics 208
Physics Minor 209
Astronomy Minor 210
Master of Science: Physics 211
Interdisciplinary Ph.D. Program Regulations 214
Teacher Certification in Physics 214
Political Science 214
Bachelor of Arts: Political Science 217
Minor in Political Science 218
Master of Arts: Political Science 219
Interdisciplinary Ph.D. 220
Teacher Certification io Social Studies 220
Pre-Law 220
Psychology 222
Bachelor of Arts: Psychology 225
Psychology Minor 228
Psychology Double Major 228
Master of Arts: Psychology 229
Doctor of Philosophy: Clinical Psychology (Health Emphasis) Track 230
Doctor of Philosophy: Psychology: Experimental Health Psychology Track 233
Religious Studies 236
Social Work 236
Master of Social Work 241
Sociology 243
Bachelor of Arts: Sociology 245
Minor in Anthropology 247
Minor in Sociology 248
Master of Arts in Sociology 248
Theatre 250
Bachelor of Arts in Theatre 252
Theatre Minor 253
Graduate Assistantships 253
Master of Arts in Theatre 254
Master of Fine Arts in Acting and Directing 254
Master of Fine Arts in Design and Technology 255
Women's and Gender Studies 256

Concentration in Women's and Gender Studies ... 257
Interdisciplinary Women's and Gender Studies Course Listing ... 258
Minor in Women's and Gender Studies ... 260
Student Services ... 261
Advising System ... 261
Advanced Preparation Program (APP) ... 262
PACE ... 262
Study Abroad ... 264
General Undergraduate Degree Requirements & Information ... 265
Major and Minor Requirements ... 267
Pre-Professional Programs ... 268
Degree Requirements ... 268
Credit by Examination ... 271
Special Opportunities ... 271
Fellowships and Awards ... 271
Honors Program ... 271
Dual Credit High School/College Partnerships (HSCP) ... 272
Independent Study ... 272
Scholarships ... 272
Student Council ... 272
Study Abroad ... 272
Undergraduate Research ... 273
Biological Sciences, School of ... 273
General Education Requirements ... 279
Graduate Admissions ... 280
Bachelor of Science in Biology ... 281
Bachelor of Science in Biology Bioinformatics Emphasis ... 284
Bachelor of Science in Biology Biomedical Sciences Emphasis ... 286
Bachelor of Science in Biology Biotechnology Emphasis ... 288
Bachelor of Science in Biology Cellular and Molecular Basis of Health and Disease Emphasis ... 291
Bachelor of Science in Biology Clinical Laboratory Science Emphasis ... 293
Bachelor of Science in Biology Pre-Dentistry Concentration ... 295
Bachelor of Arts in Biology ... 297
Bachelor of Arts in Biology for combined BA/MD Dual Degree ... 299
Honors Program ... 301
Minor in Biology ... 302
Teacher Certification in Biology ... 303
Elective Courses for the Non-Biology Major ... 303
Master of Science in Cellular and Molecular Biology ... 304
Master of Arts in Biology ... 305
Doctor of Philosophy Study ... 306
Computing and Engineering, School of ... 306

Civil Engineering and Mechanical Engineering Department ... 311
Civil Engineering ... 317
Bachelor of Science in Civil Engineering ... 318
Civil Engineering Career Opportunities ... 319
Civil Engineering Program Description ... 319
Civil Engineering Specialty Areas ... 320
Doctoral Studies in Civil Engineering ... 320
Engineering and Construction Project Management Certificate ... 320
Master of Science in Civil Engineering ... 321
Mechanical Engineering ... 321
Bachelor of Science in Mechanical Engineering ... 321
Doctoral Studies in Mechanical Engineering ... 323
Master of Science in Mechanical Engineering ... 323
Mechanical Engineering Career Opportunities ... 324
Mechanical Engineering Program Description ... 324
Mechanical Engineering Specialty Areas ... 324
Department of Computer Science Electrical Engineering ... 325
Bachelor of Information Technology ... 331
Bachelor of Science: Computer Science ... 334
Bachelor of Arts: Computer Science ... 337
BS/MS Program in Computer Science ... 340
Minor in Computer Science ... 341
Bachelor of Science in Electrical and Computer Engineering ... 341
BS/MS Electrical and Computer Engineering/Electrical Engineering ... 344
Master of Science in Computer Science ... 345
Master of Science in Electrical Engineering ... 351
Doctoral Studies in Computer Science or Electrical Engineering ... 355
Dual Degree Programs ... 355
Dentistry, School of ... 356
General Information and History ... 364
Mission, Vision and Goals ... 364
Research Programs ... 365
Facilities ... 365
Academic/Student Support Services ... 366
Academic Standards ... 366
Grading System ... 368
Degrees Offered ... 368
Outreach Programs ... 368
Advanced Education Programs ... 368
Dental Graduate Certificate Programs ... 371
Graduate Certificate in Advanced Education in General Dentistry ... 372
Graduate Certificate in Endodontics ... 373

Graduate Certificate in Oral and Maxillofacial Surgery 377
Graduate Certificate in Orthodontics and Dentofacial Orthopedics 380
Graduate Certificate in Periodontics 382
Dental Hygiene Division 384
Bachelor of Science in Dental Hygiene 385
Academic Standards 386
Admission Requirements 386
Admission to the Degree Completion Program 387
Degree Completion Program Requirements 387
Expenses and Financial Assistance 388
General Education Requirements 389
Job Opportunities 390
Licensure Examinations 390
Professional Associations 390
Program Requirements 390
Scholarships and Awards 392
Student Learning Outcomes 392
Master of Science: Dental Hygiene Education 392
Requirements for Admission 392
Tuition and Fees Schedule 393
Scholarships 393
Program Goals 393
Vision Statement 393
Mission Statement 393
Student Learning Outcomes 393
Program and Graduation Requirements 394
Other Requirements 395
Department of Oral and Craniofacial Sciences 396
General Nature of the Program 396
Admission Information 396
Master of Science in Oral and Craniofacial Sciences 397
Other Requirements 397
Program Requirements 397
Student Learning Outcomes 399
Thesis Research & Writing 399
Oral and Craniofacial Sciences Interdisciplinary Ph.D. 399
Doctor of Dental Surgery Program 400
Admission Information 400
GPA/College Hour Minimums 401
Pre-Dental Course Requirements 401
Dental Admission Test 401
Personal Interview 401

Candidate Subjective Criteria 402
Technical Standards 402
Notification of Admission 403
Minority Recruitment Program 403
Reserved Admission Program 403
Disability Services 404
Dental Education Curriculum Mission 404
Graduation Requirements 404
Program Requirements 404
Student Learning Outcomes 406
Cost Estimates 407
Student Organizations/Activities 407
Education, School of 408
Accreditation 413
Admission to the Teacher Education Program 413
Advising and Student Services 414
Bachelor of Arts: Early Childhood Education 414
Bachelor of Arts: Elementary Education 415
Bachelor of Arts: Middle School Education 416
Bachelor of Arts: Secondary Education 419
Centers and Projects 427
Curricula Objectives 428
Division of Counseling and Educational Psychology 429
Division of Curriculum and Instructional Leadership 429
Division of Educational Leadership, Policy and Foundations 431
ELPF Student Learning Outcomes 432
Ed.D. - Educational Administration 434
Educational Specialist: Counseling and Guidance 437
Educational Specialist: Curriculum and Instruction 440
Educational Specialist: Educational Administration 442
Educational Specialist: Language and Literacy 444
General Information on Doctoral Degrees 446
General Information on Educational Specialist Degrees 446
General Information on Master of Arts Degrees 447
Graduate Certificate - Health Professions Education 448
Graduate Certificate in Community College Leadership 449
Graduate Certificate in Educational Foundations 450
Graduate Certificate in Reading Intervention 451
Graduation and Certification Requirements 451
History and Mission 451
Institute for Urban Education (IUE): Description 452
Interdisciplinary, Ph.D. 452

Master in Health Professions Education 452
Master of Arts: Counseling and Guidance 453
Master of Arts: Curriculum and Instruction 456
Master of Arts: Educational Administration 464
Emphasis Area: Higher Education 465
Emphasis Area: School (Grades K-12) Administration 467
Master of Arts: Language and Literacy 470
Master of Arts: Special Education 471
Ph.D. - Counseling Psychology 472
Recommendation for Teacher Certification 474
Retention 475
Scholarships 476
Special Services 477
Student Organizations 477
Teacher Education Student Learning Outcomes 478
Undergraduate Programs 480
Graduate Studies, School of 480
Mission and Administrative Organization of Graduate Education 481
Interdisciplinary Leadership Certificate in Disability Studies 482
Graduate Certificate in College Teaching & Career Preparation 483
Interdisciplinary Ph.D. Program 484
Program Description 485
Program Administration 486
Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission 486
Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements 488
Interdisciplinary Ph.D. Discipline-Specific Requirements 492
Student Learning Outcomes 493
Doctoral Faculty Participation in the Interdisciplinary Ph.D. Program 493
Interdisciplinary Doctoral Student Council 493
Art History 493
Biomedical and Health Informatics 494
Cell Biology and Biophysics 496
Chemistry 498
Computer Science 501
Curriculum and Instruction 505
Economics 507
Educational Leadership, Policy and Foundations 509
Electrical and Computer Engineering 510
Engineering 512
English 513
Entrepreneurship 515
Geosciences 517

History 518
Humanities Consortium 521
Mathematics 523
Molecular Biology and Biochemistry 524
Music Education 526
Oral and Craniofacial Sciences 528
Pharmaceutical Sciences 532
Pharmacology 534
Physics 536
Political Science 538
Public Affairs and Administration 539
Religious Studies 540
Social Science Consortium 542
Telecommunication and Computer Networking 543
Law, School of 545
Academic Rules and Regulations for Juris Doctor Degree Program 547
Attendance 548
Examinations and Grades 549
Credit in Lieu of Grade Option 550
Appeal of Grades 550
Withdrawal from Courses 550
Scholastic Probation and Dismissal 550
Latin Honors 552
Dean's Honor List 552
Employment by Juris Doctor Degree Candidates 552
Activities and Services 552
Competitions 553
Fee Information 553
Financial Aid 553
Professional and Social Activities 553
Scholarly Publications 553
Urban Mission 554
General Information 555
History 555
Accreditation 555
Academic and Professional Training at UMKC 556
Law Building 557
The Rooniverse 557
Law Library 557
Study Spaces in Suites 558
The Law Foundation 558
The School of Law in the Community 558

Nondiscrimination Policy 558
Disabled Student Services 558
Admission to the Bar 559
Law Alumni Association 559
Continuing Legal Education 559
Career Services 559
J.D./MBA and J.D./M.P.A. Combined-degree Programs 560
Juris Doctor Degree 561
Academic Support and Success 562
Admission to the Juris Doctor Program 562
Scholarships 564
Assistance to Students with Financial Need 564
Other 566
Prizes and Awards 567
Scholarships Based on Merit 568
Six-Year Law Scholars Program 571
J.D. Degree Requirements 571
Business & Entrepreneurial Emphasis Area Requirements 573
Child & Family Law Emphasis Area Requirements 576
International, Comparative & Foreign Law (ICF) Emphasis Area Requirements 578
Litigation Emphasis Area Requirements 580
Urban, Land Use and Environmental Law Emphasis Area Requirements 584
LL.M./M.P.A. Combined Degree Program 586
Master of Laws Degree 586
LL.M. Academic Rules and Regulations 587
LL.M. Scholarships 587
Curriculum, Master of Laws (General) 588
Curriculum, Master of Laws (Taxation) 589
Curriculum, Master of Laws (Urban Affairs) 590
Foreign Student LL.M. Curriculum 591
School of Law Administrative Rules 593
Management, Henry W. Bloch School of 593
About the Bloch School 598
Special Programs and Centers 599
Student Organizations 601
Undergraduate Programs 602
Undergraduate Policies and Procedures 602
General Education Requirements 603
Bachelor of Business Administration 604
Bachelor of Science in Accounting 608
Business Administration Minors 609
Graduate Programs 610

Graduate Policies and Procedures 610
Graduate Certificate in Nonprofit Management and Innovation 611
Graduate Certificate in Urban Policy Administration 611
Master of Business Administration 612
Master of Entrepreneurial Real Estate 619
Master of Public Administration 620
Master of Science in Accounting 623
Master of Science in Finance 626
Ph.D. in Entrepreneurship and Innovation 627
Interdisciplinary PhD programs 629
Medicine, School of 629
Admission Requirements 632
Graduate Certificate in Clinical Research 634
Graduate Certificate in Health Professions Education 634
MD Program 634
Master of Medical Science – Physician Assistant 635
Master of Science Program in Bioinformatics 637
Master of Science in Anesthesia Program 638
Medical Student Organizations, Publications and Awards 639
Philosophy 641
Requirements for Graduation in the B.A. - M.D. Combined Program 641
Six Year Program Description 641
Student Learning Outcomes for Six Year B.A.-M.D. Program 642
Typical Six-Year Program of Study 646
Music and Dance, Conservatory of 648
Undergraduate Programs 653
Admissions 653
Conservatory Minimum Grade Requirements 654
Bachelor of Arts in Music 654
Bachelor of Arts in Music Therapy 655
Bachelor of Fine Arts in Dance 658
Bachelor of Music 660
Bachelor of Music in Jazz Studies 660
Bachelor of Music in Music Composition 661
Bachelor of Music in Music Theory 663
Bachelor of Music in Performance 665
Guitar Emphasis Area 665
Organ Emphasis Area 666
Piano Emphasis Area 667
String Instrument Emphasis Area 668
Voice Emphasis Area 669
Wind, Strings and Percussion Emphasis Area 671

Bachelor of Music Education ... 672
Bachelor of Music Education - Choral Emphasis Area ... 674
Bachelor of Music Education - Instrumental Emphasis Area ... 677
Graduate Programs ... 679
Doctor of Musical Arts ... 682
Artist's Certificate Required Courses ... 684
Doctor of Musical Arts in Conducting Required Courses ... 685
Doctor of Musical Arts in Music Composition Required Courses ... 687
Doctor of Musical Arts in Performance Required Courses ... 688
Interdisciplinary Ph.D. study in Music Education ... 689
Master's Degrees ... 689
Master of Arts in Music Required Courses ... 690
Master of Arts in Music: Music Therapy Emphasis ... 691
Master of Music Education Required Courses ... 692
Master of Music in Conducting Required Courses ... 692
Master of Music in Music Composition Required Courses ... 694
Master of Music in Music Theory Required Courses ... 694
Master of Music in Musicology Required Courses ... 695
Master of Music in Performance: Keyboard Emphasis ... 695
Master of Music in Performance: Orchestral Instruments and Guitar Emphasis Areas ... 696
Master of Music in Performance: Voice Emphasis ... 697
Master of Music in Performance: Woodwind Emphasis ... 698
Performer's Certificate Required Courses ... 699
Nursing & Health Studies, School of ... 699
Academic Regulations in the School of Nursing & Health Studies ... 703
Accreditation ... 703
Admissions ... 703
Bachelor of Health Sciences ... 704
Bachelor of Science in Nursing ... 706
Doctor of Nursing Practice Program ... 711
Facilities ... 713
Financial Assistance ... 713
History ... 713
International Students ... 714
Master of Science in Nursing (M.S.N.) ... 714
Nurse Educator Certificate ... 715
Organizations ... 716
Ph.D. in Nursing ... 716
Program Changes ... 717
Pharmacy, School of ... 717
Academic Regulations and Requirements ... 723
Scholarships, Special Awards and Financial Assistance ... 730

Doctor of Pharmacy ... 733
Doctor of Pharmacy Professional Program ... 737
Interdisciplinary Ph.D. Degree Requirements in Pharmaceutical Sciences and Pharmacology ... 738
University College ... 738
Pre-Medicine/Pre-Health ... 741
Choosing an Undergraduate Major ... 741
Pre-Medicine/Dentistry ... 741
Advising ... 743
College of Arts and Sciences Track ... 743
College of Biological Sciences Track ... 744
Honors Program ... 744
Student Organizations ... 745
Undergraduate Academic Regulations and Information ... 746
Academic Calendar ... 746
Academic Loads, Full- and Part-Time Status ... 746
Academic Credit Hour Equlivalencies Policy ... 747
Academic Standing ... 747
Academic Amnesty ... 747
Academic Probation and Ineligibility ... 748
Deans List ... 748
Admissions Policies & Procedures ... 748
Application Forms ... 749
Application for Admission ... 749
Former Student Readmission ... 750
Freshman Admission ... 750
Metro Rate ... 751
Midwest Student Exchange Program ... 751
Policies on Admission of International Students ... 751
Policies on Regular Admission - Medicine ... 754
Special Admission Cases ... 754
Timing of Applications ... 755
Transfer Admission ... 755
Visiting and Community Student Admission ... 756
Attendance Policy ... 756
Classification of Students/Student Levels ... 757
Course Numbering ... 757
Electronic Grade Change Policy ... 757
Final Exam Policy ... 758
General Education Requirements ... 758
Grading Options and Auditing Courses ... 758
Grading ... 759
Grade Appeals ... 760

Grade-Point Average ... 760
Incomplete Grades ... 760
Repeated Courses ... 760
Graduation ... 761
Declaration of Major ... 761
Multiple Major & Double Degree Policy ... 761
Changes in Degree Requirements ... 761
Minimum Hours ... 762
Assessment Requirements ... 762
Awarding Posthumous Degrees ... 762
RooWriter Assessment ... 762
Junior-Senior Hours ... 762
Residence Requirements ... 762
General Course Requirements ... 762
Time Limit on Degree Credit ... 763
Application for Graduation ... 763
Graduation with Latin Honors ... 763
Leave of Absence Policy ... 763
Privacy Rights ... 766
Registration ... 766
Additions ... 766
Drops ... 766
Administrative Drop Policy ... 767
Withdrawals ... 767
Total Withdrawals ... 767
Retroactive Withdrawals ... 767
Class Waitlist ... 768
Cancellation of Enrollment for Financial Delinquency ... 769
Concurrent Enrollment ... 769
RooWriter ... 769
Tools for Planning and Fulfilling Academic Requirements ... 769
Transcripts ... 769
Transfer and External Sources of Credit ... 770
Correspondence and Extension Credit ... 770
Credit by Examination ... 770
Credit for Military Training ... 771
Missouri Higher Education Articulation Agreement ... 771
Transferring Within the University of Missouri System ... 772
Transferring from a Community or Junior College ... 772
Writing Intensive ... 772
Graduate Academic Regulations and Information ... 774
Mission and Administrative Organization of Graduate Education ... 775

Admission Policies and Procedures 775
Graduate Academic Regulations 776
Master's Degrees Academic Regulations 785
Doctoral Degree Programs (Ed.D., Ph.D., D.M.A.) 787
International Graduate Student Admission Policies and Procedures 790
International Graduate Student Academic Regulations 792
University of Missouri (UM) System Visiting Graduate Student Program 795
Cooperative Doctoral Degrees 795
Graduate Teaching and Research Assistantships 796
Federally Supported Sources of Financial Aid 796
Institutionally Supported Fellowship and Award Competitions 796
Division of Student Affairs and Enrollment Management 797
Academic Support and Mentoring 797
Bookstores 799
Admissions 800
Career Services 801
Counseling, Health, Testing, and Disability Services 802
Counseling 802
Student Health and Wellness and Student Health Pharmacy 804
Testing Services 805
Student Disability Services 805
Financial Aid and Scholarships Office 806
HelpLine 807
International Student Affairs 807
Multicultural Student Affairs 807
Office of Registration & Records 808
Residential Life 809
Student Involvement 809
Associated Students of University of Missouri (ASUM) 810
Campuswide Honor Societies 810
Clubs and Organizations 810
CommUniversity 811
Departmental Honorary and Professional Societies 811
LGBTQIA Programs and Services 811
Leadership Programs 812
Social Fraternities and Sororities 812
Student Government Association (SGA) 812
Union Programming Board (UPB) 813
University News 813
Student Success Center 813
Student Union 814
Swinney Recreation Center 814

UMKC Central ... 815
Women's Center ... 815
Student Affairs Offices Located in Academic Units ... 816
Libraries ... 823
Leon E. Bloch Law Library ... 826
Special Notices ... 828
Academic Honesty and Student Code of Conduct ... 828
Acceptable Use Policy ... 828
Equal Opportunity Guidelines ... 829
Guidelines on Sex Discrimination ... 829
Guidelines on Sexual Harassment ... 830
Minimum Standards of Progress for Veterans ... 830
Discrimination Grievance Procedure for Students ... 831
Notice of Nondiscrimination ... 836
Policy on Positive Work and Learning Environment ... 836
Policy on Student Records ... 837
School Honor Codes ... 837
School of Dentistry Honor Codes ... 837
School of Law Honor Codes ... 838
School of Medicine Honor Codes ... 843
School of Nursing Honor Codes ... 851
School of Pharmacy Honor Codes ... 858
Student's Right-To-Know ... 865
Telecommunications Services for the Speech and Hearing Impaired ... 865
UMKC AIDS Policy Statement ... 865
Faculty of the University of Missouri-Kansas City ... 866
UMKC Online ... 867
Course Offerings ... 868
Undergraduate Course Offerings ... 868
Accounting (ACCTNG) ... 868
American Studies (AMER-ST) ... 869
Anthropology (ANTHRO) ... 871
Arabic (ARABIC) ... 874
Architectural Studies (ENV-DSN) ... 874
Art (ART) ... 875
Art - Special Studies (ART-SS) ... 879
Art History (ART-HIST) ... 879
Arts & Sciences - General (A&S) ... 884
Astronomy (ASTR) ... 888
Bassoon (BASSOON) ... 888
Biology (BIOLOGY) ... 889
Black Studies (BLKS) ... 892

Cello (CELLO) 893
Chemistry (CHEM) 894
Chinese (CHINESE) 898
Civil Engineering (CIV-ENGR) 898
Clarinet (CLARINET) 903
Classics (CLASSICS) 904
Communication & Technology (CIT) 907
Communication Studies (COMM-ST) 908
Computer Science (COMP-SCI) 914
Computing & Engineering (SCE) 918
Conservatory (CONSVTY) 919
Counseling Psychology and Counselor Education (CPCE) 935
Criminal Justice and Criminology (CJC) 935
Curriculum and Instruction (EDUC-C&I) 939
Dance (DANCE) 940
Decision Science and Operations Management (DSOM) 943
Dental Hygiene (DENT-HYG) 944
Dentistry-Biological Sciences (BIO-SCI) 948
Discourse (DISC) 948
Economics (ECON) 949
Education (EDUC) 956
Education Research and Psychology (EDUC-R&P) 958
Electrical and Computer Engineering (E&C-ENGR) 958
English Language & Literature (ENGLISH) 965
Entrepreneurship (ENT) 981
Environmental Sciences (ENV-SCI) 983
Environmental Studies (ENV-STDY) 983
Euphonium (EUPHNM) 984
Finance (FIN) 985
Flute (FLUTE) 986
Foreign Language (FRN-LNG) 987
French (FRENCH) 988
General Enrollment - MSSU/DENT-HYG (GEN-ENRL) 992
Geography (GEOG) 992
Geology (GEOLOGY) 996
German (GERMAN) 1000
Greek (GREEK) 1003
Guitar (GUITAR) 1004
Harp (HARP) 1005
Harpsichord (HRPCHD) 1005
Health Sciences (HLSC) 1005
History (HISTORY) 1009

Honors (HONORS) 1020
Horn (HORN) 1023
Humanities (HMNTY) 1023
Information Technology (INFO-TEC) 1026
Integrated Studies (INTGR) 1027
Interdisciplinary Studies (INT-DISC) 1027
Italian (ITALIAN) 1028
Latin (LATIN) 1029
Latina / Latino Studies (LLS) 1030
Life Sciences (LIFE-SCI) 1030
Life Sciences - Anatomy (LS-ANATO) 1034
Life Sciences - Biochemistry (LS-BIOC) 1034
Life Sciences - Microbiology (LS-MCRB) 1035
Life Sciences - Physiology (LS-PHYS) 1036
Management (MGT) 1036
Management Information Systems (MIS) 1038
Marketing (MKT) 1038
Mathematics (MATH) 1039
Mechanical Engineering (MEC-ENGR) 1043
Military Sciences (MIL-SCI) 1049
Natural Sciences (NAT-SCI) 1051
Nursing (NURSE) 1052
Oboe (OBOE) 1058
Organ (ORGAN) 1059
Percussion (PERCSN) 1059
Philosophy (PHILOS) 1060
Physical Education (PHYS-ED) 1065
Physical Sciences (PHY-SCI) 1066
Physics (PHYSICS) 1068
Piano (PIANO) 1071
Political Science (POL-SCI) 1072
Psychology (PSYCH) 1076
Public Administration (PUB-ADM) 1079
Reading (EDRD) 1079
Real Estate (RL-EST) 1080
Religious Studies (RELIG-ST) 1080
Saxophone (SAXOPH) 1081
Social Sciences (SOC-SCI) 1082
Sociology (SOCIOL) 1083
Spanish (SPANISH) 1088
Special Education (EDUC-SP) 1092
Statistics (STAT) 1092

String Bass (STR-BASS) 1092
Teacher Education (TCH-ED) 1093
Theatre (THEATRE) 1102
Trombone (TROMB) 1105
Trumpet (TRUMPET) 1106
Tuba (TUBA) 1106
University College (UNIV) 1107
Urban Planning and Design (UPD) 1108
Urban Studies (URBAN ST) 1110
Viola (VIOLA) 1111
Violin (VIOLIN) 1111
Voice (VOICE) 1112
Women and Gender Studies (WGS) 1112
World Literature (WLD-LIT) 1113
Graduate Course Offerings 1114
Accounting (ACCTNG) 1114
Anesthesia (ANESTH) 1116
Anthropology (ANTHRO) 1118
Art (ART) 1118
Art History (ART-HIST) 1119
Arts & Sciences - General (A&S) 1120
Basic Medical Science (BMS) 1121
Bassoon (BASSOON) 1122
Biology (BIOLOGY) 1122
Black Studies (BLKS) 1124
Business & Public Administration (B&PA) 1125
Cello (CELLO) 1125
Chemistry (CHEM) 1125
Civil Engineering (CIV-ENGR) 1127
Clarinet (CLARINET) 1132
Communication Studies (COMM-ST) 1132
Computer Science & Electrical Engineering (CSEE) 1132
Computer Science (COMP-SCI) 1133
Conservatory (CONSVTY) 1138
Counseling Psychology and Counselor Education (CPCE) 1144
Criminal Justice and Criminology (CJC) 1148
Curriculum and Instruction (EDUC-C&I) 1149
Decision Science and Operations Management (DSOM) 1155
Dental Hygiene (DENT-HYG) 1156
Dentistry Professional (DENT) 1158
Dentistry-Biological Sciences (BIO-SCI) 1165
Economics (ECON) 1167

Education (EDUC) 1172
Electrical and Computer Engineering (E&C-ENGR) 1173
Endodontics (ENDO) 1179
English Language & Literature (ENGLISH) 1180
Entrepreneurship (ENT) 1185
Environmental Sciences (ENV-SCI) 1188
Euphonium (EUPHNM) 1188
Finance (FIN) 1189
Flute (FLUTE) 1191
Foreign Language (FRN-LNG) 1192
French (FRENCH) 1192
General Practice (G-PRAC) 1194
Geography (GEOG) 1195
Geology (GEOLOGY) 1197
Guitar (GUITAR) 1200
Harpsichord (HRPCHD) 1200
Health Administration (HLTH-ADM) 1201
Health Professions Education (HPRE) 1201
History (HISTORY) 1202
Horn (HORN) 1207
Humanities (HMNTY) 1208
Kansas University Medical Center (KUMC) 1208
Law (LAW) 1208
Life Sciences (LIFE-SCI) 1230
Life Sciences - Cell Biology and Biophysics (LS-CBB) 1230
Life Sciences - Molecular Biology and Biochemistry (LS-MBB) 1231
Management (MGT) 1232
Management Information Systems (MIS) 1235
Marketing (MKT) 1236
Mathematics (MATH) 1237
Mechanical Engineering (MEC-ENGR) 1239
Medical Bioinformatics (MEDB) 1243
Medical Technology (MED-TECH) 1245
Medicine (MEDICINE) 1245
Nursing (NURSE) 1249
Oboe (OBOE) 1263
Oral & Craniofacial Sciences (OR-BIO) 1264
Oral Diagnosis & Medicine (OR-D&M) 1264
Oral Surgery (OR-SURG) 1264
Organ (ORGAN) 1266
Orthodontics (ORTHOD) 1266
Pediatrics (PEDS) 1266

Percussion (PERCSN) 1267
Periodontics (PERIO) 1267
Pharmacy (PHARM) 1268
Philosophy (PHILOS) 1280
Physical Education (PHYS-ED) 1281
Physician Assistant Program (MEDPA) 1281
Physics (PHYSICS) 1283
Piano (PIANO) 1285
Political Science (POL-SCI) 1286
Psychology (PSYCH) 1287
Public Administration (PUB-ADM) 1291
Reading (EDRD) 1294
Real Estate (RL-EST) 1295
Religious Studies (RELIG-ST) 1296
Research Methodology - Dentistry (RES-ME) 1299
Research and Psychology (EDUC-R&P) 1299
Saxophone (SAXOPH) 1302
School of Graduate Studies (SGS) 1302
Social Sciences (SOC-SCI) 1303
Social Work (SOC-WK) 1304
Sociology (SOCIOL) 1306
Spanish (SPANISH) 1308
Special Education (EDUC-SP) 1310
Statistics (STAT) 1311
String Bass (STR-BASS) 1312
Teacher Education (TCH-ED) 1313
Theatre (THEATRE) 1313
Trombone (TROMB) 1318
Trumpet (TRUMPET) 1319
Tuba (TUBA) 1319
University of Missouri Traveling Scholar (UMTS) 1319
Urban Leadership (EDUC-UL) 1320
Urban Planning and Design (UPD) 1325
Viola (VIOLA) 1325
Violin (VIOLIN) 1326
Voice (VOICE) 1326

Home

Welcome to the University of Missouri-Kansas City 2014-2015 catalog! We are pleased to provide an interactive and searchable catalog online.

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

We welcome your feedback and suggestions to make this catalog better for the future. We would also appreciate reports of any broken links inside the catalog. Feedback may be provided by sending an email to catalog@umkc.edu.

Doug Swink
University Registrar

UMKC Summary Profile

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

- 15,746 - undergraduate and graduate students enrolled at UMKC
- 8 - percent of students that live on campus
- 64.6 - percent of undergraduate students received financial aid or scholarships in 2013
- 120+ - majors and programs
- 57 - percent of classes have fewer than 20 students
- 21 - average class size
- 13:1 - student to faculty ratio
- 16 - NCAA Division I sports teams
- 91 - percent of classes have fewer than 50 students
- 25 - percent of minority students enrolled

Introduction

University of Missouri - Kansas City (UMKC)

Catalog Archives (http://www.umkc.edu/catalog/archive/default.asp)

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

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

The web site address for the UMKC catalog is http://umkc.edu/catalog.

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

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

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

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

UMKC Administrative Divisions and Offices (http://www.umkc.edu/administration)

UMKC History (http://www.umkc.edu/history)

UMKC Strategic Plan (http://www.umkc.edu/provost/strategic-plan.asp)

Accreditation

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

-- *Council for Higher Education Accreditation*

The University of Missouri - Kansas City is accredited by The Higher Learning Commission and is a member of the North Central Association.

> The Higher Learning Commission
>
> North Central Association of Colleges and Schools
>
> 30 North LaSalle Street, Chicago, IL 60602
>
> (312) 263-0456
>
> http://www.ncahlc.org

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

Mission

Mission statement

UMKC’s mission is to lead in life and health sciences; to deepen and expand strength in the visual and performing arts; to develop a professional workforce and collaborate in urban issues and education; and to create a vibrant learning and campus life experience.

Goal 1. Place student success at the center

To provide the optimal learning environment for all students: outstanding academic programs and experiences, seamless student support and a vibrant campus community.

- Challenge all undergraduate, graduate, and professional students to the highest levels of achievement by providing excellent academic programs.
- Engage and retain students by providing “high-impact” educational practices, such as first-year and capstone seminars, undergraduate research, study abroad and internships.
- Empower all students to contribute to a demographically and technologically complex world.
- Offer superior services to students through a model that allows a one-stop approach (real and virtual) to meet students’ needs.
- Support student success with new, proactive intervention systems and programs.
- Provide on-campus, co-curricular experiences that encourage student engagement and community participation.

Goal 2. Lead in life and health sciences

To attain national recognition for excellence in research, expand opportunities for clinical practitioner training and provide outstanding health care delivery.

- Become an essential partner with other members of the Kansas City area life and health sciences community.
- Establish a unified strategic approach to the UMKC life and health sciences research mission emphasizing translational research.
- Implement innovative life and health sciences graduate, doctoral, professional and interprofessional education initiatives.
- Expand clinical practice initiatives and research opportunities that address community health needs.
- Enhance collaborative and cross-disciplinary research and educational programs both within the science and engineering communities, and across disciplines.

Goal 3. Advance urban engagement

To become a model urban university by fully engaging with the Kansas City community to enhance education, public health, the arts and economic development.

- Expand relationships in the Kansas City area to ensure that UMKC is embedded in the fabric of the community and that the community is embedded in the University.
- Facilitate the exchange of the rich intellectual and cultural assets of UMKC and of the Kansas City community.
- Strengthen the PK-20 educational pipeline through strategic alliances with area school districts and community colleges.
- Promote environmental responsibility by integrating sustainability into the curriculum, research and institutional practices.

Goal 4. Excel in the visual and performing arts

To create excellent programs in visual and performing arts that are central to campus life and support Kansas City’s initiatives in entrepreneurship, urban education and innovation.

- Enhance UMKC’s reputation as a national leader in artistic excellence.
- Enhance all students’ education through infusing the arts into campus life.
- Collaborate with local and regional partners to provide community arts programming and experiences.
- Demonstrate the relationships between artistic creativity, entrepreneurial innovation and economic development.

Goal 5. Embrace diversity

To celebrate diversity in all aspects of university life, creating inclusive environments, culturally competent citizens, and globally-oriented curricula and programs.

- Cultivate an environment committed to civility and respect where all students, faculty and staff are empowered to pursue their personal, academic and professional goals.
- Provide a diverse learning and life experience to create culturally competent citizens.
- Recruit and retain a diverse campus community.
- Ensure diversity initiatives are actively reviewed and owned by the University community.

Goal 6. Promote research and economic development

To produce world-class scholarship and creative activity, encourage entrepreneurship, foster innovation, increase technology transfer, and build relationships that create economic and workforce development.

- Expand opportunities for extraordinary scholarship and creative activity.
- Create cross-disciplinary programs, at all levels, and align with strong community partnerships that support research, innovation and economic development.

- Strengthen workforce development programs to address current and future market needs.
- Encourage innovation within science and technology communities to increase technology transfer.

Academic Programs

Fields of study are listed in the first column. The actual undergraduate and graduate degrees or certificates to be earned are listed to the right of each field of study. Only programs and degrees displayed on this table will appear on students' official transcripts.

Degree Programs (emphasis)	College	Undergraduate	Graduate
Accounting	Bloch	BS (p. 608)	MS (p. 623)
Advanced Education in General Dentistry	Dentistry		GRCT (p. 372)
Anesthesia	Medicine		MS (p. 638)
Anthropology	A&S	Minor (http://catalog.umkc.edu/colleges-schools/arts-sciences/academic-departments-programs/sociology/anthropology-minor)	
Art History	A&S	Minor (p. 50), BA (p. 44)	MA (p. 47), (i)PhD (p. 493)
Artist's Certificate	Conservatory		GRCT (p. 684)
Astronomy	A&S	Minor (p. 210)	
Bioethics	A&S		GRCT (p. 50)
Bioethics and Medical Humanities	A&S	Minor (p. 202)	
Bioinformatics	Medicine		MS* (p. 637)
Biology	SBS	BA (p. 297), BS* (p. 281)	MA (p. 305)
Biomedical and Health Informatics	Medicine		(i)PhD (p. 494)
Black Studies	A&S	Minor (p. 58)	GRCT (p. 55)
Business Administration	Bloch	Minor (p. 609), BBA* (p. 604)	MBA* (p. 612)
Cell Biology and Biophysics	SBS		(i)PhD (p. 496)
Cellular and Molecular Biology	SBS		MS* (p. 304)
Chemistry	A&S	Minor (p. 71), BA (p. 64), BS* (p. 65)	MS* (p. 67), (i)PhD (p. 498)
Civil Engineering	SCE	BS (p. 318)	MS (p. 321)
Classical and Ancient Studies	A&S	Minor (p. 73)	
Clinical Research	Medicine		GRCT (p. 634)
College Teaching and Career Preparation	Graduate Studies		GRCT (p. 483)
Communication Studies	A&S	Minor (p. 82), BA* (p. 77)	
Community College Leadership	Education		GRCT (p. 449)
Computer Science	SCE	Minor (p. 341), BA (p. 337), BS* (p. 334)	MS* (p. 345), (i)PhD (p. 501)
Conducting	Conservatory		MM (p. 692), DMA (p. 685)
Counseling Psychology	Education		PhD (p. 472)
Counseling and Guidance	Education		MA* (p. 453), EDSP (p. 437)
Creative Writing and Media Arts	A&S		MFA (p. 127)
Criminal Justice and Criminology	A&S	Minor (p. 90), BA (p. 87)	MS (p. 89)
Curriculum and Instruction	Education		MA* (p. 456), EDSP* (p. 440), (i)PhD (p. 505)
Dance	Conservatory	BFA (p. 658)	
Dental Hygiene	Dentistry	BS* (p. 385)	
Dental Hygiene Education	Dentistry		MS* (p. 392)
Dentistry	Dentistry		DDS (p. 400)

Early Childhood Education	Education	BA (p. 414)	
Economics	A&S	Minor (p. 99), BA (p. 94)	MA (p. 98), (i)PhD (p. 507)
Education	Education		EdD (p. 434)
Educational Administration	Education		MA* (p. 464), EDSP* (p. 442)
Educational Foundations	Education		GRCT (p. 450)
Educational Leadership, Policies and Foundations	Education		(i)PhD (p. 509)
Electrical Engineering	SCE		MS (p. 351)
Electrical and Computer Engineering	SCE	BS (p. 341)	(i)PhD (p. 510)
Elementary Education	Education	BA (p. 415)	
Endodontics	Dentistry		GRCT (p. 373)
Engineering	SGS		(i)PhD (p. 512)
Engineering and Construction Project Management	SCE		GRCT (p. 320)
English	A&S	BA* (p. 105)	MA* (p. 123), (i)PhD (p. 513)
English Creative Writing	A&S	Minor (p. 117)	
English Language & Literature	A&S	Minor (p. 119)	
English Manuscript, Print Culture, and Editing	A&S	Minor (p. 121)	
English Writing	A&S	Minor (p. 122)	
Entrepreneurial Real Estate	Bloch		MERE (p. 619)
Entrepreneurship and Innovation	Bloch	Minor (p. 609)	PhD (p. 627), (i)PhD (p. 515)
Environmental Science	A&S	BS* (p. 150)	
Environmental Studies	A&S	Minor (p. 153), BA (p. 130)	
Environmental Sustainability	A&S	Minor (p. 155)	
Environmental and Urban Geosciences	A&S		MS (p. 163)
Film Studies	A&S	Minor (p. 83)	
Finance	Bloch		MS (p. 626)
French	A&S	Minor (p. 140)	
Geographic Information Systems	A&S	UGCRT (p. 161)	GRCT (p. 162)
Geography	A&S	Minor (p. 161), BA (p. 156), BS (p. 156)	
Geology	A&S	Minor (p. 161), BA (p. 159), BS (p. 159)	
Geosciences			(i)PhD (p. 517)
German	A&S	Minor (p. 140)	
German Studies	A&S	Minor (p. 138)	
Gerontology	A&S	Minor (p. 166)	GRCT (p. 166)
Healing and Humanities	A&S	Minor (p. 167)	
Health Professions Education	Medicine		GRCT (p. 448), MPHE (p. 452)
Health Science	SoNHS	BHS (p. 704)	
History	A&S	Minor (p. 174), BA (p. 172)	MA (p. 174), (i)PhD (p. 181)
Information Technology	SCE	BIT (p. 331)	
Interdisciplinary Leadership in Disability Studies	SGS		GRCT (p. 482)
Jazz Studies	Conservatory	BM (p. 660)	
Judaic Studies	A&S	Minor (p. 185)	
Language & Literacy	Education		EDSP (p. 444), MA (p. 470)
Languages & Literatures	A&S	BA* (p. 135)	
Latino/Latina Studies	A&S	Minor (p.)	

Law	Law		JD* (p. 561), LLM* (p. 586)
Liberal Arts	A&S	BLA* (p. 186)	
Liberal Studies	A&S		MA (p. 187)
Mathematics	A&S	Minor (p. 193)	MS (p. 194), (i)PhD (p. 523)
Mathematics & Statistics	A&S	BA (p. 191), BS (p. 192)	
Mechanical Engineering	SCE	BSME (p. 321)	MS (p. 323)
Medicine	Medicine		MD (p. 632)
Medieval and Early Modern Studies	A&S		GRCT (p. 195)
Middle School Education	Education	BA (p. 416)	
Molecular Biology and Biochemistry	SBS		(i)PhD (p. 524)
Multi/Interdisciplinary	SGS		PHD (p. 484)
Music	Conservatory	BA* (p. 654)	MA* (p. 690)
Music Composition	Conservatory	BM (p. 661)	MM (p. 694), DMA (p. 687)
Music Education	Conservatory	BME* (p. 672)	MME* (p. 692), (i)PhD (p. 526)
Music Theory	Conservatory	BM (p. 663)	
Musicology	Conservatory		MM (p. 695)
Nonprofit Management & Innovation	Bloch		GRCT (p. 611)
Nurse Educator	SoNHS		GRCT (p. 715)
Nursing	SoNHS	RN-BSN (p. 706), BSN (p. 706)	MSN* (p. 714), DNP* (p. 711), PhD (p. 716)
Oral & Craniofacial Sciences	Dentistry		MS (p. 397), (i)PhD (p. 528)
Oral and Maxillofacial Surgery	Dentistry		GRCT (p. 377)
Orthodontics & Dentofacial Orthopedics	Dentistry		GRCT (p. 380)
Performance	Conservatory	BM* (p. 665)	GRCT* (p. 699), MM* (p. 689), DMA* (p. 688)
Periodontics	Dentistry		GRCT (p. 382)
Pharmaceutical Sciences	Pharmacy		(i)PhD (p. 532)
Pharmacology	Pharmacy		(i)PhD (p. 534)
Pharmacy	Pharmacy		PharmD (p. 733)
Philosophy	A&S	Minor (p. 202), BA (p. 201)	
Physician Assistant	Medicine		MMS (p. 635)
Physics	A&S	Minor (p. 209), BA (p. 208), BS* (p. 206)	MS (p. 211), (i)PhD (p. 536)
Political Science	A&S	Minor (p. 218), BA (p. 217)	MA (p. 219)
Psychology	A&S	Minor (p. 228), BA (p. 225)	MA (p. 229), PHD(clinical health) (p. 230), PHD(experimental health) (p. 233)
Public Administration	Bloch		MPA* (p. 620), (i)PhD (p. 539)
Reading Intervention	Education		GRCT (p. 451)
Romance Language and Literature	A&S		MA (p. 141)
Secondary Education	Education	BA* (p. 419)	
Social Work	A&S		MSW (p. 241)
Sociology	A&S	Minor (p. 248), BA* (p. 245)	MA (p. 248)
Spanish	A&S	Minor (p. 140)	

Special Education	Education		MA* (p. 471)
Statistics	A&S		MS (p. 194)
Studio Art	A&S	Minor (p. 50), BA (p. 45)	MA (p. 48)
Taxation	Law		LLM (p. 589)
Teaching of Writing	A&S		GRCT (p. 129)
Telecommunications & Computer Networking	SCE		(i)PhD (p. 543)
Theatre	A&S	Minor (p. 253), BA (p. 252)	MA (p. 254)
Theatre: Acting & Directing	A&S		MFA* (p. 254)
Theatre: Design & Technology	A&S		MFA* (p. 255)
Urban Affairs	Law		LLM (p. 590)
Urban Planning & Design	A&S	BA (p. 34)	
Urban Policy Administration	Bloch		GRCT (p. 611)
Urban Studies	A&S	Minor (p. 39), BA (p. 36)	
Waste Management	A&S		GRCT (p. 163)
Women & Gender Studies	A&S	Minor (p. 260)	

* Indicates degrees with emphasis areas.

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

Colleges & Schools

UMKC Volker Campus

College of Arts & Sciences (p. 31)

Conservatory of Music & Dance (p. 648)

Henry W. Bloch School of Management (p. 593)

School of Biological Sciences (p. 273)

School of Computing & Engineering (p. 306)

School of Education (p. 408)

School of Law (p. 545)

School of Graduate Studies (p. 480)

University College (p. 738)

UMKC Health Sciences Campus

School of Dentistry (p. 356)

School of Medicine (p. 629)

School of Nursing & Health Studies (p. 699)

School of Pharmacy (p. 717)

College of Arts and Sciences

Administrative Offices
Dean's Office, Scofield Hall (http://www.umkc.edu/virtualtour/scofield-hall.asp)
711 E. 51st Street
(816) 235-1136
Fax: (816) 235-5191
college@umkc.edu
http://cas.umkc.edu/

Mailing Address
University of Missouri-Kansas City
College of Arts and Sciences
5100 Rockhill Road
Kansas City, MO 64110-2499

Dean:
Wayne Vaught Contact Information

Associate Deans:
Diane Filion Contact Information

Michael Kruger Contact Information

Kati Toivanen Contact Information

Statement of Purpose

The primary academic missions of the College of Arts and Sciences are teaching, research and service. Through these functions, the College serves the community, the state and society at large. The research and scholarship of the College's faculty not only expand the body of knowledge generally, but also enrich and enhance its teaching and instructional programs.

Most departments of the College offer both undergraduate and graduate study. The College enables students to develop the creative, analytical and communication skills which sustain a lifelong educational process. In addition to serving its own students, the College provides instruction in the liberal

arts and sciences for students in the UMKC professional schools. Through its continuing education division and certificate programs, the College also serves individuals and groups in the community.

The College's degree requirements, in coordination with the UMKC general education core, give students a breadth of knowledge, enabling them to understand and appreciate the many facets of human experience, to make meaningful relationships between the various fields of knowledge, and to increase their understanding of themselves, their interests and special abilities. The general requirements and introductory courses allow for maximum freedom in selection of a field of study and provide the basic knowledge for that particular program.

Work in a field of study provides students with a comprehensive and systematic introduction that prepares them to function in the professional fields of their choice. The objective of the total academic program of the College is to engage students in study that will enable them to work competently in their chosen fields or pursue graduate work, while at the same time developing a breadth of knowledge in the arts and sciences. In that way, students can understand their specializations in the larger context of the intellectual and social life of the community.

Graduate-level studies provide students with advanced instruction and/or independent research in a major field of study. Students pursuing master's-level work in a major field or a Ph.D. in Clinical Psychology are directed to the relevant department or program listing in the Arts and Sciences section of this catalog and to the General Graduate Academic Regulations and Information section of this catalog. Those planning other Ph.D.-level studies are directed to UMKC's Interdisciplinary Ph.D. program listing in the School of Graduate Studies section of this catalog.

Departments and Programs

Department of Architecture, Urban Planning and Design

Katz Hall Room 109 (http://www.umkc.edu/virtualtour/katz-hall.asp)
5005 Rockhill Road
(816) 235-1725
aupd@umkc.edu
http://cas.umkc.edu/AUPD

Mailing Address
University of Missouri-Kansas City
Department of Architecture, Urban Planning + Design
109 Katz Hall
5005 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Joy D. Swallow, M.Arch., F.A.I.A.

Associate Professors:
Joy D. Swallow (chair), M.Arch., F.A.I.A.; Michael Frisch, Ph.D., A.I.C.P.; Sungyop Kim, Ph.D.; Jacob A. Wagner, Ph.D.

Assistant Professor: Stephanie Frank, Ph.D.

Assistant Teaching Professor:
John Eck, M.Arch., R.A.

Lecturers:
Sylvia Augustus; Christopher Brewster, J.D., A.I.C.P.; Daniel Dermitzel; John Funk, P.E.; Vincent Gauthier, A.I.C.P.; Vince LaTona; David Knopick, A.I.C.P; Sue Malik, R.A.; Vicki Noteis, A.I.A.; Rebecca Riden, A.I.A.; Theodore H. Seligson, F.A.I.A.; Robyne Stevenson, Ph.D.; Ryan Townsend; Lauren E. Wendlandt, R.A.;

Joint Appointment:
Joseph Hughey, Ph.D., (professor, department of psychology); Rochelle Ziskin, Ph.D. (professor, art and art history); Robert Cohon, Ph.D., (visiting research associate professor, art and art history)

Administrative Assistant:
Stella Szymanski

Participating Faculty:
Caroline P. Davies, Ph.D., (associate professor, geosciences); Steve Driever, Ph.D., (professor, geosciences); Wei Ji, Ph.D, (professor, geosciences); James Sheppard, Ph.D., (assistant professor, philosophy);

Department Description

The Department of Architecture, Urban Planning and Design has two degree tracks to choose from.

One degree track is a B.A. in Urban Planning and Design. This degree program is a four-year degree and can be completed at UMKC in its entirety.

The second track leads to a degree in one of the following professional areas: architecture, landscape architecture and interior architecture. This track is a two-year program, offered in conjunction with Kansas State University's College of Architecture, Planning and Design.

UMKC is an urban university, and architecture, urban planning and design is consistent with our vision for our community and region. Kansas City is a great urban laboratory. Few American cities have the planning and design tradition of Kansas City. We think this sets us apart, and places the students within a professional community with unmatched resources, whether one is studying architecture, interior architecture, landscape architecture or urban planning and design.

As the United States population continues to grow and is concentrated in metropolitan areas, urban planning and design is becoming a societal imperative. Planners address diverse public issues affecting where people live, work, and play; where they shop and receive health care; how they get from place to place; what our communities look like; and how we use our resources.

Admission and Advising

Admission to the Department of Architecture, Urban Planning and Design is selective. Seats are limited to 36 incoming students in the Architectural Studies curriculum. Interested students can call or e-mail the department and schedule an appointment for a visit with one of our advisors. On-campus location, contact information and mailing address appear at the beginning of this section.

Financial Aid

Many scholarships and student financial aid alternatives are available. Every year approximately 80 percent of our students have some form of scholarship. For students who qualify, UMKC can be a great resource for scholarship assistance. Contact the UMKC Financial Aid Office (phone: (816) 235-**1154** Web site: http://www.umkc.edu/finaid) for scholarship information.

Student Activities

The department supports two student organizations, AIAS and PDS, on the UMKC Campus.

The American Institute of Architecture Students (http://www.aias.org) (AIAS) is a national student organization for students studying architecture and related fields. Many times the professionals serve as mentors to students on various capacities. Every year students attend national and regional AIAS meetings around the country.

Planning and Design Students (PDS) is a student organization for students studying Urban Planning and Design. The students interact with the local APA (American Planning Association (http://www.planning.org)) chapter in a variety of activities. A group of students attend the national conventions that are held in various locations around the country every year.

The American Public Works Association (http://www.apwa.net) (APWA) is a student organization that consists of a multi-disciplinary group of students (i.e. Engineering, Geosciences, Public Administration) from across the campus. The APWA's national office is in Kansas City, and UMKC is the first campus to initiate an APWA student group. This organization allows students to interact with private industry, as well as governmental agency professionals.

Faculty

John Eck assistant teaching professor of architecture, urban planning and design; B.Arch. (Kansas State University); M.Arch. (University of Virginia); R.A.

Stephanie Frank assistant professor of architecture, urban planning and design; M.A. (University of Maryland); Ph.D (University of Southern California)

Michael Frisch Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=frisch); associate professor of architecture, urban planning and design; M. City Planning (Massachusetts Institute of Technology); Ph.D. (Rutgers University); A.I.C.P.

Sungyop Kim[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kim); associate professor of architecture, urban planning and design; M. Urban and Regional Planning (University of Hawaii); Ph.D. (University of Washington).

Theodore H. Seligson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=seligson); adjunct professor of architecture, urban planning and design; B.Arch. (Washington University); F.A.I.A.

Joy D. Swallow Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=swallow); chair, department of architecture, urban planning and design, and associate professor of architecture; B.Arch. (Kansas State University); M.Arch. (University of Pennsylvania); F.A.I.A.

Jacob A. Wagner[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wagner); associate professor of architecture, urban planning and design; B.A.,M.S. (University of Oregon); Ph.D. (University of New Orleans).

1 Associate or Adjunct Graduate Faculty
2 Members of UMKC Graduate Faculty
3 Members of UMKC Doctoral Faculty
4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Architectural Studies Major (p. 34)
- Bachelor of Arts in Urban Planning and Design (p. 34)

Architectural Studies Major

Architectural Studies is a two-year cooperative program with Kansas State University that began in 1987. The accredited curriculum at the KSU College of Architecture Planning and Design is offered at UMKC for the first two years of study. After successfully completing the coursework at UMKC, students are eligible for entry to Kansas State University, College of Architecture Planning and Design. There, students can study architecture, interior architecture and landscape architecture.

Architectural Accreditation

The Kansas State University College of Architecture, Planning and Design (with which the UMKC Architectural Studies Program collaboratively participates) is accredited by the National Architectural Accrediting Board (NAAB).

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes two types of degrees: the bachelor of architecture and the master of architecture.

A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Master's degree programs may consist of a pre-professional undergraduate degree and professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree

B.A. (Urban Studies) - M.P.A. Program

Student Learning Outcomes

Students graduating with a baccalaureate degree in this field will:

- Students appreciate how gender, ethnicity, and race play important roles in understanding the city. They will be exposed to the broader public through internships in the community.
- Students will be able to demonstrate knowledge of how local, regional, and state governments and related institutions interact. They will understand how the urban economy is structured in interrelated sectors that influence each other locally and interact with sectors beyond the local city. They will understand how to interpret demographic patterns at various scales, from the city block to the metropolitan area.
- Either at least qualitatively or quantitatively students will demonstrate the ability of critical thinking about urban space.

This program allows Urban Studies majors to complete a B.A. in Urban Studies in The College of Arts and Sciences and a master's in public administration in the Henry W. Bloch School of Business and Public Administration in five years. The program allows students to take M.P.A. courses to satisfy Urban Studies and M.P.A. requirements, which reduces the number of courses needed to complete both degrees.

Students interested in this option should first contact the Director of Urban Studies at (816) 235-6053 during the final semester of the junior year or early in the first semester of the senior year.

Bachelor of Arts in Urban Planning and Design

The Urban Planning and Design program provides an innovative curriculum that incorporates a combination of broad liberal arts courses, with a core of professional planning classes, coupled with a series of design studios. The design studio represents a forum where students employ a creative process,

infused with knowledge gained from supporting courses, to generate holistic urban planning and design solutions. Urban design projects will engage professionals, civic officials, neighborhood leaders and government officials into an important dialogue.

Student Learning Outcomes

Students graduating with a baccalaureate degree in planning should have significant exposure to each of the basic subject areas of knowledge, skills and values.

Knowledge of

- Structure and functions of urban settlements.
- History and theory of planning processes and practices.
- Administrative, legal and political aspects of plan-making and policy implementation.
- Familiarity with at least one area of specialized knowledge of a particular subject or set of issues.

Skill in

- Problem formulation, research skills and data gathering.
- Quantitative analysis and computers.
- Written, oral and graphic communication.
- Collaborative problem solving, plan-making and program design.
- Synthesis and application of knowledge to practice.

Value in

- Issues of equity, social justice, economic welfare and efficiency in the use of resources.
- The role of government and citizen participation in a democratic society and the balancing of individual and collective rights and interests.
- Respect for diversity of views and ideologies.
- The conservation of natural resources and of the significant social and cultural heritages embedded in the built environment.
- The ethics of professional practice and behavior, including the relationship to clients and the public, and the role of citizens in democratic participation.

Program Requirements

Studio		
ENV-DSN 201	Environmental Design Studio I	4
ENV-DSN 202	Environmental Design Studio II	4
UPD 310	Planning And Design Studio I	4
UPD 312	Planning And Design Studio II	4
UPD 410	Planning And Design Studio III	4
UPD 411	Professional Practice I	1
UPD 412WI	Planning And Design Studio IV	5
UPD 413	Professional Practice II	1
Urban Planning		
ENV-DSN 203	Survey of the Design Professions	1
UPD 203	GIS For Urban Planning	3
UPD 260	History Of Planning And Urban Design	3
UPD 280	Land Use Planning	3
UPD 300	Quantitative Planning Methods And Techniques	3
UPD 320	Planning Theory And Practice	3
UPD 432	Urban Environment Planning And Design	3
UPD 450	Planning Law And Practice	3
UPD 490	Urban Planning Internship	3
Statistics and either Microeconomics or Macroeconomics		
Planning and Professional Electives		
Select a minimum of 2 of the following:		6
UPD 332CZ	Enviromental Sustainability	
UPD 340	Neighborhood And Community Development	

UPD 400	Advanced GIS For Urban Planning	
UPD 420	Transportation Planning	
UPD 430	Planning For Historic Preservation	
UPD 440	New Urbanism	
UPD 460CC	CC: Queer in the City: An introduction to Lesbian and Gay Studies	
UPD 472	Urban Redevelopment	
UPD 499	Special Topics In Urban Planning	
Urban Social Science		
Select a minimum of one course, this includes but is not limited to the following: [1]		3
ANTHRO 331	Urban Anthropology	
ECON 336	The Kansas City Economy	
ECON 458	Urban Economics	
GEOG 309	Urban Geography	
HISTORY 356	Rise of the City in the U.S.	
POL-SCI 424	Urban Politics and Community Power Structures	
POL-SCI 438	Urban Politics	
PSYCH 403	Environmental Psychology	
SOCIOL 431	Social Organization Of The City	
SOCIOL 433	Immigration and the City	
SOCIOL 434	Spatial Thinking in Social Science	

1 The Department will approve other related urban social science classes as needed.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Urban Studies

Student Learning Outcomes

Students graduating with a baccalaureate degree in this field will:

- Students appreciate how gender, ethnicity, and race play important roles in understanding the city. They will be exposed to the broader public through internships in the community.
- Students will be able to demonstrate knowledge of how local, regional, and state governments and related institutions interact. They will understand how the urban economy is structured in interrelated sectors that influence each other locally and interact with sectors beyond the local city. They will understand how to interpret demographic patterns at various scales, from the city block to the metropolitan area.
- Either at least qualitatively or quantitatively students will demonstrate the ability of critical thinking about urban space.

Program Requirements

It is recommended that students planning an Urban Studies major take ENV-SCI 110R, ENV-SCI 210, or GEOLOGY 220 to satisfy part of the natural sciences area general degree requirements of the College. ENV-DSN 110 should be elected as one of the humanities area courses. In preparation for the core requirements of the urban studies major, the student should take ECON 201, SOCIOL 101, GEOG 105 and PSYCH 210.

Introductory Course (Choose 1)		
URBAN ST 101	Introduction To Urban Studies	3
URBAN ST 206	Cities of the World	3
URBAN ST 268	Queer in the City/An Introduction to LGBT Studies	3
ENV-SCI 332CZ	Environmental Sustainability	3
Methods (Choose 1)		

BLKS 404	Research Seminar	3
SOCIOL 362	Methods Of Sociological Research	3
SOCIOL 434	Spatial Thinking in Social Science	3
UPD 300	Quantitative Planning Methods And Techniques	3
History (Choose 1)		
UPD 260	History Of Planning And Urban Design	3
HISTORY 356R	Kansas City: History of a Regional Metropolis	3
Statistics (Choose 1)		
SOCIOL 363		3
STAT 235	Elementary Statistics	3
Urban Political Economy (Choose 1)		
ECON 336	The Kansas City Economy	3
ECON 458	Urban Economics	3
POL-SCI 314	Politics of Kansas City Metro	3
POL-SCI 424	Urban Politics and Community Power Structures	3
PUB-ADM 415	Issues In Urban Administration	3
Race/Class/Gender (Choose 1)		
ECON 314	Race, Class And Gender: Theory, History, And Policy	3
LLS 201	Introduction to Latina/o Studies	3
SOCIOL 322	Race And Ethnic Relations	3
CJC 440	Hate & Bias Crimes	3
Required Courses		
GEOG 309	Urban Geography	3
URBAN ST 495	Urban Studies Internship	1-6
URBAN ST 499WI	Urban Studies Seminar	3
Total Credits		70-75

Concentration (18 hours)

In addition to the core requirements, 18 hours must be taken in an area of concentration:

- Community Development and Housing
- Community Organization and Social Services
- Urban Policy/Management

In consultation with an advisor, selected by the student or designated by the program director, students are expected to develop a program (reflecting interest and applicability to career goals) in one area of concentration: a required course and five electives from those listed under the concentration chosen. Students may not double count any core courses toward the 18 hours.

Community Development and Housing Concentration

Required Course		
UPD 340	Neighborhood And Community Development	3
Electives		
Select five of the following:		15
ENV-DSN 110	The Meaning Of Architecture	
ENV-DSN 201	Environmental Design Studio I	
ENV-DSN 202	Environmental Design Studio II	
ECON 336	The Kansas City Economy	
GEOG 203	Introduction to Geographic Information Systems	
GEOG 311	Economic Geography	
GEOG 317	Cartography	
GEOG 437	Population Geography	
SOCIOL 337	Community Development In Urban America	
SOCIOL 431	Social Organization Of The City	
UPD 203	GIS For Urban Planning	

UPD 260	History Of Planning And Urban Design	
UPD 310	Planning And Design Studio I	
UPD 312	Planning And Design Studio II	
UPD 320	Planning Theory And Practice	
UPD 420	Transportation Planning	
UPD 430	Planning For Historic Preservation	
UPD 450	Planning Law And Practice	
UPD 472	Urban Redevelopment	
Total Credits		18

Community Organization and Social Services Concentration

Required Course		
ANTHRO 331	Urban Anthropology	3
Electives		
Select five of the following:		15
CJC 101	Introduction To Criminal Justice	
CJC 317	Policies Of Drug Use And Control	
CJC 440	Hate & Bias Crimes	
ECON 314	Race, Class And Gender: Theory, History, And Policy	
GEOG 203	Introduction to Geographic Information Systems	
GEOG 437	Population Geography	
POL-SCI 360	Labor, Politics and Society	
POL-SCI 424	Urban Politics and Community Power Structures	
PSYCH 322	Child Psychology	
PSYCH 406P	Introduction To Developmental Disabilities	
PSYCH 407P	Developmental Disabilities And Community Life	
SOCIOL 211	Social And Psychological Development Through The Life Cycle	
SOCIOL 302	Social Stratification	
SOCIOL 322	Race And Ethnic Relations	
SOCIOL 335R	Introduction To Social Work: Principles And Practice	
SOCIOL 337	Community Development In Urban America	
SOCIOL 431	Social Organization Of The City	
SOCIOL 433	Immigration and the City	
UPD 203	GIS For Urban Planning	
UPD 340	Neighborhood And Community Development	
Total Credits		18

Urban Policy/Management Concentration

Required Course		
PUB-ADM 310	Introduction To Public Administration	3
Electives		
Select five of the following:		15
CJC 440	Hate & Bias Crimes	
ECON 336	The Kansas City Economy	
ECON 435	Public Finance	
ECON 458	Urban Economics	
GEOG 203	Introduction to Geographic Information Systems	
GEOG 311	Economic Geography	
GEOG 333	Geographic Elements of Urban Planning	
POL-SCI 314	Politics of Kansas City Metro	
POL-SCI 360	Labor, Politics and Society	
POL-SCI 424	Urban Politics and Community Power Structures	

PUB-ADM 495	Voluntarism, Philanthropy & The Non-Profit Sector In The U.S.
SOCIOL 348	Latin American Immigrants & Refugees in the U.S.
SOCIOL 433	Immigration and the City
UPD 203	GIS For Urban Planning
UPD 320	Planning Theory And Practice
UPD 420	Transportation Planning
UPD 432	Urban Environment Planning And Design
UPD 450	Planning Law And Practice
Total Credits	18

NOTE: Courses counted towards the core requirements can not be double-counted for the Area of Concentration

Internship (6 hours)

In developing internships, students should first contact the urban studies director.

The student is expected to participate in work activities in a community organization and receive instruction from agency staff. For each three hours of internship the student must spend 120 hours on site. In addition, the student is evaluated academically.

The internship may be repeated up to a maximum of three semesters and should be taken as URBAN ST 495. Other internship courses may satisfy this requirement with approval of the advisor.

Summary

During the first 60 hours of coursework, students are advised to fulfill prerequisites for core courses and for required courses in the urban studies concentration they choose. At the same time, students should fulfill general graduation requirements, where possible, through completion of courses listed under General Degree Requirements in Arts and Sciences.

When prerequisites and general requirements have been satisfied, students must complete for the urban studies major:

- Core course requirements: 24 hours
- Concentration requirements: 18 hours
- Internship: 6 hours

Total hours required for the major in urban studies: 48

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Minor in Urban Studies

Student Learning Outcomes

Students graduating with a minor degree in this field will:

- Students appreciate how gender, ethnicity, and race play important roles in understanding the city. They will be exposed to the broader public through internships in the community.
- Students will be able to demonstrate knowledge of how local, regional, and state governments and related institutions interact. They will understand how the urban economy is structured in interrelated sectors that influence each other locally and interact with sectors beyond the local city. They will understand how to interpret demographic patterns at various scales, from the city block to the metropolitan area.
- Either at least qualitatively or quantitatively students will demonstrate the ability of critical thinking about urban space.

Total Hours Required: 18 Minimum of 9 hours from UMKC (not transfer credits)

Courses selected to meet minor requirements cannot be double-counted. Academic Minors are optional. They will be noted on the academic transcript.

Required Course		
Choose one of the following:		3
GEOG 309	Urban Geography	
SOCIOL 431	Social Organization Of The City	
URBAN ST/UPD/BLKS 101	Introduction To Urban Studies	
Methods		
Choose one of the following:		3
GEOG 203	Introduction to Geographic Information Systems	
PUB-ADM 410	Research Methods In Public Administration	
SOCIOL 362	Methods Of Sociological Research	
SOCIOL 434	Spatial Thinking in Social Science	
UPD 203	GIS For Urban Planning	
UPD 260	History Of Planning And Urban Design	
UPD 300	Quantitative Planning Methods And Techniques	
Urban Political Economy		
Choose one of the following:		3
BLKS 302	Conceptual and Theoretical Foundations in African American Studies	
ECON 336	The Kansas City Economy	
ECON 395	Current Economic Issues	
ECON 458	Urban Economics	
GEOG 311	Economic Geography	
POL-SCI 438	Urban Politics	
Race/Class/Gender		
Choose one of the following:		3
ANTHRO/SOCIOL 302	Social Stratification	
ANTHRO/SOCIOL 322	Race And Ethnic Relations	
ANTHRO 331	Urban Anthropology	
BLKS 201	Global Systems and the Origins of Black American Culture and Institutions	
CJC 316	Race, Class and Justice	
ECON 314	Race, Class And Gender: Theory, History, And Policy	
GEOG 334	Gender and the Environment	
LLS 201	Introduction to Latina/o Studies	
POL-SCI 424	Urban Politics and Community Power Structures	
SOCIOL 433	Immigration and the City	
The Urban Built Environment		
Choose one of the following:		3
GEOG 309	Urban Geography	
HISTORY 356	Rise of the City in the U.S.	
PSYCH 403	Environmental Psychology	
PUB-ADM 497	Special Topics In Public Administration	
UPD 432	Urban Environment Planning And Design	
UPD 472	Urban Redevelopment	
PHILOS 370	Environmental Ethics And Policy	
Urban Policy and Management		
Choose one of the following:		3
ECON 435	Public Finance	
POL-SCI 314	Politics of Kansas City Metro	
POL-SCI 438	Urban Politics	
PUB-ADM 310	Introduction To Public Administration	
PUB-ADM 415	Issues In Urban Administration	

UPD 450	Planning Law And Practice	
Total Credits		18

Department of Art and Art History

Fine Arts Building (http://www.umkc.edu/virtualtour/fine-arts.asp), Room 204
5015 Holmes Street
Kansas City, MO 64110
(816) 235-1501
art@umkc.edu
http://info.umkc.edu/art

Department Chair:

Elijah Gowin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gowin)

Professors:

Barry Anderson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=anderson)
Frances S. Connelly Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=connelly)
Burton L. Dunbar Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dunbar) Principal Graduate Advisor in Art History
Elijah Gowin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gowin)
Kati Toivanen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=toivanen)
Maude Wahlman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wahlman) Dorothy & Dale Thompson/Missouri Endowed Professor of Global Arts
Rochelle Ziskin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ziskin)

Associate Professors:

Richard W. Allman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=allman) Principal Graduate Advisor in Studio Art
Paul Tosh Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=tosh)

Assistant Professor:

Cristina Albu Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=albu)
Hyeyoung Shin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=shin)

Research Associate Professor and Joint Appointment with The Nelson-Atkins Museum of Art:

Robert Cohon Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cohon)

Full-time Lecturer:

Davin Watne Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=watne) Principal Undergraduate Advisor in Studio Art

Visual Resources Director:

Carla Gilliland Poirier Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=poirier)

Olson Professor:

Craig A. Subler Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=subler)

Professors Emeriti:

Eric J. Bransby
William Crist
George Ehrlich
Geraldine E. Fowle
Stephen Gosnell
Leonard Koenig
Barbara Mueller

Instructor Emeritus:

Nancy DeLaurier

Department Description

The Department of Art and Art History is a dynamic environment that aims to provide all UMKC students with education and experience to develop their creative- and critical-thinking skills, their art-making abilities, and their versatility in professional and personal situations. The Department serves a variety of students, ranging from the non-major to the professionally oriented. The department offers programs leading to the Bachelor of Arts and Master of Arts degree in Art History or Studio Art, as well as minors in each area. Art History also participates in the Interdisciplinary Ph.D. program.

Students studying Art History or Studio Art obtain a broad liberal arts foundation during their educational career and receive sound fundamental training in the arts. Small class sizes combined with interactive teaching methods offer a comprehensive learning environment for the aspiring arts professional. The department also collaborates with other departments and schools, and works with the School of Education (http://education.umkc.edu) on Art Education (http://info.umkc.edu/art/programs/ba-arted) degrees.

Kansas City is nationally known for its vibrant arts scene, with the UMKC Gallery of Art (http://info.umkc.edu/art/umkcgallery/contact), Urban Culture Project (http://www.charlottestreet.org/category/urban-culture-project), Plug Projects (http://www.plugprojects.com), Grand Arts (http://www.grandarts.com) and the many galleries in Crossroads Arts District (http://www.kccrossroads.org). Our department has partnerships with art organizations like Charlotte Street Foundation (http://www.charlottestreet.org), ArtsKC (http://www.artskc.org), Studios Inc (http://thestudiosinc.org), and others structure internships, networking, entrepreneurial mentoring and other professional development opportunities. Visiting artists and scholars (http://info.umkc.edu/art/about/lectures), gallery exhibitions (http://info.umkc.edu/art/umkcgallery/exhibitions), and enrichment programs supplement course work.

Outside of the classroom, physical proximity and close professional connections to the museums, studios, galleries, and art organizations in the Kansas City community offer students additional opportunities for exposure to new ideas, media, and special events. The extensive collection of The Nelson-Atkins Museum of Art (http://www.nelson-atkins.org) is located three blocks away, and there are also major contemporary collections nearby, including those of the Kemper Museum of Contemporary Art (http://www.kemperart.org), H&R Block Artspace (http://www.kcai.edu/hr-block-artspace), the Belger Arts Center (http://www.belgerartscenter.org), and the Nerman Museum of Contemporary Art (http://www.nermanmuseum.org).

Special Resources/Programs

UMKC Gallery of Art

The department is home to the UMKC Gallery of Art (http://info.umkc.edu/art/umkcgallery/contact). The gallery organizes curated shows from visiting local, national, and international artists, as well arranging shows of student and alumni work. The annual Student Art Exhibition is a guest-juried exhibition that features the work of the current student body.

Visual Resources Library (VRL)

The department is also home to the Visual Resources Library (http://info.umkc.edu/art/about/vrl), which hosts an online collection of approximately 45,000 digital images representing significant works of Western art and architecture, ancient through contemporary; the history of photography, printmaking, decorative arts and design; and art of Islam, Asia, Africa and the Americas. The VRL is also a space that hosts workshops for student needs and development, such as informational sessions about department events/opportunities as well as special events like the VRL Book Sale.

The Nelson-Atkins Museum of Art

The University of Missouri-Kansas City is fortunate to be adjacent to one of the most comprehensive and distinguished art museums in the country: The Nelson-Atkins Museum of Art (http://www.nelson-atkins.org). In addition to having ready access to the gallery's collection, advanced students may be privileged to use the museum's other facilities, such as the reference library, the acquisition records or the museum's collections. Use of these facilities is undertaken only after consultation with a member of the faculty. Admission to the museum is free to everyone.

The Department maintains a close relationship with the museum through joint appointments, curator-taught seminars, student internships and other cooperative programs.

Undergraduate Admission Information

In undergraduate studies, the Studio Art (http://info.umkc.edu/art/programs/ba-studioart) and Art History (http://info.umkc.edu/art/programs/ba-arthistory) programs offer Bachelor of Arts degrees. For incoming freshmen, there are no special requirements beyond those for admission to the University. Transfer students to UMKC need to meet with both a department and a general education advisor prior to beginning classes to evaluate their transcripts to determine course equivalencies.

Program Overview

Degree programs in Studio Art and Art History at UMKC are the B.A. and the M.A. Art History also participates in the Interdisciplinary Ph.D. program. All the programs provide an exciting educational experience in a liberal arts setting.

The Studio Art faculty is comprised of accomplished and actively exhibiting artists, offering courses in drawing, painting, graphic design, print media, digital imaging, motion design, and photography. The faculty of six art historians, one a joint appointment with the Nelson-Atkins Museum, offer courses in the art and architecture of Ancient, Northern Renaissance, Baroque, Modern European, Contemporary, and American, Native American, African, and African-American cultures. The strong adjunct faculty consists of local artists, art educators and professionals. Curators from The Nelson-Atkins Museum

of Art (http://www.nelson-atkins.org) regularly offer advanced Art History courses, most recently on topics like Decorative Arts, Art and Patronage in 16th Century Rome, Islamic Art and the Spiritual in Contemporary Art.

Outside of the classroom, physical proximity and professional connections to the museums, studios and art organizations in Kansas City community offer students additional opportunities for internships, visiting artists, and enrichment programs to supplement coursework. Classes make use of the extensive collections at The Nelson-Atkins located three blocks away, as well as the major contemporary collections in Kansas City, including those of the Kemper Museum of Contemporary Art (http://www.kemperart.org), the Belger Arts Center (http://www.belgerartscenter.org) and the Nerman Museum of Contemporary Art (http://www.nermanmuseum.org). Kansas City is nationally known for its vibrant arts scene, with the UMKC Gallery of Art, the Urban Culture Project (http://www.charlottestreet.org/urban-culture-project), the H&R Block Artspace (http://www.kcai.edu/hr-block-artspace), Grand Arts (http://www.grandarts.com) and the many galleries in Crossroads Arts district (http://www.kccrossroads.org). Research in Art History is supported by the Miller-Nichols Library (http://library.umkc.edu/node) at UMKC, the Spencer Art Reference Library (http://www.nelson-atkins.org/education/Library.cfm) at the Nelson-Atkins Museum, and the Linda Hall Library (http://www.lindahall.org).

Career Opportunities

Career opportunities in Studio Art include education, arts administration and practicing art and design in fields of graphic design, interactive design, video arts, print media, photography, digital arts, painting and illustration. Graduates in the Studio Art programs at UMKC have found employment with Artist Inc (http://www.kcartistlink.org/artistinc), Hallmark (http://www.hallmark.com), Barkley (http://www.barkleyus.com), Epsten Gallery at Village Shalom (http://www.villageshalom.org), Review Publishing (http://ereview.org), the Kansas City Municipal Commission and as successful independent artists. Students have been accepted into graduate programs at institutions including the University of Missouri at Columbia (http://www.missouri.edu), Sam Fox School at Washington University (http://www.samfoxschool.wustl.edu/node/4145), Ohio State (http://www.osu.edu), Guildhall at Southern Methodist University (http://guildhall.smu.edu) and the Rhode Island School of Design (http://www.risd.edu).

Career paths in Art History include work in museums and galleries, educational institutions, and arts administration. Other career choices that mesh well with an Art History degree are publishing, art appraisal, non-profit art or history organizations, archival work, and library science. Graduates from the Art History M.A. program at UMKC have found positions at the Los Angeles County Museum of Art (http://www.lacma.org), Rhode Island School of Design, the Nelson-Atkins Museum, the H&R Block Artspace, the Kemper Museum of Contemporary Art, Avila University (http://www.avila.edu), the Wadsworth Athenaeum (http://www.wadsworthatheneum.org), and the University of North Carolina at Chapel Hill (http://www.unc.edu), as well as right here at UMKC. The M.A. degree at UMKC provides an excellent preparation for doctoral work. Degree requirements are structured to give students a thorough background in research methodology, and courses are taught by faculty actively involved in research. Our graduates have continued their work toward the Ph.D. at institutions including the University of Chicago (http://www.uchicago.edu), Princeton University (http://www.princeton.edu), Case Western Reserve University (http://www.case.edu), the University of Michigan (http://www.umich.edu), and the University of Kansas (http://www.ku.edu).

Faculty

Cristina Albu[1,2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=albu); Assistant Professor of Art History; B.A. (University of Bucharest); M.A. (University of Warwick); M.A., Ph.D. (University of Pittsburgh)

Richard W. Allman[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=allman); Associate Professor of Studio Art; B.F.A. (Massachusetts College of Art); M.F.A. (Rhode Island School of Design).

Barry Anderson[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=anderson); Professor of Studio Art; B.F.A. (University of Texas at Austin); M.F.A. (Indiana University - Bloomington).

Eric J. Bransby; Professor Emeritus of Studio Art; B.A., M.A. (Colorado College); M.F.A. (Yale University).

Robert Cohon; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cohon); Research Associate Professor of Art History & Joint Appointment with The Nelson-Atkins Museum of Art; B.A. (Columbia University); M.A., Ph.D. (New York University).

Frances Connelly[1,2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=connelly); Professor of Art History; B.A. (Wake Forest University); M.A. (University of Pittsburgh); M.F.A. (University of North Carolina at Greensboro); Ph.D. (University of Pittsburgh).

William G. Crist; Professor Emeritus of Studio Art; B.A. (University of Washington, Seattle); M.F.A. (Cranbrook Academy of Art).

Nancy DeLaurier; Instructor Emeritus of Studio Art; B.S. (Northwestern University).

Burton L. Dunbar III[1,2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dunbar); Professor of Art History; B.A. (Park College); M.A., Ph.D. (University of Iowa).

George Ehrlich; Professor Emeritus of Art History; B.S., M.F.A., Ph.D. (University of Illinois).

Geraldine E. Fowle; Associate Professor Emeritus of Art History; A.B. (Aquinas College); M.A., Ph.D. (University of Michigan).

Stephen J. Gosnell; Associate Professor Emeritus of Studio Art; M.A. (State University of New York).

Elijah Gowin[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gowin); Department Chair; Professor of Studio Art; B.A. (Davidson College); M.F.A. (University of New Mexico).

Leonard I. Koenig; Professor Emeritus of Studio Art; B.A. (Adelphi College); M.A. (University of Iowa); M.F.A. (University of Wisconsin-Madison).

Barbara A. Mueller; Professor Emeritus of Studio Art; B.A. (Maryville College); M.A. (University of Iowa).

Craig A. Subler Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=subler); Olson Professor of Studio Art; B.F.A. (Dayton Art Institute); M.A., M.F.A. (University of Iowa).

Kati Toivanen[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=toivanen); Associate Dean of Undergraduate Programs (College of Arts & Sciences); Professor of Studio Art; B.F.A. (Clark University); M.F.A. (School of the Art Institute of Chicago).

Paul Tosh Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=tosh); Associate Professor of Studio Art; B.F.A. (Middle Tennessee State University); M.F.A. (University of Arizona).

Hye Young Shin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=shin); Assistant Professor of Studio Art; B.F.A. (Kyung-Sung University); B.F.A. (Hong-Ik University); M.F.A. (University at Buffalo).

Maude Southwell Wahlman[1,2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wahlman); Dorothy and Dale Thompson/ Missouri Endowed Professor in Arts; B.A. (Colorado College); M.A. (Northwestern University); M.Phil., Ph.D. (Yale University).

Davin Watne Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=watne); Full Time Lecturer of Studio Art; B.F.A (Kansas City Art Institute); M.F.A (Maryland Institute College of Art)

Rochelle N. Ziskin[1,2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ziskin); Professor of Art History; B.A. (University of Illinois-Chicago), M.A.; Ph.D. (Harvard University).

1 Members of UMKC Graduate Faculty

2 Members of UMKC Doctoral Faculty

Undergraduate

Undergraduate Degrees

Bachelor of Arts: Art History (p. 44)

Bachelor of Arts: Studio Art (p. 45)

Graduate

Graduate Degrees:

- Master of Arts: Art History (p. 47)
- Master of Arts: Studio Art (p. 48)

Bachelor of Arts: Art History

Student Learning Outcomes

1. Students graduating with a B.A. degree in Art History will:
    - Have a basic knowledge of both Western and Non-Western art history.
    - Cultivate aesthetic understanding and a life-long enthusiasm for history and the arts.
    - Develop skills and perspectives to understand art and architecture as complex cultural products.
    - Develop effective writing skills.
    - Be able to understand the context of information contained in scholarly publications.
2. Students graduating with a B.A. degree in Art History will be prepared for entry into a graduate program or the job market.

Art History Curriculum

Formal study of Art History begins with introductory survey courses. There are two courses in Western art (ART-HIST 201 and ART-HIST 202), a survey in contemporary art (ART-HIST 303), and two in non-Western art (ART-HIST 315 and ART-HIST 319). There are no prerequisites for these courses. Students are encouraged to take the survey sequence in Western art sequentially, if possible.

Lectures are intermediate-level courses and are assigned 400-level numbers. Seminars are advanced-level courses and are assigned 400- and 5000-level numbers. The prerequisite for these courses is the relevant survey course, or permission of the instructor.

Independent Study (ART-HIST 493 : Directed Studies) and Internship classes (ART-HIST 497Q) may also help fulfill Art History Electives with the approval of an Art History advisor. Enrollment in these courses is granted only by the instructor who will supervise the study.

Program Requirements

Two Western Surveys:		6
ART-HIST 201	From Cave Paintings to Cathedrals	
ART-HIST 202	From Michelangelo to Modernism	
Contemporary Survey:		3
ART-HIST 303	World Currents of Contemporary Art	
Two non-Western courses on 300- or 400- level, typically: [1]		6
ART-HIST 315	The Arts Of African and New World Cultures	
ART-HIST 319	Asian Art	
At least six 400-level courses in at least two different art historical areas, chosen in consultation with department advisor.		18
At least three studio arts courses. Recommended classes include:		9
ART 112	Foundation Drawing	
ART 114	Foundation Digital Design	
ART 206	Photography I	
ART 235	Digital Imaging I	
Capstone Course:		3
ART-HIST 482	Scope & Methods Of Art History	
Foreign Language:		
Proficiency equivalent to successful completion of third semester at college level in one foreign language (UMKC, equivalent of completing 211).		
Total Credits		45

[1] A 400-level course in non-Western art can count for this requirement OR towards the six 400-level courses requirement, but not both).

Grade-point Average Requirements

All art history majors are required to maintain a minimum of 2.5 GPA in art history courses.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Studio Art

Student Learning Outcomes

1. Students graduating with a B.A. degree in Studio Art will:
   - Have the basic skills for the practice of art in one or more specialized disciplines.
   - Develop creative, conceptual and technical skills in a variety of visual media to produce work that can effectively contribute to the larger creative community.
   - Develop professional skills appropriate to the discipline, including awareness of the latest advances in adapting technology for the creation of works of art, including appropriate software and hardware skills.

- Communicate ideas visually, verbally, and through the written word.
- Recognize and understand the relevance of global art history to the current practice of art.

2. Students graduating with a B.A. degree in Studio Art will be prepared for entry into a professional school, a graduate program or the job market.

Studio Art Curriculum

Formal study in Studio Art begins with foundation courses: ART 112, ART 114, ART 121, and ART 131. There are no prerequisites for these courses and non-majors and exploratory students are also encouraged to take foundation courses. They cannot be taken for graduate credit.

Intermediate and advanced courses typically require the foundation series and possibly other prerequisites. The areas of study are digital imaging, drawing, motion design, graphic design, photography, printmaking, and painting.ART 495: Special Topics may be offered that can count towards the Studio Electives. Recent Special Topics include screenprinting, art book publishing, and advertising campaigns (with Communication Studies).

Independent Study (ART 493: Directed Projects) and Internship classes (ART 498O and ART 498Q) may also help fulfill Studio Electives with the approval of a Studio Art advisor. Enrollment in these courses is granted only by the instructor who will supervise the study. Graduate credit is possible only when a student is admitted to graduate study.

Another important part of the Studio Art program is the Junior Portfolio Reviews that happen each spring semester. Students gather around 10 of their strongest pieces to present to a group of faculty and guests for a comprehensive critique of their work with suggestions for areas of growth, classes to take before graduating, and more. Many students benefit from this process so much that they do it again as a senior.

Program Requirements

Formal study in Studio Art begins with foundation courses. These are:		12
ART 112	Foundation Drawing	
ART 114	Foundation Digital Design	
ART 121	Foundation 2D Design	
ART 131	Foundation 3D Design	
Studio Electives selected from at least 3 different areas: digital imaging, drawing, motion design, graphic design, photography, printmaking, and painting. [1]		24
At least 12 credit hours from Studio Electives must be on the 300 or 400 level.		
Capstone:		3
ART 499WI	Senior Seminar	
or ART 423WI	Design Seminar	
Art History requirements		12
Select three from 200- and 300-level survey courses:		
ART-HIST 201	From Cave Paintings to Cathedrals	
ART-HIST 202	From Michelangelo to Modernism	
ART-HIST 303	World Currents of Contemporary Art	
ART-HIST 315	The Arts Of African and New World Cultures	
ART-HIST 319	Asian Art	
One 400-level Art History course (with appropriate 200- or 300-level prerequisite).		
Total Credits		51

[1] Up to 6 additional credit hours in Art History can be counted toward the 24 Studio Elective credit hours with preapproval from a studio faculty advisor.

Grade-point Average Requirements

All studio art majors are required to maintain a minimum 2.5 GPA in studio art courses.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Master of Arts: Art History

Applications for Graduate Study

Applications for the M.A. degree in Art History are reviewed continually during the calendar year. However, students must have their applications completed by November 15 for admission for the spring semester and by June 15 for the fall term. To be considered for graduate assistantships (GTAs) and fellowships during the following academic year, and for maximum choice in coursework for the first semester, fall candidates need to have their application submitted by February 1.

How to Apply for the M.A. in Art History:

- To Office of Admissions (http://www.umkc.edu/admissions)
  - Application ($35 online, $45 paper)
  - Transcripts
- To Department of Art & Art History (http://info.umkc.edu/art/about/contact), Attention: Graduate Advisor in Art History
  - Writing Sample
  - Two letters of recommendation
  - Personal statement, addressing: 1) Reason(s) for pursuing admittance into graduate-level study, 2) Reason(s) for choosing UMKC's Department of Art & Art History as educational institution, 3) Ultimate professional ambitions, and 4) Why you should be selected for the M.A. program.

Art History Classification of Entering Students

Admission to the graduate program in art history requires a B.A. or equivalent degree and sufficient undergraduate study in art history to provide a sound foundation for advanced study. Ideally, this foundation would include a solid grounding in the history of Western art, some study of non-Western art, and sufficient advanced-level work to indicate that a student can succeed in the specialized or topical courses and seminars associated with graduate study. Admission review is done by the graduate advisor in Art History.

The applicant should have, in addition to a good general education in the humanities, 18 to 24 credit hours in art history with a grade-point average of 3.0 or better. Students with fewer hours and/or a restricted exposure to other humanities and fine arts courses, or having inconsistent grades, are eligible for admission to the graduate program on the basis of recent evidence indicating the potential for success, such as performance in 400-level courses, or through papers and exams for courses elsewhere. If there are some deficiencies in preparation that can be met readily by one or two undergraduate survey courses, a student will be admitted to graduate study. However, the survey courses must be taken for undergraduate credit before the student is allowed to take the qualifying examination that is required for advancement to degree candidacy.

Applicants lacking the minimum preparation deemed necessary for admission to graduate-level study in art history may make up their deficiency through enrollment in selected undergraduate courses offered by the department. These will be determined after consultation with a faculty advisor and in all cases must include 400-level work. Progress will be reviewed at the end of each term, and if warranted, reclassification to graduate status will occur prior to the start of the next semester.

Student Learning Outcomes

1. Students graduating with an MA in Art History will:

- Have an advanced knowledge of specialized areas of art history.
- Cultivate independent and original thinking.
- Employ comprehensive communication through written, oral, and technological methods.
- Express aesthetic appreciation of art and architecture.
- Explain works of art and architecture as complex cultural products.

2. Students graduating with an MA in Art History will be prepared for entry into a PhD program or the job market.

Requirements for Graduation

All degree candidates are required to take a minimum of 30 graduate credits, including ART-HIST 5501, and a maximum of 6 credit hours of ART-HIST 5599. Other courses are determined in consultation with the advisor and the supervising committee for the thesis.

Special Requirements

Requirements for Retention

A student must maintain a graduate grade-point average of 3.0. In extenuating circumstances, a student may petition the Department of Art and Art History to be continued as a graduate student for one term (or 6 hours) if the graduate GPA falls below 3.0. The deficiency must be remedied during the approved probationary period if the student is to be continued.

Reading Knowledge in Foreign Language

M.A. students must acquire a reading knowledge of one foreign language considered essential to advanced study in art history before beginning the M.A. thesis. Students are encouraged to acquire this skill as early as possible in their graduate studies, so they may use it in graduate seminars and research papers. This requirement is most often fulfilled by three semesters at the college level, with a grade of B or better in the third semester. Students who believe they have acquired a sufficient reading knowledge, but have not completed three semesters of language training at the college level, may petition the graduate advisor to take a reading exam in that language. Normally, however, three semesters of college-level study are necessary to achieve sufficient mastery.

Thesis

The final requirement for the M.A. degree in Art History is the M.A. thesis, which is normally begun two semesters before a student completes the degree. The thesis is an approved project that demonstrates capacity for independent work of a suitably high level of proficiency, one utilizing the primary sources available on the topic in English and in the foreign language that meets the program requirement, as well as the major relevant secondary sources. This project, selected in conjunction with the thesis advisor most often develops from a seminar paper, and its presentation must conform to the requirements of the School of Graduate Studies.

Summary of Forms

1. Master's Degree Program of Study – filled out by the student and the graduate advisor/principal advisor in the department.
2. Recommendation for Appointment of Advisor or Supervisor/Examination Committee form – filled out by the student and the graduate advisor in the department.
3. Report of Results of Examination for Master's Degree Students Form – filled out by the chair of the thesis committee and mailed to the Office of Graduate Records.
4. Intent to Graduate – filled out by the student at the Records Office in the Administrative Center (no faculty signature required)
5. Thesis Review/Examination – filled out by the chair of the thesis committee and mailed to the Office of Graduate Records.

Master of Arts: Studio Art

M.A. in Studio Art Overview

For Studio Art, the UMKC Department of Art and Art History only offers the Master of Arts Degree, which is not the terminal degree in studio art and will not qualify candidates to teach on the University level. The M.A. in studio art has the following emphasis areas: painting, drawing, printmaking, photography, digital imaging, motion design, and graphic design. Most students will take the majority of their coursework as independent study classes under the direction of one faculty member in the graduate student's area of emphasis. Students must decide which single emphasis area they plan to pursue before they apply for graduate school in the Department of Art and Art History.

Applications for Graduate Study in Studio Art

Application deadline is February 1 for the Fall semester and October 15 for the Spring semester. There is no summer semester admission.

How to Apply:

- To Office of Admissions (http://www.umkc.edu/admissions)
  - Application ($35 online, $45 paper)
  - Transcripts
- To Department of Art & Art History, Attention: Graduate Advisor in Studio Art
  - Portfolio of recent work on CD is with 15-20 images (jpeg/bmp/QT/AVI/Flash)
  - Listing the images' titles, dates, sizes and media (hard-copy)
  - CV/resume
  - Personal statement, addressing:
    - i Reason(s) for pursuing admittance into graduate-level study,
    - ii Reason(s) for choosing UMKC's Department of Art & Art History as educational institution,
    - iii Focus of art work,
    - iv Ultimate professional ambitions, and
    - v Why you should be selected for the M.A. program.
  - Three letters of recommendation from art professionals or professors

Applications are reviewed by a committee of Studio Art faculty.

Student Learning Outcomes

1. Students graduating with an M.A. in Studio Art will:

- Have an advanced knowledge of a specialized area of studio art.
- Develop creative, conceptual and technical skills in a variety of visual media to produce work that can effectively contribute to the larger creative community.
- Communicate ideas visually, verbally, and through the written word.
- Recognize and understand the relevance of global art history to the current practice of art.
- Develop professional skills.
- Be proficient in adapting technology for the creation of works of art, including computer skills and digital photography.

2. Students graduating with an M.A. in Studio Art will be prepared for entry into an M.F.A. program or the job market.

Degree Requirements

A minimum of 36 graduate credit hours is required for the M.A. degree in studio art, including a minimum of six hours of ART 5599, and three courses in Art History on the 400- or 5000-level. Additional courses are determined in consultation with the discipline advisor and the supervising thesis committee. Courses are usually three credit hours each and are offered at both the 400 and 5000 levels. Any course counted as part of the required 36-hour minimum must be taken for credit. Students may take no more than 14 hours of 400-level classes (40 percent of a 36-hour program). Any 400- or 5000-level course taken for graduate credit must be completed with a grade of B- (2.7) or better in order to be counted toward the M.A. degree.

Each student's program of study is designed in consultation with the lead professor in the primary discipline, who will be their principal art advisor. There is no general distribution requirement within the studio courses taken, but the student's choice and mix of classes needs to be approved by their art advisor. Courses in disciplines outside the Art and Art History department may be applied toward the degree with the preapproval of the student's principal art advisor.

Thesis Committee

After completion of an 18 to 21-hour minimum, the student selects a thesis committee. Normally, the faculty member in the student's major studio discipline is requested to act as chair of the thesis committee in addition to two other faculty members who have been asked by the student to serve on the committee. The chair of the thesis committee must be on the graduate faculty. Members of the thesis committee may include other studio faculty, an art historian or a faculty member from another department within the University. Typically, all three members of the thesis committee are faculty with whom the student has had some association. At this stage, the thesis chair consults with the student, who then submits a Master's Degree Program of Study form to the principal graduate advisor. This form is forwarded to the chair of the Department of Art and Art History, the dean of The College of Arts and Sciences and the Graduate Office.

M.A. Qualifying Exam (Review)

At some appropriate time after the completion of 18 to 21 hours toward the M.A. degree and before the beginning of the thesis, a review of the student's studio work by the chosen thesis committee is held. The purpose of this review is to determine the readiness of the student to engage in thesis-level work. For this review, the candidate presents a body of studio work representing both their present accomplishments and the potential for a thesis project. The student will also submit a prospectus for the intended thesis work. In an oral discussion with the thesis committee, student will explain the concept of the thesis and how this work will contribute to their continued art production. The committee will ask questions of the student and assess the progress of the work in order to determine whether the student should be allowed to advance to the final hours of class work leading to thesis. The thesis committee must approve the research plan and has a right to refuse it if the student does not have an available thesis project. If the prospectus is refused, the committee will make suggestions on how to improve the thesis proposal and a second review will be scheduled at a future date. Additional coursework may be recommended.

Thesis Procedure

The student plans a body of work to pursue a clearly identified artistic concept in consultation with his/her committee. An Appointment of Thesis Committee form with the names of the student's committee members is filled out by the student in consultation with the departmental principal graduate studio advisor and sent to the associate dean for graduate studies of the College of Arts and Sciences as well as to the Office of Graduate Faculties and Research. If, at any point during the thesis process, the student's committee is changed, an updated version of the form must be resubmitted. It is the responsibility of students to notify the principal graduate studio advisor of any changes in the composition of their committee, allowing the proper forms to be corrected.

At the beginning of the final semester of the student's program of study, he or she must fill out Intent to Graduate form, available online and from the Office of Registration and Records. This form enables the student to be placed on the graduation roll and on a mailing list to receive materials concerning graduation and other important information. If, for some reason, the student does not graduate that semester, he or she is required to file another form the subsequent semester. The deadline for the Intent to Graduate form is listed in the front part of each semester's catalog of courses.

Review of Thesis

(Defense/Public Manifestation of Work)
Upon completion of the thesis body of work, the student presents the work to his or thesis committee for final review and approval. This review must be in the form of a public exhibit or performance. This exhibit can be held in the UMKC Gallery of Art or any other public location within the Kansas City metropolitan area.

Summary of Forms

1. Master's Degree Program of Study – filled out by the student and the graduate advisor/principal advisor in the department.
2. Recommendation for Appointment of Advisor or Supervisor/Examination Committee form – filled out by the student and the graduate advisor in the department.
3. Report of Results of Examination for Master's Degree Students Form – filled out by the chair of the thesis committee and mailed to the Office of Graduate Records.
4. Intent to Graduate – filled out by the student at the Records Office in the Administrative Center (no faculty signature required)
5. Thesis Review/Examination – filled out by the chair of the thesis committee and mailed to the Office of Graduate Records.

Minor in Art History

Minor in Art History Requirements

ART-HIST 201	From Cave Paintings to Cathedrals	3
ART-HIST 202	From Michelangelo to Modernism	3
ART-HIST 303	World Currents of Contemporary Art	3
Additional courses selected with an Art History advisor at the 300- or 400- level.		9
Total Credits		18

Minor in Studio Art

Minor in Studio Art Requirements

Three of four foundation courses:		9
ART 112	Foundation Drawing	
ART 114	Foundation Digital Design	
ART 121	Foundation 2D Design	
ART 131	Foundation 3D Design	
Additional courses selected with a Studio Art advisor		12
9 hours should be at the 300- or 400-level.		
Total Credits		21

Bioethics

Online Degree Certificate Program in Bioethics

The Department of Philosophy, in conjunction with the Department of History and the Sirridge Office of Medical Humanities and Bioethics, offers an online graduate certificate program in Bioethics. The program provides a foundation in the history and theory of bioethics, a deeper understanding of healthcare law and policy, and the skills necessary to engage in ethics consultation and case review. Students who complete the program receive training in ethical issues related to clinical care and research involving human subjects.

Students working toward an Interdisciplinary Ph.D., Master of Arts in Liberal Studies, or any other graduate degree program will be able to complete the required courses and receive a graduate level certificate in bioethics. In addition to students completing other degrees at UMKC, students with appropriate academic credentials may apply solely to the certificate program.

Office Location:
Cockefair Hall, Room 222
5121 Rockhill Road
(816) 235-1331
Fax: (816) 235-2819
philosophy@umkc.edu

http://cas.umkc.edu/philosophy

Mailing Address:
University of Missouri-Kansas City
Department of Philosophy
CH 222
5100 Rockhill Road
Kansas City, MO 64110-2499

Faculty

Faculty

Jeremy Garrett, Ph.D., Adjunct Assistant Professor of Philosophy

Clancy Martin, Ph.D., Professor, Department of Philosophy

Lynda Payne, Ph.D., R.N., Sirridge Missouri Endowed Professor in Medical Humanities and Bioethics; Professor, Department of History

Marilyn Pesto, J.D., R.N., Director, Sirridge Office of Medical Humanities and Bioethics

Diane Plantz, M.D., Emergency Department, Children's Mercy Hospital

Wayne Vaught, Ph.D., Professor of Philosophy, Medicine and Bioethics; Dean, College of Arts and Sciences; Program Director, Online Degree Program in Bioethics

Graduate

- Graduate Certificate in Bioethics (p. 51)

Graduate Certificate in Bioethics

Graduate Certificate in Bioethics

The Department of Philosophy, in conjunction with the Department of History and the Sirridge Office of Medical Humanities and Bioethics, offers an online graduate certificate program in Bioethics. The program provides a foundation in the history and theory of bioethics, a deeper understanding of healthcare law and policy, and the skills necessary to engage in ethics consultation and case review. Students who complete the program receive training in ethical issues related to clinical care and research involving human subjects.

The goal of the online certificate program in bioethics is to provide health professionals with the knowledge and skills necessary to effectively resolve ethical dilemmas they encounter in clinical practice.

Students working toward an I.Ph.D., Master of Arts in Liberal Studies, or any other graduate degree program will be able to complete the required courses and receive a graduate level certificate in bioethics. In addition to students completing other degrees at UMKC, students with appropriate academic credentials may apply solely to the certificate program.

Student Learning Outcomes:

By the end of the program the student will

- Identify key historical events in bioethics
- Identify foundational principles of bioethics
- Understand key legal cases and concepts
- Have an understanding of health policy and ethics
- Be able to identify and utilize resources in bioethics
- Be able to effectively identify and resolve ethical conflicts in healthcare

Program Requirements

The certificate program consists of four courses, 3 credit hours each (12 credit hours total). They include PHILOS 5550 History and Philosophy of Bioethics, PHILOS 5551 Healthcare Law and Policy, PHILOS 5552 Clinical Ethics Case Consultation, and PHILOS 5690 Research in Selected Fields: Graduate Study.

Black Studies

Black Studies Office

5305 Holmes Road
Phn: (816) 235-2636
Fax: (816) 235-5596
umkcblackstudies@umkc.edu
http://cas.umkc.edu/blackstudies

Mailing Address:
5100 Rockhill Road
Kansas City, MO 64110

Program Description

The UMKC Black Studies Program is an academic unit that holistically investigates the experience, contributions and conditions of African-descent people in the formation and evolution of American society and culture. In accordance with these objectives, our focus extends to an examination of the active role of Africa and the African Diaspora in global society and human culture. The Black Studies Program – through both a social science and a humanities orientation – provides a unique and rich approach to exploring and comprehending the human experience.

The Black Studies Program is focused on the acquisition and dissemination of an instructive body of knowledge. The curriculum prepares students with a critical skillset that will enable them to pursue diverse employment opportunities. The Program makes available to students the foundational research for undergraduate, graduate and professional training in the discipline of Black Studies.

The Program currently offers undergraduate courses that can lead to a minor in Black Studies. Students can also obtain an Emphasis Area in Black Studies through the Bachelor of Liberal Arts Program. Black Studies offers students from any graduate discipline coursework toward a Graduate Certificate. In addition, coursework is available at the graduate level leading to an Informal Emphasis in Black Studies under the Master of Arts in Liberal Studies Degree (http://cas.umkc.edu/mals).

Faculty

Program Director:
Adrienne Walker Hoard, EdD

Program Advisors:

Dr. Adrienne Walker Hoard - **Undergraduate**

Dr. Clovis E. Semmes - **Graduate**

Professor(s):

Adrienne Walker Hoard, MFA, EdD

- Art/Studio Art (Color Theory, African/African American Art), Art-History, African American Art-History and Black Studies.

Clovis E. Semmes, PhD

- Black Studies and Sociology (African American Business Development, the Black Family, Critical Health Issues).

Associate Professor:

Jacqueline E. Wood, PhD

- Black Studies and English (Drama, Literature, Poetry).

Visiting Professor:

Veronica N. Wilson-Tagoe, PhD

- Black Studies, Black Atlantic Studies, Gender Studies, Literature (African, African American, Black British, British, Caribbean and Comparative), Literary Theory and Postcolonial Studies.

Library Co-Liaison(s):

Tracey Hughes, MISLT, MALS

- Library Instruction and Reference

Gloria Tibbs, MLS

- Collection Development and Reference

Administrative Assistant:

LaDonna McCullough

Undergraduate

The Black Studies Program at UMKC provides instruction for undergraduate students to develop proficiency in written and oral communications regarding the study of African descent people in the Americas and in the African Diaspora. Our curriculum offers in-depth knowledge regarding an African perspective on political systems, humanities contributions and social science research in higher education. While contributing to the general education requirements of UMKC in both the humanities and the social sciences, our program serves to enhance the global literacy and professional development of our undergraduate populations.

Undergraduate Degrees:

- Bachelor of Liberal Arts: Black Studies Emphasis (p. 53)

Undergraduate Minor:

- Minor in Black Studies (p. 58)

Graduate

The Black Studies Program provides critical skill sets in written and oral communication, research, analysis, theory building, multicultural understanding and global awareness. Through a holistic examination of the African American experience, we are committed to enhancing general education and to promoting professional development as well as the training of scholars in the field.

Graduate Degrees:

- Master of Liberal Studies: Black Studies Informal Emphasis (p. 56)

Graduate Certificates:

- Certificate in Black Studies (p. 55)

Bachelor of Liberal Arts: Black Studies Emphasis

Student Learning Outcomes:

1. Demonstrate a holistic understanding of the experience, contributions, and condition of African-descent peoples in the evolution and formation of American society and culture.
2. Illustrate a basic understanding of the active role of Africa and the African Diaspora in global society and human culture.
3. Apply Black Studies curriculum as a critical tool to understand the human experience generally.
4. Identify the breadth and depth of perspectives that give respect and voice to the Black experience.
5. Apply social science and humanistic approaches to examine human society and culture.
6. Demonstrate advanced skills in critical thinking, written and oral communication, research, analysis, theory building, multicultural understanding, and global awareness.

Program Requirements:

The emphasis area in Black Studies assists undergraduate students who want to obtain graduate and professional degrees in a variety of fields (master's degrees, Ph.D.'s, law, public health, counseling, social work, educational administration, business, journalism, social work, medicine, library or information science, public policy, public administration, and so on) where specialized knowledge of the broad-based experiences and perspectives of African descent peoples would be useful. At the same time, students learn skill sets that are applicable to a wide variety of circumstances, which prepare them for entry-level positions in private industry, government, and public or non-profit agencies.

Students must take **30 hours of Black Studies courses** to complete the emphasis area in Black Studies under the Bachelor of Liberal Arts Degree. A minimum of 24 hours of Black Studies courses must be at the 300 or 400 level or above. A minimum of 24 credit hours must be earned at UMKC.

Students declaring the Black Studies Emphasis under the Bachelor of Arts in Liberal Studies must meet with the Black Studies undergraduate adviser (http://cas.umkc.edu/blackstudies/faculty.asp) to begin a plan of study prior to enrolling in courses.

Twelve of the 30 hours of coursework must include the ***Core Black Studies*** courses:

BLKS 201	Global Systems and the Origins of Black American Culture and Institutions	3
BLKS 302	Conceptual and Theoretical Foundations in African American Studies	3
BLKS 403WI	Writing for African American Studies	3
BLKS 404	Research Seminar	3

Beyond the 12 hours of required core courses, students must pursue either a **humanities focus** in Literature and Culture or a **social science focus** in Institutions and Social process (within the field of Black Stuides), two focus areas already existing as divisions in the BLA degree.

Humanities Focus—Literature and Culture (15 credits):

- Under this focus the Black Studies emphasis will require four courses (12 credits) from the humanities track and one course (3 credits) from the social science track.

Social Science Focus—Institutions and Social Process (15 credits):

- Under this focus the Black Studies emphasis will require four courses (12 credits) from the social science track and one course (3 credits) from the humanities track.

Examples of elective undergradute courses in Black Studies are:

BLKS 315	The Arts of African and New World Culture (Humanities Focus)	3
BLKS 320	Critical Health Issues in Black Communities (Social Science Focus)	3
BLKS 321	The Black Family and Male-Female Relationships (Social Science Focus)	3
BLKS 331	African American Literature I (Humanities Focus)	3
BLKS 332WI	African American Novel (Humanities Focus)	3
BLKS 333	African American Literature II (Humanities Focus)	3
BLKS 325	African American Business Development (Social Science Focus)	3
BLKS 334	From Field Shout to Hip Hop: African American Poetic Traditions (Humanities Focus)	3
BLKS 335	Stages Toward Freedom: African American Dramatic Traditions (Humanities Focus)	3
BLKS 337	The Civil Rights Movement in African American Literature (Humanities Focus)	3
BLKS 338	Women’s Literature in Africa and the African Diaspora (Humanities Focus)	3

Examples of **Black Studies, BLKS 5580 Special Topics** courses with a **Humanities Focus** are:

- African American Art History, Pt. 1: 1600-1960
- African American Art History, Pt. 2: 1960-Present Day
- African American Experience in Literature (1773-1960)
- African American Migrations in Literature
- Africana Arts Survey: Symbols and Codes in the Diaspora
- Contemporary African American Literature
- Film Adaptations in African American Literary Text
- Introduction to Caribbean Literature and Film

Examples of **Black Studies, BLKS 5580 Special Topics** courses with a **Social Science Focus** are:

- From Vaudeville to Rhythm and Blues
- Hip-Hop’s Influence on African Americans and American Society
- Kansas City and the Black Experience
- Race, Class and Justice
- Racial and Ethnic Relations

Students are strongly encouraged to take the remaining **3 hours of coursework** as an **approved community engagement project/research** under **Directed Study**, BLKS 490 or through **Internship**. Because faculty consent is required in order to enroll in the Directed Study or Internship options, students should begin building an academic relationship with the Black Studies faculty member whose academic background can best guide them.

Students cannot earn credit toward the Emphasis Area in Black Studies with a grade below a "C" in a Black Studies course.

To graduate with an Emphasis Area in Black Studies, students must achieve a minimum grade-point average of 2.0 in all courses accepted toward the emphasis area.

For more information on the Black Studies Program, please visit http://cas.umkc.edu/blackstudies/.

Tools for Planning and Fulfilling Academic Requirements

UMKC’s Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student’s evaluation of progress and major “fit”. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Graduate Certificate in Black Studies

Graduate Certificate in Black Studies:

The Black Studies Program at the University of Missouri-Kansas City offers a graduate certificate in Black Studies. The certificate permits students to augment their graduate and professional work with specialized training in Black Studies.

Black Studies is a liberal arts specialty that typically draws from multiple fields of inquiry. The graduate certificate in Black Studies advances students' awareness of the multidisciplinary and trans-disciplinary character of the field, key theoretical issues that form the parameters of this specialty, and important tools for producing knowledge in Black Studies. The graduate certificate familiarizes students with the expansive character of existing knowledge in Black Studies and shows how this knowledge can be used to understand the human experience generally.

The graduate certificate offers a coherent and focused course of study for any graduate student. The certificate also prepares students to seek advanced degrees with an emphasis is Black Studies if they choose to do so. *Applicants seeking to enroll in the graduate certificate may do so as a free-standing option or within a UMKC degree program.*

Admission Criteria:

To be admitted to the graduate certificate program in Black Studies, students must be admitted as a graduate student to the University of Missouri-Kansas City and have an overall grade-point average of 3.25. They must have had an acceptable introductory course in the field of Black Studies (which may come from programs or departments of Black Studies, African American Studies, African Studies, Pan African Studies, and the like) from an accredited college or university.

If a student has not had an introductory course in the field, he or she must pass BLKS 201, with a grade of C or better.

Applicants whose undergraduate GPA is less than 3.25 may be considered for admission upon petition to the **Graduate Admission Committee** for the Black Studies Program.

Prospective students applying for admission must:

1. Complete the online UMKC Graduate Application.
2. Submit official transcripts from an accredited institution showing the awarding of an undergraduate degree. Transcripts are considered official if they are received in a sealed envelope from the institution or sent electronically to the UMKC Office of Admissions (admit@umkc.edu).
3. Provide an Academic Writing Sample.
4. Provide three letters of recommendation to the **Black Studies Graduate Admission Committee** at the **Black Studies Program, 5305 Holmes Road, Kansas City, Missouri 64110**

The **priority deadline** to apply for **Fall Semester** is **March 1**. The **final deadline** to apply for **Fall semester** is **August 1**. The **deadline** to apply for **Spring semester** is **November 1**.

Student Learning Outcomes

1. Demonstrate knowledge of the historical development of African American studies as an academic field.
2. Be able to review and evaluate the work of key scholars in the field of African American studies.
3. Demonstrate the ability to apply foundational ideas in African American studies in the interpretation of historical, political and social phenomena.

Program Requirements:

To earn the graduate certificate in Black Studies students must complete 18 hours of graduate course work in Black Studies, which does not include **BLKS 201** . At least 12 hours must be at or above the 5500 level. Students must maintain a 3.0 grade-point average while enrolled. The requirements for the certificate must be completed within two (2) years. Students should seek advising from the Black Studies Program graduate advisor prior to beginning a *Plan of Study* and to make sure they have met the requirements for the certificate.

The 18 hours of course work must include the three core courses:

BLKS 5502	Conceptual and Theoretical Foundations in African American Studies (must be taken during the first year)	3
BLKS 5503	Writing for African American Studies (must be taken during the first year; fulfills MALS introductory seminar requirement)	3
BLKS 5504	Research Seminar (must be taken during the final year; fulfills MALS capstone seminar requirement)	3

Students who may have taken undergraduate versions of these courses must complete them at the required graduate level.

Beyond the three required core courses, students must complete **6 hours of electives** in Black Studies, which includes any graduate level course with a Black Studies prefix (BLKS).

Examples of elective graduate courses in Black Studies are:

BLKS 5520	Critical Health Issues in Black Communities (Social Science Focus)	3
BLKS 5521	The Black Family & Male-Female Relationships (Social Science Focus)	3
BLKS 5525	African American Business Development (Social Science Focus)	3
BLKS 5534	From Field Shout to Hip Hop: African American Poetic Traditions (Humanities Focus)	3
BLKS 5535	Stages toward Freedom: African American Dramatic Traditions (Humanities Focus)	3
BLKS 5537	The Civil Rights Movement in African American Literature (Humanities Focus)	3

Electives may also be **Special Topics courses, BLKS 5580** . At least one of the electives courses may have a **humanities focus**, and at least one of the elective courses may have a **social science focus**.

Examples of **Black Studies, Special Topics (BLKS 5580)** courses with a **Humanities Focus** are:

- African American Art History, Pt. 1: 1600-1960
- African American Art History, Pt. 2: 1960-Present Day
- African American Experience in Literature (1773-1960)
- African American Migrations in Literature
- Africana Arts Survey: Symbols and Codes in the Diaspora
- Contemporary African American Literature
- Film Adaptations in African American Literary Text
- Introduction to Caribbean Literature and Film

Examples of **Black Studies, Special Topics (BLKS 5580)** courses with a **Social Science Focus** are:

- From Vaudeville to Rhythm and Blues
- Hip-Hop's Influence on African Americans and American Society
- Kansas City and the Black Experience
- Race, Class and Justice
- Racial and Ethnic Relations

Students are strongly encouraged to take the **remaining 3 hours** as an **approved community engagement project/research** under **Directed Study**, BLKS 5590, or **Internship**, BLKS 5580. Because faculty consent is required in order to enroll in the Directed Study or Internship options, students should begin building an academic relationship with the Black Studies faculty member whose academic background can best guide them.

To learn more about the **Graduate Focus in Black Studies**, please click here (http://cas.umkc.edu/blackstudies/pdfs/BLKS-graduate-certificate.pdf). For more information on the Black Studies Program, please click here (http://cas.umkc.edu/blackstudies).

Master of Arts in Liberal Studies: Black Studies Informal Emphasis

Admission Requirements:

Students may be admitted to the Informal Emphasis in Black Studies if they have a baccalaureate degree in Black Studies or an equivalent degree from an accredited college or university with an overall grade-point average of 3.25. Applicants whose undergraduate GPA is less than 3.25 may be considered for admission upon petition to the **Graduate Admission Committee** for the Black Studies Program.

Students who have a baccalaureate degree with an overall GPA of 3.25 or better and who did not major in Black Studies may be conditionally admitted to the Program upon consultation with the program's graduate adviser (http://cas.umkc.edu/blackstudies/faculty.asp) and enrollment into the Black Studies introductory course, BLKS 201.

Upon satisfactory completion of the above course, the student must receive final approval from the Black Studies Director for full admission to the Informal Emphasis Area.

Prospective students applying for admission must submit, in addition to the UMKC application, the following documents:

1. A "Statement of Purpose" in the form of a personal essay of approximately 1,000 words outlining the focus area the applicant wishes to pursue. The statement should include the student's reasons for applying to the Program along with their academic plans and goals.

2. An Academic Writing Sample.
3. 3 Letters of Recommendation.
4. Official transcripts from an accredited institution showing the awarding of an undergraduate degree. Transcripts are considered official if they are received in a sealed envelope from the institution or sent electronically to the UMKC Office of Admissions (admit@umkc.edu).

These documents (except the UMKC application) should be sent directly to the Master of Arts in Liberal Studies Program. The documents can be sent in print form to: **Ms. Marsha Carothers, Research Associate, MALS Program, 106 Cockefair Hall, UMKC, 5100 Rockhill Road, Kansas City, MO 64110.**

Electronic copies may also be submitted as either Word or PDF attachments to an email to carothersm@umkc.edu.

Applications that indicate Black Studies as the focus area will be forwarded to the respective program for review by the Graduate Admission Committee for Black Studies.

Prior to submitting an application, prospective students should speak with the Black Studies graduate advisor (http://cas.umkc.edu/blackstudies/faculty.asp).

The **priority deadline** to apply for **Fall Semester** is **March 1**. The **final deadline** to apply for **Fall semester** is **August 1**. The **deadline** to apply for **Spring semester** is **November 1**.

Student Learning Outcomes:

1. Demonstrate knowledge of the historical development of African American studies as an academic field.
2. Be able to review and evaluate the work of key scholars in the field of African American studies.
3. Demonstrate the ability to apply foundational ideas in African American studies in the interpretation of historical, political and social phenomena.

Program Requirements:

The degree is a 36 credit hour program. Students who elect to participate in the Black Studies Informal Emphasis area should begin by enrolling in the Black Studies core courses, BLKS 5502 and BLKS 5503 (fulfills MALS introductory seminar requirement) and during their last year of the program, students should enroll in BLKS 5504 (fulfills MALS capstone seminar requirement).

Thesis Option

A written thesis is not required, however students who have a particular interest that lends itself to detailed research are especially encouraged to consider the thesis option. Students who wish to complete a thesis project may apply three credit hours from BLKS 5599 toward their degree requirements. With the thesis option, the students must select a Black Studies faculty member as their thesis advisor who will direct the plan of study and research.

Plan of Study

Students who elect to earn an Informal Emphasis in Black Studies under the Master of Arts in Liberal Studies Program are strongly encouraged to meet with the Black Studies graduate adviser (http://cas.umkc.edu/blackstudies/faculty.asp), prior to enrolling in courses, in order to begin their **Plan of Study worksheet**. Graduate students should complete the three core courses listed below. *Please note, that those students who may have taken undergraduate versions of the core courses must complete them at the graduate level.*

The three core courses are:

BLKS 5502	Conceptual and Theoretical Foundations in African American Studies (must be taken during the first year)	3
BLKS 5503	Writing for African American Studies (must be taken during the first year; fulfills MALS introductory seminar requirement)	3
BLKS 5504	Research Seminar (must be taken during the final year; fulfills MALS capstone seminar requirement)	3

Students should work with the Black Studies graduate adviser (http://cas.umkc.edu/blackstudies/faculty.asp), prior to the start of each semester, in order to review their **plan of study worksheet** and make sure they are accurately fulfilling the additional **27 hours of elective** course work that is relevant to the field. Recommended courses include all graduate-level courses with a Black Studies prefix and other courses approved by the Director of the Black Studies Program.

Examples of elective graduate courses in Black Studies are:

BLKS 5520	Critical Health Issues in Black Communities	3
BLKS 5521	The Black Family & Male-Female Relationships	3
BLKS 5525	African American Business Development	3
BLKS 5534	From Field Shout to Hip Hop: African American Poetic Traditions	3

BLKS 5535	Stages toward Freedom: African American Dramatic Traditions	3
BLKS 5537	The Civil Rights Movement in African American Literature	3

Electives may also be Special Topics courses, BLKS 5580, or the Research Thesis , BLKS 5599. Students are encouraged to take elective courses in both the humanities and the social sciences.

Examples of **Black Studies, Special Topics (BLKS 5580)** courses with a **Humanities Focus** are:

- African American Art History, Pt. 1: 1600-1960
- African American Art History, Pt. 2: 1960-Present Day
- African American Experience in Literature (1773-1960)
- African American Migrations in Literature
- Africana Arts Survey: Symbols and Codes in the Diaspora
- Contemporary African American Literature
- Film Adaptations in African American Literary Text
- Introduction to Caribbean Literature and Film

Examples of **Black Studies, Special Topics (**BLKS 5580**)** courses with a **Social Science Focus** are:

- From Vaudeville to Rhythm and Blues
- Hip-Hop's Influence on African Americans and American Society
- Kansas City and the Black Experience
- Race, Class and Justice
- Racial and Ethnic Relations

Students are strongly encouraged to take the remaining **3 hours of course work** as an **approved community engagement project/research** under the **Directed Study**,BLKS 5590 or through **Internship**, BLKS 5580. Because faculty consent is required in order to enroll in the Directed Study or Internship options, students should begin building an academic relationship with the Black Studies faculty member whose academic background can best guide them.

To learn more about the **Black Studies Informal Emphasis**, please click here (http://cas.umkc.edu/blackstudies/pdfs/RecommendedProgramMALSRevised.pdf). For more information on the **Master of Arts in Liberal Studies Degree**, please click here (p. 187).

Minor in Black Studies

Student Learning Outcomes

1. Demonstrate a holistic understanding of the experience, contributions, and condition of African-descent peoples in the evolution and formation of American society and culture.
2. Illustrate a basic understanding of the active role of Africa and the African Diaspora in global society and human culture.
3. Apply Black Studies curriculum as a critical tool to understand the human experience generally.
4. Identify the breadth and depth of perspectives that give respect and voice to the Black experience.
5. Apply social science and humanistic approaches to examine human society and culture.
6. Demonstrate advanced skills in critical thinking, written and oral communication, research, analysis, theory building, multicultural understanding, and global awareness.

Program Requirements:

Students who elect to earn a minor in Black Studies must meet with the Black Studies undergraduate advisor (http://cas.umkc.edu/blackstudies/faculty.asp) to begin a plan of study prior to enrolling in courses toward the minor.There are 18 credit hours of prescribed coursework, of which nine hours must be at the 300 or 400 levels, and a minimum of nine hours must be earned at UMKC.

The four Black Studies Core Courses are required for the minor:

BLKS 201	Global Systems and the Origins of Black American Culture and Institutions	3
BLKS 302	Conceptual and Theoretical Foundations in African American Studies	3
BLKS 403WI	Writing for African American Studies	3
BLKS 404	Research Seminar	3

To complete the minor, students must take three (3) hours of elective credit under Black Studies. Courses approved for the minor will appear under the Black Studies prefix (**BLKS**), this includes **Special Topics, BLKS 480.**

Examples of elective undergraduate courses in Black Studies are:

BLKS 315	The Arts of African and New World Culture (Humanities Focus)	3
BLKS 320	Critical Health Issues in Black Communities (Social Science Focus)	3
BLKS 321	The Black Family and Male-Female Relationships (Social Science Focus)	3
BLKS 331	African American Literature I (Humanities Focus)	3
BLKS 332WI	African American Novel (Humanities Focus)	3
BLKS 333	African American Literature II (Humanities Focus)	3
BLKS 325	African American Business Development (Social Science Focus)	3
BLKS 334	From Field Shout to Hip Hop: African American Poetic Traditions (Humanities Focus)	3
BLKS 335	Stages Toward Freedom: African American Dramatic Traditions (Humanities Focus)	3
BLKS 337	The Civil Rights Movement in African American Literature (Humanities Focus)	3
BLKS 338	Women’s Literature in Africa and the African Diaspora (Humanities Focus)	3

Examples of **Black Studies, Special Topics (BLKS 480)** courses with a **Humanities Focus** are:

- African American Art History, Pt. 1: 1600-1960
- African American Art History, Pt. 2: 1960-Present Day
- African American Experience in Literature (1773-1960)
- African American Migrations in Literature
- Africana Arts Survey: Symbols and Codes in the Diaspora
- Contemporary African American Literature
- Film Adaptations in African American Literary Text
- Introduction to Caribbean Literature and Film

Examples of **Black Studies, Special Topics (BLKS 480)** courses with a **Social Science Focus** are:

- From Vaudeville to Rhythm and Blues
- Hip-Hop’s Influence on African Americans and American Society
- Kansas City and the Black Experience
- Race, Class and Justice
- Racial and Ethnic Relations

Students are strongly encouraged to take the remaining **3 hours of coursework** as an **approved community engagement project/research** under **Directed Study**, BLKS 490 or through **Internship**. Because faculty consent is required in order to enroll in the Directed Study or Internship options, students should begin building an academic relationship with the Black Studies faculty member whose academic background can best guide them.

Students wishing to graduate with a Minor in Black Studies must achieve a minimum grade-point average of 2.0 (cannot be below a "C") in Black Studies courses.

To learn more about the Black Studies Program, please click here (http://cas.umkc.edu/blackstudies/default.asp).

Department of Chemistry

Spencer Chemistry Building (http://www.umkc.edu/virtualtour/spencer-chemistry.asp), Room 205
5009 Rockhill Road
(816) 235-**2273**
Fax: (816) 235-**5502**
umkc-chemdept@umkc.edu
http://cas.umkc.edu/chem

Mailing Address
University of Missouri-Kansas City
Department of Chemistry
SCB 205
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Kathleen V. Kilway

Professors Emeriti:
John W. Connolly, Wesley Dale, Henry A. Droll, Peter Groner, Eckhard W. Hellmuth, Y.C. Jerry Jean (Curator's Distinguished Teaching Professor Emeritus),Peter F. Lott, Layton L. McCoy, Timothy F. Thomas, Charles J. Wurrey (Curator's Distinguished Teaching Professor Emeritus and James C. Olson's Professor of Chemistry)

Curators' Professors:
Jerry R. Dias (chemistry), James R. Durig (chemistry and geosciences), Kathleen V. Kilway (chemistry and chair)

Professors:
Keith R. Buszek, Andrew J. Holder, Zhonghua Peng (principal graduate advisor), Thomas C. Sandreczki (associate dean, arts and sciences), Kenneth S. Schmitz

Associate Professors:
J. David Van Horn

Associate Teaching Professors:

Andrea Drew Gounev (coordinator: organic chemistry laboratories and undergraduate advisor), Todor K. Gounev (program director)

Assistant Professors:
Xiaobo Chen, Nathan A. Oyler, Fedor Rudakov

Assistant Teaching Professors:
Paul Barron (coordinator: general chemistry laboratories and undergraduate advisor)

Department Description

The Department of Chemistry offers programs of study leading to the bachelor of arts, bachelor of science and master of science degrees, and participates in UMKC's Interdisciplinary Ph.D. program. To the extent that each program is flexible (see degree requirements), it is possible to specialize at the graduate level in the areas of analytical, inorganic, organic, physical or polymer chemistry.

Research Facilities

Major Instrumentation

- Varian Inova 400 MHz NMR spectrometer.
- Bruker 250 MHz NMR spectrometer with solid state probe.
- IBM 200 Electron Spin Resonance Spectrometer.
- AA and ICP-AA spectrophotometers.
- CARY-1 UV-Visible dual beam spectrophotometer.
- Cambridge Structural Database Subscription (Van Horn).
- Raman and Infrared Spectroscopy Lab (Durig).
- Positron Annihilation and Gamma-ray Spectroscopy Lab (Jean).
- ABI Pioneer peptide synthesizer.
- Sprint BioCad liquid chromatography system.
- Finnigan MAT Double Focusing mass spectrometer.

Research Instrumentation

- Ocean Optics UV-Vis-NIR and other UV-Visible spectrophotometers.
- Metrohm Titrando system with "PC Control" software.
- BAS Epsilon electrochemistry apparatus (Peng).
- Shimadzu HPLC (Van Horn).
- Shimadzu RF-5301PC Fluorescence spectrophotometer.
- Perkin Elmer Polarimeter (Buszek).

Support Facilities

- Computer and Electronics Shop.
- Chemical Stores.

On Campus Resources

- Jasco J-710 Circular Dichroism Spectropolarimeter (School of Biological Sciences).
- Varian 600 MHz NMR Spectrometer (School of Biological Sciences, Laity).
- ESI-mass spectrometer and Triple-Quad LC-ESI MS with nanospray adaptor (School of Pharmaceutical Sciences).
- Machine Shop (Department of Physics).

Computer facilities include UMKC's Academic Research servers using HP's Itanium technology and numerous personal computers located in the Spencer Chemistry Building and Flarsheim Hall for teaching and research purposes. A computational research laboratory is also housed in the department with a number of high-speed workstations and modern software.

Faculty

Paul M. Barron Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=barron); assistant teaching professor of chemistry, coordinator of general chemistry laboratories, principal undergraduate advisor and lecturer; Ph.D. (University of Nebraska).

Keith R. Buszek[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=buszek); professor of chemistry; B.S. (University of California, Irvine); Ph.D. (University of California, Los Angeles).

Xiaobo Chen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=chen); assistant professor of chemistry; B.S. (Peking University, China); M.S. (Chinese Academy of Sciences); Ph.D. (Case Western Reserve University).

John W. Connolly; professor emeritus of chemistry; B.S. (Xavier University); Ph.D. (Purdue University).

Jerry R. Dias[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dias); curators' professor of chemistry; B.S. (San Jose State College); Ph.D. (Arizona State University).

Andrea Drew-Gounev Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dr3ew); associate teaching professor of chemistry, coordinator of organic laboratories, principal undergraduate advisor and lecturer; B.S. Ph.D. (University of South Carolina).

Henry A. Droll; professor emeritus of chemistry; B.S., M.S. (George Washington University); Ph.D. (University of Pennsylvania).

James R. Durig[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=durig); curators' professor of chemistry and geosciences; B.A. (Washington and Jefferson College); Ph.D. (Massachusetts Institute of Technology).

Todor K. Gounev Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gounev); associate professor of chemistry and program director; B.S., M.S. (University of Sophia, Bulgaria); Ph.D. (University of South Carolina).

Peter Groner Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=groner); retired associate professor of chemistry and director of laboratories; Diploma, Ph.D. (Swiss Federal Polytechnic Institute).

Eckhard W. Hellmuth; professor emeritus of chemistry; B.S., M.S., Ph.D. (University of Marburg, Germany).

Andrew J. Holder[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=holder); professor of chemistry; B.S. (Mobile College); Ph.D. (University of Southern Mississippi).

Y. C. Jerry Jean[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jean); curators' emeritus professor of chemistry and physics; B.S. (Taipei Institute of Technology Taiwan); Ph.D. (Marquette University).

Kathleen V. Kilway[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kilway); chair and curator's teaching professor of chemistry; B.S. (St. Mary's College); M.S., Ph.D. (University of California-San Diego).

Peter F. Lott; professor emeritus of chemistry; B.S., M.S. (St. Lawrence University); Ph.D. (University of Connecticut).

Layton L. McCoy; professor emeritus of chemistry; B.S., Ph.D. (University of Washington).

Nathan A. Oyler[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=oyler); assistant professor of chemistry; B.S. (University of Arizona); Ph.D. (University of Washington).

Zhonghua Peng[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=peng); professor of chemistry; B.S. (University of Science and Technology of China); M.S. (Chinese Academy of Sciences); Ph.D. (University of Chicago).

Fedor Rudakov[2,3]; assistant professor of chemistry

Thomas C. Sandreczki[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sandreczki); interim chair of social work and professor of chemistry; B.A. (Houghton College); M.S., Ph.D. (University of Rochester).

Kenneth S. Schmitz[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schmitz); professor of chemistry; B.A. (Greenville College); Ph.D. (University of Washington-Seattle).

Timothy F. Thomas; professor emeritus of chemistry; A.B. (Oberlin College); Ph.D. (University of Oregon).

J. David Van Horn[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vanhorn); associate professor of chemistry; B.A. (Point Loma Nazarene College); Ph.D. (University of Utah).

Charles J. Wurrey[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wurrey); curators' distinguished teaching professor emeritus and James C. Olson professor of chemistry; B.S. (Northern Michigan University); Ph.D. (Massachusetts Institute of Technology).

1 Associate or Adjunct Graduate Faculty
2 Members of UMKC Graduate Faculty
3 Members of UMKC Doctoral Faculty
4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Science: Chemistry (p. 65)
- Bachelor of Arts: Chemistry (p. 64)
- Minor in Chemistry (p. 71)

Career Implication of the Bachelor's Degree

The Department of Chemistry offers two bachelor of science degree programs. Both require a minimum of 43 credit hours of chemistry courses; they are designed for those who want to work in the field of chemistry. The American Chemical Society approved degree is based on the guidelines established by the American Chemical Society (ACS) and specifically requires Organic and Inorganic Synthesis (CHEM 382) and a Biochemistry course (either CHEM 367 or LS BIOCHEM numbered 341 or higher). Many of those receiving the bachelor of science degree have gone on to graduate work, professional schools, and advanced degrees. Others have gone directly into the chemical industry (laboratory assistants).

In contrast, the bachelor of arts degree is more flexible because it requires only a minimum of 26 credit hours of chemistry. The bachelor of arts student is shown a minimum of what chemistry is about. By choosing suitable courses, this degree prepares the individual with the chemical background for work in other areas. Examples include technical librarian, medical technologist, business administration, public health, and sales or advertising in the chemical industry. The majority of students pursuing the bachelor of arts in chemistry do so in preparation for professional schools, such as medicine, dentistry, and pharmacy. The bachelor of arts can also provide a student with a background in chemistry equivalent to that of a bachelor of science, but tailored to the individual's desires.

Teacher Certification in Chemistry

Certification as a middle school (grades 5-9) or secondary (grades 9-12) chemistry teacher in either Kansas or Missouri requires that a student complete specific requirements in biology, chemistry, environmental science, geology, physics and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education section of this catalog or contact the Education Student Services Office at (816) 235-**2234**.

Admission Requirements

Other than University of Missouri admission requirements, there are no special prerequisites for beginning either the bachelor of arts or the bachelor of science program. High-school chemistry and a good working knowledge of algebra and arithmetic are desirable for entering the bachelor of science program. It should be noted that much of the bachelor of science program, and some of the bachelor of arts program, are highly structured in the order which chemistry courses must be taken. It is assumed that transfer students, Associates degree students, and junior college students should have begun the appropriate course sequence in their previous schools. All students are required to consult with the Chemistry Undergraduate Advisor before their registration at UMKC.

Advising

Those seeking either a bachelor of science or a bachelor of arts degree should see the Chemistry Department's principal undergraduate advisor or the department chair at the earliest possible time. Students who major in Chemistry must see the Undergraduate Advisor each semester prior to enrolling in courses.

Honors Program

Students with outstanding records of achievement may be eligible to enroll in special honors courses. Such courses are designated by the letter H preceding the course number, or special arrangements can be made with instructors of regular courses. Students enrolled in the special courses should consult with their faculty advisor to arrange for optimal degree planning.

Prerequisites and Corequisites

A minimum grade of C- or higher is required for all prerequisite and corequisite courses for all students taking courses within the Department of Chemistry. In exceptional cases, students may receive written consent from the Chemistry Undergraduate Advisor to waive this requirement. Students must be concurrently enrolled in all corequisite courses. In exceptional cases, students may receive written consent of the Curriculum Committee by obtaining a petition form from the Department to waive this requirement.

Graduate

Graduate Degrees:

- Master of Science: Chemistry (p. 67)
  - Thesis Based M.S. Program (p. 70)
    - Emphasis areas (p. 70):
      - Analytical
      - Inorganic
      - Organic
      - Physical
      - Polymer
  - Non-Thesis M.S.Program (p. 68)

Graduate Study in Chemistry

The Chemistry Department offers the master of science degree, with an emphasis in analytical, inorganic, organic, physical, or polymer chemistry.

Doctor of philosophy (Ph.D.) programs at UMKC are interdisciplinary. Students desiring to study at the doctoral level in the discipline of chemistry (as the coordinating unit) must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific admission requirements for the doctoral degree may be found in the Graduate Academic Regulations and Information section of this catalog.

Students pursuing an Interdisciplinary Ph.D. degree, who have selected chemistry as one of their disciplines, should consult the School of Graduate Studies section of this catalog for degree requirements, and other academic regulations applicable to their degree programs.

General Nature of the Graduate Program

Both the master of science degree and interdisciplinary Ph.D. degree with chemistry as the coordinating discipline have the basic aim of training students to work independently in chemistry. Both programs train the student through a broad but flexible base of coursework for further education, but the interdisciplinary Ph.D. places a greater emphasis on original research.

There are two programs or tracks that lead to the master of science in chemistry: the research and the non-thesis tracks. The interdisciplinary Ph.D. with chemistry as the coordinating unit is only research track. (For further information on the Interdisciplinary Ph.D. Program, see the chemistry discipline within the School of Graduate Studies section of this catalog.)

Master of Science: Chemistry

The Department of Chemistry offers two master of science degrees. The non-thesis M.S. program has an emphasis on coursework, while the thesis-based degree has an emphasis on both coursework and original research. Graduating chemistry M.S. students will be exposed to the most recent advances in chemical sciences. In addition, thesis-based M.S. students will experience the excitement of performing guided research.

Students, who have received a grade of B- (2.7) or better in graduate coursework taken as part of a degree program at another institution, may transfer up to 6 credit hours of this work on approval of a majority of the student’s committee. A written request for this approval must be submitted within one year of full admission to the program.

Seminar Presentation (CHEM 5611)

Students must present a one-hour seminar based on their thesis research project. This seminar will include an exhaustive review of the literature pertinent to their project, a description of the objectives, the proposed methodology, and the significance of this research. Students must register for CHEM 5611 and present this seminar during the semester following selection of their research adviser and committee.

Thesis Defense

The candidate's thesis must be prepared following all of the guidelines required by the UMKC School of Graduate Studies. All supervisory committee members must receive a final draft of the thesis for approval of form and content at least two weeks before submission to the Dean of the School of Graduate Studies. Candidates should submit preliminary drafts of their thesis to their supervisory committee well in advance of this deadline. After the thesis is certified for acceptance by the Dean of the School of Graduate Studies, the student must present an oral defense of his/her research in the form of a thesis seminar. The supervisory committee will make a final determination of the acceptability of the thesis immediately following this presentation. Only minor changes may be made to the thesis at this point.

Bachelor of Arts: Chemistry

Student Learning Outcomes

1. Students graduating with a baccalaureate degree in chemistry should be proficient in the basic skills of chemistry. They will:
   - Have a functional knowledge of all the basic areas of chemistry including analytical, organic, physical, inorganic and biochemistry.
   - Be able to integrate their knowledge in these areas and use their critical thinking skills in order to become problem solvers.
   - Be proficient in chemistry laboratories, especially with respect to:
     - Following and understanding general laboratory practice guidelines, especially proper laboratory safety.
     - Performing chemical analyses.
     - Performing simple chemical synthesis.
     - Understanding and using modern chemical instrumentation.
   - Be able to articulate clearly scientific information, both in written and oral forms.
   - Be able to use effectively the scientific literature.
2. Students graduating with a baccalaureate degree in chemistry will be prepared for entry into professional schools (e.g., medical, dental, pharmaceutical, or veterinary), graduate programs, or chemical industries. Student

Degree Requirements

The minimum departmental requirements for this degree are:

1. The equivalent of one year of general chemistry :

CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1

2. All of the following:

PHYSICS 210	General Physics I	4
PHYSICS 220	General Physics II	4
MATH 110	College Algebra (or math exception based on high school math courses)	3

3. CHEM 341WI (writing intensive, for which the RooWriter is an enforced prerequisite.)
4. Any combination of 300-level and 400-level chemistry courses (exceptions noted below; see 5, 6, 7 and 11) to bring the total credit hours to 26. Certain biochemistry courses (offered by the School of Biological Sciences) also may be included in this total. Please confer with the principal undergraduate advisor.
5. No more than three hours total in CHEM 395 , CHEM 399 , CHEM 495 and CHEM 499 may be used in meeting the major course requirements.
6. CHEM 320 and CHEM 321 may not both be counted toward the required number of credit hours. (CHEM 321 + CHEM 322R and CHEM 320 + CHEM 322R are both acceptable combinations for meeting, in part, the bachelor of arts departmental course requirements, although the CHEM 320 + CHEM 322R combination is not preferred. The combinations CHEM 320 + CHEM 321 and CHEM 320 + CHEM 321 + CHEM 322R are not acceptable.)
7. Similarly, either CHEM 330 or the combination CHEM 431 + CHEM 432 is acceptable, but the combination CHEM 330 + CHEM 431 + CHEM 432 is not acceptable.
8. All majors must receive a C- or better in all chemistry courses with an overall chemistry GPA of 2.0 for graduation.
9. A minimum grade of C- is required for all prerequisite courses (including physics and mathematics courses). In exceptional cases, students may receive written consent of the instructor and the Chemistry Undergraduate Advisor to waive this requirement.
10. Each chemistry major must be advised by the Chemistry Undergraduate Advisor every semester.
11. In order to meet the College's residency requirement for a major in Chemistry, a minimum of 12 credit hours must be completed in the Department of Chemistry at UMKC, of which 9 of the 12 hours must be at the 300/400 level. While credit as a result of advanced placement (AP) scores and

courses in Biochemistry (LS-BIOC 341, LS-BIOC 365, or LS-BIOC 366) may be used towards meeting major requirements, they do not count towards the residency requirement.

Total Chemistry Credit Hours: 26 (or more)

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science: Chemistry

Student Learning Outcomes

1. Students graduating with a baccalaureate degree in chemistry should be proficient in the basic skills of chemistry. They will:
   - Have a functional knowledge of all the basic areas of chemistry including analytical, organic, physical, inorganic and biochemistry.
   - Be able to integrate their knowledge in these areas and use their critical thinking skills in order to become problem solvers.
   - Be proficient in chemistry laboratories, especially with respect to:
     - Following and understanding general laboratory practice guidelines, especially proper laboratory safety.
     - Performing chemical analyses.
     - Performing simple chemical synthesis.
     - Understanding and using modern chemical instrumentation.
   - Be able to articulate clearly scientific information, both in written and oral forms.
   - Be able to use effectively the scientific literature.
2. Students graduating with a baccalaureate degree in chemistry will be prepared for entry into professional schools (e.g., medical, dental, pharmaceutical, or veterinary), graduate programs, or chemical industries.

Degree Requirements

The Chemistry Department bachelor of science degree is approved by the American Chemical Society (ACS). There are two types of bachelor of science degrees. Both require a minimum of 43 credit hours in chemistry. An ACS-approved B.S. degree requires taking 2 credit hours of CHEM 382, and 3 credit hours of CHEM 367 or LS-BIOC 341 or higher[1]. The other type of B.S. degree does not require CHEM 382 or CHEM 367, or LS-BIOC 341. This program includes:

1. General Chemistry:

CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1

2. Organic Chemistry:

CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1

3. Analytical Chemistry:

CHEM 341	Analytical Chemistry I: Quantitative Analysis	4
CHEM 442R	Analytical Chemistry II: Instrumental Analysis	3

4. Physical Chemistry:

CHEM 431	Physical Chemistry I	3
CHEM 437WI	Experimental Physical Chemistry I (writing intensive for which the WEPT is an enforced prerequisite)	3
CHEM 432	Physical Chemistry II	3

5. Chemical Literature:

CHEM 410	Chemical Literature	1

6. Inorganic Chemistry:

CHEM 382	Inorganic And Organic Synthesis [1]	2
CHEM 451R	Inorganic Chemistry	3

7. A biochemistry course[1]:

LS-BIOC 341	Basic Biochemistry (or higher)	3
or CHEM 367	Bioorganic Chemistry	

8. A minimum of 3 credit hours of advanced work in either chemistry (courses numbered 400 or higher), mathematics (courses other than MATH 250 that have MATH 220 as a prerequisite), biology (courses numbered 300 or higher), or physics (courses numbered 300 or higher).
9. Math:

MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4

10. One year of Engineering Physics:

PHYSICS 240	Physics For Scientists and Engineers I	5
PHYSICS 250	Physics For Scientists and Engineers II	5

11. The total credit hours of laboratory time in the required courses and any advanced elective laboratories must be at least 12. No more than 3 hours of CHEM 495 and CHEM 499 may be used in meeting the major course requirements.
12. CHEM 499 cannot be used to meet both laboratory requirements and the 3 hours of advanced work.
13. All majors must receive a C- or better in all chemistry courses with an overall chemistry GPA of 2.0 for graduation.
14. A minimum grade of C- is required for all prerequisite courses (including physics and mathematics courses). In exceptional cases, students may receive written consent by submitting a petition to the Chemistry Undergraduate Curriculum Committee which has to be approved to waive this requirement.
15. Each chemistry major must be advised by the Chemistry Undergraduate Advisor every semester.
16. In order to meet The College's residency requirement for a major in Chemistry, a minimum of 12 credit hours must be completed in the Department of Chemistry at UMKC, of which 9 out of the 12 hours must be at the 300/400 level. While credit as a result of advanced placement (AP) scores and courses in Biochemistry (LS-BIOC 341, LS-BIOC 365, or LS-BIOC 366) may be used towards meeting major requirements, they do not count towards the residency requirement.

[1] Required for ACS-approved degree.

Suggested Plan of Study

Because plans of study are dependent on the students' backgrounds and preparation, each student admitted should develop a plan of study in conjunction with an advisor in the department. General chemistry, organic chemistry, calculus and physics should be completed by the end of the second year. Physical chemistry should be taken in the third year. Students should note that although a fair amount of flexibility is available for setting up a plan of study, the structured nature of prerequisites and corequisites in chemistry, physics, and mathematics necessitates very careful organization of any program.

For students starting at UMKC as freshmen, the department recommends the following plan of study to fulfill the major requirements for a bachelor of science degree in chemistry:

Freshman Year	**Credits**
CHEM 211	4
CHEM 211L	1
CHEM 212R	4
CHEM 212LR	1
MATH 210	4
MATH 220	4
	18

Sophomore Year	Credits
CHEM 321	3
CHEM 321L	1
CHEM 322R	3
CHEM 322L	1
MATH 250	4
PHYSICS 240	5
PHYSICS 250	5
	22
Junior Year	**Credits**
CHEM 341	4
CHEM 431	3
CHEM 432	3
CHEM 442R	3
CHEM 437WI	3
4XX+ in CHEM -or- 3XX in BIOL, PHYSCS, -or- MATH	3
	19
Senior Year	**Credits**
CHEM 410	1
CHEM 451R	3
CHEM 367 or LS-BIOC 341[1,3]	3
CHEM 382 or 499[1,2]	2
	9

Total Credits: 68

1 Required for ACS-approved degree: CHEM 367, LS-BIOC 341, CHEM 382

2 For non-ACS-approved degree

3 CHEM 3XX - or- 4XX may be taken instead of CHEM 367 or LS-BIOC 341

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Master of Science: Chemistry

The Department of Chemistry offers two master of science degrees. The non-thesis M.S. program has an emphasis on coursework, while the thesis-based degree has an emphasis on both coursework and original research. Graduating chemistry M.S. students will be exposed to the most recent advances in chemical sciences. In addition, thesis-based M.S. students will experience the excitement of performing guided research.

Requirements for Admission

Applicants should have the equivalent of an American Chemical Society (ACS)-approved bachelor's degree in chemistry. This degree includes the equivalent of: one year of general chemistry, quantitative analysis, one year of organic chemistry, one year of physical chemistry, physical chemistry laboratory, instrumental analysis, inorganic chemistry, one year of physics, and three semesters of calculus, and the ACS-recommended distribution of advanced courses and course credits. (For example, see UMKC's B.S. program in chemistry in the undergraduate catalog.) Applicants should take particular note of the physical chemistry requirement. They may be admitted as provisional students if they have a limited number of undergraduate

deficiencies. At the time that admission is offered, applicants will be notified of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of C- or higher.

Applications are only accepted through the online system, and include:

1. Official, confidentially transmitted transcripts.
2. Statement of purpose.
3. Two confidentially transmitted letters of recommendation (academic and/or professional).
4. Official Graduate Record Exam (General Test) score, less than six (6) years old.
5. English language proficiency requirement.

An official Graduate Record Exam score (general test) is required as part of the application to the program. The GRE score will be evaluated as part of the entire application.

Applicants from foreign countries, who have an official language other than English, must achieve scores of at least 550 (paper-based), 213 (computer-based), or 79 (internet-based)on the Test of English as a Foreign Language (TOEFL) to be considered for admission.

Placement Examinations

Incoming students must take placement examinations in analytical, inorganic, organic, and physical chemistry. Placement examinations are typically administered the week before the first week of classes of the fall and spring semesters. Students scoring below the 50th percentile in the organic and/or physical chemistry exams are required to enroll in CHEM 5520R and/or CHEM 5530A/CHEM 5530B, respectively. Enrollment in other graduate organic or physical chemistry courses is not permitted until CHEM 5520R or CHEM 5530A/CHEM 5530B, respectively, is (are) successfully completed. CHEM 5530A/CHEM 5530B is currently offered concurrently with CHEM 431 or CHEM 432. A student is required to take either CHEM 5530A/CHEM 431 or CHEM 5530B/CHEM 432 or both, depending on his/her performances in the various sub-disciplines of the physical chemistry placement exam. Should a student be required to take both CHEM 5530A/CHEM 431 and CHEM 5530B/CHEM 432, the average grade of the two CHEM 5530 courses will be considered for the fulfillment of the physical chemistry deficiency. Two grades of C+ (2.3 out of 4.0) or lower, or one grade of less than C- (1.7 out of 4.0) in CHEM 5520R or CHEM 5530, will result in termination from the degree program. These courses may not be counted toward the M.S. coursework requirements listed below. Students must complete all additional coursework required as a result of the placement exams by the end of their first three regular semesters.

Graduate Program Committee

Upon admission to M.S. program in chemistry, students will be advised by the department's principal graduate advisor, acting on behalf of the chemistry graduate program committee. Based on the committee's evaluation of the students' transcripts and placement exam scores, the principal graduate advisor will inform students of any deficiencies and how they should be removed. The principal graduate advisor also will advise students on course curriculum. For the thesis degree, the curriculum advising is performed by the research advisor (once they have been selected). The graduate program committee serves as the supervisory committee for non-thesis M.S. students.

Seminar Attendance

Full-time M.S. students are required to attend all regularly scheduled and special departmental seminars and colloquia. Part-time students are also required to attend these seminars but may petition the Chair of the Department of Chemistry to waive this requirement all but one semester. Such students will be required either to attend and participate fully during one semester, including the presentation of a one-hour seminar (see details below), or to present two one-hour seminars in lieu of full participation.

Minimum Requirements for Master of Science Degree

In addition to the requirements listed here, all M.S. students are subject to the all general M.S. requirements of the University. See the School of Graduate Studies (p. 480) section of this catalog for a complete listing.

Time Constraints and Financial Assistance

The non-thesis M.S. degree program is intended primarily for students currently employed in a chemically related industry. Full-time, non-thesis M.S. students are required to complete all of the requirements for their degree within four years. Part-time non-thesis M.S. students are required to complete all requirements for their degree within seven years. Non-thesis M.S. students are not eligible for financial support from the Department of Chemistry.

Non-Thesis Master of Science in Chemistry

Student Learning Outcomes

The Department of Chemistry offers two master of science degrees. The non-thesis M.S. program has an emphasis on coursework, while the thesis-based degree has an emphasis on both coursework and original research. Graduating chemistry M.S. students will be exposed to the most recent advances in chemical sciences. In addition, thesis-based M.S. students will experience the excitement of performing guided research.

The following student learning outcomes are expected for our educational process:

At the end of their studies, students will:

- Have an extensive knowledge of the basic areas of chemistry (inorganic, organic, physical, analytical, and biochemistry).
- Be familiar with the recent advances in the basic areas of chemistry.
- Have the ability to communicate scientific information clearly and precisely, both written and oral forms.
- Have the ability to read, understand, and use scientific literature.
- Have had the opportunity to work with others as part of a team to solve scientific problems.

Coursework

The emphasis of this program is coursework. Non-thesis M.S. students are required to complete a minimum of 31 credit hours of graduate-level coursework. Non-thesis M.S. Students are required to complete:

1. Three credit hours must be from Organic Chemistry courses:

CHEM 5521R	Mechanisms Of Organic Reactions	3
or CHEM 5522	Synthetic Organic Chemistry	

2. Three credit hours from Physical Chemistry courses:

Select one of the following:		3
CHEM 5531	Classical Thermodynamics	
CHEM 5532	Chemical Kinetics	
CHEM 5533	Quantum Chemistry	
CHEM 5534	Molecular Spectroscopy	
CHEM 5535	Statistical Thermodynamics	

3. Nine additional credit hours from graduate level chemistry courses numbered CHEM 5521 - CHEM 5589 excepting CHEM 5520R and CHEM 5530 .
4. One credit hour seminar presentation (CHEM 5611).
5. The remaining 15 credit hours, among which up to 6 credit hours of CHEM 5590, CHEM 5599, or CHEM 5699 may be applied, may be taken from courses approved by the graduate program committee.

Students who receive a grade of C+ (2.3) or less in more than two courses applicable to the M.S. program, or who have a cumulative grade-point average of less than 3.0 on courses applicable toward the M.S. degree after completing 18 or more credit hours of such courses, will be terminated from the degree program. Grades received for CHEM 5590 and any undergraduate-level courses are not included in the minimum GPA calculation.

Students who have received a grade of B- (2.7) or better in graduate chemistry coursework taken as part of a degree program at another institution may have up to 6 credit hours of equivalent required coursework waived upon approval of a majority of the graduate program committee. A written request for this approval must be submitted within one year of full admission to the M.S. program.

Seminars

Students must present a one-hour literature seminar based on a topic of their choice which has been approved by the Department of Chemistry Chair (or a designee). Students must register for CHEM 5611 the semester of this presentation. This seminar will include an exhaustive review of the pertinent literature and discussion of both present and future implications of research in this area. An abstract is to be posted and distributed one week prior to the presentation date.

Time Constraints and Financial Assistance

Full-time thesis M.S. students are required to complete all of the requirements for their degree within four years. In compelling circumstances, and on the written recommendation of a majority of the Supervisory Committee, a single extension for up to one year may be requested for approval by the Chair of the Department of Chemistry. Part-time thesis M.S. students are required to complete all of their requirements for their degree within seven years.

Full-time thesis M.S. students may receive financial support from the Department of Chemistry for a maximum of two-and-one-half years. Students from countries having an official language other than English, and who wish to be supported as GTAs, must take the SPEAK test before the end of their first semester on campus if necessary. Part-time thesis M.S. students are not eligible for financial support from the Department of Chemistry.

Research Advisor and Supervisory Committee

Full-time students must select a research advisor from the graduate faculty of the Department of Chemistry and a supervisory committee by the end of their first regular (i.e., fall or spring) semester on campus. Part-time students must select their research advisor and supervisory committee by the end of their third year after enrollment in their first course as an M.S. student at UMKC.

The research advisor becomes the chairperson of the supervisory committee, which includes at least two additional members of the graduate faculty. Students and their supervisory committee shall plan a program of study which, when met, will qualify students for the M.S. degree. This program of study must be approved by the supervisory committee, the department chair, and the principal graduate advisor prior to the completion of 15 hours of coursework applicable to the degree. The supervisory committee is responsible for conducting the final thesis examination for students in the thesis program.

Thesis-Based Master of Science in Chemistry

Student Learning Outcomes

The Department of Chemistry offers two master of science degrees. The non-thesis M.S. program has an emphasis on coursework, while the thesis-based degree has an emphasis on both coursework and original research. Graduating chemistry M.S. students will be exposed to the most recent advances in chemical sciences. In addition, thesis-based M.S. students will experience the excitement of performing guided research.

Students, who have received a grade of B- (2.7) or better in graduate coursework taken as part of a degree program at another institution, may transfer up to 6 credit hours of this work on approval of a majority of the student's committee. A written request for this approval must be submitted within one year of full admission to the program.

The following student learning outcomes are expected for our educational process:

At the end of their studies, students will:

- Have an extensive knowledge of the basic areas of chemistry (inorganic, organic, physical, analytical, and biochemistry) with an extensive knowledge in at least one area.
- Have done extensive research through a project.
- Have the ability to recognize scientific problems, formulate questions and answers, and carry out strategies for solving them.
- Have the ability to read, understand, and use scientific literature.
- Have the ability to communicate scientific information clearly and precisely, both written and oral forms.
- Have some understanding of the principles and applications of modern instrumentation, computation, experimental design, and data analysis.

Coursework

The emphasis of this program is research. A minimum of 31 credit hours (including research and thesis) is required. Full-time, research M.S. students should be able to complete the formal coursework requirement no later than the end of their second year. Thesis M.S. students are required to complete:

1. Three credit hours in one of the following Physical Chemistry courses:
   Select one of the following:

CHEM 5531	Classical Thermodynamics
CHEM 5533	Quantum Chemistry
CHEM 5534	Molecular Spectroscopy

2. Three credit hours in Organic Chemistry:

CHEM 5521R	Mechanisms Of Organic Reactions	3
or CHEM 5522	Synthetic Organic Chemistry	

3. Six additional credit hours from graduate level chemistry courses numbered CHEM 5521R - CHEM 5899, excepting CHEM 5520R, CHEM 5530, and CHEM 5541R.
4. Two additional graduate-level courses for a minimum of 6 credit hours.
5. One credit hour seminar presentation (CHEM 5611).
6. In addition to the formal course work requirements, a minimum of 6 credit hours of research and thesis (CHEM 5599) are required. Research and thesis (CHEM 5599) work must be done under the direction of the student's research advisor.
7. Up to 6 credit hours of directed studies (CHEM 5590) may be applied toward the degree requirements. Additional coursework may be substituted for part or all of CHEM 5590 on approval of the student's supervisory committee.

The selected courses must be approved by the student's supervisory committee. Students who receive a grade of C+ (2.3) or lower in more than two courses applicable to the M.S. program or who have a GPA lower than 3.0 on courses (not including CHEM 5590, CHEM 5599 or any undergraduate courses) applicable toward the M.S. degree after completing 18 or more credit hours of such courses, will be terminated from the degree program.

Students, who have received a grade of B- (2.7) or better in graduate coursework taken as part of a degree program at another institution, may transfer up to 6 credit hours of this work on approval of a majority of the student's committee. A written request for this approval must be submitted within one year of full admission to the program.

Seminar Presentation (CHEM 5611)

Students must present a one-hour seminar based on their thesis research project. This seminar will include an exhaustive review of the literature pertinent to their project, a description of the objectives, the proposed methodology, and the significance of this research. Students must register for CHEM 5611 and present this seminar during the semester following selection of their research advisor and committee.

Thesis Defense

The candidate's thesis must be prepared following all of the guidelines required by the UMKC School of Graduate Studies. All supervisory committee members must receive a final draft of the thesis for approval of form and content at least two weeks before submission to the Dean of the School of Graduate Studies. Candidates should submit preliminary drafts of their thesis to their supervisory committee well in advance of this deadline. After the thesis is certified for acceptance by the Dean of the School of Graduate Studies, the student must present an oral defense of his/her research in the form of a thesis seminar. The supervisory committee will make a final determination of the acceptability of the thesis immediately following this presentation. Only minor changes may be made to the thesis at this point.

Minor in Chemistry

Student Learning Outcomes

1. Students graduating with a minor degree in chemistry should be proficient in the basic skills of chemistry. They will:
   - Have a functional knowledge of all the basic areas of chemistry including analytical, organic, physical, inorganic and biochemistry.
   - Be able to integrate their knowledge in these areas and use their critical thinking skills in order to become problem solvers.
   - Be proficient in chemistry laboratories, especially with respect to:
     - Following and understanding general laboratory practice guidelines, especially proper laboratory safety.
     - Performing chemical analyses.
     - Performing simple chemical synthesis.
     - Understanding and using modern chemical instrumentation.
   - Be able to articulate clearly scientific information, both in written and oral forms.
   - Be able to use effectively the scientific literature.
2. Students graduating with a baccalaureate degree in chemistry will be prepared for entry into professional schools (e.g., medical, dental, pharmaceutical, or veterinary), graduate programs, or chemical industries.

Program Requirements

Students may elect to obtain a minor in chemistry in conjunction with a major in another academic discipline. The minimum departmental requirements are 18 credit hours of chemistry with at least 9 of these hours from courses at the 300 or 400 level. To meet The College's residency requirement for a minor in Chemistry, students must complete 9 credit hours from the Department of Chemistry at UMKC, and 6 of those 9 hours must be courses at the 300 or 400 level. While credit as a result of advanced placement (AP) scores and courses in Biochemistry (LS-BIOC 341, LS-BIOC 365, or LS-BIOC 366) may be used towards meeting minor requirements, they do not count towards meeting the residency requirement. In addition, the minor courses must be selected from more than one area of chemistry and a minimum grade of a C- is required for all minor and prerequisite courses.

Classical and Ancient Studies Program

5317 Holmes, 2nd Floor
(816) 235-**1305**
(816) 235-**1308**
http://cas.umkc.edu/classics

Mailing Address:
University of Missouri - Kansas City
Classical and Ancient Studies Program
Cockefair Hall 106
5100 Rockhill Road

Kansas City, MO 64110-2499

The field of Classics is the original interdisciplinary university field of study, illuminating the foundations of Western experience through the study of language, literature, religion, philosophy, art, archaeology and other subjects. Modern Classics programs continue to focus on the ancient Mediterranean world, particularly Greek and Roman culture, but also encompass the study of non-Western cultures and post-Greco-Roman societies. The broad scope and intellectual rigor of the Classical and Ancient Studies major and minor options help students to understand the contemporary world and to prepare for a wide range of careers.

The Classical and Ancient Studies program provides several options for the study of history, literature, art, culture, and language of the Ancient Mediterranean world. Students can major in English and complete the track in Classical, Medieval, and Early Modern Literature; major in History with a concentration in Antiquity and Medieval history; major in Foreign Languages with an emphasis in Greek and Latin; or pursue a minor in Classics in conjunction with either of the degrees above or with any other degree program in the college.

Faculty

Faculty:
Jeff Rydberg-Cox, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%3D%3F7%5F%40L%2FWML%20%0A) Professor, Department of English; Classical and Ancient Studies Program Director
Elpida Scott, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%3D%3F7%5E0%20%29V%5DX%20%0A) Instructor, Classical and Ancient Studies Program
Cynthia Jones, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%3D%3F7%5E0%28%25W%3D%28%20%0A) Instructor, Classical and Ancient Studies Program
James Falls, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%3D%3F7%5F04%2AU%2DT%20%0A) Associate Professor Emeritus, Department of history

Affiliated Faculty:
Virginia Blanton, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%2D%3B6%5D%20H%2BV%2D%40%20%0A) Chair, Department of English
Robert Cohon, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%2D%3B5%5E0L%25W%5D%5C%20%0A) Research Associate Professor, Department of Art and Art History; Curator of Ancient Art, Nelson-Atkins Museum of Art
Laurie Ellinghausen, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%2D%3B5%5FP%28%2AV%2DD%20%0A) Associate Professor, Department of English
Linda Mitchell, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%2D%3B5%5E%20%28%2CVM%28%20%0A) Martha Jane Phillips Starr/Missouri Distinguished Professor of Women's and Gender Studies
Tina Niemi, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%3D%3F7%5F0%20%2FW%2DT%20%0A) Professor, Department of Geosciences
Ann Raab, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%2D35%5F%40H%29V%3DX%20%0A) Adjunct Lecturer
L. Mark Raab, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%2D%3B5%5F%40L%2FV%5DH%20%0A) Adjunct Lecturer
Massimiliano Vitiello, Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%2D%3B5%5E%20H%29W%5DL%20%0A) Assistant Professor, Department of History

Undergraduate

Undergraduate Degrees That Offer a Classics Emphasis:

The Classical and Ancient Studies program provides several options for the study of history, literature, art, culture, and language of the Ancient Mediterranean world. Students can major in English and complete the track in Classical, Medieval, and Early Modern Literature; major in History with a concentration in Antiquity and Medieval history; major in Foreign Languages with an emphasis in Greek and Latin; or pursue a minor in Classics in conjunction with either of the degrees above or with any other degree program in the college.

- English Department: Emphasis in Classical, Medieval, and Early Modern Literature (p. 72)
- Foreign Languages and Literatures Department: Emphasis in Greek and Latin (p. 73)
- History Department: Antiquity and Medieval History Concentration (p. 73)
- Minor in Classical and Ancient Studies (p. 73)

English Department: Emphasis in Classical, Medieval, and Early Modern Literature

Students wishing to focus on ancient literatures in translation can pursue a degree in English with an emphasis in Classical, Medieval, and Early Modern Literature. This track involves a core of three survey courses to give students grounding in each of the three periods. Students also take one elective from each time period that allows them to study each period in more depth, a course such as 'Shakespeare In Film', 'The Ancient World in Film', or 'Arthurian Legends' that allows them to study how these literatures have been received in modern society; a course such as 'History of English', 'Old English', 'Ancient Greek', 'Classical Latin', or the 'History and Principles of Rhetoric' that allows students to understand the linguistic backgrounds of

these literatures. Students complete the degree with three electives that can be taken in the English department or many other departments in the college including Classics, History, Art History, Philosophy, and Geosciences. For more information, see the relevant catalog section for the English Department (p. 111).

Foreign Languages and Literatures Department: Emphasis in Greek and Latin

If you would like to focus on the study of ancient languages, you can pursue a degree in Foreign Languages with an emphasis in Greek and Latin. This track involves a core set of language courses that allow you to become a proficient reader of Ancient Greek and Latin texts. This language core is supplemented with electives offered by the Classics Program, the History Department, the English Department, the Art and Art History Department, and the Philosophy Department. These electives are taught using translated texts, and these courses allow you to tailor your program of study to your specific interests in history, art or literature. In addition to these electives, students must also complete a capstone course. For more information, see the relevant catalog section for the Foreign Languages and Literatures Department (p. 135).

History Department: Antiquity and Medieval History Concentration

Students who are interested in ancient and medieval history can pursue a concentration in Antiquity and Medieval history as part of a history major. The history major includes two foundation courses that survey world history, four courses in the Classics area of concentration, four courses in areas outside the area of concentration, and a two-semester final research sequence: History 301WI “Historiography and Method,” and History 498WI “Senior Capstone Seminar.” For the Antiquity and Medieval history concentration, students take four courses in Ancient or Medieval History. Two of these courses can be taken in departments other than history including Classics, English, Art History, Philosophy, and Geosciences. For more information, see the relevant catalog section for the History Department (p. 172).

Minor in Classical and Ancient Studies

Student Learning Outcomes

1. Knowledge of Historical, Literary, Artistic, and Cultural Contexts
   Students will be able to reproduce in broad outline the main periods of Ancient Mediterranean history, along with significant events and/or developments in each period. Students will also be able to demonstrate their awareness of basic literary, philosophical, social, and cultural developments that affect the interpretation of texts, artifacts, and historical events from cultures and across the Mediterranean.
2. Understanding of the Reception of the Ancient World
   Students will be able to demonstrate knowledge of at least one of the ways in which material from the Ancient Mediterranean World has been received and integrated into other later artistic, literary, historic, or cultural contexts.
3. Proficiency With Primary Sources
   Students will be able to identify and articulate scholarly problems based on interaction with primary source materials from the ancient world. Students who elect to take Greek or Latin will demonstrate further proficiency working with primary source materials in the original languages.
4. Proficiency in Research Methods
   Students will demonstrate knowledge of current research methods and contemporary sources and be able to describe current scholarly conversations about the ancient world.
5. Communication of Knowledge
   Students will be able to communicate results of their work effectively to others in expository prose, oral presentations, or electronic media such as films or web pages.

Students can also pursue a minor in Classics in conjunction with any of the degrees above or with any other degree program in the college. The minor is an 18 hour program that allows students the flexibility to pursue their individual interests in the ancient world. To complete the minor students take 18 hours of credit selected from any of the courses in the college about the ancient world (http://cas.umkc.edu/classicalstudies/pdfs/AdvisingSheetForClassicsMinor.pdf). Nine of these hours must be at or above the 300 level. For students choosing to pursue both the minor and one of the majors above, six credit hours can be counted towards both the major and the minor.

Department of Communication Studies

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), Room 202
5120 Rockhill Road
(816) 235-**1337**
Fax: (816) 235-**5539**
com-s@umkc.edu
http://cas.umkc.edu/comm

Mailing Address
University of Missouri-Kansas City

Department of Communication Studies
HH 202
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Michael McDonald

Professors Emeriti:
Joan E. Aitken, Gregory Black, Michael Neer, Robert Unger

Associate Professor Emeriti:
Larry G. Ehrlich

Associate Professors:
Lyn Elliot, Gregory Gutenko, Caitlin Horsmon (undergraduate advisor for film and media arts), Michael McDonald, Peter Morello, G. Thomas Poe

Associate Teaching Professors:
Linda Kurz (undergraduate advisor), Judith K. McCormick (undergraduate advisor)

Assistant Professors:
Angela Elam, Ye Wang, Jason Martin

Assistant Teaching Professors:
Mitchell Brian, Steve Kraske

Lecturers:
Jean Dufresne, Steven Melling, Michael Schaefer

The department offers courses leading to a Bachelor of Arts in Communication Studies.

The Bachelor of Arts in Communication Studies degree offers three areas of emphasis:

- Interpersonal and Public Communication
- Journalism and Mass Communication
- Film and Media Studies

Department Description

The Interpersonal and Public Communication emphasis offers study in the areas of public address and rhetoric, interpersonal and intercultural communication, organizational communication and areas associated with human communication behavior including advertising and public relations..

The Journalism and Mass Communication emphasis offers concentrated study in select areas including print and electronic journalism, radio, television, journalism, advertising and public relations.

The Film and Media Studies emphasis offers a comprehensive approach to film, digital video and new media production.

The UMKC debate program operates from the Department of Communication Studies. UMKC offers a great blend of quality education, extremely competitive debate program and a wonderful city to spend your college years in.

- UMKC Debate Team is open to all UMKC students including those with no previous debate experience. Interested students can find information at http://umkcdebate.com/ or by emailing the Director of Debate: vegam@umkc.edu.
- Travel Schedule: UMKC has a full travel schedule and travels the NDT/CEDA policy debate circuit. This includes tournaments throughout the region and across the country.
- Squad Size: UMKC has a medium-sized squad which has the benefit of allowing all debaters the ability to go to many tournaments throughout the year. Each debater will have the chance to flourish at regional and national tournaments.
- Coaching: UMKC currently has an excellent coaching staff. Our excellent student-to-coach ratio guarantees hands-on coaching and extensive focus for each debater.

Special Laboratories

The department has media classrooms and production spaces for student projects, that include a video production studio with multi-camera and “green-screen” capabilities, a sound recording facility with narration booth and radio console, and post production media labs outfitted with latest software, including Final Cut Pro, Avid, Pro Tools, Photoshop, After Effects, Flash, etc. These software packages provide the tools to not only edit sound and video, but to produce animation, motion graphics, and rich media content for the web. A student equipment check-out lab maintains an extensive inventory of production equipment ranging from traditional film cameras, such as Super 8 and 16mm; to the latest HD video cameras providing the

capabilities for professional digital cinematography. Location lighting equipment includes tungsten, fluorescent & HMI instruments. Pro sound gear packages are also available to students including a wide variety of microphones, booms, mixers and digital recorders. Our facilities foster the ability to light, shoot and edit professionally, allowing the students to tell compelling stories that make an impact on audiences.

K-ROO Radio is a student-run multimedia organization that aims to provide students, faculty, staff, and the Kansas City community with quality entertainment and information about UMKC events and organizations. Through Internet radio and live events, www.k-roo.org (http://www.k-roo.org) provides a platform to reach a worldwide audience to promote and support student endeavors, as well as create programming in music, sports, news, and spoken word/comedy/drama productions. K-ROO Radio, which reports to the Office of Student Involvement, is open to all students of any major and is located on the third floor of the Student Union at 5100 Cherry St. in room 303B. Internships for production and promotions are available through the Communication Studies Department.

The nationally syndicated public radio program, *New Letters on the Air*, features creative writers from around the world and is produced in association with the internationally distributed *New Letters* magazine and the Communication Studies department. Broadcast locally on KCUR-FM, the weekly program is also available via www.newletters.org/radio (http://www.newletters.org/radio) and podcasts. KCUR-FM http://kcur.org/ is the 100,000-watt public radio station licensed to UMKC. Programming includes offerings from Nantional Public Radio and Public Radio International, as well as local news from the award-winning news department. Internships are available year round to Communication Studies students.

Special Awards and Scholarships

The Alex and Josephine B. Coleman Scholarship is awarded each year to an outstanding junior- or senior-level student. The award recognizes meritorious undergraduate work in communications and encourages program completion. The Suzanne Crispin Williams Scholarship is awarded annually to a non-traditional returning female student in Communication Studies or Women's Studies. A Film Finishing Fund provides grants to intermediate and advanced production students and the Student Film League holds showcases of student film and video projects. Cash prizes may be awarded for winning entries. The Faye Kircher Public Speaking Contest is held in the fall and spring semesters. Students enrolled in COMM-ST 110 courses are selected by their classmates for participation in the public speaking contest. Cash prizes are awarded. The Fred G. Andrews Jubilee Creative Cinema Fund will provide support for sponsored or co-sponsored workshops, programming for Film and Media Arts, as well as internships and scholarships for students majoring in Communication Studies with an emphasis in Film and Media Arts. The Carol Koehler Memorial Scholarship is awarded annually to a Communication Studies student enrolled in a three hour internship. Scholarship information can be found on the Communication Studies website at http://cas.umkc.edu/Communication_Studies/scholarships.cfm.

Career Implications

Communication students may find rewarding careers in the multifaceted communication industry. The program is excellent preparation for careers in business, industry, health, public relations, advertising, radio, video and film production, Non-profit organizations and Human resources.

Further Educational Opportunities

The B.A. in communication studies prepares students for advanced study in communication studies, film and media, as well as in graduate programs such as law, medicine, business, public administration and those associated with the applied and performing arts.

Internship Program

Communication Studies 484 (Internship) COMM-ST 484 is required for all students completing an emphasis in Journalism and Mass Communication. Although an Internship is **not** required for students completing the emphasis in Interpersonal/Public Communication or Film and Media Arts, the Communication Studies Department strongly recommends the internship experience as a means of linking theory to practice, and preparing students to work effectively in professional settings. Internships provide students with on-the-job experience which is both practical and purposeful. The internship program allows opportunities for experience on a national and international level.

The Internship course number is COMM-ST 484. Each intern is required to enroll in at least one credit hour. One credit hour requires 75 hours of internship work. Two credit hours require 150 hours of internship work. Three credit hours require 225 hours of internship work. Four credit hours require 300 hours of internship work.

Information on Internship Opportunities is available in the department office and at http://cas.umkc.edu/Communication_Studies/internships.cfm, and through the Roo Career Network https://umkc-csm.symplicity.com/. The coordinator for the Internship Program is Linda Kurz. 816-235-5846.

Advising System

Current program requirements are available in the department office. Students must file a formal declaration of major with a departmental adviser. The department highly recommends that students meet with their major adviser before enrolling in classes each semester. At 90 hours or one year prior to graduation, students should file for a final degree audit with their major adviser and with the College of Arts and Sciences. Undergraduate advisers are Linda Kurz 816-235-5846 kurzl@umkc.edu and Judith McCormick 816-235-1120 mccormickjk@umkc.edu. Students in the Film and Media Studies Emphasis should contact Caitlin Horsmon mailto:hormsonc@umkc.edu 816-235-2735 or Lyn Elliot mailto:elliotl@umkc.edu 816-235-1708 for advising in that emphasis area.

Financial Aid

Students with University work-study assignments are welcomed as student assistants in various aspects of the department's activities.

Faculty

Joan E. Aitken[2,3]; Retired professor emerita of communication studies; B.A. (Michigan State University); M.A., Ed.D. (University of Arkansas).

Gregory D. Black Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=black); Retired professor emeritus of communication studies; B.S. (Bowling Green State University); M.A. (California State); Ph.D. (University of Kansas).

Mitchell Brian[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brian); assistant visiting professor of communication studies; B.A. (California State University, Northridge); M.A. (University of Missouri-Kansas City).

Linda M. Collier[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=collier); Retired associate professor of communication studies; director of debate; B.A., J.D. (University of Missouri-Kansas City).

Jean Dufresne Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dufresne); lecturer, communication studies; B.A. (Morningside College); M.A. (University of Iowa); Ph.D. (University of Nebraska-Lincoln).

Angela C. Elam Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=elam); assistant professor of communication studies and radio producer; B.A. (Clemson University); M.F.A. (University of Georgia-Athens).

Lyn Elliot Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=elliot); assistant professor of communication studies; B.A. (Carleton College); M.A., Ph.D. (University of Iowa); M.F.A. (University of Iowa).

Gregory Gutenko[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gutenko); associate professor of communication studies; B.A., M.A. (University of Missouri-Kansas City); Ph.D. (University of Missouri-Columbia).

Caitlin M. Horsmon[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=horsmon); associate professor of communication studies; B.A. (Oberlin College); M.A.,M.F.A. (University of Iowa).

Gaylord V. Marr; Retired professor emeritus of communication studies; B.A., M.A. (University of Nebraska).

Jason Martin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=martin); assistant professor of communication studies; B.B.A., B.S. (University of Kentucky); M.A. (The Ohio State University); Ph.D. (University of Kentucky).

Judith McCormick Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mccormick); associate teaching professor of communication studies; B.A., M.A. (Texas Tech University), Ph.D. (Kansas State University).

Michael K. McDonald Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mcdonald); associate professor of communication studies; B.S., M.A. (University of Missouri-Kansas City), Ph.D. (University of Kansas).

Steven P. Melling Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=melling); lecturer of communication studies; B.S. (Northwestern Missouri StateUniversity); M.A., Ph.D. (University of Kansas).

Peter Morello[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=morello); associate professor of communication studies; B.A. (University of Wisconsin-Madison); M.S. (Columbia University).

Michael Neer Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=neer); retired, Olsen professor of communication studies; B.A., M.A., Ph.D. (University of Missouri-Columbia).

G. Thomas Poe Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=poe); associate professor of communication studies; B.A. (Central Methodist College); M.A. (Northwest Missouri State), M.Div. (Emory University), M.A. (University of Missouri-Kansas City); Ph.D. (University of Kansas).

Michael W. Schaefer Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schaefer); lecturer of communication studies; B.A., M.A. (University of Missouri-Kansas City).

Robert B. Unger Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=unger); professor of communication studies and English; B.A. (University of Missouri-Columbia); M.P.A. (Harvard University).

Ye Wang Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wang); assistant professor of communication studies; B.A. (Beijing University of Posts and Telecommunications); M.A. Linguistics (Beijing Foreign Studies University); M.A., Ph.D. Journalism (University of Missouri).

[1] Associate or Adjunct Graduate Faculty
[2] Members of UMKC Graduate Faculty
[3] Members of UMKC Doctoral Faculty
[4] Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Communication Studies
  - Film and Media Studies Emphasis
  - Journalism and Mass Communication Emphasis
  - Interpersonal and Public Communications Emphasis
- Minor in Communication Studies
- Online Minor in Communication Studies
- Minor in Film Studies

Bachelor of Arts: Communication Studies

Student Learning Outcomes

1. Students will understand social science research using analytical skills by demonstrating the ability to conduct historical and contemporary research using print and online resources.
2. Students will understand how human values determine communication outcomes. Included in this understanding are cultural, political, legal and philosophical perspectives.
3. Students will demonstrate the ability to recognize his/her bias', identify argument fallacies and increase their objectivity to view their ideas from all sides of an issue.
4. Students will demonstrate that they can communicate effectively in oral, written, and/or visual styles; as well as establish relationships with others based on respect and equality. This includes supportiveness, empathy, collaboration, and conflict management in personal and professional behaviors.
5. Students will develop reasoned and supported arguments in a logical progression with both requisite competence and grammatical precision.

Core Program Requirements

The department provides a multidisciplinary approach so students can satisfy their educational and occupational needs across multiple, firmly grounded degree tracks. Regardless of the emphasis, students are required to satisfactorily complete the department's core courses. Students must maintain a 2.0 GPA in their major field. A grade of "D" in a course within the major will not be accepted for credit in the program. With prior permission, three hours of elective credit from another department may be accepted as Communication Studies elective credit. At least 18 of 33 credit hours must be at the 300 or 400 level. Transfer students may transfer a maximum of 15 hours from another institution, and in addition, must complete a minimum of 18 credit hours within the department.

Required Core Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
COMM-ST 483	Research Seminar In Communication Studies	3
Total Credits		6

The program of study for the Bachelor of Arts in Communication Studies consists of 33 total credit hours. COMM-ST 110 and COMM-ST 483 are required for all three emphasis areas. COMM-ST 483 must be taken during a student's final semester. Students are expected to work closely with a departmental advisor in designing an undergraduate program of study for their emphasis. Only three credit hours within the 33 hours for a major may be taken in one-credit-hour courses. Students are required to take one writing intensive course within their emphasis area with the exception of Film and Media Studies. Film and Media Studies students must take one designated writing intensive course in any discipline.

Note: Students must complete the RooWriter before enrolling in any writing intensive courses. As noted in Pathway, the following classes do not count toward electives in Communication Studies:

COMM-ST 390	Forensic Activities	1-4
COMM-ST 400G	Special Studies In Communication Studies (Debate Practicum)	1-3
COMM-ST 421P	Multimedia & New Media Streaming	3
COMM-ST 422P	New Media Writing For The Web	3

COMM-ST 423P	Shooting Digital Video For The Web And New Media	3
COMM-ST 424P	Web Radio	3

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Communication Studies - Film and Media Arts

Student Learning Outcomes

The Department of Communication Studies offers a variety of program areas, including interpersonal communication, public communication, print and electronic journalism, advertising, public relations, media theory and history, as well as radio, television, and film/video production. While each of these program areas have distinct outcomes in regard to professional competence, the faculty makes a strong effort to work collaboratively to assure that the measure of success in earning a degree in Communication Studies is defined in three departmental outcome goals which we seek to make one in the learning process:

1. Oral and written communication competence.
2. The development of critical thinking skills.
3. The development of both social and professional skills.

We recognize that the development of "professional skills" involve both general and specific outcomes. General outcomes include producing students who display professional standards in regard to interpersonal, intercultural, and organizational communication skills, as well as professional work habits (punctuality, reliability, ethical discernment, teambuilding, etc.). Specific professional skills taught in the Department prepare students to succeed in the professional areas of business communication, health communication, advertising, public relations, film, broadcasting, and journalism.

The Department makes a conscious effort to assess our curricula, teaching, as well as learning processes, and student/faculty competence, on the basis of student learning outcomes. We take pride in our reputation as a "teaching" department.

These outcome goals must equally serve students who will be immediately entering the workplace following the attainment of their undergraduate degree, as well as those who will be entering graduate school programs in a wide variety of academic areas (law, business, interpersonal communication, public communication, journalism, film, among others).

In every departmental course/lab, we consciously seek to employ specific learning process options that reinforce the three goals above.

Degree Requirements - Film and Media Arts Emphasis

In addition to the 6 credit hours of the department's core courses (COMM-ST 110, COMM-ST 483), the Film and Media Arts emphasis requires COMM-ST 330, COMM-ST 339 and 21 hours of Film and Media Arts electives for a total of 33 credit hours. Students are required to take one writing intensive course in any department.

Department's Core Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
COMM-ST 483	Research Seminar In Communication Studies	3
Required Courses		
COMM-ST 330	Introduction To Film Studies	3
COMM-ST 339	Film Theory And Criticism	3
Film and Media Studies Electives		
Select seven of the following:		21
COMM-ST 250	Introduction To Film And Video Methods	
COMM-ST 286	Race in American Film	
COMM-ST 308	Introduction To The Study Of Human Communication	
COMM-ST 320	Mass Media, Culture And Society	
COMM-ST 341WI	Rhetorical Theory And Criticism	
COMM-ST 351WI	Fundamentals Of Writing For The Media	

COMM-ST 354	Introduction to Screenwriting
COMM-ST 363	Radio Production I
COMM-ST 373	Intermediate Media Production
COMM-ST 376	History Of The Film Industry
COMM-ST 379	African American Images in Film
COMM-ST 380	Contemporary Media Topics
COMM-ST 381	Narrative Production
COMM-ST 384	Documentary Film History
COMM-ST 385	Documentary Production
COMM-ST 386	Animation
COMM-ST 391	The World(s) Of Alfred Hitchcock
COMM-ST 392	Great Directors Of Foreign Film
COMM-ST 393	History Of The Hollywood Musicals
COMM-ST 394	The World Of "Film Noir
COMM-ST 400	Special Studies (variable topics - topics must be within the Film/Media Studies Emphasis)
COMM-ST 402CD	CC: American Social Film: Silver Screen & American Dream
COMM-ST 403CE	CC: Radical Changes Since 1945
COMM-ST 406CD	CC: Film Adaptation
COMM-ST 454	Advanced Screenwriting
COMM-ST 457	Producing And Distributing Media
COMM-ST 470	Directing
COMM-ST 471	Advanced Media Production
COMM-ST 473	Directing Actors and Scenes
COMM-ST 478	Media Law
COMM-ST 484	Communication Studies Activities
COMM-ST 498	Special Problems In Communication Studies (restricted to 3 cr. hrs. with any one instructor)
Total Credits	33

Tools for Planning and Fulfilling Academic Requirements

UMKC’s Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student’s evaluation of progress and major “fit”. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC’s Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student’s officially recorded (Office of Registration and Records) and “what if” plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Communication Studies - Interpersonal and Public Communication Emphasis

Student Learning Outcomes

The Department of Communication Studies offers a variety of program areas, including interpersonal communication, public communication, print and electronic journalism, advertising, public relations, media theory and history, as well as radio, television, and film/video production. While each of these program areas have distinct outcomes in regard to professional competence, the faculty makes a strong effort to work collaboratively to assure that the measure of success in earning a degree in Communication Studies is defined in three departmental outcome goals which we seek to make one in the learning process:

1. Oral and written communication competence.
2. The development of critical thinking skills.
3. The development of both social and professional skills.

We recognize that the development of "professional skills" involve both general and specific outcomes. General outcomes include producing students who display professional standards in regard to interpersonal, intercultural, and organizational communication skills, as well as professional work habits

(punctuality, reliability, ethical discernment, teambuilding, etc.). Specific professional skills taught in the Department prepare students to succeed in the professional areas of business communication, health communication, advertising, public relations, film, broadcasting, and journalism.

The Department makes a conscious effort to assess our curricula, teaching, as well as learning processes, and student/faculty competence, on the basis of student learning outcomes. We take pride in our reputation as a "teaching" department.

These outcome goals must equally serve students who will be immediately entering the workplace following the attainment of their undergraduate degree, as well as those who will be entering graduate school programs in a wide variety of academic areas (law, business, interpersonal and public communication, journalism, film, among others).

In every departmental course/lab, we consciously seek to employ specific learning process options that reinforce the three goals above.

Degree Requirements - Interpersonal and Public Communication Emphasis

In addition to the department's six hours of core courses (COMM-ST 110, COMM-ST 483), COMM-ST 308, COMM-ST 341WI and COMM-ST 377 are required for this emphasis. Three hours of Interpersonal and 3 hours of Public Communication courses are required. Twelve hours of Interpersonal and Public electives complete the emphasis for a total of 33 credit hours. Students are required to take one writing intensive course within the emphasis area.

Department's Core Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
COMM-ST 483	Research Seminar In Communication Studies	3
Required Courses		
COMM-ST 308	Introduction To The Study Of Human Communication	3
COMM-ST 341WI	Rhetorical Theory And Criticism	3
COMM-ST 377	Interpersonal Communication	3
Interpersonal Communication		
Select one of the following:		3
COMM-ST 343	Group Dynamics	
COMM-ST 344	Communication In Organizational Settings	
COMM-ST 344WI	Communication In Organizational Settings	
COMM-ST 378	Computer-Mediated Communication	
COMM-ST 400	Special Studies	
COMM-ST 431	Colloquium In Interpersonal Dynamics	
COMM-ST 444WI	Intercultural Communication	
Public Communication		
Select one of the following:		3
COMM-ST 213	Argumentation And Critical Thought	
COMM-ST 312	Advanced Public Speaking	
COMM-ST 317	Persuasion	
COMM-ST 426	History And Criticism Of American Public Address I	
COMM-ST 428	History and Criticism of American Public Address II	
COMM-ST 446	Principles Of Advertising	
COMM-ST 447	Interactive and Social Media Advertising	
COMM-ST 448	Principles Of Public Relations	
COMM-ST 484	Communication Studies Activities	
Interpersonal and Public Electives		
Select four of the following:		12
COMM-ST 213	Argumentation And Critical Thought	
COMM-ST 312	Advanced Public Speaking	
COMM-ST 317	Persuasion	
COMM-ST 343	Group Dynamics	
COMM-ST 344	Communication In Organizational Settings	
COMM-ST 344WI	Communication In Organizational Settings	
COMM-ST 400	Special Studies (topic must be within the Interpersonal & Public Emphasis area)	
COMM-ST 426	History And Criticism Of American Public Address I	

COMM-ST 428	History and Criticism of American Public Address II	
COMM-ST 431	Colloquium In Interpersonal Dynamics	
COMM-ST 444WI	Intercultural Communication	
COMM-ST 446	Principles Of Advertising	
COMM-ST 447	Interactive and Social Media Advertising	
COMM-ST 448	Principles Of Public Relations	
COMM-ST 484	Communication Studies Activities	
COMM-ST 498	Special Problems In Communication Studies (restricted to 3 cr. hrs with any one instructor)	
Total Credits		33

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Communication Studies - Journalism and Mass Communications Emphasis

Student Learning Outcomes

The Department of Communication Studies offers a variety of program areas, including public address, print and electronic journalism, advertising, public relations, media theory and history, as well as radio, television, and film/video production. While each of these program areas have distinct outcomes in regard to professional competence, the faculty makes a strong effort to work collaboratively to assure that the measure of success in earning a degree in Communication Studies is defined in three departmental outcome goals which we seek to make one in the learning process:

1. Oral and written communication competence.
2. The development of critical thinking skills.
3. The development of both social and professional skills.

We recognize that the development of "professional skills" involve both general and specific outcomes. General outcomes include producing students who display professional standards in regard to interpersonal, intercultural, and organizational communication skills, as well as professional work habits (punctuality, reliability, ethical discernment, teambuilding, etc.). Specific professional skills taught in the Department prepare students to succeed in the professional areas of business communication, health communication, advertising, public relations, film, broadcasting, and journalism.

The Department makes a conscious effort to assess our curricula, teaching, as well as learning processes, and student/faculty competence, on the basis of student learning outcomes. We take pride in our reputation as a "teaching" department.

These outcome goals must equally serve students who will be immediately entering the workplace following the attainment of their undergraduate degree, as well as those who will be entering graduate school programs in a wide variety of academic areas (law, business, speech communication, journalism, film, among others).

In every departmental course/lab, we consciously seek to employ specific learning process options that reinforce the three goals above.

Degree Requirements - Journalism & Mass Communication Emphasis

In addition to the department's six credit hours of core courses (COMM-ST 110, COMM-ST 483), the Journalism and Mass Communication emphasis requires nine hours: COMM-ST 220 COMM-ST 303WI **OR** COMM-ST 351WI and COMM-ST 484. An additional 18 hours of Journalism and Mass Communication electives are required, for a total of 33 hours. Students are required to take one writing intensive course within the emphasis area.

Department's Core Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
COMM-ST 483	Research Seminar In Communication Studies	3
Required Courses		
Select 220, 303WI OR 351WI and 484:		
COMM-ST 220	Introduction: Modern Communications Media	3
COMM-ST 303WI	Introduction To Journalism (OR)	3

COMM-ST 351WI	Fundamentals Of Writing For The Media	
COMM-ST 484	Communication Studies Activities	3
Journalism and Mass Communication Electives		
Select six of the following:		18
COMM-ST 260P	Introduction To Web Communications	
COMM-ST 265	Visual Communication	
COMM-ST 303WI	Introduction To Journalism (If not taken above as one required course)	
COMM-ST 308	Introduction To The Study Of Human Communication	
COMM-ST 311	Radio & Television Performance	
COMM-ST 314WI	Reporting	
COMM-ST 320	Mass Media, Culture And Society	
COMM-ST 331	Mass Media In America	
COMM-ST 341WI	Rhetorical Theory And Criticism	
COMM-ST 351WI	Fundamentals Of Writing For The Media (If not taken above as required course)	
COMM-ST 361	Media Management	
COMM-ST 363	Radio Production I	
COMM-ST 383	Cross-Cultural Journalism & Mass Media	
COMM-ST 384	Documentary Film History	
COMM-ST 388	Media Ethics	
COMM-ST 400	Special Studies (topic must be within the Journalism & Mass Communication Emphasis)	
COMM-ST 432	Press, Politics And Public Policy	
COMM-ST 446	Principles Of Advertising	
COMM-ST 447	Interactive and Social Media Advertising	
COMM-ST 448	Principles Of Public Relations	
COMM-ST 456	Electronic Journalism	
COMM-ST 462	Public Broadcasting	
COMM-ST 466	Advanced Electronic Journalism	
COMM-ST 478	Media Law	
COMM-ST 484	Communication Studies Activities	
COMM-ST 498	Special Problems In Communication Studies (restricted to 3 cr. hr. with any one instructor)	
Total Credits		33

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Minor in Communication Studies

Student Learning Outcomes

The Department of Communication Studies offers a variety of program areas, including interpersonal communication, public communication, print and electronic journalism, advertising, public relations, media theory and history, as well as radio, television, and film/video production. While each of these program areas have distinct outcomes in regard to professional competence, the faculty makes a strong effort to work collaboratively to assure that the measure of success in earning a degree in Communication Studies is defined in three departmental outcome goals which we seek to make one in the learning process:

1. Oral and written communication competence.
2. The development of critical thinking skills.
3. The development of both social and professional skills.

We recognize that the development of "professional skills" involve both general and specific outcomes. General outcomes include producing students who display professional standards in regard to interpersonal, intercultural, and organizational communication skills, as well as professional work habits (punctuality, reliability, ethical discernment, teambuilding, etc.). Specific professional skills taught in the Department prepare students to succeed in the professional areas of business communication, health communication, advertising, public relations, film, broadcasting, and journalism.

The Department makes a conscious effort to assess our curricula, teaching, as well as learning processes, and student/faculty competence, on the basis of student learning outcomes. We take pride in our reputation as a "teaching" department.

These outcome goals must equally serve students who will be immediately entering the workplace following the attainment of their undergraduate degree, as well as those who will be entering graduate school programs in a wide variety of academic areas (law, business, interpersonal and public communication, journalism, film, among others).

In every departmental course/lab, we consciously seek to employ specific learning process options that reinforce the three goals above.

A minor in communication studies may be earned by completing two required courses (COMM-ST 110 and COMM-ST 308), plus another 12 credit hours in any 300-400 level courses within the department, with the exception of those courses listed below. Students may declare their minor by meeting with the undergraduate advisor and filing a completed Declaration of Major Form (available in 202 Haag Hall) with a current copy of their transcript. A grade of "D" in a course within the minor will not be accepted for credit in the program.

Required Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
COMM-ST 308	Introduction To The Study Of Human Communication	3

COMM-ST 390, COMM-ST 400G, COMM-ST 421P, COMM-ST 422P, COMM-ST 423P and COMM-ST 424P DO NOT count toward the minor in Communication Studies

Minor in Film Studies

Student Learning Outcomes

The Department of Communication Studies offers a variety of program areas, including interpersonal communication, public communication, print and electronic journalism, advertising, public relations, media theory and history, as well as radio, television, and film/video production. While each of these program areas have distinct outcomes in regard to professional competence, the faculty makes a strong effort to work collaboratively to assure that the measure of success in earning a degree in Communication Studies is defined in three departmental outcome goals which we seek to make one in the learning process:

1. Oral and written communication competence.
2. The development of critical thinking skills.
3. The development of both social and professional skills.

We recognize that the development of "professional skills" involve both general and specific outcomes. General outcomes include producing students who display professional standards in regard to interpersonal, intercultural, and organizational communication skills, as well as professional work habits (punctuality, reliability, ethical discernment, teambuilding, etc.). Specific professional skills taught in the Department prepare students to succeed in the professional areas of business communication, health communication, advertising, public relations, film, broadcasting, and journalism.

The Department makes a conscious effort to assess our curricula, teaching, as well as learning processes, and student/faculty competence, on the basis of student learning outcomes. We take pride in our reputation as a "teaching" department.

These outcome goals must equally serve students who will be immediately entering the workplace following the attainment of their undergraduate degree, as well as those who will be entering graduate school programs in a wide variety of academic areas (law, business, interpersonal and public communication, journalism, film, among others).

In every departmental course/lab, we consciously seek to employ specific learning process options that reinforce the three goals above.

A minor may be earned in film studies and/or film and media production. (Not available to ComS majors.)

Required Courses		
COMM-ST 330	Introduction To Film Studies	3
COMM-ST 376	History Of The Film Industry	3
Electives		
Select four of the following:		12
COMM-ST 220	Introduction: Modern Communications Media	
COMM-ST 250	Introduction To Film And Video Methods	

COMM-ST 320	Mass Media, Culture And Society
COMM-ST 330	Introduction To Film Studies
COMM-ST 339	Film Theory And Criticism
COMM-ST 341WI	Rhetorical Theory And Criticism
COMM-ST 351WI	Fundamentals Of Writing For The Media
COMM-ST 354	Introduction to Screenwriting
COMM-ST 363	Radio Production I
COMM-ST 373	Intermediate Media Production
COMM-ST 380	Contemporary Media Topics
COMM-ST 381	Narrative Production
COMM-ST 384	Documentary Film History
COMM-ST 385	Documentary Production
COMM-ST 386	Animation
COMM-ST 391	The World(s) Of Alfred Hitchcock
COMM-ST 392	Great Directors Of Foreign Film
COMM-ST 393	History Of The Hollywood Musicals
COMM-ST 394	The World Of "Film Noir
COMM-ST 400	Special Studies
COMM-ST 402CD	CC: American Social Film: Silver Screen & American Dream
COMM-ST 403CE	CC: Radical Changes Since 1945
COMM-ST 406CD	CC: Film Adaptation
COMM-ST 454	Advanced Screenwriting
COMM-ST 457	Producing And Distributing Media
COMM-ST 470	Directing
COMM-ST 471	Advanced Media Production
COMM-ST 473	Directing Actors and Scenes
COMM-ST 478	Media Law
COMM-ST 484	Communication Studies Activities
COMM-ST 498	Special Problems In Communication Studies (restricted to 6 cr. hr. with any one instructor)
Total Credits	18

Online Minor in Communication Studies

Student Learning Outcomes

The Department of Communication Studies offers a variety of program areas, including interpersonal communication, public communication, print and electronic journalism, advertising, public relations, media theory and history, as well as radio, television, and film/video production. While each of these program areas have distinct outcomes in regard to professional competence, the faculty makes a strong effort to work collaboratively to assure that the measure of success in earning a degree in Communication Studies is defined in three departmental outcome goals which we seek to make one in the learning process:

1. Oral and written communication competence.
2. The development of critical thinking skills.
3. The development of both social and professional skills.

We recognize that the development of "professional skills" involve both general and specific outcomes. General outcomes include producing students who display professional standards in regard to interpersonal, intercultural, and organizational communication skills, as well as professional work habits (punctuality, reliability, ethical discernment, teambuilding, etc.). Specific professional skills taught in the Department prepare students to succeed in the professional areas of business communication, health communication, advertising, public relations, film, broadcasting, and journalism.

The Department makes a conscious effort to assess our curricula, teaching, as well as learning processes, and student/faculty competence, on the basis of student learning outcomes. We take pride in our reputation as a "teaching" department.

These outcome goals must equally serve students who will be immediately entering the workplace following the attainment of their undergraduate degree, as well as those who will be entering graduate school programs in a wide variety of academic areas (law, business, interpersonal and public communication, journalism, film, among others).

In every departmental course/lab, we consciously seek to employ specific learning process options that reinforce the three goals above.

A minor in communication studies may be earned online by completing two required courses (COMM-ST 110 and COMM-ST 308), plus another 12 credit hours in any 300-400 level online courses within the department. Students may declare their minor by meeting with the undergraduate advisor and filing a completed Declaration of Major Form (available in 202 Haag Hall). A grade of "D" in a course within the minor will not be accepted for credit in the program.

Required Online Courses		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
COMM-ST 308	Introduction To The Study Of Human Communication	3
Elective Online Courses		
Select four of the following:		12
COMM-ST 378	Computer-Mediated Communication	
COMM-ST 383	Cross-Cultural Journalism & Mass Media	
COMM-ST 400N	Special Studies	
COMM-ST 446	Principles Of Advertising	
COMM-ST 484	Communication Studies Activities	
Total Credits		18

Note: COMM-ST 260P, COMM-ST 390, COMM-ST 400G, COMM-ST 421P, COMM-ST 422P, COMM-ST 423P and COMM-ST 424P do not apply toward an online minor in Communication Studies

Department of Criminal Justice and Criminology

5215 Rockhill Road
(816) 235-2751
Fax: (816) 235-5193
mailto:falkp@umkc.edu
http://cas.umkc.edu/cjc

Mailing Address
University of Missouri-Kansas City
Department of Criminal Justice and Criminology
5215 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Kenneth Novak

Professor Emeritus:
Wayne Lucas

Professor Emerita:
Cathleen Burnett

Professors:
Alexander Holsinger (principal graduate advisor), Kristi Holsinger (undergraduate director), Kenneth Novak (chair)

Associate Professors:
Toya-Like Haislip

Assistant Professors:
Andrew Fox, Jessica Hodge, Jennifer Owens, Lori Sexton

Administrative Assistant:
Tricia Falk

Department Description

The Department of Criminal Justice and Criminology offers programs of study leading to the following degrees:

- Bachelor of Arts in Criminal Justice and Criminology
- Master of Science in Criminal Justice and Criminology

A program minor is available in Criminal Justice and Criminology.

The mission of the department is to extend knowledge about the nature of crime and criminal justice. This mission includes continuing participation by faculty in significant criminological research; other scholarly endeavors; and inviting students to join in that activity by:

- Learning the core materials of the discipline.
- Acquiring research skills.
- Assisting in faculty research.
- Becoming involved in student activities that supplement coursework and research.

Within the context of a liberal arts education, the program offers an interdisciplinary approach to study the criminal justice system. The program is designed to develop the intellectual skills required to function effectively as a field practitioner and to provide the knowledge base for careers as planners, administrators and researchers. The course offerings emphasize issues and problems relevant to policy considerations in criminal justice.

Department Activities

Undergraduate Academic Advising

Student academic advising is a continuous process in the department. Undergraduate advisors are available for consultation throughout the academic year. The department recommends that students check the program requirements in the department office before filing the declaration of major form. Undergraduate majors are encouraged to consult with the department to establish a tentative plan of study. Students should leave their mail and e-mail addresses with the department office so that they can receive notifications concerning class time tables, new classes, and other departmental information of interest to majors.

Financial Assistance

Students can receive financial assistance through various campus scholarships, loan programs, grants and the work-study program. Students who are interested should contact the Financial Aid and Scholarships Office.

Alvin Brooks Scholarship

Award Amount: Varies

Qualifications: Full-time undergraduate student majoring in Criminal Justice & Criminology, who is in good academic standing with a minimum GPA of 2.0. Preference given to students who are a first generation college student, who graduated from an accredited Kansas City, Missouri high school or transferred from a Kansas City area community college. The student must demonstrate financial need.

How to Apply: The College of Arts and Sciences' Scholarship Application.

Criminal Justice Club and Honor Society

The Criminal Justice and Criminology Club is open to all students interested in criminal justice topics; students do not have to be a Criminal Justice and Criminology Major. Club activities include service projects in the community, sponsorship of community speakers on campus, participation in local and regional professional meetings, and learning about internships and research opportunities. The department also has a chapter of Alpha Phi Sigma, a national honor society for Criminal Justice students. Students must meet certain academic qualifications and pay an initiation fee to join this national honor society.

Cooperative Programs

The department cooperates with several other programs on the campus by jointly listing courses at the undergraduate level. Students may benefit from combining one of these areas of study with their major:

- Gerontology
- Honors program
- Urban Studies
- Women's and Gender Studies
- Black Studies

Graduate Academic Advising

Student academic advising is a continuous process in the department. The principal graduate advisor is available for consultation throughout the academic year. Graduate students are required to consult with the department to establish a tentative plan of study. A master's degree program of study form, and a form appointing a supervisory committee, should be submitted by the end of the student's first semester in the program. Students

should leave their mail and e-mail addresses with the department so they can receive notifications concerning class time tables, new classes and other departmental news and opportunities.

Faculty

Cathleen Burnett[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=burnett); professor of sociology/CJC; B.A. (St. Lawrence University); M.S., Ph.D. (Vanderbilt University).

Andrew M. Fox Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=fox); assistant professor of criminal justice and criminology; B.A. (Aquinas College); M.S., Ph.D. (University of Cincinnati).

Jessica Hodge[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hodge); assistant professor of criminal justice and criminology; B.A. (university of Minnesota); M.S. (Western Oregon University; Ph.D. (University of Delaware).

Alexander Holsinger[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=holsinger); associate professor of criminal justice and criminology; B.A. (Aquinas College); M.S. (Illinois State University); Ph.D. (University of Cincinnati).

Kristi Holsinger[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=holsinger); associate professor of criminal justice and criminology; B.A. (Aquinas College); M.S., Ph.D. (University of Cincinnati).

Toya Z. Like-Haislip[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=like); assistant professor of criminal justice and criminology; B.S., M.A., Ph.D. (University of Missouri-St. Louis).

Wayne L. Lucas[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lucas); professor of criminal justice and criminology; B.S., M.S. (Illinois State University); Ph.D. (Iowa State University).

Ken Novak[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=novak); associate professor of criminal justice and criminology; B.S. (Bowling Green State University); M.S., Ph.D. (University of Cincinnati).

Lori Sexton Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sexton); assistant professor of criminal justice and criminology; B.S. (Cornell University); M.A. (University of Pennsylvania); Ph.D. (University of California, Irvine).

1 Associate or Adjunct Graduate Faculty
2 Members of UMKC Graduate Faculty
3 Members of UMKC Doctoral Faculty
4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts in Criminal Justice and Criminology (p. 87)
- Minor in Criminal Justice and Criminology (p. 90)

Graduate

Graduate Degrees:

- Master of Science in Criminal Justice and Criminology (p. 89)

BA in Criminal Justice and Criminology

Career Implications

The B.A. curriculum is designed to prepare students for entry-level positions and middle-management careers in the public and private sectors of police and security services, adult and juvenile justice systems and post-adjudicatory services such as probation, parole and related private organizations, as well as federal, state and local administrative agencies. The program is intended to augment skills that are developed in the training programs and academies of service agencies and to develop new talent for the wide variety of agencies and organizations that administer our legal institutions. In addition to the foregoing variety of career roles, CJC majors can exercise career options in consulting, government, human services, journalism and urban planning, and with the appropriate graduate training, in teaching social work, criminology and law.

Student Learning Outcomes

The mission of the Bachelor of Arts in Criminal Justice and Criminology is to offer students the opportunity to learn how to analyze and interpret the systems of social control that are applied through the criminal justice system and throughout society, as well as how to explain the causes and consequences of these social structures. This major focuses on crime, criminals, and professionals who handle these concerns through arrest, court processing and punishments. As such the major emphasizes community engagement and service so to prepare students for the jobs and leadership opportunities that will be necessary for their role as future change agents. The major offers skills in critical thinking and in conducting and evaluating research which promote evidence-based decision-making and effective communication. Always striving for best practices, this major is especially relevant to the urban engagement mission of the university, and its domain is always situated within inclusive learning environments which demand students become culturally competent individuals in order to understand and thrive in society.

Graduates of the UMKC's Undergraduate Criminal Justice & Criminology Degree Program will:

- Demonstrate ability to integrate, critique, synthesize, and apply content.
- Demonstrate strong oral and written communication skills.
- Demonstrate understanding of skills.
- Possess an understanding of job and career paths.
- Demonstrate ability to link theory, research and policy.
- Demonstrate ability to engage with and address existing social problems.
- Demonstrate ability to communicate as is appropriate for CJC practitioners and professionals.

Degree Requirements

The B.A. degree requires a total of 36 credit hours in addition to the general education requirements for a degree in The College of Arts and Sciences.

For students selecting the CJC major:

Required Courses		
CJC 101	Introduction To Criminal Justice	3
CJC 210	Introduction To Statistics In Sociology/Criminal Justice [*]	3
CJC 215	Methods Of Criminological Research	3
CJC 220	Theoretical Criminology	3
CJC 495WI	Capstone: Criminal Justice And Criminology	3
Select two of the following:		6
CJC 354	Policing in America	
CJC 361	Principles & Practices of Criminal Courts	
CJC 370	Principles Of Corrections	
Electives		
CJC Electives (see restrictions below)		15
Total Credits		36

1 STAT 235 is not a substitute for CJC 210.

2 Students are expected to take CJC 495WI after they finish all other CJC courses. CJC 495WI is open only to CJC majors in their last semester of coursework who have completed the RooWriter.

Students must receive a grade of no lower than C- in the core required courses (CJC 101, CJC 210, CJC 215, CJC 220, and CJC 495WI) and achieve an overall GPA of 2.0 in the major. Students with more than one academic major may apply only 9 credit hours from another degree program toward the CJC major.

It is suggested that students broaden their course choices by selecting related offerings in English (especially those courses that stress writing skills), philosophy, history, geography, political science, psychology, sociology and public administration.

Transfer students may be credited with a maximum of 15 Criminal Justice and Criminology credit hours (the introductory course plus 12 hours of electives) from other institutions.

In selecting courses to fulfill the 15 credit hours of CJC electives, CJC majors and minors should be aware of the following restrictions:

- No more than 6 credit hours of Directed Studies in Criminal Justice and Criminology (CJC 490) may be used to fulfill CJC elective requirements.
- Participation in only one Internship in Criminal Justice (CJC 491) may be used to fulfill CJC elective requirements.
- No more than 3 credit hours of Topics in Criminal Justice (CJC 492) may be used to fulfill CJC elective requirements.

Students who are pursuing the CJC major or minor are strongly encouraged to meet with a CJC advisor each semester to review their progress toward degree completion, as well as to determine the appropriateness of coursework selected.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Master of Science: Criminal Justice and Criminology

MS-CJC Program Description

The M.S. degree in CJC offers coursework that emphasizes policy analysis of criminal justice and criminology issues. The M.S.-CJC degree may serve as a terminal degree for those seeking appropriate study and academic credentials to qualify for management and administrative positions in justice-related agencies. The degree may also serve as preparation for advanced study in criminology and criminal justice at the doctoral level. Depending upon personal academic or career goals, students may concentrate studies in the treatment and research area, or the area of justice agency development and management.

Application Procedures

Applicants must submit an application for admission to UMKC and transcripts of their undergraduate work to the university Office of Admissions. Additionally, applicants must submit a writing sample to the department's Admissions Committee (i.e., the Principal Graduate Advisor). This writing sample should be two to three pages in length (double-spaced) and should identify how the applicant's undergraduate education and their work or personal experience has prepared them for graduate study in the area of criminal justice and criminology. Applicants are also encouraged to express how they view study in our graduate program as fitting with their future career or educational goals. It is recommended students review the MS in CJC program's course offerings (available via the department's web site) as well as the concentration areas of the faculty (also available on-line) in order to glean additional information about what the academic programming has to offer. The writing sample is to be sent directly to the principal graduate advisor for the M.S.-CJC program at the department address. Applicants for the spring term must have all materials to the admissions committee by November 1, and those applying for fall semester or summer term admission must have materials in by April 1.

The department strongly recommends that application materials be submitted well in advance of the posted due date to ensure all materials will be on hand in time for review.

Decisions regarding admission to the graduate program are made by the graduate faculty of the program. Materials are reviewed with attention to past academic performance and substantive areas of study that would prepare students for CJC graduate study.

Admission Requirements

The minimum admission requirements for entrance into the M.S.-CJC program include the following:

1. Completed an undergraduate degree, from an accredited university or college, with coursework in the socio-behavioral sciences sufficient to prepare for graduate-level study in the criminal justice and criminology field.
2. Achieved a minimum cumulative GPA of 3.0 in all undergraduate work.
3. Completed three undergraduate courses one each in statistics, research methods, and theories of crime.
4. Two letters of recommendation: Applicants should ask at least two individuals to provide references on their behalf using the form that can be found at http://cas.umkc.edu/cjc/admissions.asp. Please note that references may also include a written letter of reference, that speaks to the applicant's scholastic aptitude, and their level of preparation for graduate-level education. References should be provided by individuals who are not related to the applicant, and ideally will come from individuals who have direct knowledge of the applicant's academic credentials and preparedness.

The application process is competitive. Satisfaction of the minimum criteria stated above does not guarantee admission to the graduate program of study. Students are admitted according to their rank in the applicant pool and consideration of the adequacy of departmental resources.

Students who do not meet admission requirements, but who otherwise may show promise for graduate work, may be admitted provisionally to the program. Provisional admission means deficiencies must be corrected before a student is fully admitted as a degree-seeking student in the M.S.-CJC program. Typical deficiencies include a need to take undergraduate coursework to prepare for graduate study in this program, or to demonstrate scholastic ability in graduate-level courses.

Student Learning Outcomes

The Department of Criminal Justice and Criminology's mission is to lead in graduate education within the area of Criminal Justice and Criminology; to deepen and expand scientific understanding of America's justice systems; to develop a graduate-educated workforce and collaborate in urban issues and education; to create a vibrant learning and campus life experience for our master's students.

Graduates from the Master of Science in Criminal Justice and Criminology program will demonstrate:

- A comprehensive understanding of policies and practices
- An advanced knowledge of criminological theory
- Competency in research and analysis

The M.S.-CJC degree requires successful completion of 30 credit hours of graduate work. Within these 30 hours, students may elect to complete a thesis or pursue the non-thesis option.

A core of five courses is required of all students. The required courses include:

CJC 5511	Sociological Methods II	3
CJC 5515	Qualitative Research Methods in Criminal Justice	3
CJC 5516	Intermediate Statistics	3
CJC 5518	Advanced Criminological Theory	3
CJC 5580	Seminar: Policy And Decision Making In Criminal Justice	3
Total Credits		15

One of the following:

CJC 5551	Seminar In Policing	3
CJC 5570	Contemporary Corrections And Correctional Policy	3
CJC 5575	Correctional Rehabilitation And Treatment	3

The required graduate courses in statistics, research methods and theory demand completion of prerequisite courses in these areas from the student's undergraduate work. Those who have not had such courses may be required to take the prerequisite course(s) prior to enrolling in the graduate course. Beyond the required courses, students must complete an additional 15 hours of academic work. This work may include thesis hours, courses in independent directed studies, classes from the CJC curriculum, or courses from other disciplines as well as those listed above. The content of those 15 hours of study will reflect the student's choice after consultation with their faculty advisor, with respect to thesis or non-thesis options.

Thesis Option

Those electing to write a thesis as part of their graduate work can receive up to 6 hours credit (CJC 5599) for preparation of the thesis. In addition to writing the thesis students must successfully complete an oral defense of that thesis before their supervisory committee. The research topic of the thesis will address some issue of specific interest to the student. Through courses, literature review, and analyses conducted in developing the thesis, students are expected to become proficient in their specific thesis topic area.

Non-Thesis Option)

Those electing the non-thesis option will take additional coursework in lieu of the 6.0 credit hours allotted for the thesis option outlined above.

Demonstration Project

During their final semester, students pursuing the non-thesis option must successfully complete a demonstration project. The demonstration project will require the student to write an independent research paper that outlines solutions to a given scenario. After completion and submission of the paper, the student will meet with a panel of two faculty members where an assessment of the paper will be given ("Pass", "Revise and Resubmit", "Fail"). Students doing the demonstration project will take 3 credit hours of Directed Studies in Criminal Justice and Criminology (CJC 5590), under the direction of the principal graduate advisor. These three hours will be counted toward the fifteen hours of electives for the program of study. See the Principal Graduate Advisor for more information regarding the demonstration project option.

Minor in Criminal Justice and Criminology

Student Learning Outcomes

The mission of the minor in Criminal Justice and Criminology is to prepare future leaders in the field of Criminal Justice with the knowledge to understand and the skills to utilize resources for creative and effective problem-solving.

Graduates of the UMKC's Undergraduate Criminal Justice & Criminology Degree Program will:

- Demonstrate knowledge of the Criminal Justice System, its subsystems (the institutions and structures of police, courts, and corrections) and their interactions (processes).
- Demonstrate knowledge of the major theoretical explanations for individual motivations to commit crime as well as the nature/occurrence of crime which includes the prominent schools of criminological thoughts - the Positivist, Classical and Chicago Schools of Criminology - and emergent theories.
- Demonstrate the ability to analyze criminal justice literature, through reading comprehension and interpretation.

Program Requirements

Undergraduate students can obtain a CJC minor. A minimum of 18 credit hours is required, including the introductory course CJC 101. At least 9 of the 18 credit hours must be in courses at the 300 or 400 level, and at least 9 of the 18 credit hours must be taken at UMKC. Only 6 credit hours from the major field of study may be applied toward a CJC minor, and only 3 credit hours may overlap between two minors. Students should receive a grade no lower than a C- in the required course and should have an overall 2.0 GPA for the minor.

Department of Economics

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), Room 211
5120 Rockhill Road
(816) 235-**1314**
Fax: (816) 235-**2834**
economics@umkc.edu
http://cas.umkc.edu/econ

Mailing Address
University of Missouri-Kansas City
Department of Economics
HH 211
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Stephanie Kelton, (816) 235-**2837**

Undergraduate Adviser:
Karen Vorst, (816) 235-**5875**

IPhD Coordinator:
Peter J. Eaton, (816) 235-**2832**

MA Advisor:
Fred Lee, (816) 235-**2543**

Administrative Associate:
Deborah E. Foster, (816) 235-**2405**

Senior Secretary:
Katherine A. Taylor, (816) 235-**1153**

Professors Emeriti:
W. Robert Brazelton, L. Kenneth Hubbell, A. Ross Shepherd, F. Eugene Wagner, John O. Ward

Professors:
Mathew Forstater, Michael Hudson (distinguished research professor), Jan Kregel (distinguished research professor), Frederic S. Lee, James I. Sturgeon (chair), Karen S. Vorst, L. Randall Wray

Associate Professors:
William Black, Peter J. Eaton, Stephanie Kelton, Linwood Tauheed, Erik K. Olsen

Lecturers:
Judith Ancel, John Henry, Michael Kelsay, Ben Young

The Department of Economics is committed to promoting excellence in broad-based undergraduate programs; graduate and interdisciplinary doctoral education; research; and community, university and professional service. The department focuses its research, teaching and service efforts on the urban mission of the University by fostering a diversity of research and teaching perspectives for faculty and students.

The department offers an undergraduate major that can be completed either through day or evening classes and is a major participant in PACE (Program for Adult College Education).

Our Students

The department offers programs leading to a Bachelor of Arts, Master's of Arts and Interdisciplinary Ph.D., in Economics. It also provides undergraduate service courses to the College of Arts and Sciences, the Bloch School, and the School of Computing and Engineering. Undergraduate major participate in a variety of visiting lecture programs and faculty colloquialism through the Economics Club and the Omicron Delta Epsilon (the economics honorary society).

Faculty and Facilities

Faculty members of the department maintain active, extensive research programs and a strong commitment to teaching -- holding four outstanding teaching awards. Faculty members have served as presidents for national and regional economic associations and lectured and conducted research in the Fulbright Program, the Ford Foundation, the U.S. Department of Commerce, and the U.S. Department of Labor. Faculty members have established national and international reputations in a number of research fields. For a small faculty, the department has ranked high among other economics departments at comparable institutions nationally.

The Department of Economics and the Center for Economic Information are housed in Haag Hall. Faculty and other department programs are housed in Manheim Hall. Students have access to state-of-the-art computer labs and classrooms.

Center for Economic Information

Haag Hall (http://www.umkc.edu/virtualtour/haag.asp), Room 210
5120 Rockhill Road
(816) 235-1394
http://www.umkc.edu/cei/

The Center for Economic Information was established in November 1994 with the goal of making local, regional and national information accessible to economic decision-makers in the Kansas City metropolitan area. The CEI is affiliated with the Department of Economics and the College of Arts and Sciences.

The center is involved in research, teaching and outreach activities. The primary expertise of the center is in application of information technology for economic analysis.

Missouri Council for Economic Education

The department houses the Missouri Council for Economic Education (MCEE). MCEE is the statewide provider of economic education training for elementary and secondary education. It is located in Manheim Hall.

Information

You may request information about economics programs by calling the department's main number, (816) 235-1314; visiting the Web site, http://cas.umkc.edu/econ/; or sending an information request via e-mail to economics@umkc.edu.

For specific information on the undergraduate degree program, contact Karen Vorst (816) 235-5875 or vorstk@umkc.edu. Master's program contact Fred Lee, Master of Arts Advisor, (816) 235-2543 or leefs@umkc.edu. Peter Eaton, IPHD Coordinator, (816) 235-2832 or mailto: eatonp@umkc.edu.

Research Centers and Programs

Center for Economic Information:
Peter Eaton, director

Douglas Bowles, associate director

Sara Ballew, programmer/analyst

Saima Sami, programmer/analyst

Faculty

W. Robert Brazelton[2,3]; professor emeritus of economics; B.A. (Dartmouth College); M.A., Ph.D. (University of Oklahoma).

William Black[2,3]; associate professor of economics and law; Ph.D. (University of California at Irvine).

Doug Bowles; research associate, assistant director, CEI, director, SSC, Ph.D., (University of Missouri-Kansas City)

Peter J. Eaton[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=eaton); associate professor of economics; B.A. (University of Santa Clara); Ph.D. (University of Florida).

Mathew Forstater[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=forstater); professor of economics; B.A. (Temple University); M.A. (New School for Social Research); Ph.D. (New School for Social Research).

John Henry. Lecturer in Economics, Ph.D. (McGill University)

L. Kenneth Hubbell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hubbell); professor emeritus of economics and joint professor in the L.P. Cookingham Institute of Public Affairs; B.A., M.A. (Texas Christian University); Ph.D. (University of Nebraska).

Stephanie A. Kelton[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kelton); associate professor of economics; B.A. (California State University-Sacramento); M.Phil. (Cambridge University); Ph.D. (New School for Social Research).

Michael Kelsay, Lecturer, Ph.D. (University of Tennessee).

Frederic S. Lee[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lee); professor of economics; B.A. (Frostburg State University); M.Phil, Ph.D. (Rutgers University).

Erik K. Olsen[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=olsen); associate professor of economics; B.S. (Northeastern University); Ph.D. (University of Massachusetts at Amherst).

Ross Shepherd; professor emeritus of economics; A.B. (Harvard University); M.A., Ph.D. (Syracuse University).

James I. Sturgeon[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sturgeon); chair, department of economics, and professor of economics; B.A. (Kansas State Teachers College-Emporia); M.A. (University of Missouri-Kansas City); Ph.D. (University of Oklahoma).

Linwood Tauheed[2,3], assistant professor of economics; Ph.D. (University of Missouri at Kanas City).

Karen S. Vorst[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vorst); professor of economics; B.S. (Bowling Green State University); Ph.D. (Indiana University).

F. Eugene Wagner Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wagner); professor emeritus of economics; B.A., M.S. (University of Missouri-Kansas City); Ph.D. (Syracuse University).

John O. Ward[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ward); professor emeritus of economics; B.A., M.A. (University of Toledo); Ph.D. (University of Oklahoma).

L. Randall Wray[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wray); professor of economics; B.A. (University of the Pacific); M.A. (Washington University); Ph.D. (Washington University).

Ben Young, lecturer, Ph.D. (University of Oklahoma).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Economics
- Minor in Economics

Graduate

Graduate Degrees:

- Master of Arts: Economics
- Interdisciplinary Ph.D.

Bachelor of Arts: Economics

Career Implications

The undergraduate degree in economics is excellent preparation for graduate study in economics and most other academic disciplines, as well as law and business. A degree in economics opens a wide range of career choices including teaching, government service, finance, banking and insurance. It is excellent preparation for a career in business, public administration and management.

Advising System

Students in the program should consult Professor Karen Vorst, (816) 235-5875 and E-mail: mailto:vorstk@umkc.edu, for undergraduate advising.

Program of Study

The department offers a bachelor of arts in economics.

Honor Society

The Zeta chapter of the Omicron Delta Epsilon International Honor Society in Economics is on campus. Information on this organization can be obtained from Ben Young. The society is open to all undergraduate students with at least 12 hours of economics and a 3.0 GPA in economics and related courses. Graduate students in economics with a 3.0 GPA also may join.

Special Awards and Scholarships

The Joe E. Brown Institutional Economics Award is given each year to an undergraduate or graduate student for outstanding academic performance in the study of institutional theory. The department also offers the Robert Greene Scholarship, Frank Wagner Scholarship and the James Crew Scholarship for undergraduates.

The Bachelor of Arts in Economics

Student Learning Outcomes

Upon graduating with a B.A. degree in Economics:

- Students will be able to distinguish the attributes of a variety of economic theories and policies.
- Students will be able to use their economic knowledge to examine a wide variety of problems that are economic, social and/or political in nature, on both the micro and macro levels.
- Students will have knowledge of statistical methods that will become part of their problem-solving toolset.
- Students will become proficient writers through assignments in regular classes, as well as intensive-writing experiences in the capstone course.
- All students will have undertaken a research project in conjunction with a local community development corporation as part of an academic service learning assignment. In fact, there will be many opportunities to be actively engaged with the Kansas City community through our community service requirement in various courses.
- Students will be better problem solvers and better-informed citizens.

This program requires a minimum of 36 hours and a maximum of 45 hours of courses in the department. A minimum 2.0 GPA in the major is required for graduation.

Related courses in anthropology, English, geography, philosophy, history, political science, psychology, sociology, accounting and computer programming are recommended to satisfy the College of Arts and Sciences requirements for graduation.

The following courses are required:

ECON 201	Introduction To Economics I	3
ECON 202	Introduction To Economics II	3
ECON 301	Macroeconomic Analysis	3
ECON 302	Microeconomic Analysis	3
ECON 425	Intermediate Economic Statistics [1]	3

ECON 451	Institutional Economic Theory	3
Six track-specific electives. See the specific track for details.		18
Total Credits		36

[1] MATH 110 and STAT 235 are prerequisites for ECON 425.

[2] ECON 421 is recommended for students who plan to do graduate work in economics.

General Economics Track

Student Learning Outcomes

- Students will be able to identify important issues related to the economy, from both a macro (broad policy questions) and micro (firm-specific questions) perspective.
- Students will be able to determine what information is needed to evaluate the issues and identify/construct appropriate data sets and other information for analysis.
- Students will develop and use their problem-solving skills and be able to analysis specific issues in order to formulate a variety of solutions.
- Students will be able to communicate their analysis effectively through written and oral presentations.
- Students will gain experience working in teams either in the classroom and/or on the job through an internship experience.

ECON 201	Introduction To Economics I	3
ECON 202	Introduction To Economics II	3
ECON 301	Macroeconomic Analysis	3
ECON 302	Microeconomic Analysis	3
ECON 425	Intermediate Economic Statistics	3
ECON 451	Institutional Economic Theory	3
Six electives from any other Economics courses taught.		18
Total Credits		36

Money and Finance Track

Student Learning Outcomes

- Students will be able to identify important issues related to money and finance from both a macro (broad policy questions) and micro (firm-specific questions) perspective.
- Students will be able to determine what information is needed to evaluate the issues and identify/construct appropriate data sets and other information for analysis.
- Students will develop and use their problem-solving skills and be able to analysis specific issues in order to formulate a variety of solutions.
- Students will be able to communicate their analysis effectively through written and oral presentations.
- Students will gain experience working in teams either in the classroom and/or on the job through an internship experience.

ECON 201	Introduction To Economics I	3
ECON 202	Introduction To Economics II	3
ECON 301	Macroeconomic Analysis	3
ECON 302	Microeconomic Analysis	3
ECON 425	Intermediate Economic Statistics	3
ECON 451	Institutional Economic Theory	3
Select 4 of the following electives:		12
ECON 331P	Money And Banking	
ECON 353	Financial Analysis And The Economy	
ECON 431	Monetary Theory And Policy	
ECON 435	Public Finance	
ECON 437	State And Local Government Finance	
ECON 442	International Finance	
ECON 497	Internship	

Two electives at the 300 or 400 level from outside the track. These 2 electives may come from outside the Department of Economics, subject to approval by the Undergraduate Advisor.	6
Total Credits	36

Political Economy Track

Student Learning Outcomes

- Students will explain, analyze, and critically evaluate different market structures.
- Students will be able to analyze specific economic issues using different methodologies of both a quantitative and qualitative nature.
- Students will be able to undertake independent research into an examination of an issue of current social concern.
- Students will assess the role of domestic and international institutions and norms in shaping economic outcomes.
- Students will address and critically evaluate policy proposals from different theoretical perspectives.
- Student will explain why different theoretical perspectives lead to different policy recommendations.
- Students will understand the relation between economic theory(ies) and the examination of at least two major social issues (race and/or gender, economic development, environmental concerns, etc.).
- Students will examine a specific issue from a standpoint that incorporates social and political concerns in the economic inquiry.

ECON 201	Introduction To Economics I	3
ECON 202	Introduction To Economics II	3
ECON 301	Macroeconomic Analysis	3
ECON 302	Microeconomic Analysis	3
ECON 425	Intermediate Economic Statistics	3
ECON 451	Institutional Economic Theory	3
Select 4 of the following electives:		12
ECON 308	Challenges Facing The US Economy	
ECON 312	Theory Of Economic Development	
ECON 314	Race, Class And Gender: Theory, History, And Policy	
ECON 395	Current Economic Issues	
ECON 420	Environment, Resources And Economic Growth	
ECON 438	Economic Policy	
ECON 488	Radical Political Economy	
ECON 497	Internship	
Two electives at the 300 or 400 level from outside the track. These 2 electives may come from outside the Department of Economics, subject to approval by the Undergraduate Advisor.		6
Total Credits		36

Urban Economic Development

Student Learning Outcomes

- Students will become familiar and conversant with the full range of private, public, and non-profit sector organizations and activities which contribute to the process of urban economic development.
- Students will develop comprehensive and advanced skills in spatial analysis and the operation of Geographic Information Systems (GIS) in the support of urban economic development.
- Students will learn and develop competency in the theory and methods of the field of Urban Economics.
- In collaborative partnerships with local organizations, students will demonstrate the ability to integrate and apply the knowledge and skills acquired in learning outcomes 1-3 to practical problems in urban economic development.

ECON 201	Introduction To Economics I	3
ECON 202	Introduction To Economics II	3
ECON 301	Macroeconomic Analysis	3
ECON 302	Microeconomic Analysis	3
ECON 425	Intermediate Economic Statistics	3
ECON 451	Institutional Economic Theory	3
Electives:		12
ECON 336	The Kansas City Economy	

ECON 411	Geographic Information Systems (GIS) for Urban Economic Development	
ECON 458	Urban Economics	
ECON 496	Practicum in Urban Economic Development	
Two electives at the 300 or 400 level from outside the track. These 2 electives may come from outside the Department of Economics, subject to approval by the Undergraduate Advisor.		6

Teacher Certification in Social Studies

Student Learning Outcomes

Upon graduating with a Teacher Certification in Social Studies:

- Students will be able to distinguish the attributes of a variety of economic theories and policies.
- Students will be able to use their economic knowledge to examine a wide variety of problems that are economic, social and/or political in nature, on both the micro and macro levels.
- Students will have knowledge of statistical methods that will become part of their problem-solving toolset.
- Students will become proficient writers through assignments in regular classes, as well as intensive-writing experiences in the capstone course.
- All students will have undertaken a research project in conjunction with a local community development corporation as part of an academic service learning assignment. In fact, there will be many opportunities to be actively engaged with the Kansas City community through our community service requirement in various courses.
- Students will be better problem solvers and better-informed citizens.

Certification as a middle school (grades 5-9) or secondary (grades 9-12) social studies teacher in either Kansas or Missouri requires that a student complete specific requirements in History, Political Science, Economics, Geography, Behavioral Sciences and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education section of this catalog or contact the Education Student Services Office at (816) 235-2234.

PACE Degree in Liberal Arts

Student Learning Outcomes

Upon graduating with a PACE degree in liberal arts:

- Students will be able to distinguish the attributes of a variety of economic theories and policies.
- Students will be able to use their economic knowledge to examine a wide variety of problems that are economic, social and/or political in nature, on both the micro and macro levels.
- Students will have knowledge of statistical methods that will become part of their problem-solving toolset.
- Students will become proficient writers through assignments in regular classes, as well as intensive-writing experiences in the capstone course.
- All students will have undertaken a research project in conjunction with a local community development corporation as part of an academic service learning assignment. In fact, there will be many opportunities to be actively engaged with the Kansas City community through our community service requirement in various courses.
- Students will be better problem solvers and better-informed citizens.

The department participates in several courses in PACE: leading to concentrations in human resources or ca program for working adults in a weeknight/weekend format. These courses include:

Economics Pace Courses

ECON 366	Art Markets	3
SOC-SCI 395C	Economics Of Energy	1
ECON 202P	Introduction To Economics II	3
ECON 395I	Views Of A Good Society	1
ECON 201P	Introduction To Economics I	3
SOC-SCI 397A	The Economics Of Public Process I	1
ECON 301P	Macroeconomic Analysis	3
ECON 406WI	History Of Economic Thought	3
ECON 331P	Money And Banking	3
ECON 397CP	Current Macroeconomic Issues	3
ECON 302P	Microeconomic Analysis	3
SOC-SCI 397B	The Economics Of Public Process II	1

ECON 353	Financial Analysis And The Economy	3
SOC-SCI 438P	Labor History & Economic Policy	3
HISTORY 400	Special Studies (KC Labor History)	1-3
ECON 486	Labor Economics	3
SOC-SCI 490C	Readings In Labor Economics	1
HMNTY 401PW	The Culture of the Working Class: Independent Study	4

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Interdisciplinary Ph.D.

The Department of Economics participates in the Interdisciplinary Ph.D. program.

For further information see School of Graduate Studies (p. 480) section in this catalog, contact the Department of Economics, (816) 235-1314, or Peter Eaton Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=eaton), Interdisciplinary Ph.D. Coordinator, (816) 235-2832 or eatonp@umkc.edu

Master of Arts: Economics

Career Implications

The master of arts in economics is designed as a preparation for further graduate training at the doctoral level and for professional positions in industry, business, government, teaching and research. Courses may be taken in areas other than economics with the approval of the graduate adviser.

Advising System

Students should consult with the graduate advisor, Fred Lee (816) 235-2543, leefs@umkc.edu, to plan their graduate program of study.

Admission Requirements

Students may be admitted for graduate study in economics if they have a baccalaureate degree in economics from an accredited college or university with an overall grade-point average of at least 2.5 on the 4.0 scale (or the equivalent). Applicants whose undergraduate GPA is less than 2.5 may be considered for admission upon petition to the Graduate Admission Committee of the Department of Economics.

Students who have a baccalaureate degree with an overall undergraduate GPA of 2.5 or better and who did not major in economics may be admitted to the program upon consultation with the department's graduate adviser and on demonstrating proficiency in the following areas:

- Intermediate Macroeconomic Analysis
- Intermediate Microeconomic Analysis
- Introductory Statistics

All students with less than a 2.5 (4.0 scale) GPA prior to admission shall be required to take the general Graduate Record Examinations (GRE) and obtain a score of 153 in verbal, a score of 144 in quantitative, and a score of 4.0 on the analytical portion or better.

International students who have studied less than two years (full time) in a U.S. academic program or a comparable program in an English-speaking country are required to have TOEFL score of 550 or above or 213 on the computer-based test.

Student Learning Outcomes

Students graduating with a master's degree in economics will:

- Have an advanced knowledge of the basic areas of the field.
- Be able to integrate their knowledge with critical thinking skills.
- Be able to articulate their knowledge, both orally and in writing.
- Be able to effectively research the literature of this field.

The Department of Economics offers a master of arts degree. The M.A. program seeks to provide students with a broad level of competence in economics. Students are encouraged to extend the reach of their scholarship to acquire a wide-ranging foundation in addition to technical mastery of theory and quantitative methods. This is done through the combination of required and elective courses.

Degree Requirements

Thirty hours of graduate work are required for the M.A. in economics. The following required courses (15 hours) and their prerequisites are listed:

ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3
ECON 5521	Mathematical Economics [1,2]	3
ECON 5525	Econometric Methods [3]	3
ECON 5551	Advanced Institutional Theory [4]	3
Additional hours of coursework [5]		15
Total Credits		30

1. ECON 5521 is waived if students have completed ECON 421 or its equivalent. In the event students have not had ECON 421 they should take ECON 5521. Calculus is strongly recommended as a prerequisite for ECON 5521.
2. For students not entering in the fall semester, it is strongly recommended that ECON 5521 be taken at the first opportunity.
3. ECON 425 is required for all students who have not had it, or something very much like it. (See Professor Eaton)
4. ECON 451 is required for all students who have not had an approved substitute - see graduate adviser.
5. An additional 15 hours of coursework must be completed. Up to nine of these hours may be in selected 400-level courses in economics and related disciplines, upon consultation with the graduate adviser. Graduate credit toward the M.A. in economics is not given for courses at the 300 level. No more than 6 hours of ECON 5590, may be counted toward graduation.

Substitutions for the above prerequisites may be approved by the graduate adviser.

The prerequisites for graduate courses are very important and must be completed prior to enrollment in courses with prerequisites. Graduate students in economics must also comply with the general graduate academic regulations as found in the School of Graduate Studies section of this catalog.

Requirements for Retention

Students are expected to maintain a high degree of academic excellence. Students must maintain a minimum 3.0 graduate grade-point average. A student who receives a grade of C+ or lower will receive an academic warning. Students who receive a grade of C or C- in two classes, or a grade of D + or lower in one class, will be dropped from the program. A 3.0 (B) must be earned in all undergraduate courses approved for graduate credit and in ECON 5590 and ECON 5599.

A student is required to fill out a "program of study" with the graduate adviser before the completion of 15 hours of coursework. At that time, the graduate committee will consider the student’s performance and make a recommendation with regard to retention of the student. After being approved by the College of Arts and Sciences graduate officer, the program of study is filed with the UMKC Records Office and may be amended upon consultation with the graduate adviser.

Requirements for Graduation

Students on the elective courses track are required to complete 15 hours beyond the required courses. Of these, 6 hours must be at the 5500 level or above. Students on the project track complete a supervised applied research project which counts as part of the 15 hours beyond the required courses. The number of hours for the project depends on its scope and is determined by students and their project adviser. For more information about the project, see the graduate adviser. Depending on the scope of the project, students are required to take 3 to 6 hours from among the following courses:

ECON 5591	Research And Planning Seminar (required)	3
ECON 5599	Research And Thesis [1]	1-6

1. ECON 5591 prerequisite.

Minor in Economics

Student Learning Outcomes

Upon graduating with a minor in Economics:

- Students will be able to distinguish the attributes of a variety of economic theories and policies.
- Students will be able to use their economic knowledge to examine a wide variety of problems that are economic, social and/or political in nature, on both the micro and macro levels.
- Students will have knowledge of statistical methods that will become part of their problem-solving toolset.
- Students will become proficient writers through assignments in regular classes, as well as intensive-writing experiences in the capstone course.
- All students will have undertaken a research project in conjunction with a local community development corporation as part of an academic service learning assignment. In fact, there will be many opportunities to be actively engaged with the Kansas City community through our community service requirement in various courses.
- Students will be better problem solvers and better-informed citizens.

Program Requirements

The minor in economics is open to all students and consists of a minimum of 18 hours (six courses) in economics.

The courses are:

ECON 201	Introduction To Economics I	3
ECON 202	Introduction To Economics II	3
ECON 3XX or 4XX [1]		12
Total Credits		18

[1] Twelve hours in 300- to 400-level courses must be approved by the economics undergraduate adviser.

Department of English Language and Literature

Cockefair Hall (http://www.umkc.edu/virtualtour/cockefair-hall.asp), Room 106
5121 Rockhill Road
(816) 235-**1305** or (816) 235-**1307**
Fax: (816) 235-**1308**
umkc-english@umkc.edu
http://cas.umkc.edu/english

Mailing Address
University of Missouri-Kansas City
Department of English Language and Literature
Cockefair Hall 106
5100 Rockhill Road
Kansas City, MO 64110-2499

Chair: Virginia Blanton
Associate Chair: Jennifer Phegley

Professors:
Virginia Blanton, Michelle Boisseau, Norma Cantú, Joan F. Dean, Stephen Dilks, Jennifer Phegley, Jeffrey Rydberg-Cox, Thomas Stroik

Associate Professors:
Hadara Bar-Nadav, John Barton, Laurie Ellinghausen, Jennifer Frangos, Jane Greer, Christie Hodgen, Daniel Mahala, Michael Pritchett, Anthony Shiu, Jacqueline Wood

Assistant Professors:
Whitney Terrell

Assistant Teaching Professors:
Henri Rix Wood

Assistant Research Professors:
Robert Stewart

Full-time Lecturers:
Elpida Anthan, Crystal Gorham Doss, Nicole Higgins, Sheila Honig, Cynthia Jones, Katie Kline, Ben Moats

Professors Emeriti:

Robert M. Farnsworth, Moira Ferguson, Daniel F. Jaffe, James McKinley, David Ray, Lois Spatz, Linda Voigts, David Weinglass, Robert Willson

Associate Professors Emeriti:
Ralph Berets, James A. Reeds, Jonas Spatz

Department Description

The Department of English Language and Literature offers programs of study that lead to the Bachelor of Arts, the Master of Arts, the Master of Fine Arts, and the Interdisciplinary Doctor of Philosophy degrees. In the undergraduate program, students may pursue a general English program, they may elect to focus on language and rhetoric, British and American literature, Classical, Medieval and Early Modern literature, or they may choose an emphasis in creative writing or secondary English education. Four minors in English are offered: Language and Literature; Creative Writing; Writing; and Manuscript, Print Culture, and Editing. M.A. in English students may focus their studies on Literature or may elect the Language and Literature track or the Manuscript, Print Culture, and Editing track. A Graduate Certificate in Teaching of Writing is also available. The M.F.A. in Creative Writing and Media Arts is an interdisciplinary program leading to a terminal degree. English is an academic discipline eligible for full participation in the University's Interdisciplinary Ph.D. program.

The Department of English includes faculty who have a broad range of professional competence in the study of literature and language, and who are trained to teach courses in British and American literature, linguistics, American culture, film, creative writing, and composition. The department believes the study and teaching of literature and language to be an important means of preserving and vitalizing our humanistic tradition.

Publications

The Department of English and the College of Arts and Sciences publish *New Letters*, a continuation of *The University Review*, which for over 50 years published the works of new and distinguished writers. *New Letters* continues to provide a medium for the best imaginative writing available.

The Department of English sponsors the publication of *Number One*, a magazine of student poetry and fiction, and *The Sosland Journal*, a collection of award-winning student essays from the Ilus W. Davis contest.

BkMk Press, operated under the auspices of the College of Arts and Sciences and housed in the Department of English, publishes books of high-quality poetry and prose by professional writers.

Greater Kansas City Writing Project

The English Language and Literature Department, in conjunction with several local school districts, sponsors the Greater Kansas City Writing Project (GKCWP), a graduate in-service program for teachers of writing (K-18). This program consists of summer graduate credit workshops and school district in-service sessions throughout the academic year. The GKCWP is an official National Writing Project affiliate.

Related Information, Opportunities, and Conferences

The Department of English sponsors undergraduate and graduate student conferences, a writers' reading series, summer creative writing workshops, and annual contests for the Barbara Storck Poetry and Short Story Award and the Ilus W. Davis Award in Expository Writing. The Department offers additional scholarships for creative writers and students in literature, including the Diversity in English Scholarship for undergraduates. Graduate students are also eligible for the Farnsworth Fellowship. I-PhD students can apply for the Ilus Davis Doctoral Teaching Fellowship. The Department also offers courses and an annual conference for English teachers as part of its continuing education function. Four student groups provide social and literary activities for majors and interested others: Undergraduate English Council, English Graduate Student Association, Graduate Students in Creative Writing, and Sigma Tau Delta (the national English honor society).

Career Implications of the Undergraduate Degree

The English major is recommended for students interested in a broad, general background in the humanities and in the skills of analysis, synthesis, and self-expression. It is excellent preparation for medicine, business, and law, as well as for further literary study in graduate school.

In addition to careers in education, writing, and editing, English majors with writing and editorial skills find that they are desirable candidates for positions in businesses where effective communication and written evaluation are required.

Advising System

All undergraduate English majors are assigned to the Director of Undergraduate Studies.

Internships and Other Opportunities

Through the resources of the metropolitan media and publishing houses, as well as the on-campus facilities of the national literary journal *New Letters,* the literary publisher BkMk Press, and the academic journal, *Eighteenth Century Theory & Interpretation*, students may gain experience in writing and editing. With the approval of the supervising faculty, as well as the Director of Undergraduate Studies, students may intern with these media for credit. In addition, a number of other on- and off-campus internships are available for writers and editors.

Honors Credit

The letter H appearing before undergraduate English courses in the regular schedule designates honors credit.

Graduate Degrees

The Department of English offers three graduate programs: the Master of Arts: English; the Master of Fine Arts: Creative Writing and Media Arts; and the Interdisciplinary Ph.D. The Department also offers a Graduate Certificate in the Teaching of Writing.

Faculty

Elpida Anthan Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=anthan); lecturer in English & Classics; B.A., M.A. (University of Kansas).

Hadara Bar-Nadav[2,3]; associate professor of English; B.A. (William Paterson College); M.A. (Montclair State University); Ph.D. (University of Nebraska-Lincoln).

John C. Barton[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=barton); associate professor of English; B.A. (University of California-Berkeley); M.A., Ph.D. (University of California-Irvine).

Ralph A. Berets; associate professor emeritus of English; B.A., M.A., Ph.D. (University of Michigan).

Virginia Blanton[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=blanton); professor of English; B.A. (Southwestern College); M.A., Ph.D. (Binghamton University).

Michelle A. Boisseau[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=boisseau); professor of English; B.A., M.A. (Ohio University); Ph.D. (University of Houston).

Norma Cantú Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cantu); professor of English & Latina/o Studies; B.S. (Texas A&M University-Laredo); M.S. (Texas A&M University-Kingsville); Ph.D. (University of Nebraska-Lincoln).

Joan F. Dean[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dean); curators' teaching professor of English; A.B. (Canisius College); M.A., Ph.D. (Purdue University).

Stephen Dilks[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dilks); professor of English; B.A. (University of Stirling, Scotland); M.A., Ph.D. (Rutgers University).

Crystal Gorham Doss Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=doss); lecturer in English; B.A. (William Jewell College); M.A. (University of Kansas); Ph.D. (University at Buffalo).

Laurie Ellinghausen[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ellinghausen); associate professor of English; B.A. (University of Houston), M.A. (Ohio State University), Ph.D. (University of California-Santa Barbara).

Robert M. Farnsworth; professor emeritus of English; B.A. (University of Michigan); M.S. (University of Connecticut); Ph.D. (Tulane University).

Moira Ferguson; professor emerita of English; B.A. (University of London, Birkbeck College); M.A., Ph.D. (University of Washington, Seattle).

Jennifer Frangos[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=frangos); associate professor of English; B.A. (Vassar College); M.A. (State University of New York-Buffalo), Ph.D. (State University of New York-Stony Brook).

Jane Greer[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=greer); associate professor of English; B.A. (Hanover College); M.A., Ph.D. (Ohio State University).

Nicole Higgins Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=higgins); lecturer in English; B.S. (Missouri State University); M.A. (University of Missouri-Kansas City); M.F.A. (University of Georgia)

Christie Hodgen[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hodgen); associate professor of English; B.A. (University of Virginia, Charlottesville); M.F.A. (Indiana University, Bloomington), Ph.D. (University of Missouri, Columbia).

Sheila Honig Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=honig); lecturer in English; B.A., M.A. (University of Missouri, Columbia).

Daniel Freeman Jaffe; professor emeritus of English; B.A. (Rutgers University); M.A. (University of Michigan).

Cynthia Jones Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jones); lecturer in English & Classics; B.A., M.A., Ph.D. (University of Missouri-Kansas City).

Katie Kline Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kline); lecturer in English; B.A. (Western State College, Gunnison, CO); M.A. (University of Missouri-Kansas City).

Daniel Mahala[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mahala); associate professor of English; B.A. (State University of New York at Binghamton); M.A. (New York University); D.A. (State University of New York at Albany).

James C. McKinley; professor emeritus of English; B.J., M.A., Ph.D. (University of Missouri, Columbia).

Ben Moats Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=moats); lecturer in English; B.A. (Rockhurst University); M.A. (University of Missouri-Kansas City).

Jennifer Phegley[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=phegley); professor of English; B.A. (Southwest Texas State University); M.A., Ph.D. (Ohio State University).

Michael Pritchett[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pritchett); associate professor of English; B.J. (University of Missouri, Columbia); M.F.A (Warren Wilson College).

David Ray; professor emeritus of English; B.A., M.A. (University of Chicago).

James A. Reeds; associate professor emeritus of English and linguistics; B.A., M.A. (University of Iowa); A.M., Ph.D. (University of Michigan).

Jeffrey A. Rydberg-Cox[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rydberg-cox); professor of English and classics; B.A. (Colorado College); M.A., Ph.D. (University of Chicago).

Anthony Shiu[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=shiu); associate professor of English; B.A. (Ohio University); M.A. (University of Vermont), Ph.D. (Michigan State University).

Robert Stewart[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stewart); assistant research professor of English and editor of New Letters; B.A. (University of Missouri-St. Louis), M.A. (University of Missouri-Kansas City).

Thomas Stroik[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stroik); professor of English; B.A., M.A., Ph.D. (University of Wisconsin-Madison).

Whitney Terrell[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=terrell); assistant professor of English; B.A., (Princeton University); M.F.A. (University of Iowa).

Linda E. Voigts[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=voigts); curators' professor emerita of English; B.A. (William Jewell College); M.A. (University of Missouri-Kansas City); Ph.D. (University of Missouri, Columbia).

David H. Weinglass[2,3]; professor emeritus of English; B.A., M.A. (St. Catherine's College-University of Cambridge); Ph.D. (Kansas State University).

Robert F. Willson, Jr.[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=willson); professor emeritus of English; B.A. (Wayne State University); M.A., Ph.D. (University of Wisconsin).

Henrietta Rix Wood Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wood); assistant teaching professor in English; B.A. (Southern Methodist University); M.A., Ph.D. (University of Missouri-Kansas City).

Jacqueline Wood Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wood); associate professor of English & Black Studies; B.A. (Ohio Wesleyan University); M.A. (Florida Atlantic University); Ph.D. (University of Florida).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

Undergraduate

Bachelor of Arts: English

To major in English is to devote oneself to the study of culture, past and present; to books, their readers, writers, and publishers; to critical thinking and the interpretation of what it means to be human; to language and the communication of ideas in both written and spoken form. An education in English allows for a command of the written and spoken word. It is this command that allows those that have pursued a degree in English to find success in a

variety of arenas through their ability to persuade and interpret, clarify ideas, think independently and creatively, and their overall commitment to the cultural repository that an English degree offers.

Students who choose to major in English Literature and Language develop their abilities to read and analyze texts written in the English language. They study British and American literature of the past and present and learn to view texts through a variety of interpretive lenses. English majors also develop their abilities as flexible, effective writers, capable of moving among a variety of genres, including creative and expository writing.

Within the 36-credit hour program, English majors take a core set of courses, including survey courses on the history of British and American literature, a course devoted to Shakespeare, and courses in linguistics and rhetoric. Beyond this core, students may choose to emphasize in the study of literature, rhetoric, creative writing, or classical, medieval, and early modern literature. In their final year, all students select from a menu of capstone options, including a senior thesis (recommended for students interested in graduate school), a seminar on teaching writing (recommended for students seeking certification to teach in secondary schools), or one of many upper-level seminars.

Undergraduate Admission Requirements

Preparation

Transfer students should enter the English major with soundly developed writing and reading skills and a general familiarity with the major authors and literary movements of English and American literature. Transfer students should meet with the Director of Undergraduate Studies immediately upon admittance to discuss requirements and any possible transfer credits towards the major. With the approval of the Director of Undergraduate Studies, the Department accepts up to 18 hours of transfer credits in English for courses fulfilling major requirements.

Undergraduate Programs

Bachelor of Arts: English (p. 105)

Bachelor of Arts: English Creative Writing Emphasis (p. 108)

Bachelor of Arts: Classical, Medieval, & Early Modern Literature Track (p. 111)

Bachelor of Arts: Language and Rhetoric Track (p. 114)

Teacher Certification in English (p. 117)

Minor in Creative Writing (p. 117)

Minor in Language and Literature (p. 119)

Minor in Manuscript, Print Culture, and Editing (p. 121)

Minor in Writing (p. 122)

Graduate

Graduate Degrees:

- Master of Arts: English (p. 123)
- Master of Fine Arts: Creative Writing and Media Arts (p. 127)
- Graduate Certificate in the Teaching of Writing (p. 129)
- Interdisciplinary Ph.D. in English (p. 130)

Assistantships

The Department of English offers a limited number of Graduate Teaching Assistantships on a competitive basis. Applications for Graduate Teaching Assistantships are considered in January for the following fall semester. All Graduate Teaching Assistants are expected to enroll in at least six hours per semester. Graduate Teaching Assistantships may be awarded to students who demonstrate readiness to become teachers in freshman- and sophomore-level writing courses. Graduate Teaching Assistants must undergo a pre-semester orientation and attend mentoring meetings twice monthly with the GTA mentor and fellow graduate teachers. GTAs are also required to enroll in ENGLISH 5519. Normally M.A. and M.F.A. students will receive a maximum of two years of GTA funding; Interdisciplinary Ph.D. students will receive a maximum of three years of GTA funding, and those who complete both an M.A. and an Interdisciplinary Ph.D. in the department will receive a maximum of four years of GTA funding. These terms are contingent upon a successful yearly review of performance in the classroom and adequate academic performance. M.A. students who have completed 21 hours or more of coursework may not have their assistantships renewed without making a special appeal to the Graduate Committee justifying the need for continuing support. All GTAs must submit a brief statement of their intent to renew their GTA position to the Graduate Committee each year before the January 15 admissions deadline.

Bachelor of Arts: English

Program Requirements for the B.A. in English

The Bachelor of Arts in English program is recommended for students interested in literature and language, in writing and reading, in texts of all types and how they influence and reflect our world. The English major is also an excellent choice for those interested in obtaining a firm foundation for graduate study in programs as wide-ranging as business or law school, communications, cultural studies, and, of course, English and Creative Writing. English majors planning to attend graduate school are strongly urged to take courses in all periods of English and American literature.

To graduate with a major in English, students must achieve a grade-point average of at least 2.0 in the 36-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. At least 18 hours must be taken in the English Department at UMKC. Students complete a capstone project in their final year.

No more than one course in Creative Writing may be counted toward the 36-hour requirement for the Literature major. No courses in expository writing or journalism may be used to fulfill the 300- or 400-level elective requirements.

Learning Goals

During the overall 36-hour program of study for the Major in English Language and Literature, students should learn to demonstrate:

1. A working understanding of mainstream and emerging literary and cultural production in English from antiquity to the present.
2. A deep understanding of specific literary periods, movements, authors, and genres.
3. A critical understanding of rhetorical strategies and linguistic analysis.
4. An engaged understanding of issues of diversity as they shape literary and cultural production.

Student Learning Outcomes

By the time a student completes the Program of Study for the Major in English Language and Literature, s/he should be able to demonstrate the ability to:

1. Create coherent academic arguments that are built upon multi-leveled textual analysis.
2. Integrate close reading of primary texts.
3. Situate texts in cultural and/or historical contexts.
4. Engage in critical conversations.
5. Present an essay in ways that reflect a sense of professional rules and conventions.

Program of Study

All of the following in Literature:		
ENGLISH 311	American Literature I	3
ENGLISH 317	British Literature I	3
ENGLISH 321	American Literature II	3
ENGLISH 323	Shakespeare	3
ENGLISH 327	British Literature II	3
Select one of the following in Language:		3
ENGLISH 310	Introduction To Linguistics/Language Science	
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
Select one of the following in Rhetoric:		3
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 307WI	Language, Literacy, Power	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 445	History And Principles Of Rhetoric	
Select four of the following Electives: [1]		12
ENGLISH 119	Myth and Literature	
ENGLISH 120	Literary Monstrosities	
ENGLISH 123	True Lives: Autobiographical Arts and Acts	

ENGLISH 124	Writing About Literature
ENGLISH 126	Popular Literature
ENGLISH 130	Introduction to Human Language
ENGLISH 141	Women and Literary Culture/The Heroine in Literature
ENGLISH 182	The Countercultural Experience
ENGLISH 200	Introduction To Undergraduate Study In English
ENGLISH 205	Popular Literature
ENGLISH 207	World Literature in English
ENGLISH 212	Crossing Boundaries: The Latina/o Immigrant Experience
ENGLISH 241	Women And Literary Culture: Introduction
ENGLISH 242	Women Writing/Women Reading
ENGLISH 270	Writing Tutor Training Seminar
ENGLISH 273	Science Fiction
ENGLISH 278	Asian American Literature
ENGLISH 280	Empire
ENGLISH 282	Race in American Film
ENGLISH 283	Women in the Ancient World
ENGLISH 284	Women in the Medieval World
ENGLISH 285	The Classical Mediterranean World
ENGLISH 286	Critical Issues in Women’s and Gender Studies
ENGLISH 300CD	Cluster Course: American Social Film:Silver Screen&American Dream
ENGLISH 300CE	Cluster Course: Radical Changes Since 1945
ENGLISH 300CQ	Cluster Course: Race in American Film
ENGLISH 300CW	Cluster Course: Critical Issues in Women’s & Gender Studies
ENGLISH 300CY	Cluster Course: Ancient World/Cinema
ENGLISH 312	Creative Writing I Fiction
ENGLISH 315	Creative Writing Poetry
ENGLISH 316WI	Literary Nonfiction
ENGLISH 318	Bible As Literature
ENGLISH 319	Myth And Literature
ENGLISH 325	Arthurian Legends
ENGLISH 326	Modern And Contemporary Irish Literature
ENGLISH 331	African American Literature I
ENGLISH 332WI	African American Novel
ENGLISH 333	African American Literature II
ENGLISH 336	Contemporary American Literature
ENGLISH 339	Introduction to Screenwriting
ENGLISH 340A	Classical Literature In Translation
ENGLISH 344WI	Women & Literary Culture: Genre Focus
ENGLISH 345WI	Women And Literary Culture: Historical Focus
ENGLISH 350	The 18th Century Novel
ENGLISH 351	Special Readings
ENGLISH 351A	Special Readings: Detective Fiction
ENGLISH 355	The Novel Before 1900
ENGLISH 356	Studies in Poetry
ENGLISH 400CF	Cluster Course: Courts And Culture In The Middle Ages
ENGLISH 360	The Modern Novel
ENGLISH 365	Contemporary Novel
ENGLISH 365WI	Contemporary Novel
ENGLISH 375	Colonial Literature
ENGLISH 378	Asian American Literature
ENGLISH 405	Magazine Editing

ENGLISH 404	Old English	
ENGLISH 408	Harlem Renaissance	
ENGLISH 410	Black Women Writers	
ENGLISH 412	Chaucer	
ENGLISH 413	Renaissance Literature I	
ENGLISH 414	Milton	
ENGLISH 415	Restoration And Early 18th-Century British Literature	
ENGLISH 416	The Romantic Period	
ENGLISH 417	Modern Poetry	
ENGLISH 418	19th-Century American Literature	
ENGLISH 422	Medieval Literature	
ENGLISH 423	Renaissance Literature II	
ENGLISH 425	18th-Century British Literature II	
ENGLISH 426	The Victorian Period	
ENGLISH 427	Contemporary Poetry	
ENGLISH 428	20th-Century American Literature	
ENGLISH 431	18th-Century British Literature	
ENGLISH 433	Histories Of Writing, Reading, And Publishing (if content is appropriate)	
ENGLISH 434	Postcolonial Literature	
ENGLISH 439	Shakespeare and Film	
ENGLISH 440	American Culture	
ENGLISH 441	Girls And Print Culture	
ENGLISH 447	Introduction To Literary Criticism	
ENGLISH 448	External Internship	
ENGLISH 449A	Publication Practicum	
ENGLISH 449B	Publication Practicum	
ENGLISH 450	Special Readings	
ENGLISH 450A	Special Readings	
ENGLISH 450B	Special Reading Science Fiction	
ENGLISH 451	Shakespeare Comedies And Histories	
ENGLISH 452	Early English Drama	
ENGLISH 453	Modern Drama, 1880-1945	
ENGLISH 455	Studies In The Novel 1740-1900	
ENGLISH 460	Special Offerings	
ENGLISH 461	Shakespeare Tragedies And Romances	
ENGLISH 462	Restoration And 18th-Century Drama	
ENGLISH 463	Contemporary Drama II	
ENGLISH 464	Medieval Methods & Paleography	
ENGLISH 465	Studies In The Modern Novel	
ENGLISH 470	Introduction To Descriptive Linguistics	
Capstone Experience [2]		3
Select one of the following:		
Any 400 level English course in literature or linguistics that is cross-listed with a graduate level course in English		
ENGLISH 499	Senior Tutorial [3]	
Total Credits		36

1 Only one English course at the 100- or 200-level may be used to fulfill an elective requirement. At least two of the four electives must be at the 400-level. Two of the four electives must cover periods prior to 1900.

2 Please see the Director of Undergraduate Studies to apply for the Capstone course. All students must complete a Capstone contract, signed by the instructor and submitted to the Director of Undergraduate Studies before the end of the third week of the semester in which the Capstone course is being taken.

3 Approval is required by a tenure-line faculty member and the Director of Undergraduate Studies for enrollment in ENGLISH 499.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: English Emphasis in Creative Writing

Program Requirements for the B.A. in English, Creative Writing Emphasis

The Bachelor of Arts in English with Creative Writing Emphasis combines intensive writing workshops with courses in literature to foster discovery and mastery in Creative Writing. Our program is based on the belief that successful writers grow from the study of writing and the study of literature, which enables students to learn the traditions and adapt them to their own art. Students complete a capstone project in their final year.

To graduate with a Major in English, students must achieve a grade-point average of at least 2.0 in the 36-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. At least 18 hours must be taken in the English Department at UMKC.

Learning Goals

During the overall 36-hour program of study for the Major in English, Creative Writing Emphasis, students should learn to:

1. Produce a polished and complete manuscript of poetry or prose.
2. Demonstrate proficiency in evaluating their writing and the writing of others.
3. Engage in the writing process in all of its stages, from conceptualization, to drafting, to revision.
4. Critically analyze literary texts and formulate interpretations and arguments based on advantage of the department's many resources, from attending readings to working on the staff of literary magazines to completing internships.

Student Learning Outcomes

By the time a student completes the program of study in the Major in English, Creative Writing Emphasis, s/he should be able to demonstrate:

1. A thorough understanding of poetics or storytelling craft through the production of creative works that are structurally sound, polished, and complete.
2. Effective problem-solving and revision strategies in the composition of poems or stories.
3. A strong, deliberate command of style, grammar, and mechanics.
4. A general knowledge of literary history, especially the literary traditions of their chosen genre.
5. The ability to analyze texts critically and the ability to recognize how a text displays a writer's artistic decisions.
6. A working vocabulary with which to discuss the technical and aesthetic aspects of their craft.

Program of Study

Genre		3
Select one of the following:		
ENGLISH 213	Introduction To Drama	
ENGLISH 214	Introduction To Fiction	
ENGLISH 215	Introduction To Poetry	
ENGLISH 216	The Craft of Creative Writing	
Literature		
ENGLISH 323	Shakespeare	
Select one of the following sequences:		6
ENGLISH 311 & ENGLISH 321	American Literature I and American Literature II	
ENGLISH 317 & ENGLISH 327	British Literature I and British Literature II	
ENGLISH 331 & ENGLISH 333	African American Literature I and African American Literature II	

Language		3
Select one of the following:		
ENGLISH 310	Introduction To Linguistics/Language Science	
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
Rhetoric		3
Select one of the following:		
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 307WI	Language, Literacy, Power	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 445	History And Principles Of Rhetoric	
Elective		3
Select one of the following:		
ENGLISH 300CD	Cluster Course: American Social Film:Silver Screen&American Dream	
ENGLISH 300CE	Cluster Course: Radical Changes Since 1945	
ENGLISH 300CQ	Cluster Course: Race in American Film	
ENGLISH 300CW	Cluster Course: Critical Issues in Women's & Gender Studies	
ENGLISH 300CY	Cluster Course: Ancient World/Cinema	
ENGLISH 318	Bible As Literature	
ENGLISH 319	Myth And Literature	
ENGLISH 325	Arthurian Legends	
ENGLISH 326	Modern And Contemporary Irish Literature	
ENGLISH 331	African American Literature I	
ENGLISH 332WI	African American Novel	
ENGLISH 333	African American Literature II	
ENGLISH 336	Contemporary American Literature	
ENGLISH 340A	Classical Literature In Translation	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 344WI	Women & Literary Culture: Genre Focus	
ENGLISH 345WI	Women And Literary Culture: Historical Focus	
ENGLISH 350	The 18th Century Novel	
ENGLISH 351	Special Readings	
ENGLISH 351A	Special Readings: Detective Fiction	
ENGLISH 355	The Novel Before 1900	
ENGLISH 356	Studies in Poetry	
ENGLISH 360	The Modern Novel	
ENGLISH 365	Contemporary Novel	
ENGLISH 375	Colonial Literature	
ENGLISH 378	Asian American Literature	
ENGLISH 400CF	Cluster Course: Courts And Culture In The Middle Ages	
ENGLISH 404	Old English	
ENGLISH 408	Harlem Renaissance	
ENGLISH 410	Black Women Writers	
ENGLISH 412	Chaucer	
ENGLISH 413	Renaissance Literature I	
ENGLISH 414	Milton	
ENGLISH 415	Restoration And Early 18th-Century British Literature	
ENGLISH 416	The Romantic Period	
ENGLISH 417	Modern Poetry	
ENGLISH 418	19th-Century American Literature	

ENGLISH 422	Medieval Literature	
ENGLISH 423	Renaissance Literature II	
ENGLISH 425	18th-Century British Literature II	
ENGLISH 426	The Victorian Period	
ENGLISH 427	Contemporary Poetry	
ENGLISH 428	20th-Century American Literature	
ENGLISH 431	18th-Century British Literature	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 434	Postcolonial Literature	
ENGLISH 439	Shakespeare and Film	
ENGLISH 440	American Culture	
ENGLISH 441	Girls And Print Culture	
ENGLISH 447	Introduction To Literary Criticism	
ENGLISH 450	Special Readings	
ENGLISH 450A	Special Readings	
ENGLISH 450B	Special Reading Science Fiction	
ENGLISH 451	Shakespeare Comedies And Histories	
ENGLISH 452	Early English Drama	
ENGLISH 453	Modern Drama, 1880-1945	
ENGLISH 455	Studies In The Novel 1740-1900	
ENGLISH 460	Special Offerings	
ENGLISH 461	Shakespeare Tragedies And Romances	
ENGLISH 462	Restoration And 18th-Century Drama	
ENGLISH 463	Contemporary Drama II	
ENGLISH 464	Medieval Methods & Paleography	
ENGLISH 465	Studies In The Modern Novel	
ENGLISH 470	Introduction To Descriptive Linguistics	
Select one of the following Writing Sequences:		6
ENGLISH 312 & ENGLISH 432WI	Creative Writing I Fiction and Advanced Creative Writing Prose	
ENGLISH 312 & ENGLISH 437WI	Creative Writing I Fiction and Prose Forms	
ENGLISH 315 & ENGLISH 436WI	Creative Writing Poetry and Poetic Forms	
ENGLISH 315 & ENGLISH 435WI	Creative Writing Poetry and Advanced Creative Writing Poetry	
ENGLISH 316WI & ENGLISH 475	Literary Nonfiction and Creative Nonfiction	
Select two Additional Writing Courses not included in Writing Sequence, above, from the following:		6
ENGLISH 312	Creative Writing I Fiction	
ENGLISH 315	Creative Writing Poetry	
ENGLISH 316WI	Literary Nonfiction	
ENGLISH 432WI	Advanced Creative Writing Prose	
ENGLISH 435WI	Advanced Creative Writing Poetry	
ENGLISH 436WI	Poetic Forms	
ENGLISH 437WI	Prose Forms	
ENGLISH 438	The "New Letters" Writing Conference	
ENGLISH 448	External Internship	
ENGLISH 449A	Publication Practicum	
ENGLISH 449B	Publication Practicum	
ENGLISH 475	Creative Nonfiction	
The following may also qualify as additional writing courses: [1]		
ENGLISH 303WI	Introduction To Journalism	

ENGLISH 313WI	Reporting	
ENGLISH 339	Introduction to Screenwriting	
ENGLISH 429B	Advanced Screenwriting	
ENGLISH 442	Playwriting I	
ENGLISH 443	Playwriting II	
COMM-ST 339	Film Theory And Criticism	
COMM-ST 351WI	Fundamentals Of Writing For The Media	
Capstone Experience [2]		3
Select one of the following:		3
ENGLISH 432WI	Advanced Creative Writing Prose	
ENGLISH 435WI	Advanced Creative Writing Poetry	
ENGLISH 436WI	Poetic Forms	
ENGLISH 475	Creative Nonfiction	
ENGLISH 437WI	Prose Forms	
ENGLISH 499	Senior Tutorial [3]	
Total Credits		36

1 Requires permission of the Director of Creative Writing or the Director of Undergraduate Studies.

2 Please see the Director of Undergraduate Studies to apply for the Capstone course. All students must complete a Capstone contract, signed by the instructor and submitted to the Director of Undergraduate Studies before the end of the third week of the semester in which the Capstone course is being taken.

3 Students must complete a poetry or prose sequence with distinguished work before applying to a tenure-line faculty member and the Director of Creative Writing or the Director of Undergraduate Studies for permission to enroll in ENGLISH 499.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Classical, Medieval, & Early Modern Literature Track

Program Requirements for the B.A. in English, Classical, Medieval, and Early Modern Literature Track

The Bachelor of Arts in English with a focus on Classical, Medieval, and Early Modern Literature is recommended for students interested in a broad background in the humanities with a concentration in literature and language and for those interested in obtaining a firm foundation for further study in graduate school. This major involves a core of three survey courses to give students grounding in each of the three periods. Students also take one elective from each time period; a course such as "Shakespeare in Film," "The Ancient World in Film," or "Arthurian Legends" that allows for the study of how these literatures have been received in modern society; and a course on the linguistic backgrounds of these literatures, such as "History of English," "Old English," "Ancient Greek," "Classical Latin," or the "History and Principles of Rhetoric." The remaining three electives can be taken in the English Department or many other departments in the college including Classics, History, Art History, Philosophy, and Geosciences.

To graduate with a major in English, students must achieve a grade-point average of at least 2.0 in the 36-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. At least 18 hours must be taken in the Department of English at UMKC. Students complete a capstone project in their final year.

Learning Goals

During the overall 36-hour program of study for the Major in English Classical, Medieval, and Early Modern Literature, students should learn to demonstrate:

1. A working understanding of mainstream and emerging literary and cultural production in English from antiquity to the modern period.
2. A deep understanding of specific literary periods, movements, authors, and genres.
3. A critical understanding of rhetorical strategies and linguistic analysis.

4. An engaged understanding of issues as diversity as they shape literary and cultural production.

Student Learning Outcomes

By the time the Program of Study for the Major in English, Classical, Medieval, and Early Modern Literature is completed, students should be able to demonstrate the ability to:

1. Create coherent academic arguments that are built upon multi-leveled textual analysis.
2. Integrate close reading of primary texts.
3. Engage in critical conversations.
4. Present an essay in ways that reflect a sense of professional rules and conventions.

Literary Surveys		
CLASSICS 210	Foundations Of Ancient World Literature I	3
or ENGLISH 340A/ CLASSICS 340AWI	Classical Literature In Translation	
ENGLISH 317	British Literature I	3
ENGLISH 323	Shakespeare	3
Ancient Literature		
Select one of the following:		3
CLASSICS/ENGLISH 119	Myth and Literature	
CLASSICS/ENGLISH 318	Bible As Literature	
CLASSICS 300CB	CC: Women In The Ancient World	
CLASSICS/ENGLISH 300CS	CC: Clio And The Other Muses	
CLASSICS 300CR	Roman Revolution: History And Culture From Gracci To Augustus	
Medieval Literature		
Select one of the following:		3
ENGLISH 325	Arthurian Legends	
ENGLISH 400CF	Cluster Course: Courts And Culture In The Middle Ages	
ENGLISH 412	Chaucer	
ENGLISH 422	Medieval Literature	
ENGLISH 464	Medieval Methods & Paleography	
Early Modern Literature		
Select one of the following:		3
ENGLISH 414	Milton	
ENGLISH 413	Renaissance Literature I	
ENGLISH 423	Renaissance Literature II	
Reception		
Select one of the following:		3
ENGLISH/CLASSICS 300CY	Cluster Course: Ancient World/Cinema	
ENGLISH/CLASSICS 376	Ancient Concepts of the Hero	
ENGLISH 439	Shakespeare and Film	
Language/Linguistics/Rhetoric Class		
Select one of the following:		3
ENGLISH 330	History Of The English Language	
ENGLISH 404	Old English	
ENGLISH 445	History And Principles Of Rhetoric	
Any three-credit course with the curricular deisgnation GREEK or LATIN		
Electives		
Select three of the following: [1]		9
CLASSICS 300CZ/ GEOLOGY 326CZ	CC: Archaeology Of Ancient Disasters	
CLASSICS 369	Introduction To Prehistoric And Classical Archaeology	
CLASSICS 370	Archaeology as Anthropology: The Development of Human Societies	
CLASSICS 467	Myth And Ritual	

CLASSICS 469	Archaeology And Biblical History	
CLASSICS 471P	Ancient World: The Political Structure Of The Ancient World	
CLASSICS 472P	Ancient World: The Cultural & Intellectual Dimensions Ancient Civ	
CLASSICS/ART-HIST 479	From the Parthenon to the Altar of Peace	
ART-HIST 201	From Cave Paintings to Cathedrals	
ART-HIST 253	History Of The Designed Environment I, Ancient And Medieval	
ART-HIST 445	Northern European Art: 15th And 16th Centuries	
ART-HIST 450	15th Century Italian Art And Architecture	
ART-HIST 452	Greek Art And Architecture	
ART-HIST 497A	Special Studies In Medieval/Renaissance Art	
ART-HIST 497I	Special Studies In Ancient Art	
HISTORY 411A	Medieval Civilization I	
HISTORY 411B	Medieval Civilization II	
HISTORY 412A	Medieval Women & Children	
HISTORY 412B	The Black Death and Late Medieval Society	
HISTORY 413	Renaissance	
HISTORY 414	Reformation	
HISTORY 431R	Medieval England, 1066 To 1485	
HISTORY 432R	Tudor England, 1485-1603	
HISTORY 444R	Islam and the Arabs: The Formative Period	
HISTORY 468R	Archaeology and the History of Antiquity	
HISTORY/CLASSICS 470	Ancient Egypt	
HISTORY/CLASSICS 471	Ancient Greece	
HISTORY/CLASSICS 472	Ancient Rome	
HISTORY 475WI	The History of Ancient Israel	
HISTORY 476	Medieval Jewish History	
PHILOS 310WI	Ancient Philosophy	
PHILOS 328	Philosophy In The Middle Ages	
PHILOS/CLASSICS 430	Plato	
PHILOS/CLASSICS 431	Aristotle	
THEATRE 350	Theatre History I	
Capstone Experience		
ENGLISH 499	Senior Tutorial [2]	3
or CLASSICS 499	Senior Tutorial	
Total Credits		36

1 Students may also select any three courses from the list above, which have not already been used to satisfy another requirement.

2 Please see the Director of Classics to apply for the Capstone course. All students must complete a Capstone contract signed by the instructor and submitted to the Director of Classics before the end of the third week of the semester in which the Capstone course is being taken. Approval is required by a tenure-line faculty member and the Director of Classics for enrollment in ENGLISH 499 or CLASSICS 499.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Language and Rhetoric Track

Program Requirements for the B.A. in English, Language and Rhetoric Track

The Bachelor of Arts in English with a focus on Language and Rhetoric is recommended for students interested in a broad background in the humanities with a concentration in language and rhetoric and for those interested in obtaining a firm foundation for further study in graduate school. Students in this program will receive intensive concentration in the study of rhetoric and linguistic analysis. This program is especially relevant for students considering law school and careers in communications, marketing, and business.

To graduate with a major in English, students must achieve a grade-point average of at least 2.0 in the 36-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. At least 18 hours must be taken in the English Department at UMKC. Students complete a capstone project in their final year.

No more than one course in Creative Writing may be counted toward the 36-hour requirement for the Language and Rhetoric major. No courses in expository writing or journalism may be used to fulfill the 300/400-level elective requirements.

Learning Goals

During the overall 36-hour program of study for the Major in English, Language and Rhetoric track, students should learn to demonstrate

1. A working understanding of mainstream and emerging literary and cultural production in English from antiquity to the present.
2. A deep understanding of specific literary periods, movements, authors, and genres.
3. A critical understanding of rhetorical strategies and linguistic analysis.
4. An engaged understanding of issues of diversity as they shape literary and cultural production.

Student Learning Outcomes

By the time a student completes the Program of Study for the Major in English, Language and Rhetoric track, s/he should be able to demonstrate the ability to

1. Create coherent academic arguments that are built upon multi-leveled textual analysis.
2. Integrate close reading of primary texts.
3. Situate texts in cultural and/or historical contexts.
4. Engage in critical conversations.
5. Present an essay in ways that reflect a sense of professional rules and conventions.

Program of Study

Literature		
All of the following:		
ENGLISH 311	American Literature I	3
ENGLISH 317	British Literature I	3
ENGLISH 321	American Literature II	3
ENGLISH 323	Shakespeare	3
ENGLISH 327	British Literature II	3
Language		
Select one of the following:		3
ENGLISH 310	Introduction To Linguistics/Language Science	
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
Rhetoric		
Select one of the following:		3
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 307WI	Language, Literacy, Power	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 445	History And Principles Of Rhetoric	
Language/Rhetoric/Theory		

Select two of the following: [1]		6
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 307WI	Language, Literacy, Power	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 310	Introduction To Linguistics/Language Science	
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 433	Histories Of Writing, Reading, And Publishing	
ENGLISH 441	Girls And Print Culture	
ENGLISH 445	History And Principles Of Rhetoric	
ENGLISH 447	Introduction To Literary Criticism	
ENGLISH 470	Introduction To Descriptive Linguistics	
Electives		
Select two of the following: [2]		6
ENGLISH 119	Myth and Literature	
ENGLISH 120	Literary Monstrosities	
ENGLISH 123	True Lives: Autobiographical Arts and Acts	
ENGLISH 124	Writing About Literature	
ENGLISH 126	Popular Literature	
ENGLISH 130	Introduction to Human Language	
ENGLISH 141	Women and Literary Culture/The Heroine in Literature	
ENGLISH 182	The Countercultural Experience	
ENGLISH 200	Introduction To Undergraduate Study In English	
ENGLISH 205	Popular Literature	
ENGLISH 207	World Literature in English	
ENGLISH 212	Crossing Boundaries: The Latina/o Immigrant Experience	
ENGLISH 213	Introduction To Drama	
ENGLISH 214	Introduction To Fiction	
ENGLISH 215	Introduction To Poetry	
ENGLISH 216	The Craft of Creative Writing	
ENGLISH 241	Women And Literary Culture: Introduction	
ENGLISH 242	Women Writing/Women Reading	
ENGLISH 270	Writing Tutor Training Seminar	
ENGLISH 273	Science Fiction	
ENGLISH 278	Asian American Literature	
ENGLISH 280	Empire	
ENGLISH 282	Race in American Film	
ENGLISH 286	Critical Issues in Women’s and Gender Studies	
ENGLISH 300CB	Cluster Course: Women In The Ancient World	
ENGLISH 300CD	Cluster Course: American Social Film:Silver Screen&American Dream	
ENGLISH 300CE	Cluster Course: Radical Changes Since 1945	
ENGLISH 300CN	Cluster Course: Terrorism, Civil War And Trauma	
ENGLISH 300CQ	Cluster Course: Race in American Film	
ENGLISH 325	Arthurian Legends	
ENGLISH 326	Modern And Contemporary Irish Literature	
ENGLISH 329	Film As Art	
ENGLISH 331	African American Literature I	
ENGLISH 332WI	African American Novel	
ENGLISH 333	African American Literature II	
ENGLISH 336	Contemporary American Literature	

ENGLISH 350	The 18th Century Novel
ENGLISH 351	Special Readings
ENGLISH 351A	Special Readings: Detective Fiction
ENGLISH 355	The Novel Before 1900
ENGLISH 356	Studies in Poetry
ENGLISH 360	The Modern Novel
ENGLISH 365	Contemporary Novel
ENGLISH 365WI	Contemporary Novel
ENGLISH 375	Colonial Literature
ENGLISH 378	Asian American Literature
ENGLISH 404	Old English
ENGLISH 405	Magazine Editing
ENGLISH 408	Harlem Renaissance
ENGLISH 410	Black Women Writers
ENGLISH 412	Chaucer
ENGLISH 413	Renaissance Literature I
ENGLISH 414	Milton
ENGLISH 415	Restoration And Early 18th-Century British Literature
ENGLISH 416	The Romantic Period
ENGLISH 417	Modern Poetry
ENGLISH 418	19th-Century American Literature
ENGLISH 422	Medieval Literature
ENGLISH 423	Renaissance Literature II
ENGLISH 425	18th-Century British Literature II
ENGLISH 426	The Victorian Period
ENGLISH 427	Contemporary Poetry
ENGLISH 428	20th-Century American Literature
ENGLISH 431	18th-Century British Literature
ENGLISH 434	Postcolonial Literature
ENGLISH 439	Shakespeare and Film
ENGLISH 440	American Culture
ENGLISH 448	External Internship
ENGLISH 449A	Publication Practicum
ENGLISH 449B	Publication Practicum
ENGLISH 450	Special Readings
ENGLISH 450A	Special Readings
ENGLISH 450B	Special Reading Science Fiction
ENGLISH 451	Shakespeare Comedies And Histories
ENGLISH 452	Early English Drama
ENGLISH 453	Modern Drama, 1880-1945
ENGLISH 455	Studies In The Novel 1740-1900
ENGLISH 460	Special Offerings
ENGLISH 461	Shakespeare Tragedies And Romances
ENGLISH 462	Restoration And 18th-Century Drama
ENGLISH 463	Contemporary Drama II
ENGLISH 464	Medieval Methods & Paleography
ENGLISH 465	Studies In The Modern Novel

Capstone Experience [3]

Select one of the following:	3
Any 400 level English course in literature or linguistics that is cross-listed with a graduate level course in English.	

ENGLISH 499	Senior Tutorial [4]	
Total Credits		36

1 No course may be used to fulfill more than one requirement, but courses not used for "Language" or "Rhetoric" categories above may be taken for the "Language/Rhetoric/Theory" category.

2 Only one course at the 100- or 200-level may be used to fulfill an elective requirement.

3 Please see the Director of Undergraduate Studies to apply for the Capstone course. All students must complete a Capstone contract, signed by the instructor and submitted to the Director of Undergraduate Studies before the end of the third week of the semester in which the Capstone course is being taken.

4 Approval is required by a tenure-line faculty member and the Director of Undergraduate Studies for enrollment in ENGLISH 499.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Teacher Certification in English

Program Requirements

Certification as a middle school (grades 5-9) or secondary (grades 9-12) English teacher in either Kansas or Missouri requires that a student complete specific requirements in English and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education section of this catalog or contact the Education Student Services Office at (816) 235-2234.

Minor in Creative Writing

Program Requirements for the Minor in Creative Writing

The Minor in Creative Writing is designed for students who are eager to give focused attention to developing their talents in poetry, fiction, or creative nonfiction writing.

To graduate with a Minor in Creative Writing, students must achieve a grade-point average of at least 2.0 in the 21-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement.

Program of Study

Genre		
Select one of the following:		3
ENGLISH 214	Introduction To Fiction	
ENGLISH 215	Introduction To Poetry	
ENGLISH 216	The Craft of Creative Writing	
Writing Sequence		
Select one writing sequence from the following:		6
ENGLISH 312 & ENGLISH 432WI	Creative Writing I Fiction and Advanced Creative Writing Prose	
ENGLISH 312 & ENGLISH 437WI	Creative Writing I Fiction and Prose Forms	
ENGLISH 315 & ENGLISH 435WI	Creative Writing Poetry and Advanced Creative Writing Poetry	
ENGLISH 315 & ENGLISH 436WI	Creative Writing Poetry and Poetic Forms	
ENGLISH 316WI & ENGLISH 475	Literary Nonfiction and Creative Nonfiction	
Additional Writing Courses		

Select two additional courses in creative writing, in addition to those taken for the writing sequence: [1]		6
ENGLISH 312	Creative Writing I Fiction	
ENGLISH 315	Creative Writing Poetry	
ENGLISH 316WI	Literary Nonfiction	
ENGLISH 339	Introduction to Screenwriting	
ENGLISH 405	Magazine Editing	
ENGLISH 429B	Advanced Screenwriting	
ENGLISH 432WI	Advanced Creative Writing Prose	
ENGLISH 435WI	Advanced Creative Writing Poetry	
ENGLISH 436WI	Poetic Forms	
ENGLISH 437WI	Prose Forms	
ENGLISH 438	The "New Letters" Writing Conference	
ENGLISH 442	Playwriting I	
ENGLISH 443	Playwriting II	
ENGLISH 448	External Internship	
ENGLISH 449A	Publication Practicum	
ENGLISH 449B	Publication Practicum	
ENGLISH 475	Creative Nonfiction	
Electives		
Select two courses focused on literature:		6
ENGLISH 311	American Literature I	
ENGLISH 317	British Literature I	
ENGLISH 321	American Literature II	
ENGLISH 323	Shakespeare	
ENGLISH 325	Arthurian Legends	
ENGLISH 326	Modern And Contemporary Irish Literature	
ENGLISH 327	British Literature II	
ENGLISH 331	African American Literature I	
ENGLISH 332WI	African American Novel	
ENGLISH 333	African American Literature II	
ENGLISH 336	Contemporary American Literature	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 344WI	Women & Literary Culture: Genre Focus	
ENGLISH 345WI	Women And Literary Culture: Historical Focus	
ENGLISH 350	The 18th Century Novel	
ENGLISH 351	Special Readings	
ENGLISH 351A	Special Readings: Detective Fiction	
ENGLISH 355	The Novel Before 1900	
ENGLISH 356	Studies in Poetry	
ENGLISH 360	The Modern Novel	
ENGLISH 365	Contemporary Novel	
ENGLISH 365WI	Contemporary Novel	
ENGLISH 375	Colonial Literature	
ENGLISH 378	Asian American Literature	
ENGLISH 404	Old English	
ENGLISH 408	Harlem Renaissance	
ENGLISH 410	Black Women Writers	
ENGLISH 412	Chaucer	
ENGLISH 413	Renaissance Literature I	
ENGLISH 414	Milton	
ENGLISH 415	Restoration And Early 18th-Century British Literature	
ENGLISH 416	The Romantic Period	

ENGLISH 417	Modern Poetry
ENGLISH 418	19th-Century American Literature
ENGLISH 422	Medieval Literature
ENGLISH 423	Renaissance Literature II
ENGLISH 425	18th-Century British Literature II
ENGLISH 426	The Victorian Period
ENGLISH 427	Contemporary Poetry
ENGLISH 428	20th-Century American Literature
ENGLISH 431	18th-Century British Literature
ENGLISH 433	Histories Of Writing, Reading, And Publishing
ENGLISH 434	Postcolonial Literature
ENGLISH 439	Shakespeare and Film
ENGLISH 440	American Culture
ENGLISH 441	Girls And Print Culture
ENGLISH 450	Special Readings
ENGLISH 450A	Special Readings
ENGLISH 451	Shakespeare Comedies And Histories
ENGLISH 452	Early English Drama
ENGLISH 453	Modern Drama, 1880-1945
ENGLISH 455	Studies In The Novel 1740-1900
ENGLISH 460	Special Offerings
ENGLISH 461	Shakespeare Tragedies And Romances
ENGLISH 462	Restoration And 18th-Century Drama
ENGLISH 463	Contemporary Drama II
ENGLISH 464	Medieval Methods & Paleography
ENGLISH 465	Studies In The Modern Novel
Total Credits	21

[1] Some courses in Communication Studies, Theatre, or Foreign Languages may also be applicable with the permission of the Director of Undergraduate Studies or the Director of Creative Writing.

Minor in Language and Literature

Program Requirements for the Minor in English Literature

The Minor in English Literature is designed for students desiring a general background in literature written in English.

To graduate with a Minor in English Literature, students must achieve a grade-point average of at least 2.0 in the 18-hour program described below, but no credit will be given for courses in which the grade is below C-. Students must take 12 of the 18 hours required at the 300- or 400-level. No course may fulfill more than one requirement. No courses in journalism or in expository writing may be counted toward the Minor in Literature. No more than one course in Creative Writing may be counted toward the Minor in English Literature. In addition to the following approved courses, students may petition to have other considered by the Director of Undergraduate Studies in English.

Program of Study

Select six of the following:		18
ENGLISH 119	Myth and Literature	
ENGLISH 120	Literary Monstrosities	
ENGLISH 123	True Lives: Autobiographical Arts and Acts	
ENGLISH 124	Writing About Literature	
ENGLISH 126	Popular Literature	
ENGLISH 141	Women and Literary Culture/The Heroine in Literature	
ENGLISH 200	Introduction To Undergraduate Study In English	
ENGLISH 207	World Literature in English	
ENGLISH 212	Crossing Boundaries: The Latina/o Immigrant Experience	

ENGLISH 213	Introduction To Drama
ENGLISH 214	Introduction To Fiction
ENGLISH 215	Introduction To Poetry
ENGLISH 242	Women Writing/Women Reading
ENGLISH 273	Science Fiction
ENGLISH 278	Asian American Literature
ENGLISH 311	American Literature I
ENGLISH 317	British Literature I
ENGLISH 318	Bible As Literature
ENGLISH 321	American Literature II
ENGLISH 323	Shakespeare
ENGLISH 325	Arthurian Legends
ENGLISH 326	Modern And Contemporary Irish Literature
ENGLISH 327	British Literature II
ENGLISH 331	African American Literature I
ENGLISH 332WI	African American Novel
ENGLISH 333	African American Literature II
ENGLISH 336	Contemporary American Literature
ENGLISH 340A	Classical Literature In Translation
ENGLISH 344WI	Women & Literary Culture: Genre Focus
ENGLISH 345WI	Women And Literary Culture: Historical Focus
ENGLISH 350	The 18th Century Novel
ENGLISH 351A	Special Readings: Detective Fiction
ENGLISH 355	The Novel Before 1900
ENGLISH 356	Studies in Poetry
ENGLISH 360	The Modern Novel
ENGLISH 365	Contemporary Novel
ENGLISH 365WI	Contemporary Novel
ENGLISH 375	Colonial Literature
ENGLISH 376	Ancient Concepts of the Hero
ENGLISH 404	Old English
ENGLISH 408	Harlem Renaissance
ENGLISH 410	Black Women Writers
ENGLISH 412	Chaucer
ENGLISH 413	Renaissance Literature I
ENGLISH 414	Milton
ENGLISH 415	Restoration And Early 18th-Century British Literature
ENGLISH 416	The Romantic Period
ENGLISH 417	Modern Poetry
ENGLISH 418	19th-Century American Literature
ENGLISH 422	Medieval Literature
ENGLISH 423	Renaissance Literature II
ENGLISH 425	18th-Century British Literature II
ENGLISH 426	The Victorian Period
ENGLISH 427	Contemporary Poetry
ENGLISH 428	20th-Century American Literature
ENGLISH 431	18th-Century British Literature
ENGLISH 433	Histories Of Writing, Reading, And Publishing
ENGLISH 434	Postcolonial Literature
ENGLISH 439	Shakespeare and Film
ENGLISH 440	American Culture
ENGLISH 441	Girls And Print Culture

ENGLISH 451	Shakespeare Comedies And Histories	
ENGLISH 452	Early English Drama	
ENGLISH 453	Modern Drama, 1880-1945	
ENGLISH 455	Studies In The Novel 1740-1900	
ENGLISH 461	Shakespeare Tragedies And Romances	
ENGLISH 462	Restoration And 18th-Century Drama	
ENGLISH 463	Contemporary Drama II	
ENGLISH 465	Studies In The Modern Novel	
ENGLISH 482	European Literature: 18th Century	
ENGLISH 483	European Literature: 19th Century	
Total Credits		18

Minor in Manuscript, Print Culture, and Editing

Program Requirements for the Minor in Manuscript, Print Culture, and Editing

The Minor in Manuscript, Print Culture, and Editing examines the social, cultural, economic, and political history of the written word. It considers relationships among authors, editors, publishers, printers, illustrators, and booksellers as well as the reception of texts by readers, reviewers, and critics. This minor allows students to study the production of texts through the centuries while also gaining hands-on editing experience through internal and external internships. Students take a wide variety of courses covering a range of historical periods that have a significant emphasis on the history of reading, writing, and authorship as well as courses that focus on aspects of contemporary publishing and editing.

To graduate with a Minor in Manuscript, Print Culture, and Editing, students must achieve a grade-point average of at least 2.0 in the 21-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement.

Program of Study

Literature		
Select one of the following		
ENGLISH 311	American Literature I	
ENGLISH 317	British Literature I	
Select one of the following:		3
ENGLISH 321	American Literature II	
ENGLISH 327	British Literature II	
ENGLISH 331	African American Literature I	
ENGLISH 333	African American Literature II	
Language		
Select one of the following:		3
ENGLISH 310	Introduction To Linguistics/Language Science	
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
Electives		
Select four of the following:		12
ENGLISH 405	Magazine Editing	
ENGLISH 433	Histories Of Writing, Reading, And Publishing (repeatable with different focus)	
ENGLISH 441	Girls And Print Culture (repeatable with different focus)	
ENGLISH 464	Medieval Methods & Paleography	
ENGLISH 448	External Internship [1]	
ENGLISH 449A	Publication Practicum	
ENGLISH 449B	Publication Practicum	
Total Credits		18

[1] External Internship must be coordinated with a publishing house or other agency and approved by the Director of Undergraduate Studies.

The following courses may also be used to fulfill the elective requirements for the Minor in Magazine, Print Culture, and Editing when the instructor elects this designation. Each semester, courses so designated will be listed on the Department of English website:

ENGLISH 408	Harlem Renaissance	3
ENGLISH 410	Black Women Writers	3
ENGLISH 412	Chaucer	3
ENGLISH 413	Renaissance Literature I	3
ENGLISH 414	Milton	3
ENGLISH 415	Restoration And Early 18th-Century British Literature	3
ENGLISH 416	The Romantic Period	3
ENGLISH 417	Modern Poetry	3
ENGLISH 418	19th-Century American Literature	3
ENGLISH 422	Medieval Literature	3
ENGLISH 423	Renaissance Literature II	3
ENGLISH 425	18th-Century British Literature II	3
ENGLISH 426	The Victorian Period	3
ENGLISH 427	Contemporary Poetry	3
ENGLISH 428	20th-Century American Literature	3
ENGLISH 431	18th-Century British Literature	3
ENGLISH 434	Postcolonial Literature	3
ENGLISH 440	American Culture	3
ENGLISH 445	History And Principles Of Rhetoric	3
ENGLISH 451	Shakespeare Comedies And Histories	3
ENGLISH 452	Early English Drama	3
ENGLISH 453	Modern Drama, 1880-1945	3
ENGLISH 455	Studies In The Novel 1740-1900	3
ENGLISH 461	Shakespeare Tragedies And Romances	3
ENGLISH 462	Restoration And 18th-Century Drama	3
ENGLISH 463	Contemporary Drama II	3
ENGLISH 465	Studies In The Modern Novel	3

Minor in Writing

Program Requirements for the Minor in Writing

The Minor in Writing is designed for students interested in a focus on writing of all types and genres. Students select from a menu of courses in writing, rhetoric, and linguistics.

To graduate with a Minor in Writing, students must achieve a grade-point average of at least 2.0 in the 18-hour program described below, but no credit will be given for courses in which the grade is below C-. No course may fulfill more than one requirement. No more than two courses in Creative Writing may be counted toward the Minor in Writing. One writing-intensive (WI) course in a discipline other than English may be counted toward the Minor in Writing.

Program of Study

Select six of the following:		18
ENGLISH 270	Writing Tutor Training Seminar	
ENGLISH 301WI	Writing And The Academy	
ENGLISH 303WI	Introduction To Journalism	
ENGLISH 304WI	Workplace Writing	
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 307WI	Language, Literacy, Power	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 312	Creative Writing I Fiction	
ENGLISH 313WI	Reporting	

ENGLISH 315	Creative Writing Poetry
ENGLISH 316WI	Literary Nonfiction
ENGLISH 339	Introduction to Screenwriting
ENGLISH 342WI	Women And Rhetoric
ENGLISH 405	Magazine Editing
ENGLISH 429B	Advanced Screenwriting
ENGLISH 432WI	Advanced Creative Writing Prose
ENGLISH 435WI	Advanced Creative Writing Poetry
ENGLISH 436WI	Poetic Forms
ENGLISH 437WI	Prose Forms
ENGLISH 442	Playwriting I
ENGLISH 443	Playwriting II
ENGLISH 445	History And Principles Of Rhetoric
Total Credits	18

Master of Arts: English

Master of Arts: English

The Department of English offers the Master of Arts in English, which focuses on literary study, as well as two tracks that allow students to concentrate their studies in a particular area: 1) Language and Literature, and 2) Manuscript, Print Culture, and Editing. Through courses in English and American literature, creative and expository writing, film, linguistics, composition/rhetoric, literary criticism, the history of books and print culture, as well as editing, these programs of study are designed to prepare students for teaching, research, and writing careers, for careers in editing, and for further study at the doctoral level. The 31-hour M.A. in English is designed for students desiring a general background in English and American literature and is strongly recommended for students planning further graduate study in English and/or American literature.

The Language and Literature track is designed for students who wish to combine graduate study of literature with the study of linguistics and/or composition and rhetoric. This track is recommended for students interested in teaching in community colleges or secondary schools and for students interested in pursuing the Ph.D. in composition and rhetoric or linguistics.

The Manuscript, Print Culture, and Editing track is designed for students who wish to combine the study of literature with the study of book history, print culture, and editing. This track is recommended for students interested in editorial careers, offering several internship experiences in print and online media, and for students interesting in pursuing the Ph.D. in book history and print culture.

Members of the graduate faculty are assigned as advisors to newly admitted M.A. students. New graduate students should meet with their advisors as soon as possible to prepare an official program of study.

Admission

The application process is competitive. Satisfying the admission requirements does not guarantee admission to the program.

The applicant must hold:

- a B.A. in English, or a B.A. degree that includes at least 30 hours of sophomore-, junior- or senior-level English courses, or the equivalent. Applicants with fewer than 30 hours of undergraduate English courses may be admitted and assigned additional coursework as part of their program. These extra hours are added to the hours required for graduation.
- a 3.0 cumulative grade-point average in undergraduate work and a 3.0 average in undergraduate English coursework. In unusual circumstances, the graduate committee may consider applicants with lower grade-point averages.

The applicant must submit:

- a complete application to the university. The university application should be sent to the UMKC Admissions Office. All other materials should be sent to Graduate Programs, Department of English, Cockefair Hall 106.
- a complete Application for Admission to the Master of Arts: English.
- a recommended 60 percent or higher score on the verbal aptitude portion of the Graduate Record Exam (GRE).
- a writing sample that demonstrates the applicant’s writing abilities in up to 15 pages of recent academic prose.
- a statement of purpose that describes the applicant’s academic and professional objectives. In an essay of 400 to 500 words, applicants should discuss in detail their interest in their emphasis area and their research or writing in the area.
- three letters of recommendation that evaluate the applicant’s readiness for graduate study written by three professors or others who know the applicant’s abilities and potential well.

Students may not take more than six hours of graduate credit in English before entering the program as a "fully admitted" student.

Student Learning Outcomes

Students graduating with an M.A. in English will be able to:

1. Create sophisticated academic arguments that situate texts within aesthetic, social, and historical context.
2. Produce work in dialogue with current and historical conversations in the field;
3. Evaluate and engage methodological approaches appropriate to academic discourse;
4. Develop and defend, both orally and in writing, their critical perspectives;
5. Synthesize an understanding of interrelations across diverse fields of study;
6. Demonstrate a broad grounding in the diversity of fields in English studies.
7. Produce written work in a vivid, appropriate style that demonstrates mastery of mechanics and grammar.

Degree Requirements

Students must earn 31 graduate credits to complete the M.A. in English. Of these credits, at least 15 hours must be at graduate level (courses numbered 5000 and above) and taught by a member of the graduate faculty and at least 9 hours must be in 5000-level seminars or other 5000-level courses which are not cross-listed with 400-level courses.

Students must take ENGLISH 5500 and successfully complete one hour of ENGLISH 5601, ENGLISH 5602, or ENGLISH 5603 for their "Culminating Experience," as is appropriate depending on the focus of their studies.

Students must maintain a 3.0 (B) grade-point average to remain in the M.A. program and to complete the degree.

By the time of graduation from the M.A. program, students must fulfill a foreign language requirement by satisfactorily completing (with a C or better) one year (two university semesters) of the same foreign language. Alternatively, the foreign language requirement may be satisfied by scoring a "C" on the final exam of the first-year, second-semester course in a foreign language.

Students must remain continuously enrolled, except in summer, for a minimum of 1 credit hour per semester. ENGLISH 5899 is the continuous enrollment course number.

Students must complete a formal Program of Study and have it signed within a year after admission. A final Program of Study must be submitted and signed during the semester a student files to graduate.

Students must complete all coursework within seven years.

Students must take at least one course from five of the seven designated areas, including at least one course from areas I & II, one course from areas III & IV, and one course from areas V-VII:

I. Criticism and Scholarship		
ENGLISH 447/5547	Introduction To Literary Criticism	3
ENGLISH 5550G	Graduate Seminar Literary Criticism	3
ENGLISH 5555G	Graduate Seminar Literary Criticism	3
II. Language and Rhetoric		
ENGLISH 445/5545	History And Principles Of Rhetoric	3
ENGLISH 470	Introduction To Descriptive Linguistics	3
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	3
ENGLISH 5520	Greater Kansas City Writing Project	3
ENGLISH 5550J	Graduate Seminar: History Of The English Language	3
ENGLISH 5550M	Graduate Seminar In Rhetoric And Composition	3
ENGLISH 5555J	Graduate Seminar English Language	3
ENGLISH 5555M	Graduate Seminar: Composition	3
III. Literature Through the Middle Ages		
ENGLISH 400CF	Cluster Course: Courts And Culture In The Middle Ages	3
ENGLISH 412/5512	Chaucer	3
ENGLISH 422/5522	Medieval Literature	3
ENGLISH 452/5552	Early English Drama	3
ENGLISH 5503	Old English	3
ENGLISH 5550A	Graduate Seminar Medieval Literature I	3

ENGLISH 5555A	Graduate Seminar Medieval Literature II	3
IV. Renaissance Literature		
ENGLISH 413/5513	Renaissance Literature I	3
ENGLISH 414/5514	Milton	3
ENGLISH 423/5523	Renaissance Literature II	3
ENGLISH 451/5551	Shakespeare Comedies And Histories	3
ENGLISH 452/5552	Early English Drama	3
ENGLISH 461/5561	Shakespeare Tragedies And Romances	3
ENGLISH 5550B	Graduate Seminar Renaissance Literature I	3
ENGLISH 5555B	Graduate Seminar Renaissance Literature II	3
V. Late 17th- and 18th-Century Literature		
ENGLISH 415/5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 416/5516	The Romantic Period	3
ENGLISH 426/5526	The Victorian Period	3
ENGLISH 455/5556	Studies In The Novel 1740-1900 [1]	3
ENGLISH 462/5562	Restoration And 18th-Century Drama	3
ENGLISH 5550C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5555C	Graduate Seminar Neo-Classical Literature I	3
VI. Nineteenth-Century Literature		
ENGLISH 410/5510	Black Women Writers [2]	3
ENGLISH 416/5516	The Romantic Period [1]	3
ENGLISH 418/5518	19th-Century American Literature	3
ENGLISH 426/5526	The Victorian Period	3
ENGLISH 440/5540	American Culture [2]	3
ENGLISH 455/5556	Studies In The Novel 1740-1900 [1]	3
ENGLISH 5550D	Graduate Seminar 19th Century Literature I	3
ENGLISH 5550E	Graduate Seminar American Literature I	3
ENGLISH 5555D	Graduate Seminar In 19th-Century Literature II	3
VII. Twentieth-Century Literature		
ENGLISH 410/5510	Black Women Writers [2]	3
ENGLISH 417/5517	Modern Poetry	3
ENGLISH 427/5527	Contemporary Poetry	3
ENGLISH 428/5528	20th-Century American Literature	3
ENGLISH 440/5540	American Culture [2]	3
ENGLISH 453/5553	Modern Drama, 1880-1945	3
ENGLISH 463/5563	Contemporary Drama II	3
ENGLISH 465/5565	Studies In The Modern Novel	3
ENGLISH 5550F	Graduate Seminar Modern Literature I	3
ENGLISH 5555E	Graduate Seminar American Literature II	3
ENGLISH 5555F	Graduate Seminar In Modern Literature II	3

1 Satisfies 18th- or 19th-Century requirement, depending on the content.

2 Satisfies 19th- or 20th-Century requirement, depending on the content.

Other courses in the catalog may satisfy an area requirement if the content is appropriate, e.g., ENGLISH 5550H or ENGLISH 433.

Students who focus on Literature must complete ENGLISH 5601 on a topic related to the study of Literature.

Language and Literature Track

If desired, a student may elect the Language and Literature Track when obtaining the M.A. in English. At least 12 hours selected from the following list of courses are required:

ENGLISH 445/5545	History And Principles Of Rhetoric	3
ENGLISH 447/5547	Introduction To Literary Criticism	3
ENGLISH 470	Introduction To Descriptive Linguistics	3
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	3
ENGLISH 5520	Greater Kansas City Writing Project	3
ENGLISH 5550G/5555G	Graduate Seminar Literary Criticism	3
ENGLISH 5550J/5555J	Graduate Seminar: History Of The English Language	3
ENGLISH 5550M/5555M	Graduate Seminar In Rhetoric And Composition	3
ENGLISH 5550P	Graduate Seminar: Sociolinguistics And Dialectology	3
Total Credits		27

For students interested in teaching in community colleges or secondary schools or in pursuing a Ph.D. in composition and rhetoric, ENGLISH 5519 is highly recommended. ENGLISH 5519 is required for graduate teaching assistants.

In addition to the requirements for areas I & II, students must take at least one course from three of the five remaining areas (III-VII), including at least one course from areas III-IV and at least one course from areas V-VII.

Students who focus on Language & Literature must complete ENGLISH 5602 on a topic related to the study of Language & Literature.

Manuscript, Print Culture, and Editing Track

If desired, a student may elect the Manuscript, Print Culture, and Editing Track when obtaining the M.A. in English. This track examines the social, cultural, economic, and political history of the written word. It considers relationships among authors, editors, publishers, printers, illustrators, and booksellers as well as the reception of texts by readers, reviewers, and critics. In addition, it allows students to study the production of texts through the centuries while also gaining hands-on editing experience through internal and external publishing internships. Students will take a wide variety of courses covering a range of historical periods that have a significant emphasis on the history of reading, writing, and authorship as well as courses that focus on aspects of contemporary publishing and editing.

This track also follows the distribution requirements for the M.A. in English, and it requires that students take twelve (12) of the 31 required credit hours in courses that have been designated as ones fulfilling the goals of the concentration in Manuscript, Print Culture, and Editing; some courses will always be so designated, including the following:

ENGLISH 448	External Internship	1-3
ENGLISH 449A	Publication Practicum	1-3
ENGLISH 449B	Publication Practicum	1-3
ENGLISH 5501	Magazine Editing	3
ENGLISH 5533	Histories Of Writing, Reading, And Publishing	3
ENGLISH 5541	Girls And Print Culture	3

The following courses may also be used to fulfill the requirements for the concentration in Manuscript, Print Culture, and Editing if approved by the Graduate Committee. Each semester, courses so designated will be listed in the Department of English course descriptions handout, available in the Department office:

ENGLISH 5508	Harlem Renaissance	3
ENGLISH 5510	Black Women Writers	3
ENGLISH 5512	Chaucer	3
ENGLISH 5513	Renaissance Literature I	3
ENGLISH 5514	Milton	3
ENGLISH 5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 5516	The Romantic Period	3
ENGLISH 5517	Modern Poetry	3
ENGLISH 5518	19th-Century American Literature	3
ENGLISH 5522	Medieval Literature	3
ENGLISH 5523	Renaissance Literature II	3
ENGLISH 5526	The Victorian Period	3
ENGLISH 5527	Contemporary Poetry	3
ENGLISH 5528	20th Century American Literature	3
ENGLISH 5531	Late 18th-Century British Literature	3

ENGLISH 5534	Postcolonial Literature	3
ENGLISH 5540	American Culture	3
ENGLISH 5545	History And Principles Of Rhetoric	3
ENGLISH 5550A	Graduate Seminar Medieval Literature I	3
ENGLISH 5550B	Graduate Seminar Renaissance Literature I	3
ENGLISH 5550C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5550D	Graduate Seminar 19th Century Literature I	3
ENGLISH 5550E	Graduate Seminar American Literature I	3
ENGLISH 5550F	Graduate Seminar Modern Literature I	3
ENGLISH 5550I	Graduate Seminar In Dramatic Literature I	3
ENGLISH 5551	Shakespeare Comedies And Histories	3
ENGLISH 5552	Early English Drama	3
ENGLISH 5553	Modern Drama 1880-1945	3
ENGLISH 5555A	Graduate Seminar Medieval Literature II	3
ENGLISH 5555B	Graduate Seminar Renaissance Literature II	3
ENGLISH 5555C	Graduate Seminar Neo-Classical Literature I	3
ENGLISH 5555D	Graduate Seminar In 19th-Century Literature II	3
ENGLISH 5555E	Graduate Seminar American Literature II	3
ENGLISH 5555F	Graduate Seminar In Modern Literature II	3
ENGLISH 5555I	Graduate Seminar In Dramatic Literature II	3
ENGLISH 5556	Studies In The Novel 1740-1900	3
ENGLISH 5561	Shakespeare:Tragedies And Romances	3
ENGLISH 5562	Restoration And 18th- Century Drama	3
ENGLISH 5563	Contemporary Drama	3
ENGLISH 5565	Studies In Modern Novel	3

New courses may receive the designation if approved by the Department of English’s Graduate Committee.

Students who elect the MPCE track must complete ENGLISH 5603 on a topic related to the study of Manuscript, Print Culture, and Editing.

Culminating Experience

At the end of their M.A. course work (either in the last semester or the second to last semester), all M.A. students in English will revise a seminar paper (written in a previous course and/or in their area of interest) under the guidance of a faculty mentor. The goal of the revisions will be to create a polished paper of about 20-30 pages that could be the basis for a conference paper, a writing sample, or a publishable article.

Students will enroll in and successfully complete one hour of ENGLISH 5601, ENGLISH 5602, or ENGLISH 5603 for their "Culminating Experience," as is appropriate depending on the focus of their studies. Enrollment is required in order to work on this final paper with their chosen faculty mentor.

Final papers will be reviewed by a faculty committee that will rotate each semester. The committee will consist of two assigned members of the graduate faculty appointed by the Director of Graduate Studies, who will work with the student’s faculty mentor.

Students will turn in their revised papers to their mentors and the review committee at least two weeks prior to the end of the semester. The mentor is responsible for arranging a meeting with the student and the review committee before the end of the semester in which the Culminating Experience is taken. After conducting a defense about the paper and providing feedback for the student, the mentor and the review committee will assign a grade of pass or fail. Students must complete the oral defense in order to pass.

In addition to the department requirements above, graduate students in English must comply with the requirements listed in the General Graduate Academic Regulations and Information section of this catalog.

Master of Fine Arts: Creative Writing and Media Arts

The Department of English offers the degree Master of Fine Arts (M.F.A.) in Creative Writing and Media Arts. This interdisciplinary degree includes coursework in allied programs in Communication Studies and Theatre. The 42-hour program provides learning opportunities in writing, literary publishing, broadcasting, screen and stage writing, and production skills. The M.F.A. is a terminal degree in the field of Creative Writing and is designed to prepare students for careers as literary artists, authors, playwrights, poets, teachers, and screenwriters.

Admission

The application process is competitive. Satisfying the admission requirements does not guarantee admission to the program.

The applicant must hold:

- a B.A. in English, or a B.A. degree that includes at least 30 hours of sophomore-, junior- or senior-level English courses, or the equivalent. Applicants with fewer than 30 hours of undergraduate English courses may be admitted and assigned additional coursework as part of their program. These extra hours are added to the hours required for graduation.
- a 3.0 cumulative grade-point average in undergraduate work and a 3.0 average in undergraduate English coursework. In unusual circumstances, the Graduate Committee may consider applicants with lower grade-point averages.

The applicant must submit:

- a complete application to the university. The university application should be sent to the UMKC Admissions Office. All other materials should be sent to Graduate Programs, Department of English, Cockefair Hall 106.
- a complete application for admission to the M.F.A. in Creative Writing and Media Arts.
- a recommended 60 percent or higher score on the verbal aptitude portion of the Graduate Record Exam (GRE).
- a writing sample that demonstrates the applicant's writing abilities. A sample in a single emphasis area (no more than 10 pages for poetry; no more than 20 pages for all other disciplines: fiction, creative nonfiction, playwriting or screenwriting) is required (poems [6-10] or stories, essays, novel chapters, or dramatic-work excerpts).
- a statement of purpose that describes the applicant's academic and professional objectives. In an essay of 400 to 500 words, applicants should discuss in detail their interest in their emphasis area (poetry, fiction, creative nonfiction, playwriting or screenwriting), and their experience and goals in the area.
- three letters of recommendation that evaluate the applicant's readiness for graduate study written by three professors or others who know the applicant's abilities and potential well.

Students may not take more than six hours of graduate credit in English before entering the program as a "fully admitted" student.

Student Learning Outcomes

Graduates of M.F.A. program in Creative Writing & Media Arts will be able to demonstrate:

- Mastery of poetics or storytelling craft through the creation of a full-length manuscript of poetry, fiction, non-fiction, plays, or screenplays that are structurally sound, polished, and complete, and have a distinct voice;
- Effective problem-solving and revision strategies in the composition of poems, fiction, non-fiction, plays, or screenplays;
- A deliberate, masterful command of language, including style, grammar, and mechanics;
- Proficiency in at least one genre outside of their primary field and the ability to apply the techniques of their secondary genres to the work they produce in their primary field or study;
- Sophisticated critical analyses of literary texts, including an understanding of how a text displays a writer's artistic techniques and the ability to incorporate those techniques into their own writing; and
- Thorough knowledge of the literary traditions of their primary genre and the ability to situate their own work within current literary conversations.

Degree Requirements

Students must earn 42 graduate credit-hours beyond the bachelor's degree. Of these, at least 27 hours must be at the graduate level (courses numbered 5500 and above) and taught by a member of UMKC's graduate faculty.

Students must maintain a 3.0 (B) grade-point average to remain in the M.F.A. program and to complete the degree.

Foreign Language Requirement: By the time of graduation from the M.F.A. program, students must have completed one year (two university semesters) of a single foreign language. Alternatively, the foreign language requirement may be satisfied by scoring a "C" on the final exam of the first-year, second-semester course in foreign language. Previous undergraduate coursework may be used to satisfy this requirement.

Students must remain continuously enrolled, except in summer, for a minimum of 1 credit hour per semester. ENGLISH 5899 is the continuous enrollment course number.

Students must complete a formal Program of Study and have it signed within a year after admission. A final Program of Study must be submitted and signed during the semester a student files to graduate.

Students must complete all coursework within seven years.

Students must focus on one or more of the following genres:

- Creative Nonfiction
- Fiction
- Playwriting
- Screenwriting
- Poetry

Residency requirements: a minimum of 33 hours must be completed at UMKC.

Requirements for M.F.A. Thesis

In consultation with the faculty, the student will chose a thesis committee comprised of three members: a thesis director from the M.F.A. faculty and two other faculty members approved by the director and selected from the M.F.A. faculty, the faculty of another institution, or the faculties of the Departments of English, Communication Studies, or Theatre. Under the guidance of the thesis director, the student will complete a publishable or producible manuscript of one of the following:

- a book of poems (48-80 pages, single spaced); or
- a book of short stories or creative nonfiction essays (180 pages, double spaced); or
- a novel or novel-length nonfiction book (180-page minimum, double spaced); or
- a full-length play or several one-act plays; or
- a feature-length screenplay (95-120 pages) or a series bible and two 1-hour episodes (20 pages + two 45-page episodes); or
- a full-length cross-genre work, with Committee Chair permission.

At the completion of the writing project, the student will meet with his or her committee for a one-hour defense of the thesis.

Advisors may approve courses in other departments that may be highly valuable for particular student programs, e.g., History for documentary film, Foreign Language for translation work, Philosophy for aesthetics and theoretical/experimental approaches, and Art. Collaborative directed studies may be offered to allow two or more students to use two or more genres/media. Students may also seek collaborative opportunities in the Conservatory of Music and Dance and in Computer Science.

In addition to the department requirements above, graduate students in English must comply with the requirements listed in the General Graduate Academic Regulations and Information (p. 774) section of this catalog.

Graduate Certificate in the Teaching of Writing

Student Learning Outcomes

Upon completion of the Graduate Certificate in Teaching Writing, participants will be able to:

1. Understand the writing process as it translates to the teaching of writing in varied genres and contexts;
2. Develop writing assignments that demonstrate how writing can be used as a tool for learning and critical inquiry;
3. Design effective writing tasks using or situated within new media environments;
4. Create a personal writing pedagogy that leads to consistency in practice when teaching, assigning, responding to, and assessing writing;
5. Collaborate with a professional community of educators, pre-K through University, who reflect on their own teaching and writing;
6. Fullfill leadership roles in professional development programs related to improved literacy instruction.

Program Requirements

The Graduate Certificate in Teaching Writing is an 18-credit-hour program offered through the Greater Kansas City Writing Project housed in the Department of English at the University of Missouri-Kansas City. Certificate courses may be applicable to the MA or MFA in English and is especially appropriate for post-master's degree candidates who wish to pursue a specialization in teaching writing. The Certificate requires a minimum of 12 hours at the 5000 level or above.

Required Core Courses		
ENGLISH 5550MA	Greater Kansas City Writing Project: Invitational	3
ENGLISH 5520A	Greater Kansas City Writing Project	3
ENGLISH 5520B	Greater Kansas City Writing Project	3
Electives		
Select three of the following: [1]		9
Suggested electives applicable to the MA in English:		
ENGLISH 5519	Teaching Writing: Theories, Histories, Contexts, Practices	

ENGLISH 5533	Histories Of Writing, Reading, And Publishing
ENGLISH 5541	Girls And Print Culture
ENGLISH 5545	History And Principles Of Rhetoric
ENGLISH 5550M	Graduate Seminar In Rhetoric And Composition
ENGLISH 5550P	Graduate Seminar: Sociolinguistics And Dialectology
ENGLISH 5555M	Graduate Seminar: Composition
Suggested electives applicable to the Med in Education:	
EDUC-C&I 5547	Second Language Acquisition
EDUC-C&I 5547	Second Language Acquisition
EDUC-C&I 5562	Teaching For Equity And Social Justice
EDUC-C&I 5546	Intercultural communication
Total Credits	18

[1] Other English and Education courses may also be approved.

Admission Process

Applicants must be admitted to the UMKC Graduate School and by the Department of English. Application materials can be obtained from our website (http://cas.umkc.edu/english/gctw.asp).

Interdisciplinary Ph.D in English

English is an academic discipline eligible for full participation in UMKC's Interdisciplinary Ph.D. Program. Interested students should review the School of Graduate Studies catalog for general and discipline-specific admission criteria, academic regulations, and degree requirements and also contact the Department's I.Ph.D. Coordinator.

Suggested Focus Areas: American Studies; Manuscript and Print Culture; Medieval Studies; Rhetoric and Composition; Transatlantic Studies; Women's and Gender Studies.

English as a Primary Discipline coordinates well with the co-disciplines of Art History, History, and the Humanities Consortium.

Environmental Studies Program

Program Description

Environmental Studies Program provides students with the most innovative preparation in urban environmental issues and sustainability. The ES program engages a diverse student body with a strong foundation in environment and geosciences. It includes covering relationships between human beings and the environment. In addition to core courses in environmental science, environmental courses emphasizing the humanities and social sciences provide necessary balance for addressing physical Earth issues in a societal context. Undergraduate students gain essential life skills, an appreciation for complex environmental processes, and respect for the diversity of the urban environment in both Environmental Studies BA and Environmental Science BS degrees.

The department has offered geography and geology courses since 1934. The geography and geology programs of the Department of Geosciences include both bachelor of arts and bachelor of science degrees. The department also offers a master of science degree in environmental and urban geosciences (formerly the master of science in urban environmental geology degree). Students who designate geosciences as their coordinating discipline for the interdisciplinary doctoral program must meet admission and other requirements available from the department. See the School of Graduate Studies section of the graduate catalog for more information about doctoral programs.

Faculty

Program Director:
Caroline P. Davies

Participating Architecture, Urban Planning and Design Faculty:
Joy Swallow, Michael Frisch, Sungyup Kim, and Jacob Wagner

Participating Biology Faculty:
Aaron Reed

Participating Business Faculty:
Sandy Price, David Renz, and Li Sun

Participating Chemistry Faculty:
Yanching (Jerry) Jean, Kathleen Kilway, Ken Schmidtz, J. David VanHorn, and Charles Wurrey

Participating Engineering Faculty:
ZhiQiang Chen, John Kevern, Deborah O'Bannon, and Jerry Richardson

Participating Economics Faculty:
Mathew Forstater and Michael Kelsay

Participating Education Faculty:
A. Louis Odom

Participating Geosciences Faculty:
Jimmy Adegoke, Caroline Davies, Steven Driever, Syed Hasan, Daniel Hopkins, Wei Ji, Jejung Lee, James Murowchick, Tina Niemi, and Julie Urbanik

Participating History Faculty:
John Herron

Participating Law Faculty:
John Ragsdale

Participating Philosophy Faculty:
James Sheppard

Participating Political Science Faculty:
Reginald Bassa

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Environmental Studies (p. 147)
- Bachelor of Science: Environmental Science (p. 150)
- Environmental Studies Minor (p. 153)

Family Studies

Program Director:
Deborah B. Smith Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith), Associate Professor, Department of Sociology, (816) 235-2529

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp) , Room 208
5100 Rockhill Road
(816) 235-2529

Undergraduate

- Minor in Family Studies (p. 131)

Family Studies Minor

Through its Family Studies Program, the College of Arts and Sciences offers a family studies minor for matriculated undergraduate students interested in the welfare and empowerment of American families. This interdisciplinary academic curriculum introduces participants to the sociological and psychological foundations of families, as well as the historical, political and social climates in which they exist. Students who complete the 18-hour (nine hours core and nine hours elective) course of study will have expanded career opportunities in areas such as human services, health care, law, communications, program development and academic research.

Students wishing to complete a minor must declare their intention to their advisor. Completion of the minor is recorded on the student's transcript.

The following classes can be used toward the nine credit hours of core requirements:

SOCIOL 310R/PSYCH 453P	Families And The Life Course [1]	3
SOCIOL 211	Social And Psychological Development Through The Life Cycle	3
PSYCH 322	Child Psychology [2]	3

Other classes can be used toward the required electives for the family studies minor	9
Total Credits	18

1 Note: These two classes are equivalent. Do not take both SOCIOL 310R and PSYCH 453P.

2 PSYCH 210 is a prerequisite for this course.

For a list of classes fulfilling the Family Studies Minor elective requirements each semester, please consult the website: http://cas.umkc.edu/familystudies/fspminor.asp or contact the Family Studies Program Director.

Department of Foreign Languages and Literatures

Scofield Hall (http://www.umkc.edu/virtualtour/scofield-hall.asp), Room 216
711 E. 51 Street
(816) 235-**1311**
Fax: (816) 235-**1312**
frn-lg@umkc.edu
http://cas.umkc.edu/foreignlanguages

Mailing Address:
University of Missouri-Kansas City
Department of Foreign Languages and Literatures
Scofield Hall, Rm 216
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
K. Scott Baker

Professors Emeriti:
Patricia P. Brodsky, Rafael Espejo-Saavedra, Iman O. Khalil, Timothy A.B. Richards, Raymond T. Riva

Professors:
Louis Imperiale, Kathy M. Krause

Associate Professors:
K. Scott Baker (chair), Gayle Levy, Larson Powell, Alice R. Reckley Vallejos, Alberto Villamandos

Assistant Professors:
Matthew Edwards, Nacer Khelouz

Assistant Teaching Professors:
Lindsy Myers

Department Description

The Department of Foreign Languages and Literatures offers programs of study leading to the bachelor of arts degree in Languages and Literatures, with an emphasis in French Language and Literature, German Language and Literature, Spanish Language and Literature, or Classical Languages and Cultures; and graduate-level work leading to a master of arts in romance languages and literatures (French and Spanish). In addition, undergraduate minors are offered in French, German, German Studies, Spanish, and Classics.

Language instruction also is offered in Arabic, Ancient Greek, Italian and Latin.

Career Implications

Aside from pursuing teaching careers, holders of degrees in foreign languages are in demand by government, the media and international business in growing numbers, as the need for increased sophistication and expertise in international affairs continues to expand. Multinational companies and organizations now view foreign language skills as an asset in a prospective employee. In the past 10 years this notion has become widespread in such areas as business, industry, commerce, civil service, education, law, communications media and health services. The changing conditions of international economics, politics and communications indicate that this trend will continue.

Higher Educational Applications

Reading knowledge of a foreign language is a requisite for many graduate degrees. Foreign language proficiency, moreover, is gaining increasing importance on all levels of university instruction as curricula are internationalized. Scholars and professionals in many fields have long recognized

the need for, and advantages of, foreign language competency for improved international communication and effective conduct of basic and applied research.

Special Resources

Credit by Exam

Beginning-level courses (110, 120) are not applicable toward requirements for the major. College credit for them may be earned by examination.

CLEP credit is available for French, German or Spanish (110 and 120). Contact Testing Services to arrange for the exam. A passing score is necessary to receive credit. (No more than 30 of a student's total hours may be earned by examination, and students with senior standing cannot earn credit via CLEP.)

Departmental testing or "Credit by Examination," is also available for 211-level credit. Students should first speak to the appropriate language advisor. The form is available online here (http://www.umkc.edu/registrar/forms/credit_by_exam.pdf). A minimum grade of C is necessary to receive credit.

Study Abroad

UMKC has exchange and study agreements with other institutions in many parts of the world. Students have an opportunity to spend a year or a semester of study at the University of Seville in Spain, the University of Lyon II in France, the University of Klagenfurt in Austria and the University of Veracruz in Xalapa, Mexico. Summer programs are held at the University of Veracruz, Mexico; the University of Granada, Spain; the University of Bonn, German; and the University of Lyon II, France.

The department encourages students to travel and study abroad on our programs or those offered by any accredited American university. It should be noted, however, that the department must approve in advance any courses taken abroad for major or graduate credit. Interested students should contact the appropriate departmental advisor.

Language Resource Center

A modern facility housing audio, video and computer equipment and both general use and specialized software is located in 109 Scofield Hall. The purpose of the lab is to supplement and support in-class foreign language learning. Tutoring services for students of French, German and Spanish are provided free of charge. Conversation hours are also held in the Language Resource Center. All language students are encouraged to take advantage of the resources of the LRC.

Requirements for Teacher Certification in Foreign Languages

Certification as a Foreign Language teacher (K-12) in either Kansas or Missouri requires that a student complete specific requirements in Spanish, French or German and the School of Education. A separate application for teacher education is required. For further information about the program, contact Dr. Reckley Vallejos, reckleya@umkc.edu, and the School of Education at (816) 235-**2234**.

Faculty

Current Faculty

K. Scott Baker
Chair, Department of Foreign Languages and Literatures
Associate Professor of German
B.A. (University of Oregon); M.A., Ph.D. (University of Washington)
215 Scofield Hall
816-235-2823
bakerks@umkc.edu

Matthew Edwards
Assistant Professor of Spanish
B.A. (McGill University); M.A. (University of Ottawa); Ph.D. (Emory University)
213 Scofield Hall
816-235-2327
edwardsmatt@umkc.edu

Louis Imperiale
Professor of Spanish
Licence ès Lettres (Université de Grenoble); M.A. (University of Puerto Rico); Ph.D. (Catholic University of America)
203 Scofield Hall
816-235-2822
imperiale@umkc.edu

Nacer Khelouz

Assistant Professor of French
Licence, Maîtrise (Université de Paris VIII); Ph.D. (University of Pittsburgh)
204 Scofield Hall
816-235-5996
khelouznacer@umkc.edu

Kathy M. Krause
Professor of French
B.A. (Dartmouth College); M.A., Ph.D. (University of Pennsylvania)
218 Scofield Hall
816-235-1340
mailto:krausek@umkc.edu

Gayle A. Levy
Associate Professor of French
A.B. (University of California-Berkeley); M.A. (Johns Hopkins University); Ph.D. (Duke University)
211 Scofield Hall
816-235-2820
levyg@umkc.edu

Lindsy Myers
Assistant Teaching Professor of French
B.A. (University of Kansas); M.A., Ph.D. (University of Texas at Austin)
206A Scofield Hall
816-235-2826
myersll@umkc.edu

Larson Powell
Associate Professor of German
B.A. (Harvard University); M.A., M.Phil., Ph.D. (Columbia University)
217 Scofield Hall
816-235-1316
powelllar@umkc.edu

Alice Reckley Vallejos
Associate Professor of Spanish
B.A., M.A. (Ohio University, Athens); Ph.D. (University of Kansas)
214 Scofield Hall
816-235-2821
reckleya@umkc.edu

Alberto Villamandos
Assistant Professor of Spanish
Licenciatura (University of Navarra, Spain); M.A., Ph.D. (University of Ottawa, Canada)
213 Scofield Hall
816-235-2324
villamandosa@umkc.edu

Professors Emeriti

Patricia P. Brodsky
Professor Emerita of German
B.A. (University of Iowa); M.A., Ph.D. (University of California, Berkeley)

Rafael Espejo-Saavedra
Professor Emeritus of Spanish
B.A., M.A. (Occidental College); Ph.D. (University of California, Los Angeles)

Iman Osman Khalil
Associate Professor Emerita of German
M.A., Dr.Phil. (University of Munich)

Timothy A.B. Richards
Professor Emeritus of Spanish

B.A. (Bristol University, U.K.); M.A. (University of Wisconsin, Madison); Ph.D. (University of Colorado, Boulder)

Raymond T. Riva
Professor Emeritus of Spanish
B.A., Ph.D. (University of Illinois); A.M. (Middlebury College)

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Languages and Literatures (p. 135)
- Minor in French, German, Spanish, or Classics (p. 140)
- Minor in German Studies (p. 138)

Graduate

Graduate Degrees:

- Master of Arts in Romance Languages (p. 141)

Bachelor of Arts: Languages and Literatures

Attendance and Course Level

Class attendance

The nature of language acquisition is such that regular attendance, throughout the semester, is expected of all students enrolled for credit.

Course Levels

Course levels are generally indicated by the first digit of the course number. For example, 100-level courses are first-year courses, 200-level classes represent second-year courses, etc. Accordingly, students entering a 200-level French course must have completed FRENCH 110 and FRENCH 120, their equivalent, or show proof of second-year skill-level (such as Placement Test score). Successful completion of a second-year course (normally 211 and 221, their equivalent, or proof of appropriate skill-level) is required of all students who want to enroll in 300- or 400-level courses. Exceptions must have the approval of the student's foreign language advisor.

The Department of Foreign Languages and Literatures offers a program of study leading to the bachelor of arts in Foreign Languages with emphases in French, German, Spanish or Classics.

Undergraduate Advisors

French: Lindsy Myers
(816) 235-2826, myersll@umkc.edu

German: K. Scott Baker
(816) 235-2823, bakerks@umkc.edu

Larson Powell
(816) 235-1316, powelllar@umkc.edu

Spanish: Alberto Villamandos
(816) 235-2324, villamandosa@umkc.edu

Classics: Jeff Rydberg-Cox
(816) 235-2560, rydbergcoxj@umkc.edu

General Information

Initial Advising and Placement

A language placement exam is strongly recommended for all students with previous foreign language experience in French, German or Spanish. The placement exam or the recommendation of a foreign language advisor will best determine a student's level, contributing to his or her success. Contact the department office for more information. Placement test website: http://cas.umkc.edu/ForeignLanguages/PlacementExam.asp

Consultation with an advisor is recommended for students who intend to major or minor in foreign languages.

Transfer Credit

Transfer students normally may expect to continue their foreign language study at the next comparable level. On consultation with their advisors or the course instructors, and after taking the placement exam, students may be advised to do either remedial or more advanced coursework. No more than nine hours of transfer credit for 200- to 400-level courses are normally allowed toward degree requirements. Usually a maximum of six transfer credits can be applied to the minor.

Credit for study at a foreign institution will be granted, provided the courses proposed for study abroad have been approved in advance by a departmental advisor and endorsed by the chair of the department. When advance endorsement for credit is not obtained from the department, the credit is subject to approval by the department chair.

In cases where students have been engaged in an extended period (e.g., a year) of formal study at an approved academic institution abroad, transfer credit of more than nine hours may be granted, if approved by the chair of the department.

Credit by Examination

Beginning-level courses (110, 120) are not applicable toward requirements for the major. College credit for them may be earned by examination.

CLEP credit is available for French, German or Spanish (110 and 120). Contact Testing Services to arrange for the exam. A passing score is necessary to receive credit. (No more than 30 of a student's total hours may be earned by examination, and students with senior standing cannot earn credit via CLEP.)

Departmental testing or "Credit by Examination," is also available for 211-level credit. Students should first speak to the appropriate language advisor. The form is available online here (http://www.umkc.edu/registrar/forms/credit_by_exam.pdf). A minimum grade of C is necessary to receive credit.

Student Learning Outcomes

Learning outcomes are aligned with national and state standards on language and cultural understanding, and on national standards for language skill as reflected in the American Council on the Teaching of Foreign Language proficiency guidelines:

- To attain advanced reading, writing, listening and speaking proficiency in the language studied.
- To obtain a broad base of knowledge and perspectives on the Classical world, or on French-, German- or Spanish-speaking civilizations, and of their respective cultures—literature, the arts, socio-historical, political and economic structures, etc.—within a variety of interpretive frameworks.
- To understand and articulate cultural practices and process as dynamic elements in the construction of identity, and to appreciate and encourage cultural diversity in human endeavor.
- To understand aspects of language and culture in the world as part of all human communication, and within interdisciplinary contexts.
- To develop skills in critical thinking and analysis, including, but not limited to, textual analysis.

Degree Requirements

Major Requirements

Total: 36 credits at or above the 200 level

The Foreign Language major consists of two parts: an Emphasis and a Breadth Requirement.

Foreign Language majors must complete the requirements of one of the following Emphases:

Emphasis: French Language and Literature

30 credit hours at or above the 200 level

Two French 200-level courses or higher		6
FRENCH 315	Intermediate Conversation and Composition I	3
FRENCH 325	Intermediate Conversation and Composition II	3
FRENCH 415	Advanced Conversation and Composition I	3
Two 300-level French courses or higher		6
Two 400-level French courses		6
Breadth Requirement	See below	6
FRENCH 499	Senior Seminar (Capstone)	3
Total Credits		36

Emphasis: German Language and Literature

30 credit hours at or above the 200 level

Two German 200-level courses or higher		6
GERMAN 315	Intermediate Conversation and Composition I	3
GERMAN 325	Intermediate Conversation and Composition II	3
GERMAN 415	Advanced Conversation and Composition I	3
Two 300-level German courses or higher		6
Two 400-level German courses		6
Breadth Requirement	See below	6
GERMAN 499	Senior Seminar (Capstone)	3
Total Credits		36

Emphasis: Spanish Language and Literature

30 credit hours at or above the 200 level

Two Spanish 200-level courses or higher		6
SPANISH 315	Intermediate Conversation And Composition I	3
SPANISH 325	Intermediate Conversation And Composition II	3
SPANISH 415	Advanced Conversation And Composition I	3
Two 300-level Spanish courses or higher		6
Two 400-level Spanish courses		6
Breadth Requirement	See below	6
SPANISH 499	Senior Seminar (Capstone)	3
Total Credits		36

Emphasis: Classical Languages and Cultures

30 credit hours at or above the 200 level

Greek or Latin 200-level courses or higher		9
Greek, Latin, or Classics 300-level courses		9
Greek, Latin, or Classics 400-level courses		9
Breadth Requirement	See below	6
CLASSICS 499	Senior Tutorial (Capstone)	3
Total Credits		36

Breadth Requirement

The Breadth Requirement may be met by completing one of the following:

1. A second Foreign Language Emphasis;
2. A minor in another foreign language offered by the Department;
3. Six (6) credit hours of coursework at the 200-level or higher among foreign language courses outside the Emphasis (including courses taught in English). These classes must focus on language, literary or cultural studies. Appropriate courses offered by other departments (e.g. History of Latin America) can fulfill the breadth requirement with the prior approval of the undergraduate advisor.

Other Requirements and Regulations

1. A capstone course is required for the completion of the BA in Foreign Languages.
2. Higher-level courses may be substituted for lower-level coursework, eg. a 300-level class can be taken instead of a 200-level class. A minimum of two 400-level courses is required for each Emphasis in addition to the Capstone, 499.
3. A 2.0 grade-point-average in Foreign Languages courses is required for graduation.
4. Study-abroad is strongly recommended for all majors and minors in Foreign Languages, but not required for degree completion.
5. FRENCH 435 does not count toward the major in Foreign Languages.
6. Native speakers studying their own languages will complete a minimum of 21 credit hours in courses numbered 300 and above, but normally not including 315 or 325, and they will complete the breadth requirement. A native speaker is defined as a person who speaks the target language fluently and who has completed formal schooling through the secondary school level, or equivalent, in the target language.

Suggested Four-Year Plan of Study for the B.A. Degree

Year I			
Fall	**Credits**	**Spring**	**Credits**
110 (not counted toward major/minor hours)[1]	5	120 (not counted toward major/minor hours)[1]	5
Curricular Requirements and Electives	10-11	Curricular Requirements and Electives	10-11
	15-16		**15-16**
Year II			
Fall	**Credits**	**Spring**	**Credits**
211[1]	3	221[1]	3
Curricular Requirements and Electives	9-13	Curricular Requirements and Electives	9-13
	12-16		**12-16**
Year III			
Fall	**Credits**	**Spring**	**Credits**
315[1]	3	325[1]	3
300/400 Literature and Civilization	6-9	300/400 Literature and Civilization	6-9
Curricular Requirements and Electives	3-6	Curricular Requirements and Electives	3-6
	12-18		**12-18**
Year IV			
Fall	**Credits**	**Spring**	**Credits**
415[1]	3	425	3
400 Literature	3-6	400 Literature	3-6
499 Senior Seminar (Spanish, German, Classics)[1]	3	499 Senior Seminar (French)[1]	3
Electives	6-9	Electives	6-9
	15-21		**15-21**

Total Credits: 108-142

1 Required course (or equivalent skill-level: students should not take classes below their skill-level - see information on Placement Testing)

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

German Studies Minor

Student Learning Outcomes

Learning outcomes are aligned with national and state standards on language and cultural understanding, and on national standards for language skill as reflected in the American Council on the Teaching of Foreign Language proficiency guidelines:

- To attain advanced reading, writing, listening and speaking proficiency in the language studied.
- To obtain a broad base of knowledge and perspectives on the Classical world, or on French-, German- or Spanish-speaking civilizations, and of their respective cultures—literature, the arts, socio-historical, political and economic structures, etc.—within a variety of interpretive frameworks.
- To understand and articulate cultural practices and process as dynamic elements in the construction of identity, and to appreciate and encourage cultural diversity in human endeavor.
- To understand aspects of language and culture in the world as part of all human communication, and within interdisciplinary contexts.
- To develop skills in critical thinking and analysis, including, but not limited to, textual analysis.

Program Requirements

The German Studies minor consists of 18 hours selected from the list of approved courses, of which a minimum of 6 credits must be in German Language and a minimum of 9 credits must be upper-division coursework. Up to 6 credits may come from classes listed in the Associated Course List, but these courses apply only if the student's project focuses on a German topic. A capstone project is also required. A maximum of six hours may apply to both a German minor and a German Studies minor.

Approved Course Offerings

Foreign Languages and Literatures		
German Language:		
GERMAN 110	Elementary German I	3
GERMAN 120	Elementary German II	3
GERMAN 211	Second-Year German I	3
GERMAN 221	Second-Year German II	3
GERMAN 315	Intermediate Conversation and Composition I	3
GERMAN 325	Intermediate Conversation and Composition II	3
GERMAN 415	Advanced Conversation and Composition I	3
GERMAN 425	Advanced Conversation and Composition II	3
German Literature:		
GERMAN 301	Introduction to Literary Studies	3
GERMAN 307	From the Middle Ages to the Baroque	3
GERMAN 308	From the Enlightenment Through the 19th Century	3
GERMAN 310	Classical Period Of German Literature	3
GERMAN 340	Society and Literature in 20th-Century Germany (in English)	3
GERMAN 400	Rainer Maria Rilke	3
GERMAN 401	Bertolt Brecht	3
GERMAN 411	Romanticism	3
GERMAN 412	The German Novelle	3
GERMAN 421	19Th-Century Drama	3
GERMAN 422	Contemporary Drama	3
GERMAN 426	20th-Century German Literature	3
German Culture and Film:		
GERMAN 305	Current Events in Germany	3
GERMAN 306	Aspects Of Contemporary German Culture (Conducted In German)	3
GERMAN 341	German Film (in English)	3
GERMAN 342	Contemporary German Film 1980 (in English)	3
GERMAN 345	The Antifascist Tradition In Germany	3
GERMAN 453	Women's Voices in Germany and Austria	3
Interdisciplinary Cluster Courses		
GERMAN 300CZ/HISTORY 400CZ	CC: The Other Europe	3
GERMAN 313/HISTORY 400GS	CC: Intro to German Studies	3
GERMAN 314CC	Weimar Culture: Gender and Modernity in Central Europe	3
FRN-LNG/HISTORY 400CM	Nazi-Occupied Europe & The Holocaust	3
History		
HISTORY 300G/5500G	Special Studies	1-3
HISTORY 436R/5536	Modern German History	3

HISTORY 437AWI	Imperial Germanies, 1848-1918	3
HISTORY 437BWI	First German Republics, 1917-1935	3
HISTORY 437CWI	The Third Reich, 1930-1950	3
HISTORY 437DWI	Cold War Germanies, 1941-1991	3
Philosophy		
PHILOS 436	Kant	3
Associated Course Offerings		
Art History:		
ART-HIST 302	Survey Of Western Art II	3
ART-HIST 303	World Currents of Contemporary Art	3
ART-HIST 415WI	Romanticism	3
ART-HIST 416WI	Later 19th Century Painting And Sculpture	3
ART-HIST 424	Early 20th Century European Painting And Sculpture	3
ART-HIST 445	Northern European Art: 15th And 16th Centuries	3
Interdisciplinary Cluster Courses:		
HISTORY 400CF	Cluster Course: Courts and Culture in the High Middle Ages	3
HISTORY 420CC	World War I in Film: The World made Modern	3
History:		
HISTORY 413/5513	Renaissance	3
HISTORY 414/5514	Reformation	3
HISTORY 417R/5517	Nations & Empires:19th Century Europe	3
HISTORY 415B	17th and 18th Century European History	3
HISTORY 418R/5518	The Age of Extremes 20th Century History	3
HISTORY 419R/5519	Contemporary Europe: 1930-2000	3
Musicology (Conservatory):		
HISTORY 430RA	'We Are The Dead': The Great War Experience Through its Artifacts	3
CONSVTY 5554	Music of the Medieval Era	3
CONSVTY 5557	Music of the Classical Era	3
CONSVTY 5558	Music of the Romantic Era	3
CONSVTY 5559A	Music Since 1900: 1900-1945	3
CONSVTY 5560B	Seminar: Nineteenth-Century Nationalism In Music	3
Philosophy:		
PHILOS 332	Existentialism	3
Political Science:		
POL-SCI 220	Introduction To Comparative Politics	3
POL-SCI 451	International Politics In Europe	3

The Minor: French, German, Spanish, Classics

Student Learning Outcomes

Learning outcomes are aligned with national and state standards on language and cultural understanding, and on national standards for language skill as reflected in the American Council on the Teaching of Foreign Language proficiency guidelines:

- To attain advanced reading, writing, listening and speaking proficiency in the language studied.
- To obtain a broad base of knowledge and perspectives on the Classical world, or on French-, German- or Spanish-speaking civilizations, and of their respective cultures—literature, the arts, socio-historical, political and economic structures, etc.—within a variety of interpretive frameworks.
- To understand and articulate cultural practices and process as dynamic elements in the construction of identity, and to appreciate and encourage cultural diversity in human endeavor.
- To understand aspects of language and culture in the world as part of all human communication, and within interdisciplinary contexts.
- To develop skills in critical thinking and analysis, including, but not limited to, textual analysis.

The growing need for experts in the international aspects of academic and professional fields has led to a renewed interest in the foreign language minor as a complement to a student's training in a major field. In increasing numbers, students completing baccalaureate degrees in the Henry W. Bloch

School of Business and Public Administration, in the Conservatory of Music and in other departments of The College of Arts and Sciences have selected a course of study that includes a minor in a foreign language. Majors in all fields are urged to discuss this possibility with their advisors.

Requirements for Program Minor

An academic minor in a given language requires a minimum of 18 hours consisting of six hours of second-year courses or above plus 12 hours of courses at the 300 and 400 levels. FRENCH 435 does not count toward a minor. Usually a maximum of six transfer credits can be applied to the minor.

Master of Arts: Romance Language and Literature

The master of arts degree program provides necessary training in French or Spanish language and literature for those who want to teach those languages at the secondary school or junior college level. It also serves students who plan to continue with studies at the doctoral level. Other employment opportunities can be found in government, business and industry, publishing houses, foundations, etc.

Admission Requirements

A bachelor's degree from an accredited institution with a 3.0 (B) grade-point average in the subject area and a 2.75 overall GPA is required for admission.

The Graduate Record Examination (Advanced Achievement) is recommended, and two letters of recommendation are required. Students' transcripts with accompanying data are carefully evaluated.

Applicants with inadequate preparation may be required to make up deficiencies by taking more than the standard 30 hours of coursework.

Courses taken prior to admission into a graduate program will not count for graduate credit.

Requirements for Retention

If students' graduate grade-point averages fall below 3.0 (B), they may take coursework only on the 300 and 400 levels until a 3.0 graduate grade-point average has been achieved. Coursework completed under this condition will not count toward the master's degree.

Transfer Credit

No more than 6 hours of transfer credit are normally allowed toward degree requirements.

Advising

Students interested in pursuing a master's degree in Romance languages should meet with the appropriate principal graduate advisor before beginning studies:

French: Gayle A. Levy
(816) 235-2820, levyg@umkc.edu

Spanish: Louis Imperiale
(816) 235-2822, imperialel@umkc.edu

In consultation with the advisor, a course of study will be planned listing the courses that will satisfy requirements for the degree. Prior to registration at least once each year, candidates must meet with their advisors for approval of their course programs. They also must seek their advisor's endorsement whenever a change in the agreed course of study is necessary.

M.A. Degree Requirements

1. Students must earn 30 graduate credit hours to complete the M.A. in Romance Languages. Of these credits, at least 21 hours must be at the graduate level (courses numbered 5500 and above). When appropriate and/or necessary, students may count up to 9 hours of 400-level courses taken while enrolled as a graduate student towards the M.A. A minimum GPA of 3.0 is required in all graduate work. Students must take courses in a variety of areas, genres and periods in order to achieve both breadth and depth of knowledge. See below for specific course and distribution requirements for each emphasis area (Spanish & French). Students must obtain approval of their study programs by the graduate advisor for their area at least once a year.
2. Students must demonstrate ability to read, speak and write, idiomatically and with accuracy, the language in which the M.A. degree is being pursued.
3. Final Examination: Students must take a final examination consisting of both written and oral sections. See details below for each emphasis area.
4. Second Language Proficiency: In addition to the mastery of the target language, students must demonstrate a reading knowledge of a second language in one of the following ways:
   - Taking a reading examination in French, Spanish, Italian, German or Latin administered or approved by the department or given by the Educational Testing Service.

- Achieving a grade of 3.0 (B) or better in a 211 (3 credit hour), or equivalent, language course.
- Achieving a grade of 2.0 (C) or better in each of two 300-level courses or in one 400-level literature or civilization course taught in the second language.

M.A. in Romance Languages: French Emphasis

Student Learning Outcomes

Students graduating with an M.A. in romance languages will:

- Obtain specialized knowledge of either Hispanic or French and Francophone cultures, especially of their literatures as foundational paradigms for inquiry into language and cultural phenomena.
- Develop skill in reflective inquiry.
- Analyze cultural products, process and perspectives with a variety of interpretive strategies.
- Attain superior reading, writing, listening and speaking proficiency in the primary language studied, and intermediate reading proficiency in the secondary language studied.

1. Distribution of courses
    a. Students will choose courses covering five out of the seven following periods or fields:
        i Medieval/Early Modern
        ii Renaissance
        iii 17th and 18th Centuries
        iv 19th Century
        v 20th and 21st Centuries
        vi Linguistics or Pedagogy
        vii Francophonie
    b. In addition, as part of their 30 credit hours of study, students will take one course in advanced French stylistics.
2. Exams. The final exam will be comprised of a written and an oral portion.
    a. Written exam
        i In consultation with the French faculty, students will draw up a list of eight subjects covering most periods/fields and one *explication de texte* of a poem.
        ii The written exam will consist of 2-3 questions, written by the faculty and based on the subjects from the student's list. The student will have two hours in which to write the essays. No notes are allowed, but the student may consult the texts during the exam.
    b. Oral exam
        On a subsequent day, the student will take the one-hour oral exam, which will consist of the *explication de texte* and follow-up questions to the written exam. The student may bring brief notes, on index cards, to help in the *explication de texte.*

M.A. in Romance Languages: Spanish Emphasis

Student Learning Outcomes

Students graduating with an M.A. in romance languages will:

- Obtain specialized knowledge of either Hispanic or French and Francophone cultures, especially of their literatures as foundational paradigms for inquiry into language and cultural phenomena.
- Develop skill in reflective inquiry.
- Analyze cultural products, process and perspectives with a variety of interpretive strategies.
- Attain superior reading, writing, listening and speaking proficiency in the primary language studied, and intermediate reading proficiency in the secondary language studied.

1. Distribution of courses
    a. Students will choose courses covering six out of the eight following periods or fields:
        i Medieval/Early Modern
        ii Golden Age
        iii 18th and 19th Centuries
        iv 20th and 21st Centuries
        v Spanish or Romance Linguistics
        vi Foreign Language Pedagogy

vii Pre-Columbian / Indigenous/ Colonial Literature
viii U.S.-Latino Studies

b. In addition, a student's coursework must include at least one course in each general category of Peninsular or Latin American.

2. Exams. The final exam will be comprised of a written and an oral portion.
   a. Written Exam
      Questions will be based on a reading list prepared in advance by the students and their graduate advisor, based on the periods and fields covered in all their graduate courses; it will consist of 15 (out of 30 possible) identifications, two short and two long essays. The student will have four hours in which to write the essays. No notes, texts or dictionaries will be allowed.
   b. Oral Exam
      On a subsequent day, the student will take the one-hour oral exam, which will consist of a textual analysis. Prior to the exam, the student will be given a text and will have 30 minutes to prepare the analysis.

Department of Geosciences

Robert H. Flarsheim Science and Technology Hall
5110 Rockhill Road, Room 420
(816) 235-**1334**
Fax: (816) 235-**5535**
geosciences@umkc.edu
http://cas.umkc.edu/geo

Mailing Address
University of Missouri-Kansas City
Department of Geosciences
RHFH 420
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
James B. Murowchick

Professors:
Steven L. Driever (principal undergraduate Geography adviser), Syed E. Hasan (Director, CAER), Daniel P. Hopkins (undergraduate Environmental Studies BA adviser), Wei Ji (graduate Geography adviser and GIS Program Director), Tina M. Niemi (principal undergraduate Geology adviser)

Associate Professors:
Jimmy O. Adegoke, Caroline P. Davies (undergraduate Environmental Science BS adviser; Director, Environmental Studies program), Jejung Lee (principal graduate adviser; IPhD coordinator), James B. Murowchick (Chair)

Associate Teaching Professors:
Julie L. Urbanik

Professors Emeriti:
Raymond M. Coveney, Jr., Richard J. Gentile, Paul L. Hilpman, Eldon J. Parizek

Department Description

The Department of Geosciences offers programs of study leading to bachelor of science degrees in Environmental Science, Geography, and Geology and bachelor of arts degrees in Environmental Studies, Geography and Geology. The department offers a master of science degree in Environmental and Urban Geosciences. The department also participates in the Interdisciplinary Ph.D. program. The department also offers a graduate-level Waste Management Certificate Program. Students who designate Geosciences (Environmental Studies, Geology or Geography focus) on their application for admission to the doctoral program must meet admission and other requirements available from the department. See the School of Graduate Studies section in the Graduate Catalog for more information about doctoral programs. The department takes a leading role in the undergraduate interdisciplinary Environmental Studies program. Courses offered by the department can be used to fulfill the requirements of the Missouri Department of Education for earth science, science-math, and social science teaching specialties.

Students majoring in Environmental Studies, Environmental Science, Geography, or Geology obtain a broad liberal arts education during their undergraduate career and at the same time receive sound fundamental training in the geosciences. Departmental faculty members are committed to educating non-majors about the earth and environmental sciences as well as those students who plan to pursue careers in the geosciences.

All undergraduate majors in the Department of Geosciences (including Environmental Studies) must maintain a minimum grade-point average above 2.0 in all courses taken to fulfill departmental degree requirements. This minimum GPA also applies to all credit hours transferred from other institutions.

Special Resources and Services

Geosciences Museum

The Geosciences Museum, founded by Richard L. Sutton, M.D., is located in Room 271, R.H. Flarsheim Hall. It contains relief models and interactive displays, along with a full range of 2,500 spectacular mineral and fossil specimens from all over the world. Hours of operation are 8:30 a.m. to 4:30 p.m. Monday through Friday. Admission is free.

Center for Applied Environmental Research (CAER)

The Center for Applied Environmental Research http://cas.umkc.edu/caer is administered by the Geosciences Department and directed by Professor Syed E. Hasan. The center is a resource for governmental agencies, private firms, and the general public in matters of the environment. Its programs address such matters as environmental geophysics, geochemistry, underground space, foundation stability, waste management, geologic hazards, environmental justice, natural resource assessment, and land-use planning.

Undergraduate Admission Requirements

Prospective students desiring to major in the Geosciences programs should enroll in as much work as possible in mathematics, English composition and sciences during their high school years.

Students transferring from other colleges or universities should have taken required non-departmental 100- and 200-level courses listed under degree programs in this catalog prior to arriving at UMKC. For example, geology students should take mineralogy during their first fall semester and should have already completed the chemistry prerequisite by that time. In addition, it would be desirable for B.S. majors to have completed a semester of calculus. To assure that students transferring from other institutions of higher education can continue in an uninterrupted plan of study in the fields of geology, geography or environmental studies, it is advisable that they acquaint themselves with the departmental degree requirements listed in this catalog as well as the two-year timetable of course offerings available from the department advisors, prior to registration.

Natural Science/Social Sciences Area Requirements

The following geosciences courses count toward the natural science requirements of the College of Arts and Sciences:

ENV-SCI 110L	Understanding the Earth Laboratory	2
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
GEOG 203	Introduction to Geographic Information Systems	4
GEOG 215	Introduction to Weather and Climate	4
GEOG 314	Principles of Geomorphology	4
GEOG 317	Cartography	4
GEOG 319	Descriptive and Synoptic Meteorology	4
GEOG 335	Introduction to Waste Management	3
GEOG 360	Principles of Biogeography	4
GEOG 401	Advanced Geographic Information Science	4
GEOG 402	Environmental Remote Sensing and Digital Image Analysis	4
GEOG 404	Biogeography and Landscape Ecology	3
GEOG 406	Global Environmental Change	3
GEOG 435	Geoarchaeology	3
GEOG 442	Quaternary Environments	3
GEOG 444	Spatial Data Analysis	3
GEOG 448	Satellite Climatology	4
All Geology courses		

Social Science Area Requirements

All **Geography** courses **except the above** count toward the social science requirements of the College of Arts and Sciences.

Career for Geography, Geology and Environmental Studies/Science Graduates

Geography

Students of geography at UMKC are offered a well-rounded education leading to promising career prospects; the market for geographers is global. Geography is centrally concerned with the whole range of interrelations between human beings and the natural and built environments. Geography graduates find work in commerce; government and public administration; city and regional planning; natural resource management and environmental conservation; historic preservation; landscape design; pollution control; weather-forecasting; climatological and agricultural analysis; statistical analysis;

government and commercial map-making; transportation; the travel and tourism industry; market analysis and development; diplomacy; and national and international economic development programs. Experience with geographic information science (GIS) and remote sensing technologies is a great advantage in all these fields. Well-educated geographers are often involved in the crafting of policy and legislation, in the practice of law, in consulting, in publishing and in education.

Geology

Geology graduates have numerous employment opportunities, especially in areas relating to the environment, to engineering and to applied geology. Training in urban and environmental geology will prepare graduates to develop and evaluate environmental impacts, deal with waste management issues; model groundwater flow; handle laboratory and field instrumentation; and assess natural hazards. Geologic studies of soils, energy, mineral and water resources, and the environment are essential for private industry, as well as for governmental agencies. Graduates may also join state and federal geological surveys. The petroleum industry was for many years the principal employer of geologists. However, currently the best employment opportunities are in the area of the environment.

Environmental Studies

Environmental issues such as climate variation, atmospheric pollutants and non-point-source water pollution are complex issues. The general public is ill-equipped to evaluate these issues and must rely on experts. The need for environmental education and professionals in the field of the environment has never been greater. Given these needs, employment opportunities are unlimited and are likely to remain so for decades. Specific careers available to those who hold an environmental studies degree lie with companies and agencies that deal with engineering, environmental geology, environmental law, environmental health and safety, emergency response, environmental training, environmental chemistry, politics and social issues.

Departmental Activities

Advising System

Students who wish to major in Geology, Geography or Environmental Studies should seek advice from the department at the earliest possible time. Transfer students, including those from local community colleges, should see faculty advisors in the department prior to admission to UMKC. All full-time faculty members serve as department advisors, but lead roles are designated to particular faculty for each discipline. Individuals may inquire about advising appointments at any time during the semester by phone at (816) 235-**1334** or by e-mail at geosciences@umkc.edu.

Practicums and Internships

The nature of the fields of atmospheric science, environmental studies, geology, and geography necessitates practical in-class and laboratory exercises; field trips and fieldwork; working seminars and independent projects of a practical nature. More explanation of specific courses can be found in the individual course descriptions. Internships are available with local organizations.

Financial Aid and Transportation Costs

A variety of scholarships and student financial aid alternatives are available to students accepted for regular enrollment. (See the Financial Aid Web site http://www.umkc.edu/finaid for more information.) Scholarships available solely to Geosciences students include the Richard J. Gentile Scholarship, the Peck-Williams-Garstang Scholarship, the Truman Stauffer Scholarship, the Denis Ward Scholarship, and the Greater Kansas City Gem and Mineral Show Association Scholarship. Please note that certain field courses and field trips necessitate that some travel costs are at the expense of the individual student.

Teacher Certification in Earth Science or Social Science

Certification as a middle school (grades 5-9) or secondary (grades 9-12) Earth Science teacher in either Kansas or Missouri requires that a student complete specific requirements in Biology, Chemistry, Environmental Studies, Geology, Physics and in the School of Education. Certification as a middle school (grades 5-9) or secondary (grades 9-12) Social Science teacher in either Kansas or Missouri requires that a student complete specific requirements in History, Political Science, Economics, Geography, Behavioral Sciences and in the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education section of this catalog or contact the Education Student Services Office at (816) 235-**2234**.

Faculty

Jimmy O. Adegoke[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=adegoke); Associate Professor of Geosciences; B.S. (Ahmadu Bello University); M.S. (University of Ibadan); Ph.D. (Pennsylvania State University).

Raymond M. Coveney, Jr.[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=coveney); Professor Emeritus of Geosciences; B.S. (Tufts University); M.S., Ph.D. (University of Michigan).

Caroline P. Davies[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=davies); Associate Professor of Geosciences; B.A. (College of William-Smith); M.S. (University of Maine); Ph.D. (Arizona State University).

Steven L. Driever[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=driever); Professor of Geosciences; B.A. (University of Virginia); M.S. (Northwestern University); Ph.D. (University of Georgia).

Richard J. Gentile[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gentile); Professor Emeritus of Geosciences; B.A., M.A. (University of Missouri-Columbia); Ph.D. (University of Missouri-Rolla).

Edwin D. Goebel; Professor Emeritus of Geosciences; A.B. (Augustana College); M.S. (University of Iowa); Ph.D. (University of Kansas).

Syed E. Hasan[2,3] Contact Informaiton (http://www.umkc.edu/lookup/search.cfm?LastName=hasan); Professor of Geosciences; B.S. (Patna University); M.S. (Indian Institute of Technology, formerly Roorkee University); Ph.D. (Purdue University).

Paul L. Hilpman; Professor Emeritus of Geosciences; A.B. (Brown University); M.A., Ph.D. (University of Kansas).

Daniel P. Hopkins[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hopkins); Professor of Geosciences; B.A. (Tulane University); Ph.D. (Louisiana State University).

Wei Ji[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ji); Professor of Geosciences; B.S., M.S. (Peking University); Ph.D. (University of Connecticut).

Jejung Lee[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lee); Associate Professor of Geosciences; B.S., M.S. (Seoul National University); Ph.D. (Northwestern University).

James B. Murowchick[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=murowchick); Chair of Department of Geosciences, Associate Professor of Geosciences; B.S. (University of Illinois); M.S., Ph.D. (Pennsylvania State University).

Tina M. Niemi[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=niemi); Professor of Geosciences; B.A. (College of Wooster); M.S., Ph.D. (Stanford University).

Eldon J. Parizek; Dean Emeritus, College of Arts and Sciences, and Professor Emeritus of Geosciences; B.S., M.S., Ph.D. (University of Iowa).

Julie L. Urbanik;Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=urbanik); Associate Teaching Professor of Geosciences: B.A. (Randolph-Macon College), M.A. (University of Arizona), Ph.D. (Clark University).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

Undergraduate

Undergraduate Degrees:

- Environmental Studies Program (p. 147)
  - Bachelor of Arts: Environmental Studies (p. 147)
  - Bachelor of Science: Environmental Science (p. 150)
  - Environmental Studies Minor (p. 153)
  - Environmental Sustainability Minor (p. 155)
- Geography and Geology Programs (p. 156)
  - Bachelor of Science/Bachelor of Arts: Geography (p. 156)
  - Bachelor of Science/Bachelor of Arts: Geology (p. 159)
  - Geography and Geology Minor (p. 161)s
  - Advanced Certificate Program in GIS (p. 161)

Graduate

Graduate Degrees:

- Graduate Certificate Program in GIS
- Graduate Certificate in Waste Management (p. 163)
- Master of Science: Environmental and Urban Geosciences (p. 163)

Environmental Studies Program

Program Description

Environmental Studies Program provides students with the most innovative preparation in urban environmental issues and sustainability. The ES program engages a diverse student body with a strong foundation in environment and geosciences. It includes covering relationships between human beings and the environment. In addition to core courses in environmental science, environmental courses emphasizing the humanities and social sciences provide necessary balance for addressing physical Earth issues in a societal context. Undergraduate students gain essential life skills, an appreciation for complex environmental processes, and respect for the diversity of the urban environment in both Environmental Studies BA and Environmental Science BS degrees.

The department has offered geography and geology courses since 1934. The geography and geology programs of the Department of Geosciences include both bachelor of arts and bachelor of science degrees. The department also offers a master of science degree in environmental and urban geosciences (formerly the master of science in urban environmental geology degree). Students who designate geosciences as their coordinating discipline for the interdisciplinary doctoral program must meet admission and other requirements available from the department. See the School of Graduate Studies section of the graduate catalog for more information about doctoral programs.

Faculty

Program Director:
Caroline P. Davies

Participating Architecture, Urban Planning and Design Faculty:
Joy Swallow, Michael Frisch, Sungyup Kim, and Jacob Wagner

Participating Biology Faculty:
Aaron Reed

Participating Business Faculty:
Sandy Price, David Renz, and Li Sun

Participating Chemistry Faculty:
Yanching (Jerry) Jean, Kathleen Kilway, Ken Schmidtz, J. David VanHorn, and Charles Wurrey

Participating Engineering Faculty:
ZhiQiang Chen, John Kevern, Deborah O’Bannon, and Jerry Richardson

Participating Economics Faculty:
Mathew Forstater and Michael Kelsay

Participating Education Faculty:
A. Louis Odom

Participating Geosciences Faculty:
Jimmy Adegoke, Caroline Davies, Steven Driever, Syed Hasan, Daniel Hopkins, Wei Ji, Jejung Lee, James Murowchick, Tina Niemi, and Julie Urbanik

Participating History Faculty:
John Herron

Participating Law Faculty:
John Ragsdale

Participating Philosophy Faculty:
James Sheppard

Participating Political Science Faculty:
Reginald Bassa

Bachelor of Arts: Environmental Studies

Student Learning Outcomes

- Environmental Studies students can describe the components and function of Earth systems, have knowledge of environmental policy and ethical approaches to environmental issues, and have engaged in global challenges such as climate change, global water scarcity and ocean acidification, energy, consumption and waste management, and urban sustainability.

- Environmental Studies students will be actively involved with diverse communities throughout their course work and understand environmental challenges from multiple cultural perspectives and through world experiences.
- Environmental Studies students will demonstrate this learning through the application, across the curriculum, of advanced geographical knowledge, quantitative, and analytical skills in their application to new settings and complex problems.
- Environmental Studies students will have the ability to characterize environmental elements analytically and communicate their findings effectively.

Degree Requirements

B.A. Environmental Studies: B.A. Program Coordinator: Daniel P. Hopkins, (816) 235-1334

Core Requirements		
ENV-SCI 110R & ENV-SCI 110L	Understanding the Earth: Introduction to Environmental Science and Laboratory and Understanding the Earth Laboratory	5
ENV-SCI 210	Issues in Environmental Science	3
Select one of the following:		
ENV-STDY 499WI	Environmental Studies Practicum	
GEOG 499WI	Geography Seminar	
GEOLOGY 499WI	Geology Seminar	
GEOG 403WI	History and Philosophy of Geoscience	
CJC/SOCIOL 363	Introduction To Statistics In Sociology/Criminal Justice	3
or STAT 235	Elementary Statistics	
Required Supporting Social Sciences		
Select four of the following from three different disciplines:		12-13
ECON 420	Environment, Resources And Economic Growth	
GEOG 406	Global Environmental Change	
or GEOG 449	Global Water and Sustainability	
HISTORY 365A	American Environmental History	
PHILOS 370	Environmental Ethics And Policy	
UPD 432	Urban Environment Planning And Design	
Select one of the following:		
GEOG 203	Introduction to Geographic Information Systems	
GEOG 317	Cartography	
UPD 203	GIS For Urban Planning	
Divisions of Learning		
Select three of the following (at least one from each division of learning): [1]		9-10
Natural Sciences (NS):		
BIOLOGY 302	General Ecology	
BIOLOGY 303	Invertebrate Zoology	
BIOLOGY 305	Marine and Freshwater Biology	
BIOLOGY 308	Vertebrate Zoology	
BIOLOGY 346	Plant Biology	
CIV-ENGR 401A	Special Topics In Civil Engineering	
CIV-ENGR 454	River Stability and Scour	
CHEM 160	Chemistry, Society, And The Environment	
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	
CHEM 387	Environmental Chemistry I	
ENV-SCI 310	Field Experience in Waste Management	
ENV-SCI 332CZ	Environmental Sustainability	
ENV-STDY 430	Soil and Groundwater Remediation	
ENV-SCI 449	Global Water and Sustainability	
ENV-SCI 496	Environmental Internship	

ENV-STDY 450	Ecotoxicology
All Physical Geography courses are applicable as natural science electives:	
GEOG 203	Introduction to Geographic Information Systems
GEOG 314	Principles of Geomorphology
GEOG 317	Cartography
GEOG 319	Descriptive and Synoptic Meteorology
GEOG 335	Introduction to Waste Management
GEOG 360	Principles of Biogeography
GEOG 401	Advanced Geographic Information Science
GEOG 402	Environmental Remote Sensing and Digital Image Analysis
GEOG 406	Global Environmental Change
GEOG 430	Energy Resources
GEOG 435	Geoarchaeology
GEOG 442	Quaternary Environments
GEOG 444	Spatial Data Analysis
GEOG 448	Satellite Climatology
Any Geology course may be used for additional natural science electives, but the following courses are particularly relevant to the environmental studies major:	
GEOLOGY 302	Environmental Geology
GEOLOGY 312	Mineralogy
GEOLOGY 314	Principles of Geomorphology
GEOLOGY 326CZ	Cc:Archaeology of Ancient Disasters
GEOLOGY 412	Geology and Hazardous Waste Management
GEOLOGY 460	Introduction to Geochemistry
GEOLOGY 470	Geological Development of North America
Social Sciences (SS):	
ECON 420	Environment, Resources And Economic Growth
ENV-SCI 220	Ecosystem Science for Decision Makers
ENV-SCI 332CZ	Environmental Sustainability
ENV-STDY 334	Gender and the Environment
ENV-STDY 345	Animals and Society
GEOG 309	Urban Geography
GEOG 311	Economic Geography
GEOG 333	Geographic Elements of Urban Planning
GEOG 437	Population Geography
GEOG 460	Transportation Geography
HISTORY 356	Rise of the City in the U.S.
HISTORY 356R	Kansas City: History of a Regional Metropolis
PUB-ADM 497	Special Topics In Public Administration (Urban Environmental Policy)
PUB-ADM 497	Special Topics In Public Administration (Managing for Sustainability in an Urban Environment)
POL-SCI 380	Political Science And Politics
POL-SCI 435	Politics Of The Environment
PSYCH 403	Environmental Psychology
UPD 280	Land Use Planning
UPD 420	Transportation Planning
UPD 430	Planning For Historic Preservation
UPD 432	Urban Environment Planning And Design
UPD 340	Neighborhood And Community Development
ENV-DSN 413	Environmental Systems in Architecture I
Ethics, Jurisprudence, and Culture (E):	
ENV-STDY 325	Cultural Perspectives on the Environment
GEOG 200	World Geography I

GEOG 202	World Geography II	
GEOG 210	Human Geography	
GEOG 329	World Political Geography	
GEOG 332	Cultural Geography	
GEOG 341	Geography of South America	
GEOG 342	Geography of Mexico, Central America and the Caribbean	
GEOG 340	Geography of the United States and Canada	
GEOG 350	Geography of Europe	
GEOG 355	Geography of Africa	
GEOG 403WI	History and Philosophy of Geoscience	
GEOG 499WI	Geography Seminar	
HISTORY 365A	American Environmental History	
LAW 8725	Water Law	
LAW 8728	Law And The American Indian	
LAW 8729	Preservation Law	
LAW 8773	Environmental Law	
LAW 8782R	U.S. Environment Protection Agency Law Clinic National Agricultural Compliance Assistance Center	
PHILOS 334	Philosophy Of Science	
PHILOS 338	Philosophy Of Biology	
PHILOS 370	Environmental Ethics And Policy	
UPD 320	Planning Theory And Practice	
UPD 260	History Of Planning And Urban Design	
UPD 450	Planning Law And Practice	
Total Credits		32-34

[1] BA students need at least one course taken from each of the three divisions of learning: Natural Sciences (NS), Social Sciences (SS), & Ethics, Jurisprudence, & Culture (E). Core courses cannot also be counted for credit in this section.

Minimum Core Courses from Above: 35 Distribution Electives and General Education Requirements: 85 Minimum Total Hours: 12

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science: Environmental Science

Student Learning Outcomes

- Environmental Science students can describe the components and function of Earth systems, have knowledge of environmental policy and ethical approaches to environmental issues, and have engaged in global challenges such as climate change, global water scarcity and ocean acidification, energy, consumption and waste management, and urban sustainability.
- Environmental Science students will be actively involved with diverse communities throughout their course work and understand environmental challenges from multiple cultural perspectives and through world experiences.
- Environmental Science students will demonstrate this learning through the application, across the curriculum, of advanced geographical knowledge, quantitative, and analytical skills in their application to new settings and complex problems.
- Environmental Science students will have the ability to characterize environmental elements analytically and communicate their findings effectively.

B.S. Program Coordinator: Caroline P. Davies, (816) 235-1334

Core Requirements

ENV-SCI 110R & ENV-SCI 110L	Understanding the Earth: Introduction to Environmental Science and Laboratory and Understanding the Earth Laboratory	5

ENV-SCI 210	Issues in Environmental Science	3
GEOG 215	Introduction to Weather and Climate	4
or GEOG 319	Descriptive and Synoptic Meteorology	
GEOLOGY 250L	Field Methods in Earth and Environmental Science	3
or GEOLOGY 251	Field Methods in Earth and Environmental Science: Off-Campus	
Select one of the following:		3
ENV-STDY 499WI	Environmental Studies Practicum	
GEOG 499WI	Geography Seminar	
GEOLOGY 499WI	Geology Seminar	
GEOG 403WI	History and Philosophy of Geoscience	
Required Supporting Sciences		
BIOLOGY 108 & 108L	General Biology I and General Biology I Laboratory	4
Select one of the following:		4-5
BIOLOGY 109 & 109L	General Biology II and General Biology II Laboratory	
GEOG 360	Principles of Biogeography (with lab)	
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
STAT 235	Elementary Statistics	3
or CJC 363	Introduction To Statistics In Sociology/Criminal Justice	
Divisions of Learning		
Select four of the following (at least one from each division of learning):		12-16
Natural Sciences (NS):		
BIOLOGY 302	General Ecology	
BIOLOGY 303	Invertebrate Zoology	
BIOLOGY 305	Marine and Freshwater Biology	
BIOLOGY 308	Vertebrate Zoology	
BIOLOGY 346	Plant Biology	
CIV-ENGR 401A	Special Topics In Civil Engineering	
CIV-ENGR 454	River Stability and Scour	
CHEM 387	Environmental Chemistry I	
ENV-SCI 310	Field Experience in Waste Management	
ENV-SCI 332CZ	Environmental Sustainability	
GEOG 430	Energy Resources	
ENV-SCI 449	Global Water and Sustainability	
ENV-SCI 496	Environmental Internship	
All Physical Geography courses are applicable as natural science electives:		
GEOG 203	Introduction to Geographic Information Systems	
GEOG 314	Principles of Geomorphology	
GEOG 317	Cartography	
GEOG 319	Descriptive and Synoptic Meteorology	
GEOG 335	Introduction to Waste Management	
GEOG 360	Principles of Biogeography	
GEOG 401	Advanced Geographic Information Science	
GEOG 402	Environmental Remote Sensing and Digital Image Analysis	
GEOG 406	Global Environmental Change	
GEOG 426	Paleoecology: Microfossils and Climate Change	
GEOG 430	Energy Resources	
GEOG 435	Geoarchaeology	
GEOG 442	Quaternary Environments	

GEOG 444	Spatial Data Analysis
GEOG 448	Satellite Climatology
Any Geology course may be used for additional natural science electives, but the following courses are particularly relevant to the Environmental Studies major:	
GEOLOGY 302	Environmental Geology
GEOLOGY 312	Mineralogy
GEOLOGY 313	Evolution and the Geologic Record
GEOLOGY 314	Principles of Geomorphology
GEOLOGY 326CZ	Cc:Archaeology of Ancient Disasters
GEOLOGY 412	Geology and Hazardous Waste Management
GEOLOGY 460	Introduction to Geochemistry
GEOLOGY 470	Geological Development of North America
Social Sciences (SS):	
ECON 420	Environment, Resources And Economic Growth
ENV-SCI 220	Ecosystem Science for Decision Makers
ENV-SCI 332CZ	Environmental Sustainability
ENV-STDY 325	Cultural Perspectives on the Environment
ENV-STDY 334	Gender and the Environment
ENV-STDY 345	Animals and Society
ENV-STDY 450	Ecotoxicology
GEOG 309	Urban Geography
GEOG 311	Economic Geography
GEOG 333	Geographic Elements of Urban Planning
GEOG 437	Population Geography
GEOG 460	Transportation Geography
PUB-ADM 497	Special Topics In Public Administration (Urban Environmental Policy)
PUB-ADM 497	Special Topics In Public Administration (Managing for Sustainability in an Urban Environment)
POL-SCI 380	Political Science And Politics
POL-SCI 435	Politics Of The Environment
PSYCH 403	Environmental Psychology
UPD 280	Land Use Planning
UPD 420	Transportation Planning
UPD 430	Planning For Historic Preservation
UPD 432	Urban Environment Planning And Design
UPD 340	Neighborhood And Community Development
ENV-DSN 413	Environmental Systems in Architecture I
Ethics, Jurisprudence, and Culture (E)	
ENV-STDY 325	Cultural Perspectives on the Environment
GEOG 329	World Political Geography
GEOG 332	Cultural Geography
GEOG 340	Geography of the United States and Canada
GEOG 341	Geography of South America
GEOG 342	Geography of Mexico, Central America and the Caribbean
GEOG 350	Geography of Europe
GEOG 355	Geography of Africa
GEOG 403WI	History and Philosophy of Geoscience
GEOG 499WI	Geography Seminar
HISTORY 365A	American Environmental History
LAW 8725	Water Law
LAW 8728	Law And The American Indian
LAW 8729	Preservation Law
LAW 8773	Environmental Law

LAW 8782R	U.S. Environment Protection Agency Law Clinic National Agricultural Compliance Assistance Center	
PHILOS 334	Philosophy Of Science	
PHILOS 338	Philosophy Of Biology	
PHILOS 370	Environmental Ethics And Policy	
UPD 260	History Of Planning And Urban Design	
UPD 320	Planning Theory And Practice	
UPD 450	Planning Law And Practice	
Total Credits		51-56

Minimum Core Courses from Above: 53 Distribution Electives and General Education Requirements: 70 Minimum Total Hours: 123 Note: The B.S. degree requires at least 60 credit hours of science and mathematics. In addition to the core courses and other required courses listed above, Environmental Studies majors seeking a bachelor of science degree and selecting a geosciences emphasis must take a minimum of an additional 12 credit hours in Geology or physical Geography.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Environmental Studies Minor

Environmental Studies Minor (B.A.)

Student Learning Outcomes

- Environmental Studies students can describe the components and function of Earth systems, have knowledge of environmental policy and ethical approaches to environmental issues, and have engaged in global challenges such as climate change, global water scarcity and ocean acidification, energy, consumption and waste management, and urban sustainability.
- Environmental Studies students will be actively involved with diverse communities throughout their course work and understand environmental challenges from multiple cultural perspectives and through world experiences.
- Environmental Studies students will demonstrate this learning through the application, across the curriculum, of advanced geographical knowledge, quantitative, and analytical skills in their application to new settings and complex problems.
- Environmental Studies students will have the ability to characterize environmental elements analytically and communicate their findings effectively.

B.A. Program Coordinator:
Daniel P. Hopkins, Geosciences, (816) 235-2973;

Students pursuing the bachelor of arts degree who wish to obtain a minor in environmental studies must take at least 18 credit hours of coursework from the following list, a minimum of nine credit hours at the 300- or 400-level and a minimum of nine credit hours at UMKC. The program of study is to be planned with a program coordinator.

Required Courses		
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
ENV-SCI 110L	Understanding the Earth Laboratory	2
ENV-SCI 210	Issues in Environmental Science	3
Electives		
Select a minimum of one of the following:		3
ECON 420	Environment, Resources And Economic Growth [1]	
HISTORY 364R	Nature, Culture And The Human Experience [1]	
PHILOS 370	Environmental Ethics And Policy [1]	
PSYCH 403	Environmental Psychology [1]	
POL-SCI 435	Politics Of The Environment [1]	

See the electives listed under B.S. Environmental Studies	7
Total Credits	18

[1] May not be counted in both required and elective categories.

Courses which do not apply as credit in the Minor program are:

GEOG/GEOLOGY 417	Special Topics	1
GEOG 489	Tutoring in Geography	1
GEOG/GEOLOGY 398	Field Trip	1
GEOG/GEOLOGY 499WI	Geography Seminar	3

Environmental Studies Minor (B.S.)

Student Learning Outcomes

- Environmental Studies students can describe the components and function of Earth systems, have knowledge of environmental policy and ethical approaches to environmental issues, and have engaged in global challenges such as climate change, global water scarcity and ocean acidification, energy, consumption and waste management, and urban sustainability.
- Environmental Science/Studies students will be actively involved with diverse communities throughout their course work and understand environmental challenges from multiple cultural perspectives and through world experiences.
- Environmental Studies students will demonstrate this learning through the application, across the curriculum, of advanced geographical knowledge, quantitative, and analytical skills in their application to new settings and complex problems.
- Environmental Studies students will have the ability to characterize environmental elements analytically and communicate their findings effectively.

B.S. Program Coordinator:
Caroline Davies, Geosciences, (816) 235-1335;

Students pursuing the bachelor of science degree who wish to obtain a minor in environmental studies must take at least 18 credit hours of coursework from the following list, a minimum of nine credit hours at the 300- or 400-level and a minimum of nine credit hours at UMKC. The program of study is to be planned with a program coordinator.

Required Courses		
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
ENV-SCI 110L	Understanding the Earth Laboratory	2
ENV-SCI 210	Issues in Environmental Science	3
CHEM 160	Chemistry, Society, And The Environment	3
Electives		
Select a minimum of one of the following:		3
ECON 420	Environment, Resources And Economic Growth [1]	
HISTORY 364R	Nature, Culture And The Human Experience [1]	
PHILOS 370	Environmental Ethics And Policy [1]	
PSYCH 403	Environmental Psychology [1]	
POL-SCI 435	Politics Of The Environment [1]	
See the electives listed under B.S. Environmental Studies		4
Total Credits		18

[1] May not be counted in both required and elective categories.

Courses which do not apply as credit in the Minor program are:

GEOG/GEOLOGY 417	Special Topics	1
GEOG 489	Tutoring in Geography	1
GEOG/GEOLOGY 398	Field Trip	1
GEOG/GEOLOGY 499WI	Geography Seminar	3

Environmental Sustainability Minor

Program Description

Global populations are becoming predominantly urban and the state of the environment is central to issues of quality of life, health and safety. The Sustainability minor program provides students with the most innovative preparation in urban environmental sustainability through course work that cross cuts multiple disciplines and focuses on integrative solutions. Students develop a foundation knowledge in Earth systems. Students engage the challenges of sustainability through course work and community problem solving in sustainable thinking, planning, policy, and design. Undergraduate students gain essential life skills, a foundation in complex environmental and human systems, and critical problem solving skills.

Student Learning Outcomes

- Sustainability students can describe the interactions and feedbacks of Earth systems, have knowledge of environmental policy and urban planning, and are engaged in sustainability issues at many scales.
- Sustainability students will be actively involved with diverse communities throughout their course work, and assess sustainability challenges from multiple cultural perspectives and through world experiences.
- Sustainability students will demonstrate this learning through the application of advanced sustainable knowledge, quantitative, and analytical skills in their application to new settings and complex problems.
- Sustainability students will have the ability to characterize human-environmental interactions analytically and communicate their findings effectively.

Program Requirements

Required		
Take three hours of the following:		3
ENV-SCI 496	Environmental Internship	
Earth Systems and Resources		
Select one of the following:		3-4
GEOG 406	Global Environmental Change	
ENV-SCI 449	Global Water and Sustainability	
GEOG 319	Descriptive and Synoptic Meteorology	
GEOG 360	Principles of Biogeography	
GEOG 430	Energy Resources	
Sustainable Thinking		
Select one of the following:		1-3
ENV-SCI 332CZ	Environmental Sustainability	
HISTORY 364R	Nature, Culture And The Human Experience	
PHILOS 370	Environmental Ethics And Policy	
POL-SCI 380	Political Science And Politics	
Sustainable Planning and Policy		
Select one of the following:		1-3
GEOG 333	Geographic Elements of Urban Planning	
PUB-ADM 497	Special Topics In Public Administration	
UPD 340	Neighborhood And Community Development	
UPD 430	Planning For Historic Preservation	
Sustainable Design		
Select one of the following:		1-4
CIV-ENGR 401CP	Special Topics In Civil Engineering (Certain special topics courses--check with advisor.)	1-3
ENV-DSN 413	Environmental Systems in Architecture I	
GEOG/GEOLOGY 335	Introduction to Waste Management	
PUB-ADM 497	Special Topics In Public Administration (Managing for Sustainability in an Urban Environment)	
UPD 432	Urban Environment Planning And Design	
Analytical Tools		
Select one of the following:		3-4
ECON 420	Environment, Resources And Economic Growth	
GEOG 401	Advanced Geographic Information Science	
GEOG 450	Gis Fundamentals for Research Applications	

GEOG 444	Spatial Data Analysis	
UPD 420	Transportation Planning	
Total Credits		13-24

Courses which do not apply as credit in the Minor program are:

GEOG/GEOLOGY 417	Special Topics	1
GEOG 489	Tutoring in Geography	1
GEOG/GEOLOGY 398	Field Trip	1
GEOG/GEOLOGY 499WI	Geography Seminar	3

Requirements

Minimum of 18 hours, Minimum of 9 hours from UMKC (not transferred)

Minimum of 9 Junior/Senior (300/400) level courses, Total hours determined by department. Academic Minors are optional. The minor will not appear on the Commencement Program or diploma but will be noted on the transcript.

Geography and Geology Programs

Program Description

The department has offered geography and geology courses since 1934. The geography and geology programs of the Department of Geosciences include both bachelor of arts and bachelor of science degrees. The department also offers a master of science degree in environmental and urban geosciences (formerly the master of science in urban environmental geology degree). Students who designate geosciences as their coordinating discipline for the interdisciplinary doctoral program must meet admission and other requirements available from the department. See the School of Graduate Studies (p. 480) section of the graduate catalog for more information about doctoral programs.

Faculty

Professors:
Steven L. Driever (principal undergraduate geography advisor), Syed E. Hasan (Director, CAER), Wei Ji (graduate Geography advisor and GIS Program Director), Tina Niemi (principal undergraduate Geology advisor)

Associate Professors:
Jimmy Adegoke, Caroline P. Davies (undergraduate Environmental Studies advisor, BS; Director, Environmental Studies Program), Daniel P. Hopkins (undergraduate Environmental Studies advisor, B.A.),Jejung Lee (principal graduate advisor and IPhD Coordinator) and James B. Murowchick (Chair)

AssociateTeaching Professors:
Julie L. Urbanik

Professors Emeriti:
Raymond M. Coveney, Jr., Richard J. Gentile, Paul L. Hilpman, Eldon J. Parizek

Bachelor of Science/Bachelor of Arts: Geography

Bachelor of Arts: Geography

Student Learning Outcomes

- Geography students are expected to understand human-environmental relationships and their spatial dimensions in various geographic areas, from local places to the entire world.
- Geography students integrate knowledge from the humanities, social sciences, and natural sciences and apply that information to places.
- Geography students also know how to design, produce, and interpret maps using modern technology. Evidence of success is provided by performance on our exit examinations, admission to graduate schools, and ultimately the successful careers in geosciences pursued by our graduates.

Required Courses

ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
ENV-SCI 110L	Understanding the Earth Laboratory	2
GEOG 200	World Geography I	3
or GEOG 202	World Geography II	

GEOG 203	Introduction to Geographic Information Systems	4
GEOG 317	Cartography	4
GEOG 398	Field Trip	1
GEOG 499WI	Geography Seminar	3
Human and Regional Geography		
Select four of the following:		12
GEOG 210	Human Geography	
GEOG 309	Urban Geography	
GEOG 311	Economic Geography	
GEOG 329	World Political Geography	
GEOG 332	Cultural Geography	
GEOG 333	Geographic Elements of Urban Planning	
GEOG 340	Geography of the United States and Canada	
GEOG 341	Geography of South America	
GEOG 342	Geography of Mexico, Central America and the Caribbean	
GEOG 350	Geography of Europe	
GEOG 403WI	History and Philosophy of Geoscience	
GEOG 437	Population Geography	
GEOG 460	Transportation Geography	
Other Regional Courses: One or two 300-level courses		
Physical Geography		
Select three of the following:		9-12
GEOG 215	Introduction to Weather and Climate	
GEOG 314	Principles of Geomorphology	
GEOG 319	Descriptive and Synoptic Meteorology	
GEOG 335	Introduction to Waste Management	
GEOG 336	Principles of Soil Science	
GEOG 360	Principles of Biogeography	
GEOG 401	Advanced Geographic Information Science	
GEOG 402	Environmental Remote Sensing and Digital Image Analysis	
GEOG 404	Biogeography and Landscape Ecology	
GEOG 406	Global Environmental Change	
GEOG 426	Paleoecology: Microfossils and Climate Change	
GEOG 430	Energy Resources	
GEOG 435	Geoarchaeology	
GEOG 442	Quaternary Environments	
GEOG 444	Spatial Data Analysis	
GEOG 448	Satellite Climatology	
GEOG 450	Gis Fundamentals for Research Applications	
Supporting Requisites		
A fourth semester of a foreign language		3
Total Credits		44-47

Bachelor of Science: Geography [1]

Student Learning Outcomes

- Geography students are expected to understand human-environmental relationships and their spatial dimensions in various geographic areas, from local places to the entire world.
- Geography students integrate knowledge from the humanities, social sciences, and natural sciences and apply that information to places.
- Geography students also know how to design, produce, and interpret maps using modern technology. Evidence of success is provided by performance on our exit examinations, admission to graduate schools, and ultimately the successful careers in geosciences pursued by our graduates.

Required Courses		
ENV-SCI 110R & ENV-SCI 110L	Understanding the Earth: Introduction to Environmental Science and Laboratory and Understanding the Earth Laboratory	5
GEOG 200	World Geography I	3
or GEOG 202	World Geography II	
GEOG 203	Introduction to Geographic Information Systems	4
GEOG 317	Cartography	4
GEOG 398	Field Trip	1
GEOG 499WI	Geography Seminar	3
Human and Regional Geography		
Select three of the following:		9
GEOG 210	Human Geography	
GEOG 309	Urban Geography	
GEOG 311	Economic Geography	
GEOG 329	World Political Geography	
GEOG 332	Cultural Geography	
GEOG 333	Geographic Elements of Urban Planning	
GEOG 341	Geography of South America	
GEOG 350	Geography of Europe	
GEOG 403WI	History and Philosophy of Geoscience	
GEOG 437	Population Geography	
GEOG 460	Transportation Geography	
Other Regional Courses: One or two 300-level courses		
Physical Geography		
Select four of the following:		12-16
GEOG 215	Introduction to Weather and Climate	
GEOG 314	Principles of Geomorphology	
GEOG 319	Descriptive and Synoptic Meteorology	
GEOG 335	Introduction to Waste Management	
GEOG 336	Principles of Soil Science	
GEOG 360	Principles of Biogeography	
GEOG 401	Advanced Geographic Information Science	
GEOG 402	Environmental Remote Sensing and Digital Image Analysis	
GEOG 404	Biogeography and Landscape Ecology	
GEOG 406	Global Environmental Change	
GEOG 426	Paleoecology: Microfossils and Climate Change	
GEOG 430	Energy Resources	
GEOG 435	Geoarchaeology	
GEOG 442	Quaternary Environments	
GEOG 444	Spatial Data Analysis	
GEOG 448	Satellite Climatology	
GEOG 450	Gis Fundamentals for Research Applications (with lab)	4
Supporting Requisites [2]		
STAT 235	Elementary Statistics	3
Total Credits		48-52

1 For a B.S. degree, a minimum of 60 hours of physical sciences and mathematics is required. A minimum of 26 hours of courses in the major at the 300-level or above is required for all programs in the Department of Geosciences leading to the B.A. or B.S. degree.

2 B.S. students in the Department of Geosciences are not required to take foreign languages.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science/Bachelor of Arts: Geology

Bachelor of Arts: Geology

Student Learning Outcomes

- Geology graduates will understand the forces and processes that build and shape the Earth.
- Students will be able to identify minerals and rocks and understand their formation processes.
- Students will understand evolution, earth history, and the role of fossils in geologic time.
- Students will be able to utilize techniques to describe the three-dimensional geometry of Earth layers and deformation processes.
- Students will collect and interpret field data, produce maps, and use them to solve geologic and environmental problems.
- Students will be able to critically analyze published literature and have experience with technical writing and presentations.

Required Courses		29
GEOLOGY 220 & 220L	General Geology and General Geology Laboratory	5
GEOLOGY 250L	Field Methods in Earth and Environmental Science	3
Or		
GEOLOGY 251	Field Methods in Earth and Environmental Science: Off-Campus	3
GEOLOGY 312	Mineralogy	4
GEOLOGY 325	Sedimentology/Stratigraphy	4
GEOLOGY 350	Earth Structures and Tectonics	4
GEOLOGY 490	Geology Field Camp	6
GEOLOGY 499WI	Geology Seminar	3
B.A. Supporting Requisites		30-32
STAT 235	Elementary Statistics	3
BIOLOGY 108	General Biology I (*) High School Biology satisfies this requirement	3
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
PHYSICS 210	General Physics I (**) **Physics 240 and 250 are preferred courses for the professional degree	4
Recommended Electives		12-16
Select four of the following:		12-16
GEOG 203	Introduction to Geographic Information Systems	4
GEOLOGY 313	Evolution and the Geologic Record	4
GEOLOGY 314	Principles of Geomorphology	4
GEOLOGY 335	Introduction to Waste Management	3
GEOLOGY 342	Igneous and Metamorphic Petrology	4
GEOLOGY 370R	Hydrogeology	3
GEOLOGY 407	Archaeological Resources Management	3
GEOLOGY 408	Archaeological Field Survey Methods	3
GEOLOGY 411	Mineral Deposits	3
GEOLOGY 442R	Optical Crystallography	3
GEOLOGY 446	Petroleum Geology	3
GEOLOGY 471	Tectonics	3
GEOLOGY 472	Earthquake Geology	3

[1] High school biology satisfies this requirement.

Bachelor of Science: Geology

Student Learning Outcomes

- Geology graduates will understand the forces and processes that build and shape the Earth.
- Students will be able to identify minerals and rocks and understand their formation processes.
- Students will understand evolution, earth history, and the role of fossils in geologic time.
- Students will be able to utilize techniques to describe the three-dimensional geometry of Earth layers and deformation processes.
- Students will collect and interpret field data, produce maps, and use them to solve geologic and environmental problems.
- Students will be able to critically analyze published literature and have experience with technical writing and presentations

Required Courses		29
GEOLOGY 220L	General Geology Laboratory	2
GEOLOGY 220	General Geology	3
GEOLOGY 250L	Field Methods in Earth and Environmental Science	3
or		
GEOLOGY 251	Field Methods in Earth and Environmental Science: Off-Campus	3
GEOLOGY 312	Mineralogy	4
GEOLOGY 325	Sedimentology/Stratigraphy	4
GEOLOGY 350	Earth Structures and Tectonics	4
GEOLOGY 490	Geology Field Camp	6
GEOLOGY 499WI	Geology Seminar (Select four of the following)	3
B.S. Supporting Requisites		30-32
BIOLOGY 108	General Biology I [High School Biology satisfies this requirement]	3
MATH 210	Calculus I	4
GEOG 444	Spatial Data Analysis	3
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
PHYSICS 210	General Physics I (**) [**Physics 240 is the preferred courses fo rthe professional degree]	4
PHYSICS 220	General Physics II (**) [**Physics 250 is the preferred courses fo rthe professional degree]	4
Recommended Electives		
Select four of the following:		12-16
GEOG 203	Introduction to Geographic Information Systems	4
GEOLOGY 313	Evolution and the Geologic Record	4
GEOLOGY 314	Principles of Geomorphology	4
GEOLOGY 335	Introduction to Waste Management	3
GEOLOGY 342	Igneous and Metamorphic Petrology	4
GEOLOGY 370R	Hydrogeology	3
GEOLOGY 407	Archaeological Resources Management	3
GEOLOGY 441	Environmental Geophysics	3
GEOLOGY 442R	Optical Crystallography	3
GEOG 442	Quaternary Environments	3
GEOLOGY 446	Petroleum Geology	3
GEOLOGY 460	Introduction to Geochemistry	3
GEOLOGY 471	Tectonics	3
GEOLOGY 472	Earthquake Geology	3

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Geography and Geology Minors

Academic minors are offered in geography (18 hours) and in geology (18 hours). At least nine of the hours needed for the minor must be taken at UMKC. The minor programs are sufficiently flexible to enable students with diverse backgrounds to choose relevant coursework from the department's offerings. The programs are structured to ensure that students gain an appreciation of the breadth of the minor field. The minor should be declared as early as possible, but not later than the beginning of the student's senior year. Up to eight hours of coursework may simultaneously count in both the major and minor areas, where applicable. This applies to departmental and non-departmental students.

Undergraduate Minor in Geography

Student Learning Outcomes

- Geography students are expected to understand human-environmental relationships and their spatial dimensions in various geographic areas, from local places to the entire world.
- Geography students integrate knowledge from the humanities, social sciences, and natural sciences and apply that information to places.
- Geography students also know how to design, produce, and interpret maps using modern technology. Evidence of success is provided by performance on our exit examinations, admission to graduate schools, and ultimately the successful careers in geosciences pursued by our graduates.

A minor in geography may be obtained with a minimum of 18 semester hours of coursework in this discipline (at least nine of which must be at the 300- and 400-level).

Either ENV-SCI 110R (5 hours with lab) -or- GEOG 105 (3 hours) is required.

Note: GEOG 398, GEOG 417, GEOG 489 and GEOG 499WI do not count as credit in a minor program in geography.

Undergraduate Minor in Geology

Student Learning Outcomes

- Geology graduates will understand the forces and processes that build and shape the Earth.
- Students will be able to identify minerals and rocks and understand their formation processes.
- Students will understand evolution, earth history, and the role of fossils in geologic time.
- Students will be able to utilize techniques to describe the three-dimensional geometry of Earth layers and deformation processes.
- Students will collect and interpret field data, produce maps, and use them to solve geologic and environmental problems.
- Students will be able to critically analyze published literature and have experience with technical writing and presentations.

A minor in geology may be obtained with a minimum of 18 semester hours of coursework in this discipline (at least nine of which must be at the 300- and 400-level).

GEOLOGY 220 (5 hours with lab) -and- GEOLOGY 250L (Campus) (3hours) -or- GEOLOGY 251 (Off-campus) (3 hours) are required.

Note: GEOLOGY 398, GEOLOGY 417 and GEOLOGY 499WI do not count as credit in a minor program in geology.

Undergraduate Certificate Program in GIS

Geographic Information Systems (GIS) and related geo-spatial techniques are fast-growing and increasingly applied to almost all sectors of our society. Examples include environmental mapping, urban planning, and public resource management. This Missouri State-approved, transcripted undergraduate certificate program offers GIS-related multidisciplinary courses through several academic programs of the College of Arts & Sciences, such as Geosciences, Urban Planning and Design, Sociology, Economics, and Criminal Justice and Criminology. The curriculum is designed to prepare students for a variety of careers in the rapidly growing job market.

This undergraduate certificate program is open to any degree-seeking undergraduate students at UMKC with appropriate academic backgrounds.

Student Learning Outcomes

1. Students will be able to identify geospatial issues and technical needs in problem-solving in relation to relevant academic disciplines, industrial production, or public services
2. Students will be able to design geospatial technical approaches for problem-solving
3. Students will be able to analyze geospatial data and produce maps using relevant GIS software
4. Students will be able to present geospatial study findings with oral presentation and written reports

For completion of the certificate program, the student is required to finish the coursework of 17-19 credit hours with a 3.0 GPA or higher.

GEOG 203	Introduction to Geographic Information Systems	4
GEOG 401	Advanced Geographic Information Science	4
Electives		
Select three of the following:		9-10
GEOG 402	Environmental Remote Sensing and Digital Image Analysis	4
GEOG 404	Biogeography and Landscape Ecology	3
GEOG 417	Special Topics	3
GEOG 444	Spatial Data Analysis	3
GEOG 448	Satellite Climatology	4
ECON 411	Geographic Information Systems (GIS) for Urban Economic Development	3
UPD 300	Quantitative Planning Methods And Techniques	3
UPD 400	Advanced GIS For Urban Planning	3
SOCIOL 434	Spatial Thinking in Social Science	3

Graduate Certificate Program in GIS

Student Learning Outcomes

- Students will be able to identify geospatial issues and technical needs in problem-solving in relation to relevant academic disciplines, industrial production, or public services
- Students will be able to design geospatial technical approaches for problem-solving
- Students will be able to analyze geospatial data and produce maps using relevant GIS software
- Students will be able to present geospatial study findings with oral presentation and written reports

Geographic Information Systems (GIS) and related geospatial techniques are fast-growing and increasingly applied to almost all sectors of our society. Examples include environmental mapping, urban planning, and public resource management. This Missouri State-approved, transcripted graduate certificate program offers GIS-related multidisciplinary courses through several academic programs of the College of Arts & Sciences, such as Geosciences, Urban Planning and Design, Sociology, Economics, and Criminal Justice and Criminology. The curriculum is designed to prepare students for a variety of careers in the rapidly growing job market.

This graduate certificate program is open to any students with a bachelor’s or a graduate degree and appropriate academic backgrounds, such as degree-seeking graduate students and working professionals.

For completion of the certificate program, the student is required to finish the coursework of 17-19 credit hours with a 3.0 GPA or higher.

Required Core Courses		
GEOG 450	Gis Fundamentals for Research Applications	4
GEOG 5507	Advanced Geographic Information Science	4
Electives		
Select three of the following:		9-10
GEOG 5502	Environmental Remote Sensing and Digital Image Analysis	4
GEOG 5504	Biogeography and Landscape Ecology	3
GEOG 5544	Spatial Data Analysis	3
GEOG 5548	Satellite Climatology	4
GEOG 5598D	Special Topics in Advanced GIS and Remote Sensing	3
CJC 5592	Advanced GIS For Crime Analysis	3
ECON 5511	Geographic Information Systems (GIS) for Urban Economic Development	3

UPD 400	Advanced GIS For Urban Planning	3
SOCIOL 5534	Spatial Thinking in Social Science	3

Graduate Certificate in Waste Management

Student Learning Outcomes

- Waste Management students can describe the components and function of Earth systems, have knowledge of environmental policy and ethical approaches to environmental issues, and have engaged in global challenges such as climate change, global water scarcity and ocean acidification, energy, consumption and waste management, and urban sustainability.
- Waste Management students will be actively involved with diverse communities throughout their course work and understand environmental challenges from multiple cultural perspectives and through world experiences.
- Waste Management students will demonstrate this learning through the application, across the curriculum, of advanced geographical knowledge, quantitative, and analytical skills in their application to new settings and complex problems.
- Waste Management students will have the ability to characterize environmental elements analytically and communicate their findings effectively.

Program Requirements

In keeping with the demand for trained professionals in the field of waste management, a new Graduate Certificate Program in Waste Management was launched in 2003. The program is designed for professionals working in the waste management industry who desire advanced knowledge in the field but do not have the time to enroll in a graduate degree program that may take up to two years to complete. The graduate certificate program is designed to meet this need and also to enable students holding a bachelor's degree in an appropriate discipline to improve their knowledge in the waste management field and to prepare them to enter industry with advanced knowledge at the graduate level. The carefully designed curriculum for this program consists of 15 credit hours of course work that covers every important aspect of waste management. Field visits to waste facilities and the 40-hour OSHA-approved Hazardous Waste Operator Training (HAZWOPER) course are included in the curriculum.

Required Courses		
ENV-SCI 310	Field Experience in Waste Management	2-3
GEOLOGY 335	Introduction to Waste Management	3
GEOLOGY 5512	Geology and Hazardous Waste Management	3
GEOLOGY 5534	Hazardous Waste Operation Management	2
GEOLOGY 5570	Hydrogeology	3
GEOLOGY 5597	Graduate Seminar in Geosciences II	1

Master of Science: Environmental and Urban Geosciences

The Department of Geosciences offers a master of science degree in Environmental and Urban Geosciences, the only such program in North America. This unique program prepares students, depending on their emphasis area, for advanced study of different facets of the environment including: environmental issues and geospatial methods (GIS and Remote Sensing), natural hazards, environmental remediation, waste management, air and water pollution, resource evaluation and management, geoarchaeology, historical geography, and urban land use and planning. Although the program requires students to select an area of concentration, all students must complete a core curriculum and a thesis.

Admissions Requirements

For full admission to the graduate degree program in environmental and urban geosciences (Code 6, degree-seeking status), the following requirements must be met:

1. Completion of an undergraduate degree with a major in a geosciences field (such as Environmental Sciences or Studies, Geography, and/or Geology) and a grade-point average of at least 3.0 (A = 4.0) overall, as well as in the major.
2. Submission of scores on the Graduate Record Examination (GRE) is not required but highly recommended. GRE scores may be used to award assistantships.
3. Two letters of recommendation from academic and/or professional references.
4. The student must declare one of the three degree emphasis areas in his or her application.
5. All application materials must be submitted to the Admissions Office by March 31 for fall semester and October 1 for spring semester for final consideration.

With department approval, students with non-geoscience undergraduate degrees may be provisionally admitted on a non-regular degree-seeking basis (Code 6-V). After successfully completing recommended courses for the appropriate undergraduate geoscience degree, provisionally-admitted students may be granted degree-seeking status.

Graduate Assistantships

Teaching assistantships are awarded on a competitive basis to incoming fully-admitted graduate students. Assistantship applications and all supporting materials should be submitted by March 31 for fall enrollment and October 1 for spring enrollment.

Students whose native language is not English must take the iBT test prior to holding a teaching assistantship. Specific scoring requirements for the iBT may be found here (p. 796).

Core Curriculum

Hours

GEOG 5544	Spatial Data Analysis	3
GEOG/GEOLOGY 5595	Graduate Seminar in Geosciences I	1
GEOG/GEOLOGY 5597	Graduate Seminar in Geosciences II	1
GEOG/GEOLOGY 5599	Research and Thesis Geography	3-6

Areas of Concentration

Students must select one of the following areas of concentration:

Environmental Geography and Geographic Information Science

Student Learning Outcomes

Geography

- Geography students are expected to understand human-environmental relationships and their spatial dimensions in various geographic areas, from local places to the entire world.
- Geography students integrate knowledge from the humanities, social sciences, and natural sciences and apply that information to places.
- Geography students also know how to design, produce, and interpret maps using modern technology. Evidence of success is provided by performance on our exit examinations, admission to graduate schools, and ultimately the successful careers in geosciences pursued by our graduates.

Geology

- Geology graduates will understand the forces and processes that build and shape the Earth.
- Students will be able to identify minerals and rocks and understand their formation processes.
- Students will understand evolution, earth history, and the role of fossils in geologic time.
- Students will be able to utilize techniques to describe the three-dimensional geometry of Earth layers and deformation processes.
- Students will collect and interpret field data, produce maps, and use them to solve geologic and environmental problems.
- Students will be able to critically analyze published literature and have experience with technical writing and presentations.

The Environmental Geography and Geographic Information Science area of concentration will prepare students with a wide range of knowledge on environmental issues and geospatial methods (GIS, remote sensing, and environmental modeling). Required courses for students in this area are:

Hours

GEOG 5502	Environmental Remote Sensing and Digital Image Analysis	4
GEOG 5506	Global Environmental Change	3
GEOG 5507	Advanced Geographic Information Science	4

Based on student interest and departmental research priorities, students may also take courses in such areas as biogeography, climatology, ecosystem management, hydrology, and quaternary environments.

Environmental Geology

Student Learning Outcomes

- Geology graduates will understand the forces and processes that build and shape the Earth.
- Students will be able to identify minerals and rocks and understand their formation processes.
- Students will understand evolution, earth history, and the role of fossils in geologic time.
- Students will be able to utilize techniques to describe the three-dimensional geometry of Earth layers and deformation processes.
- Students will collect and interpret field data, produce maps, and use them to solve geologic and environmental problems.
- Students will be able to critically analyze published literature and have experience with technical writing and presentations.

The Environmental Geology area of concentration provides opportunities for advanced study of geology with emphasis on human interaction with the environment. Hydrogeology, neotectonics, geochemistry, and environmental hazards and remediation are among the possible specialties a student could pursue in this emphasis area. Required courses for students in this area are:

Hours

GEOLOGY 5551	Geotechnics	4
GEOLOGY 5570	Hydrogeology	3
Select one of the following:		3-4
GEOLOGY 5531 & GEOLOGY 5532	X-Ray Diffraction and Fluorescence Methods: X-Ray Mthds Geol/Anly and Icpms Applications in Geology	
GEOLOGY 5535	Aqueous Geochemistry	
GEOLOGY 5541	Environmental Geophysics	

Other coursework may include appropriate geology courses, as well as related departmental courses, especially those in geographic information science.

Urban and Cultural Geography

Student Learning Outcomes

- Geography students are expected to understand human-environmental relationships and their spatial dimensions in various geographic areas, from local places to the entire world.
- Geography students integrate knowledge from the humanities, social sciences, and natural sciences and apply that information to places.
- Geography students also know how to design, produce, and interpret maps using modern technology. Evidence of success is provided by performance on our exit examinations, admission to graduate schools, and ultimately the successful careers in geosciences pursued by our graduates.

Students choosing this area of concentration can pursue studies in cultural geography, historical geography, history of cartography, geoarchaeology, regional analysis and development, and urban geography and planning. Required courses for students in this area are:

Hours

GEOG 5503WI	History and Philosophy of Geoscience	3
GEOG 5507	Advanced Geographic Information Science	4
GEOG 5509	Urban Geography	3

Other coursework may include appropriate geography courses, as well as related departmental courses and cognate courses in other departments**.**

Requirements for Retention

1. All fully-admitted students are required to pass a qualifying examination administered by the department during their first year.
2. A 3.0 (B) average or better must be maintained in all graduate coursework. In addition, a 3.0 (B) average and a satisfactory balance of grades must be maintained in the approved program of study, or the student will be subject to either probationary status or dismissal from the program.

Requirements for Graduation

1. Formal acceptance of a planned program of study and research is required by the department and the graduate officer of the College. Such a program must comprise at least 30 graduate credit hours (approved by the supervisory committee), including 3 to 6 hours of thesis credit, and completion of the core curriculum and emphasis area requirements. No more than 40 percent of the program may be 300- to 400-level courses, and at least 18 credit hours must be at the 5500 level or above.
2. A formal written thesis is required of all students, and its format must be in accordance with guidelines of School of Graduate Studies.
3. A final examination is required, including oral examination of thesis research and related coursework.
4. Satisfactory compliance with all applicable requirements of the School of Graduate Studies is required, including continuous enrollment and residency.

Gerontology

Program Director:
Joan McDowd, Director, Aging Studies Programs, (816) 235-2490

Program Advisor:
Linda M. Breytspraak (816) 235-1744

Cherry Hall, Room 306
(816) 235-5415
http://cas.umkc.edu/cas

Undergraduate

- Minor in Gerontology (p. 166)

Graduate

- Graduate Certificate in Gerontology (p. 166)

Graduate Certificate in Gerontology

With the rapid aging of the population along with the consequences this brings to nearly every sector of our lives it is important to prepare for this changed world. A graduate gerontology certificate can be either a way to begin to explore a new career or it can bring added value to what one already does. This eighteen-credit program can be taken either as a free-standing curriculum or in some cases integrated with a graduate degree program at UMKC. Students from such diverse fields as social work, counseling, nursing, psychology, pharmacy, dental hygiene, sociology, law, architecture, and education have completed the certificate. Students should contact the gerontology advisor to discuss enrollment and a plan of study. The certificate may also be integrated with the Master of Arts in Liberal Studies degree.

Curriculum

Interdisciplinary Core		
A&S 5500	Interdisciplinary Colloquium On Aging	3
Sociology Core		
Select one of the following:		3
SOCIOL 5550	Sociology Of Aging	
SOCIOL 5554	Sociology Of The Aging Woman	
SOCIOL 5560	Sociology Of Death And Dying	
Psychology Core		
PSYCH 5543	Adult Development And Aging	3
Health/Biology Core		
A&S 5501B	Special Topics: Critical Thinking In Social Studies (The Experience of Health in Aging (on-line))	3
Field Practicum		
A&S 5592	Field Practicum In Aging [1]	3
Elective Courses		
Electives [2]		3
Total Credits		18

1 The practicum requirement should be enrolled in after all other core requirements are completed.

2 Three elective credit hours can be taken to complete the program. Students should contact the gerontology program advisor for a list of 3-credit semester-long courses and 1-credit special topics weekend electives for the upcoming semester.

Minor in Gerontology

Undergraduate students in any major in the College of Arts and Sciences may seek an interdisciplinary minor in gerontology designed to increase awareness of issues of our aging population. The minor will augment career paths into service provision, administration, the health professions, and education or research.

Students complete an 18-credit program of study that includes a nine-credit core, six credits of electives, and a three-credit practicum as outlined below. The minor may be integrated with the Bachelor of Liberal Arts (BLA) degree. Completion of the gerontology minor is recorded on the student's transcript. Students must declare their intention to pursue the minor on the "Declaration of Major" form and should meet with the gerontology advisor. No more than 6 credits may be transferred from another institution.

Curriculum

Sociology Core		
SOCIOL 410R	Aging In Contemporary Society	3
or SOCIOL 318	Sociology Of The Aging Woman	

Psychology Core		
PSYCH 441	Adult Development And Aging	3
Health/Biology Core		
A&S 490B	Special Topics (The Experience of Health in Aging (on-line))	3
Field Practicum		
A&S 492	Field Practicum In Aging [1]	3
Elective Courses		
Electives [2]		6
Total Credits		18

1 The practicum requirement should be enrolled in after all other core requirements are completed.

2 Six elective credit hours can be taken to complete the program. Students should contact the gerontology program advisor for a list of 3-credit semester-long courses and 1-credit special topics weekend electives for the upcoming semester.

Healing and Humanities

Scofield Hall (http://www.umkc.edu/virtualtour/scofield-hall.asp), Room 9
711 E. 51st Street

Faculty Coordinator/Program Advisor:
Dennise Todd, Director of Pre-Health Programs, (816) 235-6270

The interdisciplinary minor in healing and humanities enables students to explore the complicated nature of health care issues by integrating knowledge from the arts and humanities with the social and natural sciences. The minor is particularly appropriate for students considering health-related professions, complementing other scientific, clinical and professional preparation. Health care careers are projected to be among the fastest-growing fields in the 21st century. America's changing health care environment increasingly calls for individuals who understand the complexity of factors affecting healing and who are able to take a humane, holistic approach.

Undergraduate

Minor in Healing and Humanities

Student Learning Outcomes

- Understand the complexity of factors affecting healing
- Develop an understanding of holistic and biopsychosocial dimensions of patient care
- Develop an interdisciplinary foundation for future careers in the world of health care

The healing and humanities curriculum enables pre-health and health professional students to develop an interdisciplinary foundation for a future health care career.

Requirements

To earn a minor in healing and humanities:

- Students must earn at least 18 credit hours from the list of approved courses below and other courses as approved by the program advisor
- Three core courses are required for all students seeking the minor:

PHILOS 221	Contemporary Moral Issues	3
SOCIOL 211	Social And Psychological Development Through The Life Cycle	3
or NURSE 252	Human Growth and Development	
COMM-ST 431	Colloquium In Interpersonal Dynamics	3

- At least nine credit hours must be upper-division (i.e., 300-499)
- At least nine hours must be earned at UMKC
- Complete an exit interview that will consist of one essay question that will address concepts leaned in the three core courses

Students may select from among a wide variety of courses offered by many participating departments. The program advisor is available to provide academic advice on course selection and degree requirements, as well as career guidance. Students interested in the healing and humanities minor should consult with the program advisor to plan a program of study.

Approved Courses

ANTHRO 328	Body and Society	3
A&S 240	Analysis Of Medical Terminology	3
A&S 304CM	Cluster Course: Body Images In Medicine And The Arts (Interdisciplinary Cluster Course)	3
A&S 365P	Introduction To Substance Abuse Counseling: Theory And Practice	3
A&S 420	Literature: A Healing Art	3
A&S 492	Field Practicum In Aging	3-8
CHEM 206	Human Nutrition	3
CLASSICS 391WI	Ancient Greek and Roman Medicine	3
COMM-ST 140	Principles Of Communication	3
COMM-ST 344	Communication In Organizational Settings	3
COMM-ST 377	Interpersonal Communication	3
COMM-ST 431	Colloquium In Interpersonal Dynamics (Required Course)	3
COMM-ST 444WI	Intercultural Communication	3
COMM-ST 400CT	Cluster Course: Healing And Cultural Diversity (Interdisciplinary Cluster Course)	3
CJC 317	Policies Of Drug Use And Control	3
ECON 465	The Economics Of Health And Medicine	3
HISTORY 412B	The Black Death and Late Medieval Society	3
HISTORY 428A	History Of The Body	3
HISTORY 428B	Gender & Medicine: Patients & Practitioners From Antiquity to Present	3
HMNTY 408P	Images Of Aging In Literature	1
HMNTY 490P	Perceptions & Images Of Disabilities In Literature And Film	4
MEDICINE 9514	Medicine, War & the Arts	5
MEDICINE 9515	Medicine and Music	5
MEDICINE 9518	Medicine, Law and Bioethics (3 credit hours applicable to minor)	5
MEDICINE 9578	Medicine and Art (Interdisciplinary Cluster Course)	5
MEDICINE 9594	Medicine and Body Image (Interdisciplinary Cluster Course)	5
NAT-SCI 430PC	CC: Biological And Ethical Issues In Aging (Interdisciplinary Cluster Course)	3
NURSE 230	Health In Aging	2
NURSE 252	Human Growth and Development	3
NURSE 356	Spanish for Health Care Pre-Professionals	3
PHILOS 221	Contemporary Moral Issues (Required Course)	3
PHILOS 300CK	Cluster Course: Controversy And Choice In Life And Science	3
PHILOS 315	Logic And Methodology In The Health And Social Sciences	3
PHILOS 321	Ethics	3
PHILOS 334	Philosophy Of Science	3
PHILOS 338	Philosophy Of Biology	3
PHILOS 350	Scientific Controversies	3
PHILOS 360	Current Issues In Bioethics	3
PHILOS 400CO	Cluster Course: Issues In Death And Dying (Interdisciplinary Cluster Course)	3
PHILOS 401PC	CC: Biological And Ethical Issues In Aging (Interdisciplinary Cluster Course)	3
PSYCH 320	Ethnic And Minority Perspectives In Psychology	3
PSYCH 328	Psychology Of Human Sexual Behavior	3
PSYCH 331	An Introduction To Health Psychology	3
PSYCH 406P	Introduction To Developmental Disabilities	4
PSYCH 407P	Developmental Disabilities And Community Life	4
PSYCH 418	Brain and Behavior I (formally Biopsychology I)	3
PSYCH 419	Biopsychology II (formally Biopsychology II)	3
PSYCH 430	Introduction To Community Psychology	3
PSYCH 433	Abnormal Psychology	3
PSYCH 440	The Psychology Of Aging	3
PSYCH 441	Adult Development And Aging	3

RELIG-ST 494RS	Death In The History Of Religions	3
PHILOS 451	History and Philosophy of Bioethics	3
PHILOS 452	Healthcare Law and Policy	3
PHILOS 453	Clinical Ethics and Case Consultation	3
RELIG-ST 496RS	The Body In The History Of Religions	3
SOC-SCI 411P	Aging In American Society: Past And Present	4
SOCIOL 211	Social And Psychological Development Through The Life Cycle (Required Course)	3
SOCIOL 316	Sociology Of Death And Dying	3
SOCIOL 317	Policies Of Drug Use And Control	3
SOCIOL 328	Body and Society	3
SOCIOL 410R	Aging In Contemporary Society	3
SOCIOL 416	Aging And Developmental Disabilities	2
SOCIOL 417	Practicum In Aging And Developmental Disabilities	1
SOCIOL 440R	Sociology Of Medicine	3
SPANISH 216	Spanish For The Health Sciences	3
BIOLOGY 319	Global Health: New and Emerging Infectious Diseases	3
THEATRE 300CH	Cluster Course: Healing And The Arts	3
WGS 201	Introduction To Women’s & Gender Studies	3
PSYCH 405	Motivation and Emotion	3

Department of History

Cockefair Hall (http://www.umkc.edu/virtualtour/cockefair-hall.asp), Room 203
5121 Rockhill Road
(816) 235-1631
Fax: (816) 235-5723
history@umkc.edu
http://cas.umkc.edu/history

Department Chair:
John Herron

Professors Emeriti:
Jesse V. Clardy, James S. Falls, John T. Graham, Herman M. Hattaway, Carla L. Klausner, Lawrence H. Larsen, Stanley B. Parsons, Patrick A. Peebles, Louis W. Potts, Joseph P. Schultz

Professors:
Andrew Stuart Bergerson, Gary L. Ebersole, Miriam Forman-Brunell, Dennis Merrill, Linda Mitchell, Lynda Payne

Associate Professors:
William B. Ashworth Jr., Viviana Grieco, John Herron, Diane Mutti Burke

Assistant Professors:
Christopher Cantwell, David Freeman, Matthew Warner Osborn, Massimiliano Vitiello

Assistant Teaching Professor:
Rebecca Miller Davis

Adjunct Faculty:
Fran Sternberg

Department Description

History is an essential component of a liberal arts education. As an important part of the curriculum, historical study enables students to understand the interaction of many aspects of state, society and culture, and the dynamics of human change. History offers a valuable perspective on contemporary problems as well as knowledge of the past for its own inherent interest.

Departmental offerings, at the undergraduate and graduate levels, include the major areas of historical concern such as American history and ancient, medieval, and modern European history. In recognition of the role of a university in its community, the department also offers courses in urban and

social history, the history of science, Asian and Middle Eastern history, Judaic Studies, religious studies, women's and gender studies, black studies, as well as public history and museum studies. The department is also vitally involved in interdisciplinary courses and programs.

Desirable Preparation for Undergraduate Admission

Students wishing to major in history should acquire as broad a background as possible in subjects related to their historical interests. Both secondary school and community college courses in history should be supplemented with courses in other social sciences and the humanities. Students interested in the history of science should emphasize studies in physical and biological sciences.

The discipline is broad in scope and methods. Faculty members believe a logical and systematic selection of courses in other disciplines will complement the study of history. They encourage prospective majors to consult with them in preparing an integrated course of study.

Career Implications of the Bachelors Degree

The bachelor of arts degree in history provides students with general preparation for a wide range of occupations. Most majors follow business and professional careers and receive benefits both personally and professionally from the development of analytical skills and examination of relevant subject matter in history courses. A common misconception is that the only thing available after graduation is to teach history. That is a possible path, but certainly not your only option.

Among the many jobs you can consider are: advertising, analyst, archivist, broadcaster, campaign worker, consultant, congressional aide, editor, foreign service, foundation staffer, information specialist, intelligence, journalist, legal assistant, lobbyist, museum curator, nonprofit leader, personnel manager, public relations. . . the list is almost endless. It sounds cliché, but the career path for a history majors is limited only by your imagination.

More specifically, with your degree in history you can work as an educator (primary, secondary or post-secondary schools, historic sites and museums); as a researcher (museums, think tanks, cultural resources management, preservation); as a communicator (writers, archivists, librarians); as an advocate (lawyers, legislative staff, foundations,); and in business (contract historians, non-profits, corporation staff).

Why so many opportunities? Consider this: the study of history trains us how to think—not in a small or proscribed way, but in an analytical way. In our courses, you will discover that a flexible and perceptive mind is the most practical tool imaginable. You will become excellent writers and communicators with the ability to analyze complex problems with dexterity and finesse, a skill that will help you regardless of your chosen career path. Beyond this—and this remains a much less practical concern—as we hope you discover, history is more than names and dates. At best, the study of history can be a cure for ignorance, prejudice, and provincialism. And at the very least, it is an interesting story about who we are as a community, a nation, and a people.

If your interests remain in the academic world, know that our students have gone on to many top-flight colleges and universities. Recent UMKC history majors have pursued graduate study at the state universities of Virginia, Texas, Connecticut, Iowa, New York, Mississippi, Nebraska, Kansas, Colorado, Kentucky, Florida, Michigan, and California-Berkeley as well as Ohio State, Southern Methodist, Marquette, Notre Dame, Washington University, University of British Columbia, Texas Tech, Columbia, Georgetown, Northwestern, London School of Economics, NYU, Queen's College-Belfast, King's College-London, and Cambridge.

Individuals seeking careers as teachers and professional historians may pursue advanced degrees on this campus. The department offers the Master of Arts degree and participates in the Interdisciplinary Ph.D. program. Students interested in graduate studies should contact the principal graduate advisor, Miriam Forman-Brunell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=forman), or for the Interdisciplinary Ph.D. program, contact Diane Mutti Burke Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=burke).

Departmental Activities

Advising

Counseling is key to a meaningful and profitable course of study in the department. Students should consult the principal undergraduate faculty advisor regarding selection of courses and for help in academic matters. Students may select an advisor, or an advisor can be appointed by the principal undergraduate advisor. Faculty office hours and prospective schedules of courses are posted in the department office, located in 203 Cockefair Hall and on the department Web site http://cas.umkc.edu/history. The department offers printed guides to the requirements for its graduate degrees.

Special Programs

Teaching Certification in Social Studies

Certification as a middle school (grades 5-9) or secondary (grades 9-12) social studies teacher in either Kansas or Missouri requires that a student complete specific requirements in history, political science, economics, geography, behavioral sciences and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education section of this catalog or contact the Education Student Services Office at (816) 235-**2234**.

Applied History

Courses offered by the department prepare graduates for a variety of careers in historical agencies or in the study and preservation of cultural artifacts. For further information concerning archival methodology, consult Chris Cantwell Contact Information (http://www.umkc.edu/lookup/search.cfm?

LastName=cantwell). For course offerings in material culture, contact Miriam Forman-Brunell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=forman).

The History Club

Founded in 1999, with the purpose of promoting the study of history, the History Club is open to all UMKC students, history majors and non-majors. The club sponsor is Diane Mutti Burke Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=burke).

The History Graduate Student Association

Students participating in the Masters and IPhD program are automatically members of the History Graduate Student Association (HGSA). Each year the HGSA sponsors two events: the Graduate Student Orientation and the Graduate Student Conference. The faculty advisor is John Herron Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=herron).

Faculty

William B. Ashworth, Jr.[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ashworth); associate professor of history; B.A. (Wesleyan University); Ph.D. (University of Wisconsin).

Andrew Bergerson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bergerson); associate professor of history; B.A. (Cornell University); M.A. (University of Edinburgh); Ph. D. (University of Chicago).

Diane Mutti Burke[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=burke); associate professor of history; B.A. (Dartmouth College); M.A., Ph.D. (Emory University).

Jessey Choo[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=choo), assistant professor of history; B.A. (University of Rochester); M.A. (University of Toronto); M.A. (Princeton University); Ph.D. (Princeton University).

Gary L. Ebersole[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ebersole); department chair, professor of history and director of religious studies; B.A. (Dickinson College); M.A., Ph.D. (University of Chicago).

James Stephen Falls[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=falls); professor emeritus of history; B.A. (University of Alabama); M.A., Ph.D. (Mississippi State University).

Miriam Forman-Brunell[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=forman); professor of history; A.B., M.A. (Sarah Lawrence College); Ph.D. (Rutgers University).

David Freeman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=freeman) ; assistant professor of history; B.A. (University of Minnesota-Duluth); M.A. Emory University; Ph.D. (Emory University).

Viviana L. Grieco[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=grieco); assistant professor of history; B.A. (Universidad de Buenos Aires); M.A., Ph.D. (Emory University).

John Herron[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=herron); associate professor of history; B.A., M.A. (Montana State University), Ph.D. (University of New Mexico).

Carla L. Klausner[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=klausner); professor of history and Curator's Teaching Professor; B.A. (Barnard College); M.A. (Radcliffe College); Ph.D. (Harvard University).

Pellom McDaniels[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mcdaniels) ; assistant professor of history; B.S. (Oregon State University); M.A. (Emory University); Ph.D. (Emory University).

Dennis Merrill[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=merrill); professor of history; B.A. (Providence College); M.A., Ph.D. (University of Connecticut).

Linda Mitchell[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mitchell); professor of history; Martha Jane Phillips Starr/ Missouri Distinguished Professor of Women's and Gender Studies; B.A. (Sarah Lawrence College); M.A. (Indiana University); Ph.D. (Indiana University).

Matthew Osborn Contact Information; (http://www.umkc.edu/lookup/search.cfm?LastName=osborn) assistant professor of history; B.A. (University of Californa Santa Cruz); M.A. and Ph.D. (University of California Davis).

Lynda Payne[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=payne); associate professor of history; M.A. (University of Edinburgh); Ph.D. (University of California, Davis).

Patrick A. Peebles[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=peebles); professor emeritus of history; B.A. (University of California-Berkeley); M.A., Ph.D. (University of Chicago).

Louis W. Potts[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=potts); professor emeritus of history; B.A. (Lafayette College); M.A., Ph.D. (Duke University).

Frances Sternberg[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sternberg); adjunct instructor of history; B.A.(CUNY-Brooklyn College); M.A. (University of Chicago); Ph.D. (University of Missouri-Kansas City).

Massimiliano Vitiello[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vitiello) ; assistant professor of history; M.A. (University of Rome); Ph.D. (University of Messina); postdoctoral license in medieval studies (Pontifical Instiitute of Mediaeval Studies-Toronto).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: History (p. 172)
- Minor in History (p. 174)

Graduate

Graduate Degrees:

- Master of Arts: History (p. 174)
- Interdisciplinary Ph.D. in History (p. 181)

Bachelor of Arts: History

Student Learning Outcomes

The Department of History has developed a set of carefully crafted learning objectives. Simply put, history majors are expected to acquire specified levels of knowledge, perspectives and skills through the study of the past. The learning objectives are designed to help students succeed in their undergraduate history major, as independent, creative and self-directed learners. More important, they will help students to be successful in their pursuit of a career and to hold a lifelong appreciation for the humanities and social sciences. The objectives are enumerated as follows:

Knowledge of the Past

Students studying history will:

- Acquire knowledge of the world’s civilizations and peoples, and their political, economic, social and cultural histories.
- Gain in-depth knowledge of a historical field by specializing in one of several departmental concentrations.
- Gain exposure to a range of historical subjects outside the concentration.
- Complete at least one course that examines a non-western society.

Perspectives

Students studying history will:

- Develop a historical understanding of an increasingly multicultural society and interdependent world.
- Understand the variety and complexity of the human experience and foster an appreciation for processes of change.
- Comprehend how constructions of class, race and gender dynamically shape social structures, national identities and all forms of human relationships.
- Realize the interlocking relationships among science, technology, the environment and society.
- Appreciate the value of interdisciplinary perspectives and methods.

Analysis and Interpretation

Students studying history will:

- Critically evaluate secondary, textual evidence by identifying a thesis, noting sources and methods used in argument, discerning the conclusions and determining the perspective, bias and reliability of the argument.
- Think critically, and master the art of interpretive analysis based on the widest possible array of primary sources: written, material and other cultural texts.

Research and Communication

Students studying history will:

- Locate printed and online information sources to research a topic exhaustively.
- Write clear, well organized, properly documented and grammatical prose.

Requirements

College of Arts and Sciences

Each student must fulfill the requirements of the College of Arts and Sciences, including the university's general education program as described in UMKC's Undergraduate Academic Regulations and Information.

History Department

The program of study for the Bachelor of Arts in History consists of 36 total credit hours.

Two courses, or 6 credit hours, are required in World History (HISTORY 206 and HISTORY 208) or European History (HISTORY 201 and HISTORY 202) are required for students in all concentrations. These courses may also fulfill UMKC general education requirements.

At least four courses, or 12 credits, must be inside the student's field of concentration. The history department divides all upper division courses into areas of interest, or "concentrations." All majors are required to choose a primary concentration. The idea is that with focused study, students will gain an in-depth understanding of their topic. Students will also take additional courses from other concentrations to enlarge the scope of their historical knowledge. The concentrations are: Antiquity and Medieval; Early Modern and Modern Europe; United States; and Asia, Middle East and Latin America, or a thematic concentration devised by the student and advisor, then approved by the department chair.

At least four courses, or 12 credits, must be outside of the student's field of concentration and include at least one non-western course. In our department non-western courses include those that deal primarily with Africa, Asia, Latin America, Middle-East and indigenous North Americans.

The final two courses, or 6 credits, come from HISTORY 301WI and HISTORY 498WI. These courses cannot be taken in the same semester and are not offered in the summer.

NOTE: Students must complete the RooWriter before enrolling in any writing intensive courses.

Independent-study courses (HISTORY 496, HISTORY 497) and Internship classes (HISTORY 392B) may also help fulfill History electives. Enrollment in these courses is granted only by the instructor who will supervise the study.

All history majors at UMKC are required to establish and maintain a portfolio of their undergraduate work. The portfolio is a measurement tool that will allow students and faculty mentors to monitor intellectual growth, acquisition and sharpening of skills, and mastery of historical knowledge.

Two World History Surveys:		6
HISTORY 201 & HISTORY 202	European History to 1600 and European History since 1600	
OR		
HISTORY 206 & HISTORY 208	World History To 1450 and World History since 1450	
At least four 300- or 400-level courses inside the student's field of concentration, chosen in concultation with department advisor. [1]		12
At least three 300- or 400-level courses outside of the student's field of concentration		9
At least one 300- or 400-level non-western course.		3
Methods Course:		3
HISTORY 301WI	Historiography and Method	
Capstone Course:		3
HISTORY 498WI	Senior Capstone	
Total Credits		36

[1] Please note that one-hour courses and PACE courses **cannot** be counted toward a concentration.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Minor in History

Student Learning Outcomes

The Department of History has developed a set of carefully crafted learning objectives. Simply put, history majors are expected to acquire specified levels of knowledge, perspectives and skills through the study of the past. The learning objectives are designed to help students succeed in their undergraduate history major, as independent, creative and self-directed learners. More important, they will help students to be successful in their pursuit of a career and to hold a lifelong appreciation for the humanities and social sciences. The objectives are enumerated as follows:

Knowledge of the Past

Students studying history will:

- Acquire knowledge of the world's civilizations and peoples, and their political, economic, social and cultural histories.
- Gain in-depth knowledge of a historical field by specializing in one of several departmental concentrations.
- Gain exposure to a range of historical subjects outside the concentration.
- Complete at least one course that examines a non-western society.

Perspectives

Students studying history will:

- Develop a historical understanding of an increasingly multicultural society and interdependent world.
- Understand the variety and complexity of the human experience and foster an appreciation for processes of change.
- Comprehend how constructions of class, race and gender dynamically shape social structures, national identities and all forms of human relationships.
- Realize the interlocking relationships among science, technology, the environment and society.
- Appreciate the value of interdisciplinary perspectives and methods.

Analysis and Interpretation

Students studying history will:

- Critically evaluate secondary, textual evidence by identifying a thesis, noting sources and methods used in argument, discerning the conclusions and determining the perspective, bias and reliability of the argument.
- Think critically, and master the art of interpretive analysis based on the widest possible array of primary sources: written, material and other cultural texts.

Research and Communication

Students studying history will:

- Locate printed and online information sources to research a topic exhaustively.
- Write clear, well organized, properly documented and grammatical prose.

Program Requirements

A minor in history may be earned with a minimum of 18 credit hours of coursework in the discipline (at least 12 of which must be at the 300- and 400-level). A maximum of six of the 18 credit hours may be taken in two of the survey courses.

Master of Arts: History

This master's program is designed for students who already have completed a non-terminal baccalaureate degree with a major in History or a related field. Students may pursue this master's degree as a terminal degree or may leave open the option of continuing to a doctorate.

In this program, students will typically develop an in-depth knowledge of three fields of historical scholarship in their areas of interest, including chronology, bibliography, major themes and interpretations. Students may find that they develop these interests in the process of their interaction with the department faculty.

In the process of developing this advanced knowledge, students will also be expected to master the skills of historical scholarship. They will learn: How to recognize, demonstrate, and apply appropriate knowledge of the world's civilizations and peoples as well as their political, economic, social, and cultural histories.

Fields of History Offered by Regular Graduate Faculty

William B. Ashworth, Jr. Science, Renaissance, Early Modern European
Andrew S. Bergerson Modern European, Modern German, Everyday Life, Material Culture, German Studies
Christopher Cantwell Religious, Public History, Digital History, 19th and 20th Century U.S.
Gary L. Ebersole Religious, Japanese, Cultural
Miriam Forman-Brunell Everyday Life, Material Culture of Girls and Women/Gender in U.S. History
David Freeman Early Modern European, Dutch, Religion, German Studies
Viviana Grieco Colonial and Modern Latin American, Gender and Sexuality, Political Culture, Economic and Social
John Herron Environmental, Western United States, 19th and 20th Century United States
Dennis Merrill U.S. Diplomatic, Contemporary U.S., Modern Latin America, Globalization, International Relations
Linda E. Mitchell Medieval British Isles, Women & Gender, Medieval Legal & Administrative, Ancient Greece & Rome
Diane Mutti Burke 19th Century America, American South, Civil War, Early American Women, U.S. Social History
Matthew Warner Osborn Early America
Lynda S. Payne Modern British, Science, Medicine, Gender, The Body, Women, Early Modern European
Massimiliano Vitiello Ancient History, Late Antiquity

Tracks

In addition to these topical areas, students may opt to focus their graduate studies on a particular track. Tracks allow students to develop a specialization in a particular approach to or application of history. The tracks currently available to students are:

Public History

Public history refers to the application of cutting-edge historical research to make it accessible to a wider, typically non-academic public. This track prepares students for professional positions in archives, museums, humanities councils, and governmental agencies as well as for work in broadcast and electronic media. Public historians interrogate the operation of history and memory in the present and seek to foster critical engagement about the past.

Microhistory

Microhistory refers to a study of the past that interrogates small-scale contexts and proximate interactions. It includes biography and autobiography, community studies, ethnography, everyday life, material culture, and oral history. This track can prepare students for any career but it particularly applicable to academia or teaching. Students in this track are encouraged to study abroad for one semester through exchange programs to universities associated with the Microhistory Network, including the MAUI-Utrecht Network Exchange which allows students to pay UMKC tuition to study in many different European universities. With the approval of the student's committee, students may transfer up to 12 credits from a recognized graduate school in courses specifically focused on Microhistory. Students in the Microhistory track must take the Research Seminar (HISTORY 5587RA) in one of the following topics: Life Histories, Everyday Life, or Material Culture. As part of their program of study, they must also take one or two relevant courses in Anthropology, Art History, English, Foreign Languages & Literatures, Religious Studies, or Sociology. All courses and coursework throughout the program must involve Microhistory. All curricular decisions must be approved in advance by the student's committee.

Tracks may be combined with any fields of study offered in our department. Students interested in tracking their studies may announce their interest in their application or at any time before the completion of their 12th credit hour.

Program Options

The Department of History offers two options leading to the Master of Arts degree—the M.A. in History, requiring 30 hours, and the M.A. in Public History, requiring 36 credit hours.

Student Learning Outcomes

1. How to recognize, demonstrate, and apply appropriate knowledge of the world's civilizations and peoples as well as their political, economic, social, and cultural histories.
2. How to identify and employ primary and/or secondary sources to research a topic exhaustively.
3. How to relate the events in his/her particular story to the general history of the topic; and the student relates his/her interpretation to the interpretations of other historians, or to theorists or scholars in other disciplines.

4. How to use primary and secondary sources to construct an original historical interpretation, demonstrating competency in identifying a problem, posing a hypothesis, proposing a methodology, and engaging the data.
5. How to critically appraise alternative readings of the past, create a coherent historical interpretation, and take a critical position in these debates.
6. How to compose and present clear, well-organized, properly documented grammatical prose.

Requirements

Students seeking to fulfill either program option are required to complete the minimum number of credit hours of graduate-level work which must include the following courses with a grade of 2.67 (B-) or better:

For the MA in History

Foundational Courses:		6
HISTORY 5581GR	How To - History I	
HISTORY 5582GR	How To - History II	
A Minimum of Three Graduate Colloquia, typically:		9
HISTORY 5585GR	Colloquium in U.S. History	
HISTORY 5586GR	Colloquium in World History	
Graduate Level Courses in Their Curriculum. [1]		11
Research Seminar:		3
HISTORY 5587RA	Research Seminar	
Capstone Course:		1
HISTORY 5899	Required Graduate Enrollment	
Total Credits		30

[1] The department encourages students to take graduate level electives in the History department at the 5500 level. With the approval of the student's faculty advisor, however, students may take up to 6 credits at the 400 level if these fit with their overall program of study. Students may also take up to 9 credits in courses outside the department provided:

1. They are demonstrably graduate level courses.
2. They clearly relate to the student's program of study.

For the MA in Public History

Foundational Courses:		6
HISTORY 5581GR	How To - History I	
HISTORY 5582GR	How To - History II	
A Public History Theory and Methods Course		3
A Minimum of Three Graduate Colloquia, typically:		9
HISTORY 5585GR	Colloquium in U.S. History	
HISTORY 5586GR	Colloquium in World History	
A Minimum of Five Credit Hours of Public History Internships:		5
HISTORY 5592	Public History Internship	
A Minimum of Nine Credit Hours in a Chosen Concentration. [1]		9
Research Seminar:		3
HISTORY 5587RA	Research Seminar	
Capstone Course:		1
HISTORY 5899	Required Graduate Enrollment	
Total Credits		36

[1] The department offers the following concentrations for the MA in Public History:

1. Historical Administration: Students in this concentration will focus on the intellectual and administrative issues involved with leading historic sites and historical organizations. These include the art of historical interpretation, exhibit design, digital history methods, and nonprofit management.
2. Archives and Collections Management: Students in this concentration will focus on the best practices and professional standards libraries, archives, museums, and rare book rooms use to manage their collections. These include preservation, digitization, and object curation.

The student's committee must approve all curricular decisions in regard to the concentrations.

Courses

How To-History

These foundational courses in the doing of history are offered in a two-semester sequence.

In Part I (HISTORY 5581GR, students will learn about the major trends in historiography by reading the “great books” of historical scholarship and learn the basics of historical criticism; the major assignment is a literature review that will aid the students in preparing for How To-History II.

In Part II (HISTORY 5582GR), students will learn the research methodologies and professional obligations of historians; the major assignment is a viable research prospectus that will aid the students in preparing for their Research Seminar (HISTORY 5587RA)

Colloquia

These courses form the knowledge base for the graduate program. Divided for purely administrative reasons into “American” and “World”, students are encourage to take as many of these as can fit into their Program of Study. One of each is offered each Fall and Spring semester in the evening. In them, students will

1. Read broadly and learn about the major trends in the historiography of a particular historical problem, place, period, or specialization.
2. Develop fundamental skills of the professional historian such as the ability to write academic book reviews, make conference-style presentations, and discuss among peers the work of other historians critically.

This course typically culminates in the production of a term paper and/or literature review on a subject of the student’s interest that could serve as the context for a future research project or comprehensive examination field.

Research Seminars

As the title implies, these courses, organized around large historical themes or topics, are focused around individual research projects. Students will produce an original work of scholarship anchored in primary sources that reflects their larger course of study.

Graduate Capstone Course

In this 1 credit course, taken near the completion of the program of study, students will complete, and orally defend, their capstone project. For the MA program, this capstone experience can take one of three forms: a journal-length professional paper, based on original research (10,000-12,000 words); a public history interpretative plan (8,000-9,000 words plus mock ups); or for educators, an extensive unit plan. After completion of the research seminar, students will submit to their faculty advisory committee a proposal for the completion of their professional paper. We expect candidates for the M.A. degree who choose the professional paper to produce an original piece of historical scholarship based on their research in primary sources. Students will also:

1. Meet regularly with the faculty advisor during research and writing
2. Solicit the advice of the other members of the committee before submitting a final draft to the full committee

Professional Paper

The completed professional paper, an original piece of scholarship anchored in primary sources, will:

1. Summarize the literature/s relating to this area of research and take a critical position in it/them, engaging questions about chronology, bibliography, major themes, and interpretations.
2. Explain and justify its theory and methodology.
3. Tell a story about the past eloquently on the basis of primary sources.
4. Comply with academic standards of honesty and disciplinary standards of evidence.

Paper Defense

Students will be also required to defend their thesis in an oral examination, advertised and open to the public, in which the student will

1. Make a 20-30 minute conference-style presentation of his/her research.
2. Respond to questions from the audience and the committee about events, interpretation, theory, method and historiography.

Each examiner will evaluate the thesis according to the following scale: Superior, Good, Acceptable, Acceptable with Revisions, and Unacceptable (Fail). A grade of Acceptable or better by all members of the committee is required for the award of the master’s degree.

Public History Interpretative Plan

Candidates for the M.A. in Public History degree will produce an interpretive plan for a public history project, including wireframes and mock ups, based on their own research in primary sources. The completed interpretive plan will:

1. Summarize the literature(s) relating to this area of research. Students will take a critical position in their work and engage questions about chronology, bibliography, major themes, and interpretations.
2. Narrate a creative and compelling public project grounded in primary sources that communicates a scholarly argument to a public audience.
    a. This project can be, but is not limited to, an exhibit, walking tour, digital project, documentary film, oral history, archival collection finding aid, conservation plan, or national register nomination.
3. Explain and justify the project's theory and methods.
4. Identify the project's target audience and provide a plan to reach them.
5. Comply with all academic standards of honesty and professional best practices.

While an interpretive plan of a potential project will fulfill the requirements for the Public History degree, students can receive approval to have the installation or execution of an actual public history project for which they are the primary curator count as their HISTORY 599 project. In this case, the length of the interpretive plan will be greatly reduced. All decisions regarding the final project must be made with approval of the student's advisory committee.

Education/Unit Plan

For students interested in a career in K-12 education, they will be required to produce an extended unit plan. This project, developed with the student's committee and representatives from the School of Education, will contain multiple related lessons and projects. The unit plan will illustrate the integration of the student's historical training and teaching experience with other content areas. The plan will include an explanation and defense of the purposes and goals of the unit as well as the various teaching strategies used to teach the unit. The project will also illustrate how the unit goals relate to state curriculum benchmarks and will identify teaching methods used to assess student learning levels and needs.

Dual-Numbered Courses (300/5500 & 400/5500)

Offered at a variety of times each semester, these courses expose graduate students further to major trends in the historiography of larger historical problems, places, periods, or specializations and allow them to hone their skills at academic history. Often taught in conjunction with undergraduate courses in the same subject area, graduate students in these courses will be held to a higher standard of knowledge and performance.

Language Requirements

The M.A. in History will require demonstration of foreign language competency if the subject matter requires it. The faculty advisor will determine how this requirement should be fulfilled.

Admissions

The Department of History will consider for admission as a regular graduate student any student:

- Whose undergraduate major was History.
- Who had a 3.0 grade-point average in History courses and a 3.0 grade-point average overall.

Applicants who do not hold an undergraduate degree in History, but whose baccalaureate program included substantial training in History and/or related subjects, may also be considered for regular admission. In order to be admitted into the program, applicants must provide evidence that they have scored a minimum of 150 on the GRE, or a minimum score of 80 (internet) or 550 (paper) or 213 (computer) on the TOEFL and a minimum score of 4.0 is required for English as Second Language speakers.

Applicants must submit all of the following supplemental materials in addition to the basic admissions application:

1. An autobiographical essay (typically 2 pages long),
2. An essay detailing your scholarly interests, including if possible: the faculty with whom you wish to study(typically 2 pages long),
3. A sample of your scholarly writing,
4. Three letters of recommendation, and
5. A completed admissions application.

It is crucial that the *entire application* be completed and supplementary materials submitted in three steps:

1. Send copies of your official test results to the Office of Admissions.
2. Complete the admissions application online at www.umkc.edu/admissions/.
3. Send copies of your official test results and letters of recommendation to:
   Mailing Address
   University of Missouri-Kansas City
   Office of Admissions, Administrative Center, Room 120
   5115 Oak Street
   Kansas City, MO 64110-2499

4. Complete the supplementary application process online at www.umkc.edu/grasp/ (http://www.umkc.edu/grasp) Please take great care to answer all questions. You submit application materials, including letters of recommendation and writing samples, by faxing them directly to (573) 884-4898 for domestic students or -4894 for international applications.

Do not send anything directly to the Department of History. It is your responsibility to confirm the receipt of all materials by the due date.

Completed applications are due by March 15, for admission in the Fall semester of the new academic year and October 1, for admission in the Spring semester of the following calendar year. The History Department does not accept students for admissions beginning in the Summer semester.

Financial Aid

There are a limited number of Graduate Teaching Assistantships available. For information and forms, contact the History office directly. The School of Graduate Studies also administers graduate fellowships and scholarships. For all other inquiries about financial aid, contact:

Financial Aid and Scholarships Office
Administrative Center, Room 101
5115 Oak Street
(816) 235-**1154** (Kansas City Metro)
1-800-775-8652 (Outside of Metro)
Fax: (816) 235-**5511**
finaid@umkc.edu
http://www.umkc.edu/finaid

Student Orientation

If admitted, students will be asked to sign a letter of intent to enroll.

The History Graduate Student Association will host an annual Graduate Student Orientation during the weeks prior to the start of the Fall semester. At which students will be:

- introduced to the program curriculum and administration and
- encouraged to build working relationships with faculty and peers.

Minimum Expectations

Students must demonstrate satisfactory progress towards the completion of their degree. In all courses students must

1. Receive a grade of 2.67 or higher in all courses taken in the History Department.
2. Maintain a minimum cumulative 3.0 graduate GPA.
3. Adhere rigorously and conscientiously to academic standards of honesty (see below).
4. Demonstrate serious commitment to scholarship and intellectual engagement.
5. Abide by all requirements of the School of Graduate Studies (see School of Graduate Studies section of the Graduate and Professional Catalog), in addition to those of the Department of History.

In terms of administrative procedures, students must punctually file the following forms, each of which must be approved by the M.A. advisor, the faculty advisor and the other members of the supervisory committee:

1. A tentative program of study, and the form listing the initial members of the Supervisory Committee, by the 15th of October or 15th of March before the completion of the student's 15th credit hour.
2. A final program of study, and the form listing the final members of the supervisory committee, by the 15th of October or 15th of March before the completion of the student's 30th credit hour.
3. The student must have identified a Faculty Advisor who has agreed to serve as the student's lead instructor for the semester of study. Faculty Advisors, like tentative programs of study, may be changed over the course of a student's study.

Each year students are required to submit a formal report of their progress toward their degree. The narrative statement should include a description of students' coursework, exam preparation, research activities (including progress toward the thesis/dissertation/final project, conference activities, publications, exhibits, and the status of grant applications), awards, and internships, as applicable. In addition, students should outline their goals for the coming academic year.

Students in the microhistory or public-history tracks must declare their intent to track their studies by the completion of their 12th credit hour by forming a viable committee and completing a program of study.

Advisors and Committees

Once enrolled, students should schedule a meeting with the Masters Advisor. During this meeting, the student will be assigned a faculty mentor. The faculty mentor will:

• serve as a personal connection to the department

• assist the student in all matters professional during their study in the department

• and may continue even after the student has identified a Faculty Advisor (their content specific instructor).

Supervisory Committee

The supervisory committee consists of three full-time, regular members of the UMKC History Department who are also members of the graduate faculty, with the student's faculty advisor serving as chair of this committee.

With the approval of the faculty advisor:

• One member of the committee may be a full-time, regular member of another UMKC department (this committee member must also be a member of the graduate faculty).

• A fourth member may be added to the committee from the adjunct graduate faculty or from the graduate faculty of another institution.

Students tracking their studies in Public History or microhistory are encouraged to have at least one member of the faculty whose scholarship involves the appropriate approach. Public History students are also permitted, and indeed strongly encouraged, to include members of the adjunct graduate history faculty on their committees who work professionally in the field of public history in the Kansas City region.

Extenuating Circumstances

Students incapable of meeting administrative deadlines may request an extension from the M.A. advisor. These requests must be made in writing in advance of the deadlines. Incompletes will be given only when there are legitimate reasons for not completing course requirements on time, and only when there are reasonable expectations that work can be completed within the time allowed by the School of Graduate Studies (maximum of one year).

Probation

Failing any of these conditions means that the student is not making satisfactory progress towards the completion of her/his degree. In that case, the student will be placed on probation and will have to petition the department, through a letter to the M.A. advisor and graduate committee, for permission to resume his or her studies the following semester. The department will then recommend a reasonable plan for remediation. If the student fails to meet the standards set by the department, the student will be declared ineligible for enrollment and dropped from the program.

Academic Dishonesty

Plagiarism is an inexcusable act in the view of the History faculty. Any student guilty thereof will be liable to expulsion from the program. A detailed statement by the faculty is available in the History office. Please refer to the UMKC Student Standard of Conduct (p. 828).

Research dishonesty refers to any conduct that is intended to mislead or communicate false research data or results, or which communicates such data or results in reckless disregard of their false or misleading character. Illustrations of research dishonesty include, but are not limited to, the following:

- False or misleading statements or publications concerning research data or results
- Intentional or reckless distortion or misinterpretation of research data or results
- Use of research methods which the researcher knows to be unreliable or which produce erroneous results, unless appropriately explained in publications and reports of the research
- Release of research data or scholarly efforts of other persons, and representing them as one's own or failing to give appropriate credit to their sources
- Misuse of the work of others or misrepresentation of authorship as that of the student

The Supervisory Committee

The supervisory committee consists of three full-time, regular members of the UMKC History Department who are also members of the graduate faculty, with the student's faculty advisor serving as chair of this committee.

- **For non-thesis students**, the supervisory committee will ordinarily serve as the final examining committee. In consultation with the supervisory committee, the student should select fields for examination.
- **For thesis students**, the supervisory committee will serve as the readers for the thesis.

With the approval of the faculty advisor:

- One member of the committee may be a full-time, regular member of another UMKC department so long as that person is also a member of the graduate faculty.
- A fourth member may be added to the committee from the adjunct graduate faculty or from the graduate faculty of another institution.

Students tracking their studies towards Microhistory or Public History are required to have at least one member of the faculty whose scholarship involves the appropriate approach. Public-History students are permitted, and strongly encouraged, to include one or two members of the adjunct graduate history faculty on their committees who work professionally in the field of public history in the Kansas City region.

Honorary Organizations

The department sponsors a chapter of the national history honorary, Phi Alpha Theta. Admission into the honorary requires a 3.2 grade-point average in a minimum of 12 credits of graduate work. The honorary sponsors programs and lectures during the school year, and members are often invited to read papers at the regional conventions. Membership in Phi Alpha Theta is noted on each honoree's official transcript.

Students should strongly consider membership in professional organizations for historians, such as the American Historical Association (http://www.historians.org) and others.

The Annual Graduate Student Conference

The History Department will host an annual Graduate Student Conference in the Spring Semester (typically the last week in April or the first week in May). Graduate students should plan to attend as required by the program. In it, students will

- demonstrate their expertise in a research agenda of their own creation,
- present their research to peers and faculty,
- comment constructively and critically on the research of others,
- engage critical questions in public, and
- celebrate their academic achievements that year.

At the conclusion to this conference, the faculty will present two student participants with the Carla Klausner Award for the Best Paper Presentation in History and the Lynda Payne Award for the Best Poster Presentation in History.

Interdisciplinary Ph.D. in History

History is an academic discipline eligible for full participation in UMKC's Interdisciplinary Ph.D. Program. Students interested in this study should review the School of Graduate Studies section for general and discipline-specific admission criteria, academic regulations, and degree requirements. Interested students should contact the department's doctoral program advisor, Diane Mutti Burke Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=burke).

Honors Program

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), Room 204
5120 Rockhill Road
Kansas City, MO 64110
(816) 235-2820
Fax: (816) 235-5542
http://cas.umkc.edu/honors

Program Director:
Gayle Levy, Ph.D.
Associate Professor of French
levyg@umkc.edu

Associate Program Director:
John Herron, Ph.D.
Associate Professor of History
herronj@umkc.edu

Program Description

The UMKC Honors Program seeks to attract exceptionally motivated and academically talented undergraduates from every school and college at the University to participate in an environment that encourages excellence and challenges students to realize their greatest potential.

The UMKC Honors Program is designed to enrich the college experience of the most outstanding students through the integration of traditional and novel approaches to learning from the behavioral and social sciences, the humanities, the hard sciences and other divisions of the University.

Honors Credit

In order to accomplish these goals, all honors students have the opportunity to enroll in honors seminars and a weekly interdisciplinary Colloquium taught by some of the best faculty on campus. Colloquium allows honors students to meet on a regular basis to discuss and debate important issues. Students follow a different theme each semester, selected based on faculty and student research interests. In Colloquium, all the honors students, freshmen and seniors alike, meet with UMKC faculty and distinguished guest lecturers to study and discuss subjects ranging from the environment to religion, from the fine arts to sports.

Honors credit may also be received from:

- Specially designed honors seminars
- Independent study
- Undergraduate research
- Honors contracts
- Honors discussion groups
- Senior Honors Thesis
- Study Abroad

Honors students are encouraged and supported in the conduct of research and the publication and presentation of their work regionally and nationally. As seniors, honors students have the option to complete a six-credit-hour project, the Senior Honors Thesis. Upon graduation, those who complete an honors thesis in addition to the basic honors requirements are designated as Honors Scholars.

Program Initiatives

UMKC offers a supportive atmosphere to encourage integrative thinking through an exciting Living/Learning Community and specialized advising with Honors Faculty Fellows. Leadership skills are honed through special institutes and unique seminars where students reflect on and analyze their community-service experiences. Finally, with an eye toward giving students a leg up on their graduate school and career goals, honors students are strongly encouraged to conduct innovative individual and collaborative research or artistic activity in the form of the Senior Honors Thesis.

Some of the other advantages that the UMKC Honors Program offers students include:

- Priority enrollment during registration.
- Specially designated general education courses for honors students.
- Tickets to all UMKC Theatre productions.
- Graduate-level borrowing privileges at Miller Nichols Library.
- Individual advising to prepare honors students to compete for national scholarships (i.e., Rhodes, Marshall, Truman and Goldwater).

Admission to the Honors Program

To be considered for admission, a first-year student should:

1. Score in the top 10 percent on the ACT or SAT
2. Rank in the top 10 percent of their high school class

Students not meeting these criteria may apply for admission to the Honors Program and will be given consideration on a case by case basis. For incoming freshmen, a total of 28 hours of honors credit is required to receive a bachelor’s degree with general honors.

Transfer students generally need to meet at least one of the following criteria in addition to providing recommendations from two instructors:

- Fulfill those criteria set for first-year students
- Have a GPA of at least 3.7
- Have participated in their previous college’s Honors Program

Continuing UMKC students are encouraged to apply to the Honors Program. Minimum requirements for admission are a 3.5 UMKC grade-point average and the recommendation of two UMKC professors.

For transfer and continuing students, a total of 25 hours of honors credit is required if the student enters the Honors Program with more than 25 credits but less than 50, and a total of 21 hours of honors credit is required if the student enters the program with 50 or more credits.

The Honors Program application may be found at the Honors website http://cas.umkc.edu/honors. Applications for fall semester are accepted during the previous spring semester and are due by March 15. Late applications will be given consideration by the review committee. Applications for the spring semester are due by October 31.

Continued Participation in the Honors Program

Honors students are required to register for the Honors Colloquium at least three-fourths of the time they are enrolled in the UMKC Honors Program. Additionally, a minimum overall grade-point average of 3.2 is required for all honors students for continued participation in the Honors Program. Students whose overall grade-point average drops below a 3.2 have a one-semester grace period during which time they can remain in the Honors Program while they work on bringing their cumulative grade-point average above the 3.2 minimum. If, at the end of the grace period, the student's grade-point average is still below a 3.2, the student will be dropped from the program.

Honors Certificate for Pharmacy Program Students

Honors Program students who are Pharmacy majors will be awarded an honors certificate of recognition upon successful completion of their undergraduate and Honors Program requirements. This certificate will serve as the equivalent of the honors notation for the baccalaureate diploma and transcript.

Honors Living/Learning Community

The UMKC Honors Program, in collaboration with the Department of Residential Life, sponsors the Honors Living/Learning Community. Located in UMKC's Oak Street Hall, this community of honors students has the opportunity to live and learn together through cohort classes, special programs and events, informal interaction with UMKC faculty, social activities and community service. The program is designed to build cohesive community among the honors students, promote student and faculty engagement, and provide continuity of the intellectual learning experience outside of the classroom.

Lucerna, the Honors Program Undergraduate Journal

The Honors Program produces *Lucerna*, UMKC's only research journal open to papers written by UMKC undergraduates. The honors students oversee all aspects of production of the journal, from soliciting submissions to publicity to editing the chosen papers. *Lucerna* is published annually.

Study Abroad

Members of the UMKC Honors Program are strongly encouraged to spend a summer, a semester, or a year studying in a foreign country. Taking classes and living abroad is one of the most personally and intellectually fulfilling experiences a student can have while an undergraduate. The Honors Program organizes a summer study abroad program to either Uppsala, Sweden, or Cork, Ireland; however, in consultation with the Honors Director, students can earn honors credit by participating in any study abroad program. For more information on Study Abroad, see http://www.umkc.edu/international.

The Honors House

The Honors Program is pleased to invite all honors students to make use of the Honors House: 5317-19 Holmes, 3rd Floor. Members of the Program have free access to space where they can meet, study, and conduct discussion sessions.

SEARCH: Students Engaged in Artistic and Academic Research

Honors students completing the senior honors thesis or undergraduate research are encouraged to present their findings at the annual SEARCH Symposium for Research and Creative Achievements. The purpose of this symposium is to display and celebrate undergraduate participation in outstanding research and other creative endeavors. Presentations may be in the form of poster presentations or other performance media displaying creative works. For more information, see the SEARCH website.

Latina/Latino Studies

Latina/Latina Studies program

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), Room 204
5120 Rockhill Road
(816) 235-**5854**
Fax: (816) 235-**5542**
salinasv@umkc.edu
http://cas.umkc.edu/latino-studies/

Mailing Address
University of Missouri-Kansas City
Latina/Latino Studies
Haag Hall 204

5100 Rockhill Road
Kansas City, MO 64110-2499

Program Description:

The mission of Latina/Latino Studies (LLS), a program based in the College of Arts and Sciences, is to function as a vehicle for interdisciplinary and multidisciplinary teaching, research and outreach focusing on Latinas/os-Chicanas/os in the U.S. The LLS program will provide an awareness and understanding of the wide diversity of Latino communities, cultures and backgrounds. The development and expansion of our curricula will serve to empower our students with the concepts and skills to better understand a rapidly growing Latina/o population. The LLS program will engage students, scholars and the greater Kansas City community in collaborative projects, programs and service learning efforts. These efforts will foster new curricula and advance research and outreach scholarship to create new knowledge to better understand the cultural, economic, and historical experiences and contributions of U.S. Latinas/os-Chicanas/os and their diasporic origins.

Program Activities:

- Provide all UMKC students with critical understanding of the historical, political and social context in which Latino/Chicano communities have evolved and continue to be established in the U.S., with particular attention to the greater Kansas City metropolitan area and the Midwest region. Crucial to this goal is the understanding of the transnational nature of these community ties.
- Provide access to a quality education for Latina/o students and other students interested in Latina/o-Chicana/o Studies and at the same time enhance diversity on the campus.
- Strengthen ties with UMKC Latina/o alumni
- Engage other area Latina/o professionals in LLS activities
- Strengthen ties between the UMKC and the Latino community.
- Establish UMKC as a center of teaching, learning and research on Latino/Chicano populations.
- Establish and/or strengthen alliances with local Latina/o community organizations, e.g. Guadalupe Center (KCMO), El Centro (KCK), Dos Mundos, KC Hispanic News, Mattie Rhodes Art and Counseling Center, The Mexican Consulate, Latino Writers Collective
- Create alliances/connections with local non-Latina/o organizations, e.g. Nelson-Atkins Art Museum, Kauffman Center for the Performing Arts, Kansas City Public Libraries and Kansas City Museum

Faculty

Director:

Miguel A. Carranza

Professors:

Norma E. Cantu

Miguel A. Carranza

Associate Professor:

Theresa L. Torres

Academic Advisor:

Norma E. Cantu

Administrative Assistant:

Veronica Salinas

Latino/Latina Studies Minor

The minor in Latina/Latino Studies is comprised of 18 hours. Nine (9) credit hours must be in upper division (300 or 400) level courses. A minimum of nine (9) of the 18 hours are required in Latina/Latino Studies.

- Our core gateway course - LLS 201 Introduction to Latina/o Studies (3 s.h.) is required for the minor.
- The remaining minimum of six (6) hours in Latina/Latino Studies may be taken from the following:

LLS 210	Crossing Boundaries: The Latina/o Immigrant Experience	3
LLS 300	Special Topics in Latina/Latino Studies	3
LLS 310	The World of Latino Youth and Adolescents in the U.S.	3

LLS 380	Introduction to Latina/Latino Literature	3
LLS 397	Independent Readings in Latina/Latino Studies	1-3
LLS 400	Special Topics in Latina/Latino Studies	1-3

- A maximum of six (6) hours may count for the minor from the following Arts and Humanities courses:

ART-HIST 443	Meso-American Art	3
SPANISH 365	The Search For Mexican Identity	3
SPANISH 415	Advanced Conversation And Composition I	3
SPANISH 460	U.S.-Latino Literature	3

- A maximum of six (6) hours may count for the minor from the following Social Science courses:

GEOG 342	Geography of Mexico, Central America and the Caribbean	3
HISTORY 406	Modern Latin America	3
SOCIOL 348	Latin American Immigrants & Refugees in the U.S.	3

Judaic Studies

The Department of History (http://cas.umkc.edu/history) is a major participant in the Judaic Studies Minor and Concentration.

For a minor in Judaic Studies, students must complete a minimum of 18 hours of coursework. These courses should include:

HISTORY 475WI	The History of Ancient Israel	3
HISTORY 476	Medieval Jewish History	3
HISTORY 477	Modern Jewish History	3

In addition, students should take several semesters of Hebrew language. The remaining credits may consist of electives approved by the Interim Judaic Studies advisr.

For a concentration in Judaic Studies, a student must complete 15 hours of coursework that includes the History courses listed above. Those pursuing the concentration are also encouraged to include study of the Hebrew language.

For further information, contact Dr. Carla Klausner Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=klausner), Professor of History and Interim Director of Judaic Studies. Judaic Studies Minor and Concentration

Liberal Studies Program

Office Location:
5317 Holmes, 2nd Floor
(816) 235-6257

Mailing Address:
University of Missouri - Kansas City
Master of Arts in Liberal Studies Program
Cockefair Hall 106
5100 Rockhill Road
Kansas City, MO 64110-2499
mals@umkc.edu

Program Director
Jeff Rydberg-Cox, Ph.D., Professor, Department of English, rydbergcoxj@umkc.edu, (816) 235-2560

Program Advisor
April Austin, Ph.D., austinal@umkc.edu

Program Research Associate
Marsha Carothers, (816) 235-6257, mals@umkc.edu

Undergraduate

Undergraduate Degrees:

- Bachelor of Liberal Arts (p. 186)

Graduate

Graduate Degree:

- Master of Arts in Liberal Studies (p. 187)

Bachelor of Liberal Arts

Office Location:
5317 Holmes, 2nd Floor
(816) 235-6257

Mailing Address:
University of Missouri - Kansas City
Liberal Studies Program
Cockefair Hall 106
5100 Rockhill Road
Kansas City, MO 64110-2499

Program Director:
Jeff Rydberg-Cox, Ph.D., Department of English, rydbergcoxj@umkc.edu, 816-235-25560

Program Description

The College of Arts and Sciences offers the bachelor of liberal arts (B.L.A.) degree for individuals who seek scientific literacy, an understanding of the social sciences and an appreciation of the humanities. The B.L.A. is an alternative to the B.A./B.S. degree programs and is for individuals who do not wish to commit themselves to a specialty, whose aspirations are not served by a traditional major, and who desire maximum flexibility in course selection.

Students who have found the B.L.A. degree particularly beneficial are those who have matriculated into the six-year medical program and pursue the combined B.L.A./M.D. degrees and those students wishing to apply to the UMKC School of Law through the Early Entry Law Program.

The BLA degree can also be earned by students in the online degree completion program in the College of Arts and Sciences. This option allows students with at least 80 hours of applicable college credit to complete the Bachelor of Liberal Arts (BLA) degree at UMKC through a series of online courses. These courses, which include offerings from the humanities, the social sciences, and the natural sciences, align with the mission of UMKC and cover issues of contemporary concern. For more information, see the web pages for the BLA Online Degree Completion program (http://cas.umkc.edu/blaonline/).

The B.L.A. degree can also be earned through the Program for Adult College Education, PACE. This program makes it possible for individuals with full-time work or home responsibilities to complete a baccalaureate degree in a reasonable time by attending class in the evenings and on weekends, by registering for the corresponding independent study courses, by connecting to online courses via the Internet, and through approved internships. For a detailed description of this program, see the Program for Adult College Education (PACE) (p. 198) section in the program listings under the College's section of the catalog.

Black Studies Emphasis Area (p. 53)

Potential for Graduate Study

Students completing the B.L.A. degree have the potential to pursue graduate study in many areas. One option is the Master of Arts in Liberal Studies, a master's degree similar in structure to the B.L.A., which continues the tradition of interdisciplinary work in the College at the intermediate level between baccalaureate and doctoral work. Students completing the B.L.A. degree who wish to continue their education at the graduate level are strongly encouraged to seek counsel from a graduate adviser in that discipline early in their undergraduate career.

Student Learning Outcomes

1. Students will be able to identify and articulate scholarly questions based on evidence and approaches from more than one disciplinary area.
2. Students will be able to demonstrate the ability to gather and organize scholarly literature and raw data needed to answer scholarly questions.
3. Students will be able to demonstrate the ability to analyze and evaluate scholarly literature and raw data to answer scholarly questions.
4. Students will be able to effectively communicate the results of their work via either expository rhetoric or a creative work to an audience that does not specialize in their area of study or share their disciplinary perspective.
5. Students will be able to effectively craft their program of study for intellectual and professional purposes as the foundation for life-long learning.

Program Requirements

Curriculum Degree Requirements

Hour Requirements and Eligibility

A 2.0 GPA is required to declare intent to pursue the B.L.A. and a 2.0 overall GPA is required by the University of Missouri for graduation.

A minimum of 120 hours is required for graduation. At least 36 of the total hours must be at the junior/senior (300-400) level at the University of Missouri - Kansas City.

The credit/non-credit option is not available for students pursuing this degree.

Area Requirements and Limitations Applicable to This Degree

The B.L.A. degree is separated into three divisions:

- Humanities
- Natural Sciences/Math
- Social Sciences

At least 18 hours must be earned from each division above; however, no more than 60 hours from any one division may be applied toward the B.L.A. degree. Additionally, coursework must be taken from at least two departments in each division.

Students should note that some departments within the College of Arts and Sciences (for example, geosciences and history departments) offer coursework that can be applied to more than one division. Students should consult with an adviser in selecting coursework to ensure that they receive proper credit in the various divisions required for the degree.

Minor Requirement

Students must complete a minor offered by an interdisciplinary program or department in the University or an MDHE approved emphasis area. Students will work with the faculty adviser corresponding to the selected minor or emphasis area. Black Studies is currently the only MDHE approved emphasis area for the B.L.A.

General Education Requirements

In addition to the above listed requirements for the B.L.A. degree, students must also complete the general education requirements for the University and the College of Arts and Sciences. Refer to the general education section of the catalog for complete information about these course requirements.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Master of Arts in Liberal Studies

Program Description

The Master of Arts in Liberal Studies (MALS) degree program enables individuals to pursue interdisciplinary studies at the graduate level. Courses provide participants the opportunity to extend the best experiences of baccalaureate liberal education to the graduate level.

Students admitted to the program will be encouraged to select one of the graduate certificate programs or informal focus areas listed below and will develop a program of study with the cooperation of the assigned advisor.

- Bioethics (graduate certificate)
- Black Studies (graduate certificate or informal focus area)
- Film and Media Studies (informal focus area)
- Gerontology (graduate certificate)
- Holocaust Studies (graduate certificate)
- Humanities Consortium (informal focus area)
- Medieval and Early Modern Studies (graduate certificate)
- Public Humanities (informal focus area)

- Teaching Writing (graduate certificate)
- Women's and Gender Studies (informal focus area)

Alternatively, students with a strong interest in a different interdisciplinary area of study within the College of Arts and Sciences may submit a statement indicating interest in designing an individualized plan of study. In order to ensure that courses to support a proposed individualized plan of study are available at UMKC, students who want to pursue this option should suggest a list of courses offered in the College of Arts and Sciences that could contribute to their desired area of study. Students wishing to pursue this option should contact the MALS advisor for assistance developing this list of courses.

Student diplomas will list the degree as a Master of Arts in Liberal Studies. The subject field of approved graduate certificates will be designated on a student transcript. Students pursuing informal focus areas with the Master of Arts in Liberal Studies will not have these subject designations on their transcript.\

The end result of each participant's matriculation should be a challenging experience that samples the richness of literature, the fine arts, history and those principles of the social and natural sciences that affect our lives.

Admission to the Program

Individuals admitted to the program must have a baccalaureate or equivalent degree and mature academic interests. A minimum undergraduate 3.25 GPA is desirable but can be offset by professional and career accomplishments outside academe.

Individuals applying for admission should submit, in addition to the UMKC application, the following documents:

- a statement of purpose in the form of a personal essay of approximately 1,000 words outlining the focus area the applicant wishes to pursue, his or her reasons for applying, and his or her academic plans and goals. Any applicant who does not choose one of the specific certificate programs or focus areas listed for the MALS program should also include a statement indicating interest in designing an individualized plan of study. Such a statement should indicate the proposed area of study and a list of courses offered in the College of Arts and Sciences that would contribute to the area of study.
- a sample of recent academic writing
- 3 letters of recommendation

These documents (except the UMKC application) should be sent directly to the Master of Arts in Liberal Studies Program. They can be sent as Word documents or PDFs attached to an email to carothersm@umkc.edu or in print form to Ms. Marsha Carothers, Research Associate, MALS Program, Cockefair Hall 106, UMKC, 5100 Rockhill Road, Kansas City, MO 64110.

Prior to submitting an application, prospective students should speak with the program advisor or a member of the faculty who works in their chosen focus area.

The priority deadline to apply for Fall Semester is March 1. The final deadline to apply for Fall Semester is August 1. The deadline to apply for Spring Semester is November 1.

Student Learning Outcomes

1. Students will be able to identify and articulate scholarly problems and questions based on evidence and approaches from more than one disciplinary area at an advanced level.
2. Students will be able to gather and organize the primary source materials and raw data needed to answer these questions at an advanced level.
3. Students will be able to analyze relevant primary source materials and raw data to create a coherent answer to a scholarly problem or question at an advanced level.
4. Students will be able to critically appraise scholarly conversations in multiple fields, create a coherent interpretation, and take a critical position in these debates.
5. Students will be able to effectively communicate, at an advanced level, the results of their work via either expository prose or a creative work to an audience that does not specialize in their area of study or share their disciplinary perspective.

Requirements for Completion of the Degree

The degree is a 36 credit hour program. Generally, each participant's plan of study will consist of three parts.

Program participants begin by enrolling in A&S 5509. On completion of this required three hour introductory seminar, participants earn 30 credit hours based on the study plan associated with their graduate certificate program, informal focus area, or their individual study plan. At the conclusion of the program, individuals enroll in a required three hour capstone seminar, A&S 5520.

Please consult the MALS website at cas.umkc.edu/MALS for advising worksheets for each of the graduate certificate programs and informal focus areas that can be pursued in conjunction with the MALS.

A written thesis is not required, but individuals who wish to complete a thesis project may apply three credit hours toward their degree requirements. An individual who works well independently and who has a particular interest that lends itself to detailed research is especially encouraged to consider the thesis option. With the thesis option, the participant will select a faculty advisor other than the director of the program, who will direct the plan of study and research.

Two courses (6 hours) may be taken from another school at the university outside of The College of Arts and Sciences. No more than 12 hours at the 400 level (or 300 level when permitted by the department) can be applied to the plan of study.

Relationship of the MALS to Interdisciplinary Doctoral Degrees

The College of Arts and Sciences has a strong tradition of interdisciplinary studies at both the baccalaureate and doctoral levels.

The Master of Arts in Liberal Studies degree continues the tradition of interdisciplinary work in the college at the intermediate level between baccalaureate and doctoral work. In a few cases, students completing this degree may find the transition to doctoral work as the appropriate next step. However, students should recognize that the degree is not designed to provide students in the program with specific subject skills usually associated with targeted career objectives in traditional research areas.

Students interested in coordinating their M.A. in Liberal Studies coursework with future doctoral work at UMKC are strongly encouraged to make this intent known at the outset of their work. Without initial planning conducted with a committee of doctoral faculty, a student's master's coursework may not be appropriate to later doctoral studies.

Relationship of the MALS to Interdisciplinary Doctoral Degrees

The College of Arts and Sciences has a strong tradition of interdisciplinary studies at both the baccalaureate and doctoral levels.

The Master of Arts in Liberal Studies degree continues the tradition of interdisciplinary work in the college at the intermediate level between baccalaureate and doctoral work. In a few cases, students completing this degree may find the transition to doctoral work as the appropriate next step. However, students should recognize that the degree is not designed to provide students in the program with specific subject skills usually associated with targeted career objectives in traditional research areas.

Students interested in coordinating their M.A. in Liberal Studies coursework with future doctoral work at UMKC are strongly encouraged to make this intent known at the outset of their work. Without initial planning conducted with a committee of doctoral faculty, a student's master's coursework may not be appropriate to later doctoral studies.

Student Learning Outcomes

MALS Student Learning Outcomes

1. Students will be able to identify and articulate scholarly problems and questions based on evidence and approaches from more than one disciplinary area at an advanced level.
2. Students will be able to gather and organize the primary source materials and raw data needed to answer these questions at an advanced level.
3. Students will be able to analyze relevant primary source materials and raw data to create a coherent answer to a scholarly problem or question at an advanced level.
4. Students will be able to critically appraise scholarly conversations in multiple fields, create a coherent interpretation, and take a critical position in these debates.
5. Students will be able to effectively communicate, at an advanced level, the results of their work via either expository prose or a creative work to an audience that does not specialize in their area of study or share their disciplinary perspective.

Department of Mathematics and Statistics

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), Room 206
5120 Rockhill Road
(816) 235-**1641**
math@umkc.edu
http://cas.umkc.edu/math

Mailing Address
University of Missouri-Kansas City
Department of Mathematics and Statistics
HH 206
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Jie Chen

Emeriti Faculty:
George Phillip Barker, Larry Q. Eifler, James M. Foran, James H. Gillilan, Shirley A. Hill, Thomas P. Kezlan, Paul W. Liebnitz Jr., Bennie J. Pearson, Elbert M. Pirtle Jr., Bruce R. Wenner

Professors:
Jie Chen, Kamel Rekab, Noah H. Rhee, Yong Zeng

Associate Professors:
Eric Hall, Hristo Voulov, Liana Sega

Associate Teaching Professor:
Richard Delaware

Assistant Professors:
Xianping Li, Naveen Vaidya, Majid Bani-Yaghoub, David Spade

Assistant Teaching Professor:
William Kalahurka

Lecturers:
Stephanie Van Rhein, Brent Wilson

Department Description

The Department of Mathematics and Statistics (http://cas.umkc.edu/math) offers coursework leading to the Bachelor of Arts and Bachelor of Science degrees in Mathematics. At the graduate level, the department offers a Master of Science degree in Mathematics and a Master of Science degree in Statistics, and participates in the UMKC School of Graduate Studies Interdisciplinary Ph.D. program. Qualified students can select Mathematics as the coordinating unit or a co-discipline when applying for admission or preparing their plans of study. See the School of Graduate Studies (p. 523) section in the Graduate Catalog for more information about the Ph.D. program.

These programs are designed to develop the student's own knowledge of mathematics or statistics, and to provide the tools and understanding necessary for the study of other scientific and quantitative fields.

The Department of Mathematics and Statistics has an institutional membership in the American Mathematical Society.

Advising System

Advising is on an individual basis with senior mathematics faculty members. Appointments for advising may be made by contacting the department, the undergraduate advisor, the principal graduate advisor, or the interdisciplinary Ph.D. coordinator.

Library Resources

In addition to the Miller Nichols Library, the department has full access to the holdings and services of the Linda Hall Library of Science and Technology (http://www.lindahall.org), a privately endowed institution of international prominence. The Linda Hall Library subscribes to more than 700 mathematics journals and maintains a large and growing collection of mathematics books.

Faculty

Majid Bani-Yaghoub[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bani); assistant professor of mathematics; Ph.D. (Carleton University, Canada).

Jie Chen[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=chen); chair, department of mathematics and statistics, professor of statistics; B.S. (Chongqing University, China); M.S. (University of Akron); Ph.D. (Bowling Green State University).

Richard Delaware[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=delaware); associate teaching professor of mathematics; B.S. (Santa Clara University); M.A. (University of Kansas); Ph.D. (University of Missouri - Kansas City).

Eric J. Hall[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hall); associate professor of mathematics; B.A. (Carleton College); Ph.D. (University of Michigan).

William Kalahurka Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kalahurka); assistant teaching professor of mathematics; Ph.D. (University of Texas at Austin).

Xianping Li[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=li); assistant professor of mathematics; Ph.D. (University of Kansas).

Kamel Rekab[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rekab); professor of statistics; M.S. (Stanford University); Ph.D. (University of Michigan).

Noah H. Rhee[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rhee); professor of mathematics; B.S. (Seoul National University, South Korea); Ph.D. (Michigan State University).

Liana Sega[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sega); associate professor of mathematics; B.S. (University of Bucharest, Romania); Ph.D. (Purdue University).

David Spade[2,3;] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=spade); assistant professor of statistics; Ph.D. (Ohio State University).

Naveen Vaidya[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vaidya); assistant professor of mathematics; Ph.D. (York University, Canada).

Stephanie Van Rhein> Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=van%20rhein); lecturer in mathematics; B.S., M.S. (Missouri University of Science and Technology).

Hristo D. Voulov[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=voulov); associate professor of mathematics; M.S., Ph.D. (Sofia University, Bulgaria).

Brent Wilson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wilson); lecturer in mathematics; M.S. (University of Missouri-Kansas City)

Yong Zeng[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=zeng); associate professor of statistics; B.S. (Fudan University, China); M.S. (University of Georgia); Ph.D. (University of Wisconsin - Madison).

1 Associate or Adjunct Graduate Faculty
2 Members of UMKC Graduate Faculty
3 Members of UMKC Doctoral Faculty
4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts in Mathematics and Statistics (p. 191)
- Bachelor of Science in Mathematics and Statistics (p. 192)
- Minor in Mathematics (p. 193)
- Teacher Certification in Mathematics (p. 193)

Graduate

Graduate Degrees:

- Master of Science in Mathematics/ Master of Science in Statistics (p. 194)
- Interdisciplinary Ph.D. in Mathematics (p. 195)

Bachelor of Arts in Mathematics and Statistics

Student Learning Outcomes

Students graduating with a B.A. degree in Mathematics and Statistics are expected to:

- Be able to read, write, understand mathematical proofs, and construct mathematical proofs as appropriate.
- Be able to reason with and apply mathematical concepts, principles and methods; analyze and evaluate problems (both theoretical and practical) and plan strategies for their solution.

- Be able to work collaboratively with others on projects requiring mathematical knowledge and input, to function effectively in a professional workplace related to mathematics, or in a graduate program.

Degree Requirements

For a B.A. degree in mathematics, students must satisfy the requirements of the College of Arts and Sciences and of the UMKC General Education Core curriculum, and complete the program described below.

Departmental Requirements

MATH 210	Calculus I (Focus B) [GE]	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
Select a minimum of 21 hours of coursework in mathematics or statistics at the 300 level or above, including the following: [1]		21
MATH 300	Linear Algebra I	
MATH 402	Advanced Analysis I	
MATH 410	Modern Algebra	
or MATH 420	Linear Algebra II	
Total Credits		33

[1] At least four of the courses at the 300 level or above must be completed in the Department of Mathematics and Statistics at UMKC.

[GE] See http://www.umkc.edu/core/courses/

Suggested Plan of Study

Because of the diversity of acceptable programs available, a four-year plan of study is not suggested. Students are cautioned, however, that certain mathematics courses must be taken in the appropriate sequence. Students should consult with a department undergraduate advisor to plan a program of study.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Mathematics and Statistics

Student Learning Outcomes

Students graduating with a B.S. degree in Mathematics and Statistics are expected to:

- Be able to read, write, understand mathematical proofs, and construct mathematical proofs as appropriate.
- Be able to reason with and apply mathematical concepts, principles and methods; analyze and evaluate problems (both theoretical and practical) and plan strategies for their solution.
- Be able to work collaboratively with others on projects requiring mathematical knowledge and input, to function effectively in a professional workplace related to mathematics, or in a graduate program.

Degree Requirements

For a B.S. degree in mathematics, students must satisfy the requirements of The College of Arts and Sciences and of the UMKC General Education Core curriculum, and complete the program described below.

Departmental Requirements

MATH 210	Calculus I (Focus B) [GE]	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4

Select a minimum of 21 hours of coursework in mathematics or statistics at the 300 level or above, including the following: [1]		21
MATH 300	Linear Algebra I	
MATH 402	Advanced Analysis I	
MATH 410	Modern Algebra	
or MATH 420	Linear Algebra II	
MATH 345	Ordinary Differential Equations	
or MATH 406	Partial Differential Equations	
or MATH 430	Numerical Analysis I	
or STAT 436	Introduction To Mathematical Statistics I	
Total Credits		33

1 At least four of the courses at the 300 level or above must be completed in the Department of Mathematics and Statistics at UMKC.

GE See http://www.umkc.edu/core/courses/

Suggested Plan of Study

Because of the diversity of acceptable programs available, a four-year plan of study is not suggested. Students are cautioned, however, that certain mathematics courses must be taken in the appropriate sequence. Students should consult with a department undergraduate advisor to plan a program of study.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Minor in Mathematics

Student Learning Outcomes

Students graduating with a minor degree in Mathematics are expected to:

- Be able to read, write, understand mathematical proofs, and construct mathematical proofs as appropriate.
- Be able to reason with and apply mathematical concepts, principles and methods; analyze and evaluate problems (both theoretical and practical) and plan strategies for their solution.
- Be able to work collaboratively with others on projects requiring mathematical knowledge and input, to function effectively in a professional workplace related to mathematics, or in a graduate program.

Departmental requirements

A minor in mathematics may be obtained by completing a total of 20 hours of mathematics courses at the 200-level or above, including:

MATH 210	Calculus I (Focus B) [GE]	4
MATH 220	Calculus II	4
Three courses at the 300-level or above in the department		12
Total Credits		20

GE See http://www.umkc.edu/core/courses/

Teacher Certification in Mathematics

Student Learning Outcomes

Students graduating with a B.A. or B.S. degree in Mathematics and Statistics are expected to:

- Be able to read, write, understand mathematical proofs, and construct mathematical proofs as appropriate.
- Be able to reason with and apply mathematical concepts, principles and methods; analyze and evaluate problems (both theoretical and practical) and plan strategies for their solution.
- Be able to work collaboratively with others on projects requiring mathematical knowledge and input, to function effectively in a professional workplace related to mathematics, or in a graduate program.

Program Requirements

Certification as a middle school (grades 5-9) or secondary school (grades 9-12) Mathematics teacher in either Kansas or Missouri requires that a student complete specific requirements both in Mathematics and in the School of Education. A separate application for teacher education is required. For further information, consult the School of Education (p. 408) section of this catalog or contact the Education Student Services Office at (816) 235-**2234**.

Master of Science in Mathematics and Master of Science in Statistics

The department offers an M.S. degree in **Mathematics** and an M.S. degree in **Statistics**.The master's program gives the students broad training in basic higher-level mathematics or statistics.

Student Learning Outcomes

Students graduating with an M.S. degree (in either Mathematics or Statistics) are expected to:

- Have a broad understanding of several branches of mathematics and how they are related. Be able to read and/or listen to documents and discussions having mathematical content, with an appropriate level of understanding, and exhibit a high level of mathematical literacy.
- Be able to clearly articulate mathematical information accurately and effectively, using a form, structure and style that suits the purpose, including written and face-to-face presentation.
- Be able to independently acquire further mathematical knowledge without guidance.
- Be prepared for entry into professional schools, doctoral programs, or the job market.

Degree Requirements

At least **30 credit hours** of approved coursework in the department are required. At least 18 credit hours (of the 30 minimum total credits) must be at the 5500 level in the department. Courses numbered below 400 do not carry graduate credit for mathematics and statistics graduate students. Courses numbered at the 400 level will NOT be credited to the master's degree if they were previously taken from UMKC or are equivalent (content wise) to courses previously taken from any other accredited colleges/universities for the undergraduate degree. Independent Reading courses (MATH 490 or MATH 5590 or STAT 5590) are not counted toward the degree unless approved by the department Graduate Program Committee prior to taking the course. (Normally, more than 3 credit hours of Independent Reading will not count toward the master's degree, but in any case the department Graduate Program Committee will make the decision based on the student's petition, which should clearly explain the need of counting such a course toward the master's degree.)

In addition to the minimum 30 credit hours of course work, master's degree seeking students are required to attend five Departmental Graduate Seminars per semester.

Master's degree candidates are required to submit a **Master Plan of Study Form** prior to the completion of 15 credit hours of course work.

In the last semester before graduation, the student will make a presentation on a Master's research project (based on either small scale original research or a research paper chosen from those published in relevant research journals). The presentation will be given in one of the department series of talks to an audience of faculty, students, and outside guests. This talk will be assessed by the Project Advisory Committee.

All master's degree candidates must take **six core courses** (all at the 5500 level) in the selected area.

For the M.S. in Mathematics, those courses are:

MATH 5509	General Algebra I	3
MATH 5513	Real Variables I	3
MATH 5532	Advanced Numerical Analysis I	3
MATH 5510	Complex Variables I	3
MATH 5521	Differential Equations	3
MATH 5545	Mathematical Methods In Science And Engineering	3

For the M.S. in Statistics, those courses are:

STAT 5501	Statistical Design Of Experiments	3
STAT 5537	Mathematical Statistics I	3

STAT 5551	Applied Statistical Analysis	3
STAT 5547	Mathematical Statistics II	3
STAT 5565	Regression Analysis	3
STAT 5572	Multivariate Analysis	3

Students can choose the other four courses from the 400 or 5500 level courses offered by the department. For more details about the courses offered please refer to the departmental Web site (http://cas.umkc.edu/math). (http://cas.umkc.edu/math)

Interdiciplinary Ph.D. in Mathematics

Student Learning Objectives

Students are expected to:

- Have a broad understanding of several branches of mathematics and how they are related. Be able to read and/or listen to documents and discussions having mathematical content, with an appropriate level of understanding, and exhibit a high level of mathematical literacy.
- Be able to clearly articulate mathematical information accurately and effectively, using a form, structure and style that suits the purpose, including written and face-to-face presentation.
- Be able to independently acquire further mathematical knowledge without guidance.
- Be prepared for entry into professional schools, doctoral programs, or the job market.

Degree Requirements

UMKC offers an Interdisciplinary Ph.D. program. Students desiring to study at the doctoral level in mathematics must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific requirements (p. 523) appears in the School of Graduate Studies (p. 480) section of this catalog. For more details visit the department Web site: http://cas.umkc.edu/math.

Medieval and Early Modern Studies

Graduate Certificate in Medieval and Early Modern Studies (MEMS)

The Graduate Certificate in Medieval and Early Modern Studies (MEMS) (p. 195) offers students an interdisciplinary opportunity to focus their studies in early literatures, history, and culture (ca. 500-1500). The certificate not only benefits graduate students pursuing MA, MALS, MFA, and Interdisciplinary Ph.D. degrees in traditional fields, such as Art History, English, History, and Theatre but also provides an opportunity for education professionals to pursue further study in the pre-modern period as professional development and enhancement.

Contact

Dr. Virginia Blanton, Department of English blantonv@umkc.edu (816) 235-2766

Dr. Linda E. Mitchell, Department of History mitchellli@umkc.edu (816)235-2734

Certificate Program Requirements (p. 195)

Graduate Certificate in Medieval and Early Modern Studies

Graduate Certificate in Medieval and Early Modern Studies (MEMS)

The Graduate Certificate in Medieval and Early Modern Studies (MEMS) offers students an interdisciplinary opportunity to focus their studies in early literatures, history, and culture (ca. 500-1500). The certificate not only benefits graduate students pursuing MA, MALS, MFA, and Interdisciplinary Ph.D. degrees in traditional fields, such as Art History, English, History, and Theatre but also provides an opportunity for education professionals to pursue further study in the pre-modern period as professional development and enhancement.

Required Courses		
ENGLISH 5564/HISTORY 5583GR	Medieval Methods & Paleography	3
MALS Capstone Experience or Thesis [1]		3
Electives		
Four three-hour graduate medieval or early modern courses [2]		12
Total Credits		18

1 The Capstone Experience or Thesis could be a written academic thesis or another kind of project, as developed by the student and his/her committee.

2 The four elective courses must be distributed between at least two academic disciplines (e.g. English and History) and must include at least one three-credit medieval course and one three-credit early modern course.

Strongly recommended: Two Years College-level Proficiency in Latin

Admission Process

Applicants must be admitted to UMKC's School of Graduate Studies and by a graduate program in the College of Arts and Sciences. Application materials can be obtained from SGS.

Contact

Dr. Virginia Blanton, Department of English blantonv@umkc.edu (816) 235-2766

Dr. Linda E. Mitchell, Department of History mitchellli@umkc.edu (816)235-2734

List of Courses for the Graduate Certificate in Medieval and Early Modern Studies

Courses in Medieval and Early Modern Studies are found primarily in the departments of the College of Arts and Sciences, but there is also an opportunity to collaborate with faculty members at the Conservatory of Music and Dance. The courses that would fulfill the requirements of the graduate certificate include graduate colloquia focusing on the pre-modern period, undergraduate/graduate hybrid courses (at the 300-400 level for undergrads and 5500 for graduates), special topics courses, directed readings courses with affiliated faculty, and independent studies courses with affiliated faculty. Courses appropriate to the program will be approved on a case-by-case basis.

ART-HIST 5570	Seminar In Renaissance Art	3
ART-HIST 5575	Seminar In Baroque Art	3
ENGLISH 5503	Old English	3
ENGLISH 5512	Chaucer	3
ENGLISH 5513	Renaissance Literature I	3
ENGLISH 5514	Milton	3
ENGLISH 5515	Restoration And Early 18th-Century British Literature	3
ENGLISH 5522	Medieval Literature	3
ENGLISH 5523	Renaissance Literature II	3
ENGLISH 5531	Late 18th-Century British Literature	3
ENGLISH 5533	Histories Of Writing, Reading, And Publishing	3
ENGLISH 5550/5555	Graduate Seminar (where appropriate)	3
ENGLISH 5551	Shakespeare Comedies And Histories	3
ENGLISH 5552	Early English Drama	3
ENGLISH 5561	Shakespeare:Tragedies And Romances	3
ENGLISH 5562	Restoration And 18th- Century Drama	3
ENGLISH 5564/HISTORY 5583GR	Medieval Methods & Paleography	3
ENGLISH 5566CF/FRENCH 5500CF	Courts And Culture In The Middle Ages	3
FRENCH 5512	17th-century French Literature	3
FRENCH 5513	18th-century French Literature	3
FRENCH 5514	Medieval Literature	3
FRENCH 5517	16th-century French Literature	3
FRENCH 5520	Non-Dramatic 17th-century French Literature	3
FRENCH 5540	Medieval Romance	3
FRENCH 5544	Renaissance Poetry	3
FRENCH 5545	Epistolarity and the Novel	3
FRENCH 5546	17th-century French Drama	3
FRENCH 5552	Medieval Poetry	3
FRENCH 5554	The Intellectual Origins of the French Revolution	3
HISTORY 5502	America,1000-1763: The Formative Era	3
HISTORY 5506A/RELIG-ST 5506	History of Christianity to Middle Ages	3
HISTORY 5507A/RELIG-ST 5507	The History of Christianity from the Middle Ages to the Present	3

HISTORY 5511/5512	Medieval Civilization I	3
HISTORY 5512A	Medieval Women & Children	3
HISTORY 5512B	The Black Death And Late Medieval Society	3
HISTORY 5513	Renaissance	3
HISTORY 5514	Reformation	3
HISTORY 5515B	17Th And 18Th Century European History	3
HISTORY 5525R	European Criminal Justice History, 500-1900	3
HISTORY 5526R	The Scientific Revolution 1500-1700	3
HISTORY 5528B	Women & Medicine:Patients & Practitioners From Antiquity-Present	3
HISTORY 5531	Medieval England, 1066 to 1485	3
HISTORY 5532	Tudor-England, 1485-1688	3
HISTORY 5544	Islam & the Arabs: The Formative Period	3
HISTORY 5562J	Japanese Civilization	3
HISTORY 5576R	Medieval Jewish History	3
HISTORY 558X	Colloquia in History (when appropriate)	
RELIG-ST 5502	Religion & Colonialism in Latin America	3
SPANISH 5516	Medieval Spanish Literature	3
SPANISH 5519/5520	Federico Garcia Lorca	3
SPANISH 5527	Pre-Columbian and Spanish Colonial Literature	3
SPANISH 5533	Cervantes' Exemplary Novels	3
SPANISH 5534	The Picaresque Novel	3
THEATRE 5512R	History Of The English Stage I	3
CONSVTY 5547	Opera History	3
CONSVTY 5554	Music of the Medieval Era	3
CONSVTY 5555	Music Of The Renaissance	3
CONSVTY 5556	Music of the Baroque Era	3
CONSVTY 5557	Music of the Classical Era	3

Military Science

5322 Rockhill Road
(816) 235-**1152**
armyrotc@umkc.edu

Mailing Address
University of Missouri-Kansas City
Department of Military Science
5100 Rockhill Road
Kansas City, MO 64110-2499

Assistant Professors:
Lt. Col. (USAR) Larry G. Chipman; Lt. Col. (USAR) Mark W. Lenneville; Lt. Col. (USAR) Gerald R. Sewell; Lt. Col. (USAR) Kevin Winn; Master Sgt. (USAR) William K. Quinley; Sgt. 1st Class (USAR) Pamela Morgan

Program Description

The Army Reserve Officers Training Corps provides college-trained officers for the U.S. Army and Army Reserve. With the exception of a five-week paid summer camp, all instruction is presented on campus. Various field training exercises are conducted to further enrich students' leadership skills.

A commission as a second lieutenant in the U.S. Army, Army Reserve or National Guard is awarded to individuals who have successfully completed the ROTC program and obtained a baccalaureate degree from UMKC. Currently, college graduates who are commissioned through ROTC are placed on either active duty, the reserves or National Guard duty, depending on their desires and on the needs of the service at the time of graduation. The length and type of obligation will depend on the scholarship awarded.

Financial Assistance

Financial assistance is available through the U.S. Army Scholarship Program. Two-, three- and four-year scholarships are awarded each year to selected students who are enrolled or will enroll in the Army ROTC program. The scholarships provide payment of tuition, fees, textbooks and a monthly

tax-free payment of $200 for the duration of the scholarship, not to exceed 10 months for each year of the scholarship. These scholarships are available for both undergraduate and graduate students. Non-scholarship contracted cadets in the advanced portion of ROTC receive $200 each month, not to exceed 10 months per year for two years. Students are furnished free textbooks for military science classes.

The Simultaneous Membership Program (SMP) allows students to be a member of a National Guard or Reserve unit while enrolled in ROTC. Advanced course SMP students receive E5 pay, plus $200 per month from ROTC, plus any Active Duty GI Bill entitlement.

Curriculum

All students are eligible to take Military Science 100- and 200-level courses without any military obligation. However, Military Science 300- and 400-level courses are reserved for students who have a signed contract with ROTC to become an officer upon graduation.

Undergraduate

Undergraduate Program:

- Two-Year Instruction (p. 198)

Two-Year Instruction

ROTC instruction usually is presented over the four years of traditional full-time study. This also allows commissioning at the same time graduation requirements are met. However, a two-year program is available for students who were unable to take the first two years of instruction and want to earn a commission.

PACE/Program for Adult College Education

Scofield Hall (http://www.umkc.edu/virtualtour/scofield-hall.asp), Room 104
711 E. 51st Street
(816) 235-**1588**
Fax: (816) 235-**5760**
http://cas.umkc.edu/pace

Mailing Address
University of Missouri-Kansas City
Program for Adult College Education
SH 104
5100 Rockhill Road
Kansas City, MO 64110-2499

Director:
Reginald Bassa Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bassa)

Program Description

The Program for Adult College Education (PACE) provides an alternative for students who have difficulty pursuing a bachelor's degree due to employment, family responsibilities or other obligations. PACE provides nontraditional course offerings and comprehensive student services support; tailored to the needs of adult students. Many PACE courses are presented in blocks, arranged by theme or issue. These courses are offered in a special weeknight, weekend and independent study format. There are also numerous Internet, web-assisted, first and second eight week courses.

PACE Academic Advising

The PACE program takes a highly personalized and comprehensive approach to the needs of nontraditional students. Students will work with a student services coordinator who will assist them from admissions, through the academic process, to graduation. Students can consult the Student Services Coordinator from the PACE Office, on nearly any issue which might impact their academic success. Students wishing to combine PACE coursework with other academic programs and degrees should consult the major field advisor as well as a PACE Student Services Coordinator/Advisor.

Undergraduate

Bachelor of Liberal Arts Degree (B.L.A.) with a Minor

The B.L.A. with a minor is the most popular degree offered through PACE. This degree program allows enhanced flexibility in selection of academic areas of study for students whose aspirations are not served by a traditional major. Research has shown that individuals with the breadth of knowledge and skills provided by a liberal arts education are in demand by employers. The B.L.A. provides:

- Broad knowledge and understanding of the natural sciences, social sciences, arts and humanities.
- Maximum flexibility in course selection.
- Critical thinking and problem-solving abilities.
- Personal satisfaction and self-esteem.
- Multicultural issues awareness.
- Ability to adapt and work as a team.
- Increased awareness of values and ethical questions.
- Interpersonal skills.
- Written and oral communication skills.

The B.L.A. with a minor is designed to allow all the advantages of a liberal arts education while providing students with an academic specialization. Minors earned in conjunction with the B.L.A. are reflected on official transcripts. Typically it is necessary for students pursuing a minor to take a required course outside of the PACE curriculum. However, select academic departments within the College of Arts and Sciences endeavor to offer their Minor requirements through PACE or as regular eveninig/online courses. Generally, 18 to 24 credit hours are required for a Minor. Before embarking on a BLA with a Minor through this program; students should consult with both a PACE and the respective departmental academic advisor. The following minors are recommended in conjunction with PACE course offerings:

- Black Studies
- Chemistry
- Commercial Economics
- Communication Studies
- Criminal Justice and Criminology
- Economics
- English
- Environmental Studies
- Family Studies
- Gerontology
- History
- Political Science
- Psychology
- Sociology
- Spanish
- Studio Art

Bachelor of Arts or Bachelor of Science Majors in Conjunction with PACE

Students can meet many of the B.A./B.S. general degree requirements through the PACE program and, in conjunction with designated disciplines, pursue a major. Degrees associated with an academic unit's evening division or online courses are also recommended for this process. Students should refer to the requisite departmental requirements in the UMKC undergraduate catalog and consult a Department Advisor as well as a PACE Student Services Coordinator or Academic Advisor.

Graduate

Entry into Graduate/Professional Degree Programs and PACE

The PACE Program provides to students the ability to achieve rigorous academic preparation for graduate and professional degree programs. The B.L.A. is recognized as an appropriate degree for a number of graduate/professional programs at UMKC and elsewhere (e.g., Master of Arts in Liberal Studies, Accounting, Law, Education, Public Administration, Business Administration (MBA), Medicine and Health degrees). Many PACE students continue their studies in graduate degree programs.

Department of Philosophy

Cockefair Hall (http://www.umkc.edu/virtualtour/cockefair-hall.asp), Room 222
5121 Rockhill Road
(816) 235-**1331**
Fax: (816) 235-**2819**
philosophy@umkc.edu
http://cas.umkc.edu/philosophy

Mailing Address
University of Missouri-Kansas City
Department of Philosophy
CH 222
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Bruce Bubacz

Professors Emeriti:
Henry R. Frankel, George D. Gale, Jr., Edward Walter

Professors:
Bruce Bubacz (Curators' Distinguished Teaching, School of Law), Clancy Martin, Wayne Vaught (School of Medicine)

Associate Professor:
James Sheppard (architecture, urban planning and design)

Assistant Professor:
Andrew Graham, Susanna Rinard

Undergraduate Advisor:
James Sheppard

Department Description

The Department of Philosophy offers a program of study leading to the bachelor of arts degree in philosophy. Courses are offered that develop critical and analytical skills, acquaint students with the history of philosophy and apply philosophy to issues of living.

Students who major in other disciplines can gain special insight into their majors with a philosophy minor. There is a focused minor on bioethics, targeted at students interested in the medical and health care professions.

Career Implications of the Degree

The dynamism of American economic life guarantees that change will be a constant, especially in employment – most people will change careers several times during their working lives. How can you prepare yourself for the inevitable challenges of your career? The most important traits that will serve you well in the Twenty First century are flexibility and discipline, the capacity to quickly assess and understand new environments, to recognize opportunities and the ability to deploy tools that will guarantee success. The study of philosophy will prepare you for the challenges of this evolving world. Studying philosophy provides you with the ability to read complex materials with care and comprehension, to write with clarity and economy and to express your ideas forcefully and succinctly. If you are interested in honing the skills that will allow you to succeed in any endeavor requiring focused thought, if you recognize that the best way to prepare for the challenging world of our knowledge-based economy is to hone your mind and sharpen your intellect, then philosophy is the major for you.

Advising System

Although all faculty members of the department are available for student advising, the department has an undergraduate advisor to whom questions about the philosophy program should be directed.

Special Services

The Philosophy Department is committed to having a strong student community, and has a very active Honors Society, Phi Sigma Tau. Events include everything from inviting guest speakers, movie nights, reading/discussion groups (both with and without faculty members) to socializing, and are open to anyone interested in philosophy. Students are highly encouraged to be active participants in both Phi Sigma Tau and departmental life in general.

Scholarly Presentations

Many visiting philosophers present scholarly papers to the Philosophy Department during the academic year. In addition, organizations such as the Kansas City Area Philosophical Association, the Central States Philosophical Association and other professional societies occasionally meet in Kansas City. Students are cordially invited to attend these activities.

Faculty

Bruce Bubacz Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bubacz); curators' professor of philosophy and professor of law; B.A. (Ripon College); M.S., Ph.D. (University of Washington-Seattle).

Henry R. Frankel Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=frankel); professor emeritus of philosophy; A.B. (Oberlin College); Ph.D. (Ohio State University).

George D. Gale, Jr.[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gale); Olson professor emertius of philosophy; B.A. (University of Santa Clara); M.A. (San Francisco State University); Ph.D. (University of California-Davis).

Andrew Graham Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=graham); assistant professor of philosophy; B.A. (Acadia University); Ph.D. (Massachusetts Institute of Technology).

Clancy W. Martin[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=martin); chair, department of philosophy; professor of philosophy; B.A. (Baylor University); Ph.D. (University of Texas at Austin).

Susanna Rinard Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rinard); assistant professor of philosophy; B.A. (Stanford University); Ph.D. (Massachusetts Institute of Technology).

James Sheppard[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sheppard); assistant professor of philosophy; B.A. (University of Wisconsin-Eauclaire); M.A. (Michigan State University); Ph.D. (Binghamton University).

Wayne Vaught[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vaught); Dean of Arts & Sciences and professor of philosophy; B.A. (Georgetown College); M.A. (Baylor University); Ph.D. (University of Tennessee).

Edward F. Walter; professor emeritus of philosophy; B.A. (St. John's University); M.A., Ph.D. (New York University).

1 Associate or Adjunct Graduate Faculty
2 Members of UMKC Graduate Faculty
3 Members of UMKC Doctoral Faculty
4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Philosophy (p. 201)
- Minor in Philosophy (p. 202)
- Minor in Bioethics and Medical Humanities (p. 202)

Bachelor of Arts: Philosophy

Student Learning Outcomes

Students graduating with a baccalaureate degree in philosophy will:

- Have an understanding of the central figures and themes in the history of philosophy.
- Possess the critical reasoning skills necessary to effectively analyze and critique abstract concepts and arguments.
- Be able to develop and defend philosophical arguments, both orally and in writing.
- Be able to apply critical reasoning skills in a wide range of career settings.

Degree Requirements

Philosophy majors are required to complete 30 credit hours of philosophy coursework. Required courses include:

PHILOS 210	Introduction to Philosophy	3
PHILOS 222	Foundations Of Logic and Scientific Reasoning	3
PHILOS 310WI	Ancient Philosophy	3
PHILOS 320WI	History of Modern Philosophy	3
PHILOS 321	Ethics	3

No more than nine credit hours of the 30 required hours may be at the 100- or 200-level. To graduate with a major in philosophy, students must pass all courses included in the 30 credit hours required for the degree with a grade of C or higher. This requirement also applies to transfer courses.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Minor Bioethics and Medical Humanities

Requirements for the Minor

Students wishing to complete the interdisciplinary minor in Bioethics and Medical Humanities must complete 18 hours of coursework. Students will be required to take PHILOS 221 or PHILOS 321, one course in the History of Medicine (e.g. HISTORY 412B, HISTORY 428A, HISTORY 428B, OR CLASSICS 391WI) and at least one course in Bioethics (PHILOS 451, PHILOS 452, or PHILOS 453). They must also complete 9 additional elective hours of 300/400 level courses in bioethics and medical humanities from the approved course list or as approved by the program director. Students must receive a C or better in all coursework applied toward the minor. Students can combine a minor in Bioethics and Medical Humanities in conjunction with any other major or as part of the BLA.

PHILOS 221	Contemporary Moral Issues	3
or PHILOS 321	Ethics	
Select one course in the History of Medicine, for example:		3
HISTORY 412B	The Black Death and Late Medieval Society	
HISTORY 428A	History Of The Body	
HISTORY 428B	Gender & Medicine: Patients & Practitioners From Antiquity to Present	
CLASSICS 391WI	Ancient Greek and Roman Medicine	
Select at least one course in Bioethics:		3
PHILOS 451	History and Philosophy of Bioethics	
PHILOS 452	Healthcare Law and Policy	
PHILOS 453	Clinical Ethics and Case Consultation	
300/400 level elective courses in bioethics and medical humanities [1]		9
Total Credits		18

[1] From the approved course list or as approved by the program director.

Minor in Philosophy

Student Learning Outcomes

Students graduating with a minor in philosophy will:

- Have an understanding of the central figures and themes in the history of philosophy.
- Possess the critical reasoning skills necessary to effectively analyze and critique abstract concepts and arguments.
- Be able to develop and defend philosophical arguments, both orally and in writing.
- Be able to apply critical reasoning skills in a wide range of career settings.

Requirements for the Minor

Philosophy minors are required to complete a total of 18 credit hours, including:

PHILOS 210	Introduction to Philosophy	3
or PHILOS 222	Foundations Of Logic and Scientific Reasoning	
PHILOS 310WI	Ancient Philosophy	3
PHILOS 320WI	History of Modern Philosophy	3
Any 300- or 400-level philosophy courses		9
Total Credits		18

Students must achieve a grade of C or better in a course for it to count toward the minor. Students can work with the departmental advisor to tailor focused minors that coordinate with their major.

Department of Physics and Astronomy

Welcome

These catalog pages are here to guide you regarding the central facts of the degree programs offered by the Department of Physics and Astronomy. To learn about the student activities, faculty members, research programs, resources, and culture of the Department of Physics and Astronomy, please visit our Departmental Web Site (http://cas.umkc.edu/physics).

Degree Programs

Undergraduate

The Department of Physics and Astronomy offers programs of study leading to the Bachelor of Arts (BA) and Bachelor of Science (BS). The Physics BS degree may be taken with an Emphasis in Astronomy. Through coordination with the School of Computing and Engineering, a program of study can be designed for motivated students that results in a Physics BS and an Electrical & Computer Engineering BS double degree within five years. The department also offers minors in Physics or Astronomy and provides courses for students in the School of Education to meet the requirements for Teacher Certification in Physics.

Graduate

The Department of Physics and Astronomy offers a Master of Science (MS) degree in Physics with thesis and non-thesis options through the College of Arts and Sciences. The Department of Physics is an academic discipline that is eligible for full participation in UMKC's Interdisciplinary Ph.D. (IPhD) program. Qualified students may select Physics as their coordinating unit or co-discipline when applying for admission or preparing their IPhD plan of study. (Visit the School of Graduate Studies (Catalog (p. 480), Web (http://sgs.umkc.edu)) for details about the IPhD program.)

Student Support

Advising System

Students who wish to major or minor in Physics should seek the advice of the undergraduate advisor, Professor Fred Leibsle (leibslef@umkc.edu).

Students who wish to minor in Astronomy or pursue the Physics BS with an Emphasis in Astronomy should seek the advice of the undergraduate advisor for astronomy, Professor Dan McIntosh (mcintoshdh@umkc.edu).

Students who wish to pursue graduate studies (MS / IPhD) should seek the advice of the graduate advisor, Professor Anthony Caruso (carusoan@umkc.edu).

Tutoring

Tutoring is freely available for undergraduate students taking courses from the department. The tutoring room is #259, Flarsheim Hall. Ask your instructor for the tutoring schedule.

Contact

Electronic

Email: physics-astronomy@umkc.edu
Web: http://cas.umkc.edu/physics
Office: (816) 235-1604
Fax: (816) 235-5221

Mailing Address

University of Missouri-Kansas City
Department of Physics and Astronomy
5100 Rockhill Road
Kansas City, MO 64110-2499

Physical Location

5110 Rockhill Road, Room 257
Robert H. Flarsheim Science and Technology Hall (http://www.umkc.edu/virtualtour/flarsheim-hall.asp)

Faculty

Physics & Astronomy Faculty

Department Chair:
Jerzy M. Wrobel

Undergraduate Advisor (Physics):
Fred M. Leibsle

Undergraduate Advisor (Astronomy):
Daniel H. McIntosh

Graduate Advisor:
Anthony N. Caruso

Curators' Professors:
Wai-Yim Ching, Michael B. Kruger

Professors:
Jerzy M. Wrobel (chair), Da-Ming Zhu

Associate Professors:
Anthony N. Caruso, Fred M. Leibsle, Elizabeth P. Stoddard

Assistant Professors:
Mark Brodwin, Daniel H. McIntosh, Paul M. Rulis

Assistant Teaching Professor:
Robert C. Riggs

Professors Emeriti:
Paul J. Bryant, Richard D. Murphy, Marvin R. Querry (Curators' Professor), George A. Russell (President Emeritus, University of Missouri), John R. Urani

Associate Professors Emeriti:
James R. Beacham, Richard C. Waring

****

James R. Beacham; associate professor emeritus of physics; B.S., M.S., Ph.D. (Purdue University).

Mark Brodwin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brodwin); assistant professor of physics; B.S. (McGill University); M.S., Ph.D. (University of Toronto).

Paul J. Bryant; professor emeritus of physics; B.S. (Rockhurst College); M.S., Ph.D. (St. Louis University).

Anthony Caruso Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=priour); associate professor of physics; B.A. (Bethany College); M.S., Ph.D. (University of Nebraska).

Wai-Yim Ching[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ching); curators' professor of physics; B.S. (University of Hong Kong); M.S., Ph.D. (Louisiana State University).

Y. C. Jerry Jean[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jean); professor of chemistry and physics; B.S. (Taipei Institute of Technology Taiwan); Ph.D. (Marquette University).

Michael B. Kruger[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kruger); chair, department of physics, and curators' professor of physics; B.S. (State University of New York-Stony Brook); Ph.D.(University of California-Berkeley).

Fred M. Leibsle[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=leibsle); associate professor of physics; B.S. (University of Wisconsin); Ph.D. (University of Illinois).

Daniel H. McIntosh[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mcintosh); assistant professor of physics; B.S. (University of California, LA); Ph.D. (University of Arizona).

Richard D. Murphy[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=murphy); professor emeritus of physics; B.A. (University of Colorado); M.A., Ph.D. (University of Minnesota).

Marvin R. Querry; former vice chancellor, academic affairs, and curators' professor emeritus of physics; B.S. (University of Missouri-Kansas City); M.S., Ph.D. (Kansas State University).

Paul Rulis Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rulis); assistant professor of physics; B.S. (Virginia Tech); M.S., Ph.D. (University of Missouri-Kansas City).

George A. Russell; president emeritus, University of Missouri, and professor emeritus of physics; B.S. (Massachusetts Institute of Technology); M.S., Ph.D. (University of Illinois).

Elizabeth P. Stoddard[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stoddard); associate professor of physics; B.A. (William Jewell College); M.S., Ph.D. (Washington University).

John R. Urani Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=urani); professor emeritus of physics; B.S., M.S., Ph.D. (University of Missouri-Columbia).

Richard C. Waring; associate professor emeritus; B.A. (William Jewell College); M.A. (University of Arkansas).

Jerzy Wrobel[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wrobel); professor of physics; M.S., Ph.D. (Wroclaw Technical University).

Da-Ming Zhu[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=zhu); professor of physics; B.S. (University of Science and Technology of China); M.S., Ph.D. (University of Washington).

1 Associate or Adjunct Graduate Faculty
2 Members of UMKC Graduate Faculty
3 Members of UMKC Doctoral Faculty
4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Admissions

There are no special prerequisites for beginning either the Bachelor of Arts (BA) or the Bachelor of Science (BS) degree programs in Physics. High-school physics and a good working knowledge of algebra and arithmetic are desirable for entering the BS program. However, any deficiencies may be overcome by taking the appropriate coursework. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for physics (Professor Fred Leibsle, leibslef@umkc.edu) or the undergraduate advisor for astronomy (Professor Dan McIntosh, mcintoshdh@umkc.edu) before beginning the major.

Students that are interested in pursuing Teacher Certification in Physics should contact the School of Education (Catalog (p. 408), Web (http://education.umkc.edu)) for admissions and advising.

Undergraduate Degrees

- Bachelor of Science: Physics (p. 206)
- Bachelor of Science: Physics with an Emphasis in Astronomy (p. 207)
- Bachelor of Science: Physics and Electrical & Computer Engineering Double Degree (p. 208)
- Bachelor of Arts: Physics (p. 208)
- Physics Minor (p. 209)
- Astronomy Minor (p. 210)
- Teacher Certification in Physics (p. 214)

Career Implications of the Bachelor's Degree in Physics

The BS/BA degree is recommended for students interested in seeking employment in any organization that requires a strong science or technology background. Graduates with a physics degree who enter fields other than science and technology generally find that the reasoning skills and quantitative problem-solving strategies that are developed in a physics program will help their career advancement.

Students that earn a BS degree in Physics are well positioned for continuing their education in graduate school and professional/medical school while those attaining a BS or BA degree in Physics are well positioned for entering the job market in virtually any field of endeavor. There are many career opportunities for holders of either the BS or BA degree in Physics including such possibilities as: researcher in a government/corporate lab, engineer

(electrical, mechanical, etc.), science journalist, technology entrepreneur, financial/actuarial analyst, hardware/software developer, chemist, K-12 educator, materials scientist, meteorologist/seismologist, health practitioner, legal analyst, elected political official, etc.

Graduate

Graduate Degrees:

- Master of Science in Physics (p. 211)
- Interdisciplinary Ph.D. Program in Physics (School of Graduate Studies Catalog Section) (p. 536)

Bachelor of Science: Physics

Description of the Bachelor of Science Program

The Bachelor of Science (BS) degree in Physics is recommended for students interested in seeking employment in industrial, governmental, or private organizations that require a strong scientific background and for those students that are seeking to continue their academic careers in either graduate school or professional/medical school.

Physics advising questions should be directed to Professor Fred Leibsle (leibslef@umkc.edu).

Student Learning Outcomes

Students graduating with a BS degree in Physics will:

- Have a functional knowledge of the basic areas of physics.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Students graduating with a BS degree in Physics will be prepared for entry into professional schools, graduate programs, or the job market for career employment.

Course Requirements for the Physics BS Program

In addition to the below requirements, any other requirements set by The College of Arts and Sciences and The University must be satisfied.

MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	10
PHYSICS 310 & PHYSICS 311	Mechanics I and Mechanics II	6
PHYSICS 330	Methods Of Theoretical Physics I	3
PHYSICS 350	Modern Physics With Engineering Applications	3
PHYSICS 385L & PHYSICS 395L	Physics of Electronics and Computer Interfacing Laboratory	6
PHYSICS 410	Thermal Physics	3
PHYSICS 420	Optics	3
PHYSICS 460 & PHYSICS 461	Electricity And Magnetism I and Electricity And Magnetism II	6
PHYSICS 472	Introduction To Quantum Mechanics	3
PHYSICS 476LW	Advanced Laboratory	3
Total Credits		68

Formulating a Plan of Study

In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for physics (Professor Fred Leibsle, leibslef@umkc.edu) before beginning the major.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science: Emphasis in Astronomy

Description of the Bachelor of Science Program with an Emphasis in Astronomy

The Bachelor of Science (BS) degree in Physics with an Emphasis in Astronomy is recommended for students that are seeking to continue their academic careers in graduate school or for those that are interested in seeking career employment in industrial, governmental, or private organizations that require a strong scientific background.

Astronomy advising questions should be directed to Professor Daniel McIntosh (McIntoshDH@umkc.edu).

Student Learning Outcomes

Students graduating with a BS degree in Physics with an Emphasis in Astronomy will:

- Have a functional knowledge of the basic areas of astronomy, astrophysics, and physics.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Students graduating with a BS degree in Physics with an Emphasis in Astronomy will be prepared for entry into graduate programs or the job market for career employment.

Course Requirements for the Physics BS Program with an Emphasis in Astronomy

In addition to the below requirements, any other requirements set by The College of Arts and Sciences and The University must be satisfied.

COMP-SCI 101	Problem Solving and Programming I	3
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	10
PHYSICS 310 & PHYSICS 311	Mechanics I and Mechanics II	6
PHYSICS 330	Methods Of Theoretical Physics I	3
PHYSICS 350	Modern Physics With Engineering Applications	3
ASTR/PHYSICS 353	Practical Astronomy	3
ASTR/PHYSICS 355	Stellar Astrophysics	3
ASTR/PHYSICS 356	Galaxies	3
PHYSICS 410	Thermal Physics	3
PHYSICS 460 & PHYSICS 461	Electricity And Magnetism I and Electricity And Magnetism II	6
ASTR/PHYSICS 465	Cosmology	3
PHYSICS 472	Introduction To Quantum Mechanics	3

PHYSICS 476LW	Advanced Laboratory	3
or PHYSICS 395L	Computer Interfacing Laboratory	
Total Credits		69

Formulating a Plan of Study

In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for astronomy (Professor Dan McIntosh, mcintoshdh@umkc.edu) before beginning the major.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Physics/Engineering Double Degree

Description of the Physics and Electrical & Computer Engineering Double Degree Program

The combined Bachelor of Science (BS) degree in Physics and BS in Electrical & Computer Engineering five year double degree program is recommended for students interested in seeking employment in industrial, governmental, or private organizations that require a strong theoretical science and applied engineering background and for those students that are seeking to continue their academic careers in either graduate school or professional/medical school.

Physics advising questions should be directed to Professor Fred Leibsle (leibslef@umkc.edu).

Student Learning Outcomes

Students graduating with a BS degree in Physics and a BS degree in Electrical & Computer Engineering will:

- Have a functional knowledge of the basic areas of physics and electrical & computer engineering.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Students graduating with a BS degree in Physics and a BS in Electrical & Computer Engineering will be prepared for entry into professional schools, graduate programs, or the job market for career employment.

Course Requirements for the Physics BS and Electrical & Computer Engineering BS Double Degree Program

Because of the condensed format of the program, students are strongly advised to contact the Physics undergraduate advisor (Prof. Fred Leibsle (leibslef@umkc.edu)) and the Electrical & Computer Engineering undergraduate advisor (p. 325) as early as possible before beginning this program.

Bachelor of Arts: Physics

Description of the Bachelor of Arts Program

The Bachelor of Arts (BA) degree in Physics is recommended for students interested in seeking employment in science, technology, engineering and math (STEM) areas that require a strong scientific and quantitative background. The BA degree offers greater flexibility than either the Physics BS or the Physics/Engineering Double Degree program because it requires fewer credit hours of physics in contrast to the BS.

Physics advising questions should be directed to Professor Fred Leibsle (leibslef@umkc.edu).

Student Learning Outcomes

Students graduating with a BA degree in Physics will:

- Have a functional knowledge of the basic areas of physics.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Students graduating with a BA degree in Physics will be prepared for entry into the high-tech job market.

Course Requirements for the Physics BA Program

In addition to the below requirements, any other requirements set by The College of Arts and Sciences and The University must be satisfied.

The BA program requires a minimum of 31 credit hours of Physics plus 13 credit hours of Mathematics and Chemistry. This is in contrast to 46 credit hours of Physics plus 22 credit hours of Mathematics and Chemistry that are required for the BS.

Courses		
MATH 210	Calculus I	4
MATH 220	Calculus II	4
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
Choose One Introductory Series		8-10
PHYSICS 210 & PHYSICS 220	General Physics I and General Physics II	
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	
Required Upper Division Theory Courses		9
PHYSICS 310	Mechanics I	
PHYSICS 330	Methods Of Theoretical Physics I	
PHYSICS 472	Introduction To Quantum Mechanics	
Required Upper Division Lab Course (Choose one)		3
PHYSICS 385L	Physics of Electronics	
PHYSICS 395L	Computer Interfacing Laboratory	
PHYSICS 476LW	Advanced Laboratory	
Additional Physics elective credits to reach required total of 31 Physics credit hours:		9-11
Restrictions: no more than 10 (of 31) credit hours below the 300 level; no more than 3 credit hours of PHYSICS 490 / PHYSICS 499.		
Total Required Credits		44

Formulating a Plan of Study

In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for physics (Professor Fred Leibsle, leibslef@umkc.edu) before beginning the major.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Physics Minor

Description of the Program

The minor in Physics is designed for students desiring a general background in Physics.

Physics advising questions should be directed to Professor Fred Leibsle (leibslef@umkc.edu).

Student Learning Outcomes

Students graduating with a minor in Physics will:

- Have a functional knowledge of the basic areas of physics.
- Be able to integrate their basic scientific knowledge with critical thinking skills to quantitatively solve physics problems.

Program Requirements

Students majoring in any other discipline in the University may elect to minor in Physics.

The Physics minor requires a minimum of 18 credit hours in Physics courses, with a minimum of 9 credit hours at the 300-400 level. Students must receive grades of C or better in each course. Advising questions regarding the Physics minor should be directed to Professor Fred Leibsle (leibslef@umkc.edu).

Select one of the following:		8-10
PHYSICS 210 & PHYSICS 220	General Physics I and General Physics II	
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	
Any combination of other physics courses with at least 9 credit hours at the 300-400 level and a total of 18 credit hours.		9-10
Total Credits		17-20

Formulating a Plan of Study

In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for physics (Professor Fred Leibsle, leibslef@umkc.edu).

Astronomy Minor

Description of the Program

The minor in Astronomy is designed for students desiring a general background in Astronomy.

Astronomy advising questions should be directed to Professor Daniel McIntosh (McIntoshDH@umkc.edu).

Student Learning Outcomes

Students graduating with a minor in Astronomy will:

- Have a functional knowledge of the basic areas of physics as they apply to astronomical phenomena.
- Be able to integrate their basic scientific knowledge with critical thinking skills to quantitatively solve astrophysical problems.
- Become broadly conversant on key astronomical topics.

Program Requirements

Students majoring in any other discipline (including Physics) in the University may elect to minor in astronomy.

There are two tracks (Track One, Track Two) each requiring a minimum of 18 credit hours in Physics and Astronomy courses, with a minimum of 9 credit hours at the 300-400 level. It is highly recommended that students follow Track One because the upper level courses will be very challenging without the solid foundation obtained in the calculus-based physics courses (PHYSICS 240/PHYSICS 250). Students must receive grades of C or better in each course.

Track One (Recommended)

PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II	10
Select three of the following:		9
PHYSICS 350	Modern Physics With Engineering Applications	
ASTR/PHYSICS 353	Practical Astronomy	
ASTR/PHYSICS 355	Stellar Astrophysics	
ASTR/PHYSICS 356	Galaxies	

ASTR/PHYSICS 465	Cosmology	
Total Credits		19

Track Two (Approval Required)

PHYSICS 210 & PHYSICS 220	General Physics I and General Physics II	8
Select one of the following:		2-3
ASTR/PHYSICS 150	Introduction To Astronomy: Gravity and Motion in the Universe	
ASTR/PHYSICS 153L	Introductory Astronomy Laboratory	
ASTR/PHYSICS 155	Introduction to Astronomy: Interaction of Light and Matter in the Universe	
Plus all of the following:		9
PHYSICS 350	Modern Physics With Engineering Applications	
ASTR/PHYSICS 353	Practical Astronomy	
ASTR/PHYSICS 356	Galaxies	
Total Credits		19-20

Formulating a Plan of Study

In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for astronomy (Professor Dan McIntosh (McIntoshDH@umkc.edu).

Master of Science: Physics

Description of the Master of Science in Physics Program

Degree Options

The Master of Science (MS) degree in Physics may be earned by fulfilling the requirements for the MS with thesis or the MS without thesis. A full-time graduate student seeking the MS degree in physics is expected to take the thesis option and is required for Graduate Teaching Assistants (GTAs). The without-thesis option is designed specifically for part-time students who already have career employment.

Career Implications

The career implications for students with an MS degree in Physics and seeking employment are similar to those with a BS degree in Physics, except that they will have a more advanced standing and will be recognized as having more experience in science/technical activities. Similarly, for students that intend to pursue further academic or professional training, the MS degree in Physics will give greater weight to your applications.

Student Categories Targeted

The MS programs in Physics are intended to serve the following groups:

- Those who wish to obtain a MS degree in Physics but do not expect to go further in graduate work.
- Those who intend to work toward a PhD in Physics after obtaining the MS degree in Physics.
- Those who wish to take graduate physics courses as part of a program in some other discipline or for educational or professional reasons.
- Those who wish to obtain an Interdisciplinary PhD degree from UMKC in two or more academic disciplines, one of which is Physics.

Research Advisor

A student who is entering the graduate program with the objective of earning a MS degree in Physics with a thesis will select or be assigned an advisor. The student-advisor pairing should be made during the first semester, if possible. Together, the student and the advisor will work out the complete program of study for the MS degree in Physics.

Departmental Examination

All graduate students in physics who have completed more than 6 graduate credit hours must take the written departmental examination (p. 212) that is offered each January.

Graduate Advising

Graduate student advising questions should be directed to Professor Anthony Caruso (carusoan@umkc.edu), Flarsheim Hall 250H, (816) 235-2505.

Admission to the Master of Science in Physics Program

Admissions Requirements

To be admitted to the graduate program, an undergraduate major in physics is not required, and deficiencies in completed coursework may be overcome by taking additional undergraduate-level courses for graduate credit. Applicants are encouraged to take both the Graduate Record Examination (GRE) aptitude test and physics test. International students must take the Test of English as a Foreign Language (TOEFL). Admission will be based on academic record and other information such as letters of reference, GRE score, and a personal interview.

Scholarships, Fellowships, and Assistantships

Financial support is available through fellowships, teaching assistantships, research assistantships or hourly student wages.

Students wishing to be considered for an assistantship must so specify in their letters and application forms.

Student Learning Outcomes

Students graduating with an MS degree in Physics will:

- Have an advanced knowledge of the basic areas of physics.
- Be able to integrate their knowledge with critical thinking skills in order to become quantitative problem solvers.
- Be able to clearly articulate scientific information, both orally and in writing.
- Be able to effectively use the scientific literature.

Students graduating with an MS degree in Physics will be prepared for entry into professional schools, graduate programs, or the job market for career employment.

Program Requirements

General Regulations for all MS Degree Seeking Students

1. All graduate students must maintain a grade-point average of 3.0 (A = 4.0).
2. There are no secondary language requirements as part of the MS degree in Physics.
3. Students must satisfy the general requirements set forth by the School of Graduate Studies.
4. Completion of the written departmental examination (p. 212) passed at the “MS Comprehensive” level.

Additional Requirements Specifically for the MS Degree in Physics With Thesis

1. 30 graduate credit hours with the following constraints:
   a. At least fifteen (15) hours from MS Core Courses;
   b. No more than twelve (12) credit hours of 400-level courses;
   c. At least fifteen (15) hours of MS Elective Courses with no more than six (6) hours from PHYSICS 5599;
2. Maintenance of satisfactory progress toward completion of research project and the associated written thesis.
3. A satisfactory[1] thesis defense with the following constraints:
   a. The thesis defense is administered by the student’s supervisory committee and can be taken only after the student has passed the written departmental examination (p. 212) at the “MS Comprehensive” level.
   b. The defense may be oral, written, or both and it may include the student’s thesis proposal and associated background material.

Additional Requirements Specifically for the MS Degree in Physics Without Thesis

1. 33 graduate credit hours with the following constraints:
   a. At least fifteen (15) credit hours of core MS courses;
   b. No more than twelve (12) credit hours of 400-level courses;
   c. At least six (6) credit hours of 500-level MS Elective courses.

Note: Graduate students should consult with the Department of Physics and Astronomy graduate advisor, Professor Anthony Caruso [(carusoan@umkc.edu), Flarsheim Hall 250H, (816) 235-2505], prior to enrollment.

Written Departmental Examination (a.k.a. MS Comprehensive Exam, PhD Qualifying Exam)

During January of each year, the Department of Physics and Astronomy will administer a written, MS Comprehensive/PhD Qualifying examination of all MS-level physics students and Interdisciplinary PhD students with physics as their primary discipline. The two-part examination will be given during

two sessions (morning and afternoon) of four hours each on the first Saturday after the start of the Spring Semester. Each part of the examination will contain approximately eight questions at varying levels of difficulty (introductory to advanced undergraduate). The following subject areas will be addressed in the given order by the two examination sessions:

1. Mechanics and Electromagnetism.
2. Quantum Mechanics and Thermodynamics.

Students may pass the written examination at the following ascending levels of achievement:

1. “MS Comprehensive” - necessary for the MS degree in physics.
2. “PhD Qualifying” - necessary for invitation to take the comprehensive examination in fulfillment of the Interdisciplinary PhD program requirements.

Students need only pass the written examination once at any given achievement level. But, all graduate students must attempt the exam every year until they pass it at the appropriate level, unless they are granted an exception via a petition to the physics and astronomy faculty.

A maximum of two attempts at each level (MS Comprehensive, PhD Qualifying) will be permitted, and any student who does not attempt the examination when required to do so will be deemed to have failed the examination on that attempt, unless they have been given prior permission to delay taking the exam. Students who are required to take this examination are encouraged to consult with the Department of Physics and Astronomy graduate advisor, Professor Anthony Caruso [(carusoan@umkc.edu), Flarsheim Hall 250H, (816) 235-2505], for detailed information concerning procedures and regulations for the examination.

Course List

MS Core Courses		
PHYSICS 5510	Theoretical Mechanics I	3
PHYSICS 5520	Electromagnetic Theory And Applications I	3
PHYSICS 5530	Quantum Mechanics I	3
PHYSICS 5540	Statistical Physics I	3
PHYSICS 5521	Electromagnetic Theory And Applications II	3
PHYSICS 5531	Quantum Mechanics II	3
MS Elective Courses		
PHYSICS 5500	Methods Of Mathematical Physics I	3
PHYSICS 5501	Methods Of Mathematical Physics II	3
PHYSICS 5511	Theoretical Mechanics II	3
PHYSICS 5535	Optical Properties Of Matter	3
PHYSICS 5541	Statistical Physics II	3
PHYSICS 5550	Atomic And Molecular Structure	3
PHYSICS 5560	Nuclear Physics	3
PHYSICS 5570	Quantum Theory Of Solids I	3
PHYSICS 5590	Topics In Physics	1-3
PHYSICS 5595L	Computer Interfacing Laboratory	3
PHYSICS 5599	Research And Thesis	1-9
PHYSICS 410	Thermal Physics	3
PHYSICS 420	Optics	3
PHYSICS 476LW	Advanced Laboratory	3
PHYSICS 450	Introduction To Solid State Physics	3
PHYSICS 460	Electricity And Magnetism I	3
PHYSICS 461	Electricity And Magnetism II	3
PHYSICS 472	Introduction To Quantum Mechanics	3

[1] ’Satisfactory’ is determined by the student’s committee.

Interdisciplinary Ph.D. Program Regulations

Regulations

The Department of Physics and Astronomy is a full participant in the Interdisciplinary Ph.D. Program. The doctoral studies committee of the department has the primary responsibility for administering the program within the department. The committee consists of all physics doctoral faculty members with an elected committee chairperson.

See the School of Graduate Studies (p. 480) section in this catalog and the departmental graduate brochure for general and discipline-specific regulations for Interdisciplinary Ph.D. study with physics as a coordinating unit discipline or co-discipline.

Teacher Certification in Physics

Description of the Teacher Certification in Physics Program

Certification as a middle school (grades 5-9) or secondary (grades 9-12) Physics teacher in either Kansas or Missouri requires that a student complete specific requirements from the School of Education and take coursework in Biology, Chemistry, Environmental Science, Geology, and Physics.

Students will enter this program through the School of Education. For further information about the program, consult the School of Education section of this catalog (p. 408), visit the School of Education web site (http://education.umkc.edu), or contact the Education Student Services Office at (816) 235-2234.

Department of Political Science

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), Room 213
5120 Rockhill Road
(816) 235-**1326**
Fax: (816) 235-**1117**
pol-sc@umkc.edu
http://cas.umkc.edu/polisci

Mailing Address
University of Missouri-Kansas City
Department of Political Science
Haag Hall 213
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Mona Lyne

Emeriti Faculty:
Robert E. Gamer, Dale A. Neuman, G. Ross Stephens

Curators' Professor:
Max J. Skidmore (Graduate Advisor)

Associate Professors:
Mona Lyne (Chair), Beth Vonnahme

Assistant Professors:
Rebecca Best, Debra Leiter, Greg Vonnahme, Benjamin Woodson

Lecturers:
David Brichoux, Robert Collins, David Sprick

Department Description

The Department of Political Science offers programs of study that lead to the Bachelor of Arts and Master of Arts degrees. The undergraduate major in Political Science equips students with the analytic, writing, and presentation skills to investigate, create and convey knowledge of the political and social environment. After completing two core introductory courses, students have complete flexibility in the substantive emphasis of their coursework. Some students focus on one of the main sub-disciplines of American politics, comparative politics, international relations and political theory, while others take a broad array of courses across these sub-disciplines. The political science minor is completely flexible with regard to substantive emphasis and requires only the completion of 18 credit hours of political science courses.

The Master of Arts degree provides students with analytic, quantitative and presentation skills to critically assess debates and arguments in the political science literature. After completing three core seminars in American politics, comparative politics and international relations, students have considerable flexilibility in developing their program of study. The degree can be completed with a thesis or a non-thesis option.

Undergraduate Admissions

Students planning to major or minor in political science should declare their choice officially by filling out a Declaration of Major form (http://www.umkc.edu/registrar/forms/declaration-of-major.pdf), and consult the Department Chair for a signature and program advice as early as possible.

Career Implications of the Bachelor's Degree

Political science, in addition to serving as an excellent core discipline for a liberal arts education, may also serve as vocational and professional preparation for students with interests in the following areas:

- Law school and legal careers
- Electoral politics
- Government service
- Not-for-profit and public-interest organization employment
- Business and finance
- Teaching and research
- Public and private political research and consulting services
- Electronic and print journalism

Additionally, before they take a regular job or go to graduate or professional school, many of our graduates have gone into the Peace Corps, Teach for America or other temporary - but exciting - service organizations.

Department Activities

Advising

Initially, students are assigned advisors from the faculty in the department based on last name. However, students who wish to choose a specific advisor from the department may do so by notifying the Chair. A faculty member other than the chair serves as principal graduate advisor.

Honor Society

UMKC has an active chapter of Pi Sigma Alpha, the national political science honor society. Each year Pi Sigma Alpha seeks to recognize the best students in political science in order to -- according to its national constitution -- "stimulate productive scholarship and intelligent interest in the subject of government." The local Pi Sigma Alpha chapter regularly presents films and speakers, organizes an annual picnic and sponsors the department monthly informal discussion group known as the Lunch Bunch. Open to all students, the Lunch Bunch provides an informal environment for enjoying a pizza lunch and discussing current events among faculty and students.

Internships and Study Abroad

The department has an active internship program. Information on local, regional, national and international programs of interest to undergraduates in political science is posted on departmental bulletin boards and is available from faculty members. Credit is given for successful completion of internship programs approved by the department. Further information regarding internship opportunities and requrements can be found at http://cas.umkc.edu/politicalscience/internships.asp.

UMKC has a large study abroad program, and the department strongly encourages students to participate in approved programs. Credit toward the degree can be earned for approved courses and competitive scholarships are available. For more information see http://www.umkc.edu/international/default.aspx.

Research

Students are encouraged to participate in faculty research and/or to develop their own research project in conjunction with the undergraduate research program, UMKC SEARCH (http://www.umkc.edu/searchsite/). Faculty invitation is required to assist with faculty research and course credit is available. Students who wish to develop their own research project should select a faculty mentor and develop a proposal in conjunction with the mentor. Successful proposals can receive up to $1250 to support student independent research through SEARCH.

Independent Study

Independent study in the form of tutorials is available in two courses: POL-SCI 497 and POL-SCI 498 (depending on student qualifications). In either case, without exception, the student must propose a topic for study, have the approval of the advisor and have the written consent of the instructor with whom the tutorial is to be taken before registration for the course. UMKC Honors Program participants may take any course in the department for honors credit by making special arrangements with the instructor at the beginning of the semester.

Political Science Scholarships

The department awards five scholarships each year to outstanding sophomores and juniors. The Ruth L. Gant Memorial Scholarship, the Cornelius Roach Scholarship, the Randall L. Miller Scholarship, the Dan Bishop Scholarship, and the David N. Atkinson Scholarship in Political Science are awarded specifically to political science majors and can provide from $500 to $3-4000 to exceptional students. The department announces the competition and the process for application every year in the spring. Political Science students are also elligible for College of Arts and Sciences general scholarships, and students are encouraged to apply. The department has historically had considerable success in winning general College scholarships.

Faculty

Rebecca Best[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=best);assistant professor of political science; B.A. (East Carolina University); M.A., Ph.D. (University of North Carolina - Chapel Hill).

Robert Collins Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=collins); part time lecturer; B.A. (University of Missouri - Kansas City); M.A. (University of Missouri - Kansas City); M.U.P. (University of Michigan - Ann Arbor).

Robert K. Evanson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=evanson); associate professor emeritus of political science; B.A. (University of Illinois-Urbana); M.A., Ph.D. (University of Wisconsin-Madison).

Robert E. Gamer[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gamer); professor emeritus of political science; B.A. (Monmouth College); Ph.D. (Brown University).

Debra Leiter[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=leiter); assistant professor of political science; B.A. (University of California - San Diego); M.A., Ph.D. (University of California - Davis).

Mona Lyne[2,3]Contact Information; chair and associate professor of political science; B.S. (University of California - Berkeley); M.A. (Monterey Institute of International Studies); Ph.D. (University of California - San Diego).

Dale Allen Neuman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=neuman); professor emeritus of political science; A.B. (Kenyon College); Ph.D. (Northwestern University).

Max J. Skidmore[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=skidmore); curators' professor of political science; B.S., B.S. Ed. (Southwest Missouri State); M.Ed. (University of Missouri-Columbia); Ph.D. (University of Minnesota).

Ross Stephens; professor emeritus of political science; B.A. (Park College); M.S., Ph.D. (University of Wisconsin-Madison).

Elizabeth Vonnahme[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vonnahme); associate professor of political science; B.A. (Angelo State University); M.A., Ph.D. (Rice University).

Greg Vonnahme[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vonnahme); assistant professor of political science; B.S. (University of Iowa); M.A., Ph.D. (Rice University).

Benjamin Woodson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=woodson); assistant professor of political science; B.S. (Indiana University); M.A., Ph.D. (Stony Brook University).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Political Science (p. 217)
- Minor in Political Science (p. 218)
- Teacher Certification in Social Studies (p. 220)

Graduate

Graduate Degrees:

- Master of Arts: Political Science (p. 219)
- Interdisciplinary Ph.D. (p. 220)

Bachelor of Arts: Political Science

Student Learning Outcomes

By the time a student completes the Program of Study in Political Science s/he should be able to:

1. Demonstrate knowledge of American and comparative government.

2. Demonstrate knowledge of key debates in political science.

3. Demonstrate competency in political analysis.

4. Demonstrate competency in analyzing a key theme in depth.

5. Demonstrate effective communication.

Degree Requirements

The department requirement for a major is 30 hours of political science credit. Students must achieve a GPA of at least 2.0 in political science and no credit will be given for courses in which the grade is below C-.

At least 21 hours of political science coursework must be at the 300- to 400- level, and at least 12 hours must be earned at UMKC. Students transferring from other institutions should check as soon as possible to determine which of their credits will transfer as 300- to 400-level political science courses.

Required Courses (9 hours)

Students must take the following political science courses:

POL-SCI 210	American Government	3
POL-SCI 220	Introduction To Comparative Politics	3
POL-SCI 492WI	Senior Seminar (Capstone)	3

Remaining Coursework (21 hours)

Political science majors are required to take at least one course in three of the four subfields, which include American Politics, Comparative Politics, International Relations, and Political theory. Twelve additional political science hours must be completed.

American National Politics		
POL-SCI 303	Political Behavior	3
POL-SCI 308	Parties and Interest Groups	3
POL-SCI 309	Public Opinion	3
POL-SCI 313	Politics In The American States	3
POL-SCI 314	Politics of Kansas City Metro	3
POL-SCI 315	Public Policy	3
POL-SCI 318	Political Psychology	3
POL-SCI 319	Campaigns And Elections	3
POL-SCI 326	Racial & Ethnic Politics	3
POL-SCI 343	The Politics Of Social Security	3
POL-SCI 346	Introduction to the Trial Process	3
POL-SCI 348	Constitutional Law: The Federal System	3
POL-SCI 349	Constitutional Law: Civil Liberties	3
POL-SCI 406	Presidential Politics	3
POL-SCI 407	Congressional Politics	3
POL-SCI 408	Judicial Politics	3
POL-SCI 409	Bureaucratic Politics	3

POL-SCI 424	Urban Politics and Community Power Structures	3
POL-SCI 427	Presidential Power: foundations, Growth, Issues	3
POL-SCI 429	Courts And Public Policy	3
POL-SCI 438	Urban Politics	3
Comparative Politics		
POL-SCI 304	Politics Of The Developing Nations	3
POL-SCI 316	Terrorism And Political Violence	3
POL-SCI 355	Politics In Eastern And Central Europe	3
POL-SCI 357	Western European Politics	3
POL-SCI 359	Latin American Politics	3
POL-SCI 365	Comparative Legislatures	3
POL-SCI 369	Politics Of The Middle East	3
POL-SCI 425	Seminar in Comparative Politics	3
International Relations		
POL-SCI 230	International Relations	3
POL-SCI 307	The United Nations: Politics And Economics	3
POL-SCI 336	American Foreign Policy	3
POL-SCI 361	Global Issues in a Changing World	3
POL-SCI 362	Latin America and International Relations	3
POL-SCI 418	International Conflict and Cooperation	3
POL-SCI 451	International Politics In Europe	3
POL-SCI 452	Concepts in International Relations	3
Political Theory		
POL-SCI 301	Western Political Philosophy	3
POL-SCI 341	The Theory Of Democracy	3
POL-SCI 344	Jurisprudence	3
POL-SCI 403	Political Ideology	3
POL-SCI 440	Contemporary Political Thought	3
POL-SCI 442	American Political Thought	3

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Minor in Political Science

Student Learning Outcomes

The Political Science minor is a part of the Liberal Arts curriculum. We provide the tools and information to enable students to critically evaluate their political and social environment. Political Science students should obtain an understanding of the workings of government and politics, and develop skills in critical thinking, analysis and communication.

Requirements

A minor in political science requires the successful completion of 18 hours of coursework within the discipline. At least 9 hours must be at the 300- to 400-level. In addition, at least 9 hours must be earned at UMKC. Only courses in which a grade of C- or better is earned will count towards the minor. It is advisable for students to talk with the department advisor regarding course selection.

Master of Arts: Political Science

Student Learning Outcomes

Students completing the Master of Arts in Political Science should demonstrate:

1. Knowledge of fundamental theories and concepts in political science.

2. Knowledge of key literature in political science.

3. Advanced knowledge of political science research.

4. An ability to utilize knowledge for analysis

5. Effective communication.

Requirements for Graduation

The Master of Arts degree in political science offers study of the major theories, concepts and practices of politics in the United States and throughout the world. The M.A. is designed to serve both as a terminal degree and as preparation for doctoral study at other institutions. In addition, students earning a graduate degree in the UMKC School of Education may take graduate courses in Political Science in fulfillment of their subject area.

To be admitted to the graduate program in political science, an applicant should have had some previous study in the social sciences. An undergraduate degree in political science is recommended but not required. The department normally requires applicants to have earned a 3.0 grade-point average in their last 60 credit hours of undergraduate coursework, as well as in their major field of study.

The application process is competitive. Satisfying minimum criteria does not guarantee admission to the graduate program; students are admitted according to their rank in the applicant pool and the adequacy of departmental resources. Applicants must submit:

1. A completed UMKC application for admission.
2. Official transcripts of all previous college work.
3. Scores from the Graduate Record Examination (General).
4. A letter of application to the principal master’s advisor expressing personal plans and interest in graduate work in political science.
5. Two letters of recommendation from professors or others qualified to assess academic potential.

All application materials should be sent to the UMKC Office of Admissions for transmittal to the Department of Political Science for an admissions decision.

Applicants whose records do not meet the requirements of undergraduate academic performance, or whose application submissions are incomplete, may be admitted as non-regular graduate students, depending on individual circumstances. Only regular graduate students may apply for the M.A. degree. Admission under any circumstances is no guarantee of retention.

Admissions

Graduate students are expected to maintain a high degree of academic excellence. After completion of nine credit hours of coursework in political science at UMKC, the academic performance and status of each student will be reviewed by the faculty and a departmental decision will be made as to retention of the student in the graduate program.

Students whose grade-point averages fall below 3.0 (B) for more than two semesters may be dropped from the program. A 3.0 grade-point average is required for graduation.

Temporary grades of "incomplete" will be granted only rarely by political science faculty, only in extraordinary circumstances beyond the control of the student, and only if there are reasonable expectations that the work can be completed. Except for thesis hours, all grades of incomplete will be automatically converted to F’s after one year.

The faculty of the Department of Political Science views plagiarism and academic dishonesty as inexcusable. Any student found guilty of these will be dropped from the program.

Students also should consult the School of Graduate Studies section in this catalog for general academic regulations that apply to all graduate students at UMKC.

Requirements for Retention

The Master of Arts degree in political science requires the successful completion of either of the following sets of requirements:

- Non-Thesis Option - 33 semester hours of approved coursework.
- Thesis Option - 24 semester hours of approved coursework and 6 hours of thesis (POL-SCI 5599). Students must gain permission to write a thesis. Permission to do so depends on the quality of the thesis proposal, the student's writing skills, and the ability of the Department to supervise the student in the subject area of the proposed thesis. An oral defense of the thesis is required.

All M.A. candidates must successfully complete POL-SCI 5501; POL-SCI 5530; and POL-SCI 5580. With permission of the principal M.A. advisor, students may transfer six credit hours of graduate work from other institutions, and may count no more than six credit hours of pre-approved graduate coursework in other UMKC departments.

Candidates also may take up to six credit hours of 300- or 400-level coursework in political science at UMKC and count them toward the M.A. degree. For a 300- or 400-level course to be accepted for graduate credit, a student must arrange with the instructor in advance to do supplementary work (such as additional reading, writing, and contact hours) and earn at least a B in the course. In addition, the student must not have previously taken an equivalent course at UMKC or elsewhere.

In either the 30-hour thesis option or the 33-hour non-thesis option, no more than six hours of readings, independent study or directed studies credit (other than thesis hours) may be counted toward the requirements for the M.A.

In all cases, students in the M.A. program must take at least 15 hours of graduate-level (5500-level) courses in political science at UMKC in fulfillment of their degree requirements. In addition, University of Missouri rules mandate that students in graduate programs must take at least 60% of their course work at the graduate level. Applied to the M.A. program in political science, this means that students taking the thesis option must complete at least 18 hours at the graduate level, and students in the non-thesis option must complete at least 21 graduate hours. Graduate courses taken at UMKC in political science and other programs, graduate transfer hours, and thesis hours all count toward fulfillment of this requirement.

Students should consult the principal master's advisor in selecting approved courses to assure progress toward completion of the degree and to meet their needs and interests in graduate study.

Interdisciplinary Ph.D.

Program Opportunties

The Department of Political Science participates as a co-discipline in the Interdisciplinary Ph.D. program.

For further information contact the Department of Political Science, (816) 235-1326, or Max Skidmore, Graduate Director, (816) 235-2535 or skidmorem@umkc.edu.

Teacher Certification io Social Studies

Teacher Certification in Social Studies

Certification as a middle school (grades 5-9) or secondary (grades 9-12) social studies teacher in either Kansas or Missouri requires that a student complete specific requirements in History, Political Science, Economics, Geography, Behavioral Sciences and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education (http://education.umkc.edu) section of this catalog or contact the Education Student Services Office at (816) 235-2234.

Pre-Law Program

Scofield 9
711 E. 51st Street
(816) 235-6094
http://cas.umkc.edu/prelaw

Mailing Address
University of Missouri-Kansas City
Pre-Law Program
Scofield 9

5100 Rockhill Road
Kansas City, MO 64110-2499

Program Coordinator:
Carla Oppenheimer, J.D.
oppenheimerc@umkc.edu

UMKC Pre-Law Program

The UMKC Pre-law Program is designed to help you make wise decisions about becoming a lawyer. It provides advice and information concerning the best possible path for each individual student, from the first semester of undergraduate courses to admission into law school.

The first thing to note about joining the Program is that it is not a major. There is no one major that prepares you for law school. In fact, there are over 30 majors at UMKC that a student may choose from and be on track for entrance into law school.

To garner the skills necessary for success, the pre-law student should select a curriculum that hones and develops superior writing skills, along with excellent oral communication, logical reasoning, and critical reading skills.

It is not enough, however, to be prepared for the academic rigors of law school. You'll want to ask yourself the following questions:

- Do you really want to become a lawyer?
- What law schools should you apply to?
- What does it mean to be a lawyer?
- What area of the law do you want to practice in?
- What are the alternative careers available to someone with a law degree?

When you have made the decision to pursue acceptance into law school, you'll need details on how to go about successfully presenting yourself to the admissions committee in your application. The Program provides answers to the following questions:

- What do you need to do to apply to law school?
- What do you need to do to succeed in law school?
- How can you afford law school?

90+ Program and Six-Year Law Scholars

UMKC's School of Law and The College of Arts and Sciences offer the motivated student a faster track to a legal education. While an undergraduate degree is usually a requirement for admission into law school, UMKC offers students the opportunity to start law school after completing as little as 90 undergraduate credit hours. Students then complete their undergraduate degree with law school credits. By overlapping credits, students can shorten the length of time necessary for completing their education by as much as one year.

90+ Participation

A student's first 30 hours at UMKC's School of Law may fulfill as many as 30 credit hours of non-Arts and Sciences electives towards an undergraduate degree. Therefore, if a student completes all of the general education, major, and upper-level requirements, leaving only elective credits to receive an undergraduate degree, the student may apply to the law school at UMKC.

If accepted, the student can start law school without having actually received an undergraduate bachelor's degree. The student will receive the undergraduate degree after earning the requisite amount of law school credits necessary to fulfill the remaining amount of undergraduate elective credits (up to 30 hours).

Any student who is pursuing a degree in The College of Arts and Sciences may participate. The 90+ program does not guarantee admission into UMKC's School of Law. Participants must apply and otherwise qualify for law school admission by having a competitive undergraduate GPA and LSAT score.

Road to Admission

Any interested student should meet early and often with the pre-law advisor. Given the number of requirements that must be satisfied in such a short period of time, potential 90+ students must monitor their progress with great care.

There are a number of necessary tasks to be completed by the student in order to qualify for the 90+ Program:

- The final 30 hours prior to enrolling in UMKC's School of Law must be from courses in UMKC's College of Arts and Sciences.
- Requirements to be completed prior to enrollment at UMKC's School of Law:
  - All general education requirements
  - All major requirements (and those for a minor if student chooses to complete a minor)
  - 36 hours of junior/senior (300/400-level) coursework
- Application for Graduation: After earning approximately 60-75 credit hours, the interested student should apply for graduation in the Arts and Sciences Advising Office (Scofield Room 9). Students should note on the application for graduation that they are 90+ Program candidates. As part of the graduation process, the student must schedule an audit with her/his major/minor advisors after applying for graduation. A general education audit will also be done, requiring the student to meet again with an advisor in the A&S Advising Office. The audit should be completed by the end of the fall semester prior to starting law school.

Students that are able to finish any necessary requirements prior to enrollment at the School of Law are encouraged to create a plan with the pre-law advisor directly after all audits are complete.

- Letter of Interest: After applying for graduation and completing the audit, the student must contact the pre-law advisor to arrange to have a letter sent to UMKC's School of Law stating that there is a plan in place that will allow the student to complete all requirements prior to enrolling in the law school the following fall. The advisor will send the letter to the law school at the end of the semester after all the required course work is completed. This process should be done during the student's last year of undergraduate study.

Six-Year Law Scholars

The Six-Year Law Scholars program allows high-achieving high school students to earn guaranteed admission to UMKC School of Law through the 90+ program described above, but it has a specific application process, admission standards, and a cumulative GPA requirement to remain in the program.

- First-time college freshmen who have a minimum comprehensive ACT score of 28 (or SAT score of 1240 or 1980 on the new chart) and high school GPAs demonstrating success in a demanding curriculum, may apply for admission to this program by completing the general application for admission to UMKC as well as the supplemental application for the Six-Year Law Scholars program. Prior to admission, students will be interviewed by faculty in UMKC's School of Law as part of the review process.
- To participate in this program, students must be selected for the program by the School of Law Admissions Committee. Students will be admitted to the College of Arts & Sciences as undergraduate Pre-Law students, and may choose to major in any undergraduate degree program in the College of Arts & Sciences.
- Six-Year Law Scholars will meet regularly with an advisor to ensure that they can complete their undergraduate requirements prior to early entry into UMKC School of Law.
- Six-Year Law Scholars who maintain a minimum 3.3 UG cumulative GPA may remain in the program and will be automatically accepted to the School of Law without being required to take the LSAT.
- After students have completed 60 credit hours, they will meet with the pre-law advisor to complete a Final Degree Audit, to apply for graduation, and to create a plan of study for the remaining course work. The pre-law advisor will send a letter to the School of Law reflecting the individual student's current status, the plan of study and the target start date.
- After completing at least 90 credit hours and all specific undergraduate degree requirements (including general education, major requirements, and upper level hourly requirements), Six-Year Law Scholars take the remaining elective credit hours for their undergraduate degree in the School of Law during their first year of Law School.
- Upon completion of a Six-Year Law Scholar's final undergraduate semester and as soon as final grades have been posted, the pre-law advisor will verify that the student has completed his or her plan of study and is fully qualified for early entry to the UMKC School of Law.
- To hold their guaranteed seat, students in the Six-Year Law Scholars program must, within thirty days after the pre-law advisor verifies qualification for early entry into the School of Law, (1) notify the School of Law of their intent to enroll in the law school (2) complete the paperwork the School of Law requires at that time, including an update of the character and fitness information in the original application, and (3) pay a required seat deposit.
- Students who wish to take an additional undergraduate year or otherwise defer enrollment in the School of Law may do so if they reach an agreement with the School of Law about the timing and circumstances and pay a seat deposit to hold their place in the entering class. The deposit will be non-refundable, but may be credited to their law school tuition and expenses pursuant to the agreement.
- Once Six-Year Law Scholars begin their course work in the School of Law, they will be classified as professional students. They cannot take courses in A&S and the School of Law simultaneously unless those courses are graduate level and are being counted toward the J.D. degree.
- When the Six-Year Law Scholars have obtained the remaining credit hours in the School of Law to complete the 120 credit hour requirement for their undergraduate degree, they will be awarded their undergraduate degree from the College of Arts & Sciences. If the graduation date has changed from the original application submitted after the completion of 60 credit hours, students must reapply for graduation by the application deadline.
- Students who do not qualify for this selective program or who do not maintain the 3.3 required undergraduate GPA can still apply for the early entry 90+ option, but must take the LSAT. Admission to the School of Law will be based on the application, the LSAT and the undergraduate record and will not be guaranteed.

Department of Psychology

Department Address
Department of Psychology Office
Cherry Hall, Suite 324
5030 Cherry Street
Kansas City, MO 64110-2499
(816) 235-1318 (Phone)
(816) 235-1062 (Fax - please use cover sheet)
Psychology E-Mail

Undergraduate Psychology Advising Office (http://cas.umkc.edu/psychology/undergrad/advising.asp)
Cherry Hall, Room 330
(816) 235-1092 (Phone)
(816) 235-1062 (Fax - please use cover sheet)

Undergraduate Psychology Advising E-mail

For an up-to-date listing of faculty, please visit the Department of Psychology website. (http://cas.umkc.edu/Psychology)

Department Chair:
Jennifer D. Lundgren contact information (http://www.umkc.edu/lookup/search.cfm?LastName=lundgren)

Professors:
Delwyn Catley, Diane L. Filion, Joan McDowd, Tamera B. Murdock

Associate Professors:
Jared M. Bruce, Jennifer D. Lundgren (Chair), Melisa Rempfer, Lisa Terre

Assistant Professors:
Kymberly K. Bennett, Jannette Berkley-Patton, Amanda S. Bruce, Seung-Lark Lim

Department Description

The Department of Psychology is focused on behavioral science contributions to health and healthcare. Our faculty members are national and international leaders in research on areas such as HIV/AIDS, tobacco use, obesity and eating disorders, neuropsychological functioning, safety and violence and community factors in health. We have strong and active collaborations with important community partners such as Saint Luke's Hospital, Mid America Heart Institute, KC Care, University of Kansas Medical Center, Truman Medical Center and the Calvary Community Outreach Network. At the undergraduate level, the department offers a general program of study leading to the bachelor of arts degree in psychology. A psychology minor is available to students majoring in other disciplines. Graduate programs are also offered by the Department of Psychology. See the "Degree Programs" (http://cas.umkc.edu/psychology) link at the Department of Psychology Web site for information on current graduate degree offerings.

Career Implications of the Degree

Psychology is a broad discipline incorporating material from the natural sciences, other social sciences and the humanities. The study of psychology entails an examination of the human condition that is relevant to a wide range of occupations. A psychology major serves as the basis for an excellent liberal arts education and also serves as an excellent introduction to the world of scientific inquiry. Psychology students learn about the important concepts that underlie current scientific thought and they receive training in the application of psychological research methods.

The educational background obtained by a student majoring in psychology will prove useful in a variety of professional settings and will provide adequate preparation for entry-level positions in a variety of fields. Graduates with bachelor's degrees in psychology have established careers in such diverse areas as:

- Business and industry
- Child care
- General healthcare
- Gerontology
- Mental health services
- Probation and parole
- Public relations and marketing
- Research or laboratory assisting
- Services for the developmentally disabled
- Social services

For students interested in pursuing a career in the field of psychology, a psychology major is clearly a logical beginning. There are positions available to job candidates with bachelor's degrees in psychology; however, most professional opportunities in psychology require advanced degrees (i.e., master's, doctorate). Students who want to pursue a career in psychology are advised to prepare for graduate study. The psychology major at UMKC offers a solid educational foundation for students who plan to work toward advanced degrees in the field.

Department of Activities

Honor Society

The department has a chapter of Psi Chi, the national honor society in psychology. Each year Psi Chi presents a variety of educational and social programs. Membership is open to students at both undergraduate and graduate levels. Regular meetings are held throughout the academic year. Please visit the Psi Chi & Psychology club website (http://cas.umkc.edu/psyc/PsiChiPsychClub.asp).

Psychology Club

The department also has a Psychology Club. The members of the Psychology Club join with the members of the Honor Society for educational social programs. Membership is open to students at both undergraduate and graduate level who have an interest in psychology. Regular meetings are held throughout the academic year jointly with PsiChi. Please visit the Psi Chi & Psychology club website.

Bernard Lubin Memorial Speaker Series

This speaker series is sponsored by UMKC's Department of Psychology and is named in memory of Dr. Bernard Lubin, Curators' Professor Emeritus, to honor his contributions and dedication to the field of psychology. To learn about scheduled speaker events, see our Department Website (http://cas.umkc.edu/psyc).

Graduate Psychology Activities Committee

The focus of the Graduate Psychology Activities Committee (GPAC) is to coordinate graduate student and student-faculty social events, enhance communication between the members of various graduate programs in the department, and coordinate educational events to support the professional development of students in the graduate programs. The committee and the events planned are open to graduate students within the Department of Psychology.

Advising System

For Undergraduate Psychology Program information, please contact the Psychology Advising Office at umkcpuga@umkc.edu or (816) 235-**1092**.

For UMKC College of Arts & Sciences general education requirements, please contact the College of Arts & Sciences Advising Office directly at (816) 235-**1148**.

See the Undergraduate Psychology Program Advising website (http://cas.umkc.edu/psychology/undergrad/advising.asp) for more information.

Financial Aid

Financial aid information can be found on the UMKC Financial Aid website at: http://www.sfa.umkc.edu/site2/

Part-time graduate teaching and research assistantship positions may be available to Psychology doctoral students. These opportunities will be discussed with students at the time of their acceptance into the program.

Faculty

For the most current listing, see the Department of Psychology (http://cas.umkc.edu/Psychology) **website.**

Kymberley K. Bennett[2,3]Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Bennett)**;** director, undergraduate psychology program and assistant professor of psychology; B.A. (University of Redlands); Ph.D. (University of Nevada, Reno)

Jannette Berkley-Patton[2,3]Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=berkley)**;** assistant professor of psychology; B.S., M.A., Ph.D.(University of Kansas)

Amanda S. Bruce[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bruce); assistant professor of psychology; B.A. (University of Kansas); M.S., Ph.D. (Pennsylvania State University).

Jared M. Bruce[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bruce); assistant professor of psychology; B.A. (University of Maine); M.S., Ph.D. (Pennsylvania State University).

Carl Calkins[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=calkins); director, UMKC institute for human development and professor of psychology; B.A. (State University of New York); M.A. (Southern Connecticut State College); Ph.D. (Vanderbilt University).

Delwyn Catley[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=catley); professor of psychology; Bachelor of Commerce (University of the Witwatersrand, Johannesburg, South Africa); M.S. (Purdue University); Ph.D. (State University of NY at Stony Brook).

Diane L. Filion[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=filion); associate dean, college of arts and science and professor of psychology; B.A. (Eastern Washington University); M.A., Ph.D. (University of Southern California).

Seng-Lark Lim[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lim); assistant professor of psychology; B.A., M.A. (Korea University); Ph.D. (Indiana University).

Jennifer Lundgren[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lundgren); chair, department of psychology and associate professor of psychology; B.S. (Oklahome State University); M.A., Ph.D. (University at Albany, State University of New York).

Joan M. McDowd[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mcdowd); director, Ph.D. program: experimental health psychology track and professor of psychology; B.A. (Washington University); M.A., Ph.D. (University of Toronto).

Tamera Burton Murdock[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=murdock); professor of psychology; B.A., M.S. (University of Pennsylvania); Ph.D. (University of Delaware).

Melisa Rempfer[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rempfer); director of clinical training, Ph.D. program; clinical psychology (health emphasis) track and associate professor of psychology; B.S. (University of Iowa); M.A., Ph.D. (University of Kansas).

Lisa Terre[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=terre); director of the ma in psychology program and associate professor of psychology and medicine; B.A. (Rutgers University); M.A. (Roosevelt University); Ph.D. (Auburn University).

Retired Faculty

Jim Collins, associate professor emeritus of psychology.

Jay Hewitt, associate professor emeritus of psychology.

Joseph B. Hughey Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hughey); professor emeritus of psychology; B.A., M.A. (Wichita State University); Ph.D. (University of Tennessee).

Charles L. Sheridan, professor emeritus of psychology.

1 Associate or Adjunct Graduate Faculty
2 Members of UMKC Graduate Faculty
3 Members of UMKC Doctoral Faculty
4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Psychology (p. 225)
- Psychology Double Major
- Minor in Psychology (p. 228)

Graduate

Graduate Degrees:

- Master of Arts: Psychology (p. 229)
- Doctor of Philosophy: Clinical Program (Health Emphasis) Track (p. 230)
- Doctor of Philosophy: Experimental Health Psychology Track (p. 233)

Bachelor of Arts: Psychology

Student Learning Outcomes

Students graduating with a B.A. in Psychology will:

1. Demonstrate knowledge of the major theories, concepts, research, and historical trends in psychology and breadth in the following four domains: - biological bases of behavior - developmental changes - learning and cognition - individual differences, personality, psychometrics, and social processes.
2. Understand and apply basic research in psychology, including research design, statistical analysis, and interpretation of results.
3. Be able to effectively approach, consider, and solve problems through clear, logical, critical, and scientific thinking.
4. Apply theories, terms, statistical methods, and empirical findings in psychological science to real-world contexts.
5. Understand and recognize the necessity for ethical behavior in all aspects of the science and practice of psychology.
6. Demonstrate effective written and oral communication skills.
7. Recognize the complexity of human diversity and understand the influence of macro and micro contexts on people’s psychological functioning and development.
8. Identify relevant course work, experiences, and skills that will facilitate entry into the work force, post-baccalaureate education, or both.

Program Requirements

Majors are required to complete a minimum of 31 hours of coursework in psychology. Of the 31 hours of required coursework in psychology, a minimum of 22 hours must be completed at UMKC. The major is comprised of general, core area and elective courses.

General Courses		
PSYCH 210	General Psychology	3
PSYCH 316	Quantitative Methods In Psychology [1]	3
PSYCH 302WI	Experimental Psychology [1]	4
PSYCH 415	History And Systems Of Psychology [1]	3
Core Area and Elective Courses [2]		
Core Area A		
PSYCH 312	Social Psychology	3
or PSYCH 322	Child Psychology	
Core Area B		
PSYCH 323	Theory And Methods Of Personality	3
or PSYCH 433	Abnormal Psychology	
Core Area C		
PSYCH 308	Sensation And Perception	3
or PSYCH 418	Brain and Behavior I	
Core Area D		
Select one of the following:		3
PSYCH 304	Learning	
PSYCH 405	Motivation and Emotion	
PSYCH 407	Cognitive Psychology	
Electives		
Select a minimum of two (300-400 level) elective courses in psychology [3]		6
Total Credits		31

1 PSYCH 316, PSYCH 302WI and PSYCH 415 must be completed at UMKC.

2. The remaining hours comprise a minimum of four core area courses and two 300-400 level elective courses. A minimum of one course must be taken from each core area.

3 See Undergraduate Advising (http://cas.umkc.edu/psychology/undergrad/advising.asp) for a complete list of undergraduate psychology courses that may serve as these electives. A maximum of 3 credit hours for PSYCH 490, may be used toward fulfilling elective requirement.

Music Therapy/Psychology Double Majors

For students double-majoring in Music Therapy and Psychology:

- CONSVTY 260 can fulfill one of the two required psychology elective courses.
- CONSVTY 435 can fulfill either the core area C or D requirement.

Other Requirements

Students may be able to transfer core area courses and/or psychology electives approved by the Department of Psychology. However, a minimum of 22 credit hours must be taken from the Department of Psychology at UMKC. Students wishing to transfer credits to the Undergraduate Psychology Program should contact the Undergraduate Psychology Advising Office at (816) 235-1092 to discuss courses that may be eligible for transfer.

A grade of "C-" or higher must be achieved for any course to apply toward the major in psychology. When you have completed 90 credit hours, contact Arts and Sciences Advising (Scofield Hall, room 9) to conduct a final degree audit. You will then meet with one of the Psychology Undergraduate Advisors to complete a major degree audit (completed at the Undergraduate Psychology Advising Office located at Cherry Hall, Room 330).

Suggested Plan of Study

Before beginning a psychology major or minor, students should meet with a Psychology Advisor as the choice of electives strongly depends on students' educational and career intentions.

In general, students should complete PSYCH 316 and PSYCH 302WI as early as possible. PSYCH 415 is to be taken during the senior year.

For students planning to attend graduate school in psychology, it is also desirable to complete PSYCH 490 well before graduation. Students wishing to take PSYCH 490 must contact a professor who will agree to supervise their work. Together they will discuss the possibility of doing research in an area of mutual interest. Additionally, students must complete a PSYCH 490 application prior to course registration. PSYCH 490 must be taken with a full-time faculty member.

Example Plan of Study

PSYCH 210 must be completed prior to enrollment in upper division (300- or 400-level) psychology courses. The department recommends completing this course as part of the General Education requirements.

Semester 1 of Psychology Major Course Requirements		
PSYCH 316	Quantitative Methods In Psychology	3
One Core Area A or B Course [1]		
Semester 2 of Psychology Major Course Requirements		
PSYCH 302WI	Experimental Psychology	4
One Core Area A or B Course [1]		
Semester 3 of Psychology Major Course Requirements		
Two Core Area C and D Courses [1]		
Semester 4 of Psychology Major Course Requirements		
PSYCH 415	History And Systems Of Psychology	3
Required Psychology Elective 1		
Required Psychology Elective 2		

[1] The plan of study requires a minimum of one course from each of the four Core Areas.

General Advice for Developing a Plan of Study

Note that the Department of Psychology varies course offerings each semester. Not all courses are offered every year. Students with the required prerequisite courses who are interested in a particular elective or core area course should enroll when it is offered.

Do not plan to complete coursework by taking courses during the summer. The department usually offers some courses during the summer term, but doesn't guarantee that all required courses will be offered.

Make sure the pre-requisites for courses are met prior to enrollment. Students who do not meet course pre-requisites will be asked to drop from the course during the first week of the term. At that time alternative courses may no longer be open.

For questions regarding the Undergraduate Psychology Program, or to schedule an appointment with a Psychology Advisor, please contact the Psychology Advising Office at umkcpuga@umkc.edu or (816) 235-1092.

The Undergraduate Psychology Program is designed to provide majors with a base of scientific knowledge in psychology, as well as a broad background in the field for students who want to pursue graduate study.

See Undergraduate Advising (http://cas.umkc.edu/psychology/undergrad/advising.asp) for more information.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Psychology Minor

Student Learning Outcomes

Students graduating with a minor in Psychology will:

1. Demonstrate knowledge of the major theories, concepts, research, and historical trends in psychology and breadth in the following four domains: - biological bases of behavior - developmental changes - learning and cognition - individual differences, personality, psychometrics, and social processes.

2. Understand and apply basic research in psychology, including research design, statistical analysis, and interpretation of results.

3. Be able to effectively approach, consider, and solve problems through clear, logical, critical, and scientific thinking.

4. Apply theories, terms, statistical methods, and empirical findings in psychological science to real-world contexts.

5. Understand and recognize the necessity for ethical behavior in all aspects of the science and practice of psychology.

6. Demonstrate effective written and oral communication skills.

7. Recognize the complexity of human diversity and understand the influence of macro and micro contexts on people's psychological functioning and development.

8. Identify relevant course work, experiences, and skills that will facilitate entry into the work force, post-baccalaureate education, or both.

Program Requirements

Eighteen hours of coursework in psychology are required for a psychology minor with at least 12 of those hours at the upper-division level. Of the 18 hours a minimum of nine hours must be completed at UMKC. Also, six of the 18 hours must be at the 300- or 400-level and selected from courses taught in the Department of Psychology at UMKC. A grade of "C-" or higher must be achieved for any course to apply toward the minor in psychology.

The following are required of all psychology majors and minors:

PSYCH 210	General Psychology	3
PSYCH 302WI	Experimental Psychology [1]	4
PSYCH 316	Quantitative Methods In Psychology [1]	3
PSYCH 415	History And Systems Of Psychology [1]	3

[1] PSYCH 302WI, PSYCH 316 and PSYCH 415 must be completed at UMKC.

Psychology Double Major

Student Learning Outcomes

Students graduating with a double major will:

1. Demonstrate knowledge of the major theories, concepts, research, and historical trends in psychology and breadth in the following four domains: - biological bases of behavior - developmental changes - learning and cognition - individual differences, personality, psychometrics, and social processes.

2. Understand and apply basic research in psychology, including research design, statistical analysis, and interpretation of results.

3. Be able to effectively approach, consider, and solve problems through clear, logical, critical, and scientific thinking.

4. Apply theories, terms, statistical methods, and empirical findings in psychological science to real-world contexts.

5. Understand and recognize the necessity for ethical behavior in all aspects of the science and practice of psychology.

6. Demonstrate effective written and oral communication skills.

7. Recognize the complexity of human diversity and understand the influence of macro and micro contexts on people's psychological functioning and development.

8. Identify relevant course work, experiences, and skills that will facilitate entry into the work force, post-baccalaureate education, or both.

Program Requirements

Conservatory of Music and Dance students in the bachelor of arts in music with a music therapy emphasis program, who also want to major in psychology, may apply up to six hours of courses taken in the Conservatory toward the psychology major. Specifically, CONSVTY 260, can be counted as one of the two required electives; and CONSVTY 435, may fulfill psychology core area C or D (PSYCH 308/PSYCH 418 or PSYCH 304/PSYCH 405/PSYCH 450).

Master of Arts: Psychology

Note. Beginning academic year 2012-2013, The Department of Psychology is no longer accepting new students into the Master of Arts in Psychology program. The information that follows is applicable to students accepted to the program prior to Fall 2012. Students enrolled in the Doctor of Philosophy (PhD) in Psychology degree program are eligible for a Master of Arts in Psychology degree as part of the PhD in Psychology degree program. A detailed list of requirements for obtaining a Master of Arts in Psychology degree as part of the PhD in Psychology degree program can be found in the PhD program handbook.

Program Description

Contact Person:
Cathy Rawlings Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rawlings)

The Master of Arts in Psychology Program prepares students for research careers in academic or community psychology settings. The program involves training in theory, research design and statistics, and the application of principles to real world situations. The program provides advanced training both for recent graduates and for individuals who have been in the work force for a number of years. Although some students subsequently enter doctoral programs and complete Ph.D.s, many immediately accept challenging jobs in the public, private or non-profit sector. Students may complete the program on a full- or part-time basis. However, to ensure the timeliness of training, all program requirements must be completed within five years from admission.

The program is research oriented and provides many opportunities to gain valuable experience in conducting research and includes experimental studies working with human participants in a variety of areas. See faculty interests and on-going projects on the Department of Psychology website. (http://cas.umkc.edu/psychology)

Potential applicants should be aware that the Master of Arts in Psychology program is not designed to prepare students for professional practice as a psychologist. Further, completion of the Master of Arts in Psychology program is not adequate preparation for either the practice of psychology or use of the term “psychologist,” both of which are regulated by state statute. Students interested in the practice of psychology should consider the Clinical Psychology Ph.D. program described under the Department of Psychology listing.

Student Learning Outcomes

1. To provide students with knowledge and skills in the evaluation, conduct, and dissemination of psychological research.
2. To provide students with knowledge of ethical principles and to promote ethical conduct and high professional standards in research and applied situations.
3. To provide students with knowledge and skills working with diverse individuals in professional contexts.

Suggested Plan of Study

The program is designed for students who seek rigorous training in research design and statistical analysis. Acquiring skills in these areas will prepare students for additional graduate training as well as for immediate application in a work setting. Quantitatively skilled professionals are employed in a variety of settings including: university departments such as psychology, marketing, management, education, medical and biological research programs, personnel management programs, government, industry, market research firms, large-scale mental testing corporations, software development companies and consulting firms.

One key component of training is six credit hours of a capstone research project, either research and thesis or directed research program evaluation, in which students will, under the direct supervision of faculty, apply the skills they have learned in the classroom to real-world problems and research questions.

PSYCH 5516	Quant Analysis 1: Regression And Analysis Of Variance	3
PSYCH 5517	Quantitative Analysis II: Advanced Topics In Regression And Mda	3
PSYCH 5530	Addressing Health Disparities through Community-based Participatory Research	3
PSYCH 5538	Development And Evaluation Of Assessment Tools	3
PSYCH 5601	Experimental Methods In Design And Analysis I	3
Take (6) hours of the following:		6
PSYCH 5590	Directed Research	
or PSYCH 5599	Research And Thesis	

Psychology Elective [1]	3
Electives [2]	12
Total Credits	36

1 Psychology electives must be 5500 level or above, unless prior written approval is obtained from your psychology advisor and the course instructor. Documentation of completion of additional work in undergraduate courses must be filed with the department in order to obtain graduate credit. Refer to the MA in Psychology handbook for elective options.

2 Courses at the 5500 level or above from other UMKC departments may be used to fulfill these requirements; however, prior written approval from your psychology advisor is required.

Requirements for Retention

Note. Beginning academic year 2012-2013, The Department of Psychology is no longer accepting new students into the Master of Arts in Psychology program. The information that follows is applicable to students accepted to the program prior to Fall 2012. Students enrolled in the Doctor of Philosophy (PhD) in Psychology degree program are eligible for a Master of Arts in Psychology degree as part of the PhD in Psychology degree program. A detailed list of requirements for obtaining a Master of Arts in Psychology degree as part of the PhD in Psychology degree program can be found in the PhD program handbook.

A detailed list of requirements for retention can be found in the Master of Arts Psychology Degree Program Handbook.

Doctor of Philosophy: Clinical Psychology (Health Emphasis) Track

Contact Person: Cathy Rawlings http://cas.umkc.edu/psychology/GCPhD.asp

Note: The information on the Department of Psychology web pages (link above) supersedes information in this Department of Psychology catalog section, as the catalog is updated only once per year.

The Clinical Psychology (Health Emphasis) Program is a full-time program of graduate study that provides professional education in the science and practice of clinical psychology. Within this broader context, the program also integrates clinical and epidemiological research with the health and life sciences, providing specialized training in clinical health psychology. The program seeks to enhance public health, broadly defined, through rigorous training of students (education mission); provide an accessible resource for the integration of behavioral sciences and health research and healthcare (service mission); develop knowledge and enhance health outcomes through empirical research (research and evaluation mission); and incorporate integrity and respect for human and intellectual diversity in all our activities (human mission). Based on a scientist-practitioner model, the program's clinical training and services are grounded in a commitment to the integration of science and practice. Consistent with the mission of our University to lead in the life and health sciences, our program faculty and students are actively involved in research, communities, and healthcare systems to promote a high quality of life for all.

Note: UMKC also offers a Ph.D. in Counseling Psychology through the School of Education. For information on that program, please see http://education.umkc.edu/CEP.

Admission Criteria

The program is designed for applicants with a prior bachelor's or master's level degree. New students are admitted in fall semester only. Because the program receives applications from many more qualified individuals than can be admitted, admission is competitive (see links to detailed information below). All application materials must be received by *December 5* to be considered for admission the following fall. Visit the Clinical Psychology (Health Emphasis) Track (http://cas.umkc.edu/psychology/GCPhD.asp) web page for current application procedures and links to other helpful application resources.

The following are minimum criteria recommended for admission:

1. A bachelor's degree in Psychology, Counseling, Special Education or other health-related discipline such as Pre-Med or Nursing. Satisfactory completion of prior coursework in Introductory/General Psychology, Experimental Methods/Research Design and Statistics/Quantitative Methods is required. Satisfactory completion of prior coursework in at least two of the following areas is also strongly recommended: Abnormal Psychology, Personality, Biopsychology, Sensation and Perception, Cognitive Psychology, Motivation, Social Psychology.
2. Undergraduate GPA of 3.0 or graduate GPA of 3.5. Alternative criteria may be accepted at the discretion of the admissions committee if there is good reason to believe the regular criteria do not adequately portray the student's potential to do quality work in the program. However, admission to the program is highly competitive, and we seek to admit students with a general history of excellence. A disclosure of the average GPA of students recently admitted to the program can be accessed through the program Web page.
3. Competitive Graduate Record Examination scores from the general test (GRE Math + Verbal greater than 300; Analytical Writing score of at least 4.5). Students whose scores fall below this recommended minimum may present additional evidence of their capacity to do quality doctoral-level work. Such additional evidence will be considered and accepted at the discretion of the Clinical Admissions Committee. A disclosure of the GRE

scores of students recently admitted (http://cas.umkc.edu/psychology/grad/full-disclosure10.asp) to the program can be accessed through the program web page.

4. Demonstrated evidence of interest in clinical health research. The program follows a mentorship model. Therefore, applicants whose research interests are similar to those of the faculty will be given higher consideration. A listing of program faculty interests and research can be accessed through the Department of Psychology People (http://cas.umkc.edu/psychology/People.asp) web page.
5. History of personal conduct consistent with the ability to adhere to high standards of student conduct, as outlined in the UMKC Standard for Student Conduct (p. 828), and professional conduct as outlined by the American Psychological Association (http://www.apa.org) and state licensure boards.

Because clinical and health psychology are empirically-based disciplines, the program emphasizes continuous involvement in research and practice. For this reason, students primarily interested in psychotherapy and clinical or counseling practice without a strong interest in the scientific aspect of the scientist/practitioner model would be better served by other programs.

The program typically accepts four students each year. Applicants are evaluated based on the following dimensions:

1. Academic potential
2. Research potential
3. Interpersonal skills and other indications of potential for clinical work
4. Professional identity and involvement
5. Evidence of high ethical standards

The program follows the American Psychological Association (http://www.apa.org) Guidelines for Graduate School Offers and Acceptances.

Admission Procedure

New students are admitted in fall semester only. Because the program receives applications from many more qualified individuals than can be admitted, admission into the program is highly competitive. A disclosure of relevant data for students recently admitted (http://cas.umkc.edu/psychology/grad/full-disclosure10.asp) to the program can be accessed through the Clinical Psychology (Health Emphasis) Track web page. All application materials must be received by December 5 to be considered for admission in the following fall. Please see the Clinical Psychology (Health Emphasis) Track (http://cas.umkc.edu/psychology/GCPhD_apply.asp) web page for current application procedures (http://cas.umkc.edu/psychology/GCPhD_apply.asp).

The program follows the American Psychological Association (http://www.apa.org) Guidelines for Graduate School Offers and Acceptances.

Student Learning Outcomes

The Clinical Psychology (Health Emphasis) program is organized around the following training goals and student learning outcomes:

Training Goal 1: To provide students with knowledge and skills in the evaluation, conduct, and dissemination of general psychological and clinical health related research

Student Learning outcomes:

1. Students will demonstrate the ability to critically evaluate literature relevant to the science and practice of psychology
2. Student will demonstrate the ability to conduct empirically sound research, including research design and implementation and statistical analysis

Training Goal 2: To provide students with entry-level skill in the delivery of evidence-based psychological and clinical health services

Student Learning outcomes

1. Students will demonstrate the ability to select, administer, and interpret assessment and diagnostic tools in the context of clinical service delivery
2. Students will demonstrate the ability to select, administer, and evaluate evidence-based psychological and clinical health interventions

Training Goal 3: To provide students with knowledge of ethical and professional principles and to promote ethical conduct and high professional standards in research and clinical situations

Student Learning outcomes

1. Student will demonstrate the ability to identify and appropriately respond to ethical issues raised in research contexts
2. Student will demonstrate the ability to identify and appropriately respond to ethical issues raised in clinical contexts

Training Goal 4: To provide students with knowledge and skills in working with diverse groups of individuals in professional contexts

Student Learning outcomes

1. Student will demonstrate the ability to identify the nature and impact of diversity on the administration and interpretation of assessments and the delivery of health services
2. Student will demonstrate the ability to identify the nature and impact of diversity in the conduct of research and its dissemination

Program Requirements

The following represents the program's core curriculum.

First Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
PSYCH 5509	3	PSYCH 5517	3	PSYCH 5650 (optional)[2]	1
PSYCH 5580 or 5632[3, 4]	3	PSYCH 5601	3		
PSYCH 5590 or 5599[1]	1	PSYCH 5510	3		
PSYCH 5516	3	PSYCH 5590 or 5599[1]	1		
PSYCH 5533	3				
	13		**10**		**1**

Second Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
PSYCH 5590 or 5599[1]	2	PSYCH 5580[3]	3	PSYCH 5650 (optional)[2]	1
PSYCH 5631 or 5586[4]	3	PSYCH 5590 or 5599[1]	2		
PSYCH 5538[3]	3	PSYCH 0000 Core Psychology[5]	3		
PSYCH 5650[2]	3	PSYCH 0000 Core Psychology[5]	3		
PSYCH 5580 or 5632[3, 4]	3	PSYCH 5650[2]	3		
	14		**14**		**1**

Third Year

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
PSYCH 0000 Core Psychology[5]	3	PSYCH 5696[6]	2	PSYCH 5650 (optional)[2]	1
PSYCH 5650[2]	1	PSYCH 5650[2]	1		
PSYCH 5696[6]	2	PSYCH 0000 Core Psychology or Special Topics in Health Psychology[5]	3		
PSYCH 5586 or PSYCH 5631[4]	3				
	9		**6**		**1**

Fourth Year

Fall Semester	Credits	Spring Semester	Credits
PSYCH 0000 Core Psychology or PSYCH 5586[5]	3	PSYCH 0000 Core Psychology[5]	3
PSYCH 5699[6]	2	PSYCH 5699[6]	2
PSYCH 5650[2]	1	PSYCH 5650[2]	1
	6		**6**

Fifth Year

Fall Semester	Credits	Spring Semester	Credits
PSYCH 5699[8]	1	PSYCH 5660[7]	1

PSYCH 5660[7]	1	PSYCH 5699[8]	1
	2		**2**

Total Credits: 85

1 Students are required to officially enroll and accumulate 6 hours of research credit over their first 2 years in the program (6 credit hours of graduate level research credit are required to receive the M.A.). If the master's thesis project has been waived or completed, **formal enrollment in directed research is still required.** It is expected that all students will be actively involved in research and evaluated on their research performance every fall and winter semesters. Students who have had the M.A. requirement waived need only take 1 credit hour of research in each semester of the second year. However, students will still need to accumulate the additional 8 research credit hours required over and above the master's thesis requirement to reach the graduate school minimum of 12 research credit hours for the Ph.D.

2 The program requires that students enroll in practicum each regular Fall and Winter semester of the second, third, and fourth years. Students may complete additional clinical hours in summer practicum to improve their competitiveness for internships. Official enrollment is optional, although documentation of supervised hours is required for those to be included.

3 This may be taken during the third year (same semester) instead of the second year.

4 Evidenced Based Clinical Practice and Health Psychology Interventions are both required, however, these courses will offered in alternate years

5 There are 5 core course requirements (see list at the bottom of the table). In some areas (e.g., Developmental) alternative courses may be used to fulfill the requirement.

6 The graduate school requires at least 12 hours of graduate research credit to graduate with a Ph.D. Our program requires a total of 8 research credit hours (pre-dissertation and dissertation) beyond the 6 required for the master's thesis for graduation. You may accumulate these hours in any way you wish as long as you complete the additional 8 hours prior to graduation. However you must first pass comps before enrolling in dissertation units.

7 Due to variable internship start and end dates you may only officially complete you internship after the end of the Spring semester. In these cases an incomplete grade will be given until official completion of the internship. Note that the university generally requires students to be enrolled in the semester that they graduate. However, providing all other program requirements have been completed by the end of the spring semester (such as the dissertation) the DCT will request that summer enrollment be waived for students graduating in the summer. If all other requirements are not completed you will be required to enroll in at least one credit (for example, if you dissertation is not yet defended you will enroll in 1 credit of research for the summer semester).

8 Students who defend their dissertations prior to the 5th year do not register for continuing dissertation hours. Students, fifth year or beyond, who have not successfully defended the dissertation are required to enroll in 1CH of Dissertation each fall and winter semester until it is completed.

Core Psychology

PSYCH 5521	Advanced Social Psychology	3
PSYCH 5507	Cognitive Psychology	3
or PSYCH 5505	Motivation	
PSYCH 5518	Advanced Biopsychology	3
PSYCH 5515	Advanced Systems And History Of Psychology	3
Developmental Requirement, for example:		
PSYCH 5522	Contemporary Issues In Developmental Psychology	
PSYCH 5543	Adult Development And Aging	

Footnotes about the Core Curriculum

Note: A course number of 5580 denotes a "Special Topics" course. If more than one special topics course is offered in a semester, individual courses will be denoted with letters (e.g., 5580A, 5580B).

+ This represents the currently recommended sequencing of courses. Students may be allowed to alter this sequencing, with prior approval of the faculty advisor and DCT. This sequencing is also subject to change based on course availability in a given semester as determined by the program.

Requirement for Retention

A detailed description of program policies and procedures, including the requirements for retention, is available in the student handbook which can be accessed through the Clinical Psychology (Health Emphasis) Track (http://cas.umkc.edu/psychology/GCPhD.asp) web page.

Doctor of Philosophy: Psychology: Experimental Health Psychology Track

Contact Person:

Cathy Rawlings Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rawlings)

http://cas.umkc.edu/psychology/EHPPhD.asp

Note: The information on the Department of Psychology web pages (link above) supersedes information in this Department of Psychology catalog section, as the catalog is updated only once per year.

The mission of the Experimental Health Psychology Track at UMKC is to enhance health outcomes, broadly defined, for individuals and communities. In service of this mission, we offer advanced training in the fundamental areas of experimental psychology, health psychology, and quantitative and methodological approaches for applied psychology. The program emphasizes the development of research skills and empirical investigation of real-world problems in the life and health sciences. Graduates are prepared for careers in academia, allied health, industry, and government agencies.

Experimental Health Psychology at UMKC is a full time program of graduate study. Didactic instruction is integrated with research from the beginning of students' training. Students are paired with a faculty mentor and become part of a lab where they learn how basic research is applied to practical problems and develop the knowledge and skills to carry out original research. These experiences are graded in complexity and designed to foster the development of cumulative knowledge and skill as the student progresses through the program.

Admission Criteria

The program is designed for applicants with a prior bachelor's or master's level degree. The following are minimum criteria recommended for admission:

1. A bachelor's degree in Psychology or related discipline. Satisfactory completion of prior coursework in Introductory/General Psychology, Experimental Methods/Research Design and Statistics/Quantitative Methods is required. Satisfactory completion of prior coursework in at least two of the following areas is also strongly recommended: Biopsychology, Cognitive Psychology, Learning, Motivation, Neuroscience, Sensation and Perception, and Social Psychology.
2. Undergraduate GPA of 3.0 or graduate GPA of 3.5. Alternative criteria may be accepted at the discretion of the admissions committee if there is good reason to believe the regular criteria do not adequately portray the student's potential to do quality work in the program. However, admission to the program is highly competitive, and we seek to admit students with a general history of excellence.
3. Competitive Graduate Record Examination scores from the general test (GRE Math + Verbal greater than 300; Analytical Writing score of at least 4.5). Students whose scores fall below this recommended minimum may present additional evidence of their capacity to do quality doctoral-level work. Such additional evidence will be considered and accepted at the discretion of the Admissions Committee.
4. Demonstrated evidence of interest in health research. The program follows a mentorship model. Therefore, applicants whose research interests are similar to those of the faculty will be given higher consideration. A listing of program faculty interests and research can be accessed through the Department of Psychology (http://cas.umkc.edu/psychology/default.asp) web page.
5. History of personal conduct consistent with the ability to adhere to high standards of student conduct, as outlined in the UMKC Standard for Student Conduct.

A detailed description of program policies and procedures, including the requirements for retention, is available in the student handbook that can be accessed through the Experimental Health Psychology (http://cas.umkc.edu/Psychology/EHPPhD.asp)Track web page.

Admission Procedure

New students are admitted in fall semester only. Because the program receives applications from many more qualified individuals than can be admitted, admission is competitive. All application materials must be received by December 5 to be considered for admission the following fall. Visit the Experimental Health Psychology (http://cas.umkc.edu/Psychology/EHPPhD.asp)Track web page for current application procedures and links to other helpful application resources.

Student Learning Outcomes

Students completing the Experimental Health Psychology Track will demonstrate:

1. Competence in the evaluation, conduct, and dissemination of research to support independent activity at the next level (e.g., post-doctoral research, academic research, applied research),

2. Ethical conduct and high professional standards in research, including sensitivity to issues of diversity,

3. Knowledge of the theoretical and scientific foundations of health psychology, and

4. Understanding of the breadth of scientific psychology and its application to health psychology.

Program Requirements

The following represents the program's core curriculum.

Year I

Fall	Credits	Spring	Credits
PSYCH 5516	3	PSYCH 5517	3
PSYCH 5590	3	PSYCH 5601	3
PSYCH 0000 Psychology Core Course	3	PSYCH 5590	3
	9		**9**

Year II

Fall	Credits	Spring	Credits
PSYCH 5631	3	PSYCH 5580 (Structural Equation Modeling And/Or Hierarchical Modeling)	3
PSYCH 5538	3	PSYCH 0000 Psychology Core Course	3
PSYCH 5599	3	PSYCH 5599	3
		Completion of Master's Degree[1]	
	9		**9**

Year III

Fall	Credits	Spring	Credits	Summer	Credits
PSYCH 0000 Psychology Core Course	3	PSYCH 0000 Psychology Core Course	3	Comprehensive Exam to advance to candidacy	
PSYCH 5696	3	PSYCH 0000 Elective	3		
PSYCH 0000 Elective	3	PSYCH 5696	3		
	9		**9**		**0**

Year IV

Fall	Credits	Spring	Credits
PSYCH 5699[2]	3	PSYCH 5699[2]	3
Post-master's Degree[3]		Post-Master's Degree[3]	
	3		**3**

Total Credits: 60

1 At completion of master's degree: 36 total credits, 12 research credits

2 If students do not defend their dissertation by the end of the 4th year, they must enroll in 1 credit of Dissertation in each succeeding semester until it is completed.

3 Post-master's degree: 24 total credits, 12 research credits

Psychology Core Courses

Select four of the following:		12
PSYCH 5521	Advanced Social Psychology	
PSYCH 5507	Cognitive Psychology	
PSYCH 5518	Advanced Biopsychology	
PSYCH 5515	Advanced Systems And History Of Psychology	
PSYCH 5543	Adult Development And Aging	
Possible Electives		
PSYCH 5533	Psychopathology	
PSYCH 5632	Health Psychology Interventions	
PSYCH 5580	Special Topics (Health Psychology: Community Based Participatory Research)	

Requirements for Retention

A detailed description of program policies and procedures, including the requirements for retention, is available in the student handbook that can be accessed through the Experimental Health Psychology Track (http://cas.umkc.edu/Psychology/EHPPhD.asp) web page.

Religious Studies

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), Room 204
5120 Rockhill Road
(816) 235-**5704** or **5854**
Fax: (816) 235-**5542**
rel-st@umkc.edu
http://cas.umkc.edu/Religious_Studies

Mailing Address
University of Missouri-Kansas City
Center for Religious Studies
Haag Hall 204
5100 Rockhill Road
Kansas City, MO 64110-2499

Program Director:
Dr. Gary L. Ebersole

Professor:
Dr. Gary L. Ebersole (History/Religious Studies)

Associate Professor:
Dr. Jeffrey S. Bennett (Sociology/Anthropology)

Assistant Professors:
Dr. David Freeman (History)
Dr. Christopher Cantwell (History)

Description of Program

The Center for Religious Studies (http://cas.umkc.edu/Religious_Studies) offers an interdisciplinary, cross-cultural and socio-historical approach to the study of religion. The Center is a consortium of several area institutions of higher education that have pooled their resources to participate in the UMKC Interdisciplinary Ph.D. program. Students in religious studies are introduced to the many dimensions of religious belief, practice and expression found in human cultures across time and space.

In addition to graduate courses, the Center offers a number of undergraduate courses on topics such as gender and religion, women and religion, the anthropology of religion, and religion in America. Related courses relevant to the study of religion will be found under the listings of other departments and programs.

Graduate

Graduate Degree:

- Doctoral Program Requirements

School of Social Work

Master of Social Work Program
5030 Cherry Street
(816) 235-**1025**
Fax: (816) 235-**6573**
soc-wk@umkc.edu
http://cas.umkc.edu/socialwork

Mailing Address:
University of Missouri-Kansas City
School of Social Work
5100 Rockhill Road

Kansas City, MO 64110-2499

Interim Chair: Dr. Tom Sandreczki

Director of Field Education: Dr. Elaine Spencer-Carver

Educational Program Director: Dr. Larry Dyer

Rosalyn Bertram, Ph.D., Associate Professor (children, child welfare, youth and families, wraparound and multi-systemic collaborative strengths-based practice, evidence-based practice, program implementation and evaluation, systems of care, research)

Betty Blackmon, J.D., Associate Professor (practice, violence across the life span, human behavior, cultural competency)

J. Larry Dyer, Ph.D., Assistant Teaching Professor (cultural diversity, mental health, practice, substance abuse)

Ile Haggins, MSW, LCSW, Assistant Teaching Professor, Coordinator of Field Education (practice, children and family, cultural diversity, and mental health)

Bob Prue, Ph.D., Assistant Professor (social work research methods, open source and freely available software for social workers, interface of indigenous health and healing supports with mainstream, spirituality and social work, veterans' issues, post-traumatic stress)

Lee Rathbone-McCuan, Ph.D., Professor (social policy and aging, families, international social work)

Patricia Scott, Ph.D., Assistant Teaching Professor (mental health, practice, substance abuse, disabilities)

Elaine Spencer-Carver, Ph.D., Assistant Clinical Professor, Director of Field Education (intimate partner violence, complex trauma, trauma impact on children and families, qualitative research, child welfare)

Department Description

The School of Social Work offers a program of study leading to the master's in social work degree and a professional career in social work. Started in 1999, the MSW program is the result of collaborative efforts by the University of Missouri System, UMKC and many social service agencies in the Kansas City metropolitan area. The MSW program received initial accreditation in May 2003 with reaffirmation of accreditation granted in 2007.

Mission of the School of Social Work

The mission of the School of Social Work is to "Prepare competent, advanced generalist social work practitioners to meet the needs of multicultural diverse populations in a dynamic mid-western metropolitan context; to be culturally proficient, ethical leaders and service providers engaged in knowledge-driven, inter-professional, multi-systemic, community-based practice; who advocate for social and economical justice, enhance human well being, and support individuals' capacity to address their own needs."

Mission-derived goals of the School of Social Work are to:

- Prepare culturally proficient advanced generalist social work leaders and practitioners to provide human services for diverse populations.
- Prepare advanced generalist social work leaders and practitioners to engage in interdisciplinary scientific inquiry, and critical thinking.
- Prepare advanced generalist social work leaders and practitioners to develop and implement multi-systemic, multilevel, evidence-based practices.
- Prepare advanced generalist social workers that understand and identify with the social work profession and are committed to upholding the values and ethics of the profession that serve to guide professional practice.
- Prepare advanced generalist social workers to advocate for social and economic justice through collaboration with multicultural diverse communities.

Vision of the School of Social Work

UMKC School of Social Work will become a model urban, professional school recognized for its partnership within diverse communities to effectively collaborate and sustain a safe, more economically secure, and socially just quality of life.

Career Implications

Why consider an advanced degree in social work? Above all, the degree is flexible and versatile. For example, social workers are employed in public social service agencies, nonprofit organizations, medical settings, schools, community-based clinics and residential settings. The social work perspective looks not only at individual thoughts, feelings and actions, but also at the social environment as a primary arena for opportunities for change. On behalf of the people they serve, social workers have strong interests in social policy and advocacy, as well as social science research and policy and program evaluation.

- Social workers have the right education, experience, and dedication to help people help themselves whenever and wherever they need it.
- Social workers help people in all stages of life, from children to the elderly, and from all situations from adoption to hospice care.
- Professional social workers are the nation's largest providers of mental health services.

- According to the Bureau of Labor Statistics, the need for social workers is expected to grow twice as fast as any other occupation, especially in gerontology, home healthcare, substance abuse, private social service agencies, and school social work (BLS, 2010).

Program Description

The program educates Advanced Generalist Social Work practitioners for professional responsibilities at various levels with complex and dynamic human service organizations. To accommodate working students' schedules, many classes are scheduled for late afternoons, evenings and weekends.

Faculty members and students co-create empowering learning environments through group discussions, role play, experiential occurrences and readings that enable transformational learning.

The practice-oriented curriculum is focused on advanced generalist social work practice in an urban environment. The curriculum provides: theoretically based understanding to assess diverse human behaviors in varied social environments; skills for operating in a multidisciplinary agency and community environment; research methods with practical application to agency practice; and approaches to working with culturally diverse populations.

The full-time, regular MSW program offers a two-year, 60-credit curriculum combining classroom and field experience. For students who already have a B.S.W. degree, the full-time Advanced Standing program includes 36 credits during a spring or summer semester and one full-time year of coursework with a supervised field practicum. Students may attend the part-time program schedule, but must complete the MSW in four years.

The foundation year curriculum includes coursework in generalist social work practice, theory and skills, social policy, human behavior in the social environment, social work research and a generalist field practicum experience in a human service agency approximately 16 hours a week.

The concentration year curriculum focuses on advanced generalist methods within an urban context. The required curriculum includes courses in program evaluation, advance practice methods, and a capstone course (Integration Seminar). Under the guidance of their academic advisor and in light of their career plans, students select four electives with a requirement of at least one elective in Integrative content area and at least one elective in Advanced Methodological approaches to Social Work practice. Finally, a second field practicum for approximately 16 hours a week provides advanced generalist experience and supervision.

Field Practicum

The practicum program uses agencies throughout the metropolitan area to offer experiences at both foundation and advanced levels. Students typically spend approximately two days in the field and are mentored by an MSW practitioner employed by the agency. Students spend a required number of hours in face-to-face contact with clients, in agency meetings, in individual or group supervision, and in the community. In some cases, students who already are social service employees can arrange to complete one year of their field placements at their own agencies. Practicum can also be completed in a student's human service oriented work site, provided the Director of Field Education approves the same.

Admissions

The majority of applicants to MSW programs have a variety of undergraduate degrees. Some people have life or work experience in other fields and are ready for a career change. Others have worked in the human service field and are ready to pursue an MSW degree to advance in their careers.

- Applicants who hold a baccalaureate degree that, preferably, reflects a broad liberal arts base in the social, behavioral, or psychological sciences, or related disciplines, are encouraged to apply. The baccalaureate degree should be from an institution accredited in a manner accepted by UMKC.
- B.S.W. degrees from accredited programs may be considered for the advanced standing program if students have received a B.S.W. degree within the last five years.
- A minimum cumulative GPA of 3.0 is preferred. However, lower GPAs will be considered for provisional admission when combined with volunteer and work experience, or when there are extenuating circumstances.
- GRE is not required.
- **The UMKC application and School of Social Work application are both required. Applicants must provide narratives addressing the following:**
  a. **Statement of Values and Ethics**
     Attach a brief essay (2-5 typewritten, double-spaced pages) in which you address the following: The ***NASW Code of Ethics*** may be found at http://www.socialworkers.org/pubs/code/default.asp
     i Discuss your purpose for pursuing a Master's in Social Work.
     ii Compare and contrast your personal value framework with the ***NASW Code of Ethics'*** values and principles.
     iii In light of the Code of Ethics, what human needs do you hope to address as a professional social worker?
     iv In light of the Code of Ethics, how will you infuse all of the six ethical principles into your future social work practice?
     v Describe a personal life experience that challenged your values and ethics. How did you respond to this challenge?
  b. **Preparation for Professional Training**
     Read the prompts below and provide complete answers including specific examples (2-5 typewritten, double-spaced pages).
     i Please explain any particular difficulties or successes in your undergraduate academic career.
     ii How would you evaluate your academic experience up to this point in time?

iii Identify how you manage personal and professional challenges in your life.

iv What social supports do you have in place (or can you put in place) to assist with managing work, family and academic commitments?

v Identify the areas in which you need further learning and growth.

- **Advanced Standing Only**
  Please provide a 3-5 page typewritten, double-spaced response to the following:
  a. Provide an overview of your field practicum experiences.
  b. Describe lessons learned from your field experiences. Provide specific examples.
  c. How do you think these lessons-learned will affect your future social work field experiences?
  d. In relation to the social work profession, in what areas do you need to further your personal and professional growth?
- **Additional Information**
  a. Use the forms provided to supply three references. Include a person able to judge your potential for social work (a social worker who has supervised you, an employer, or field instructor) and a person able to judge your writing, critical thinking, and academic potential.
  b. While personal interviews are not required, the MSW Admissions Committee may request a meeting with an applicant. Applicants with questions about the program may attend public information sessions, which are scheduled once a month in the Social Work office. See website for details (cas.umkc.edu/socialwork (http://cas.umkc.edu/socialwork)).
  c. The program is inclusive and draws from a diverse applicant pool. Toward this end, program faculty members make regular community presentations to diverse groups. The program works with student organizations representing women, people of color, gay, lesbian, bisexual, and transgender people, international students, and students with disabilities. Individuals from diverse groups are encouraged to apply.
  d. For additional details, please refer to the Student Handbook pdf file at the School of Social Work website: http://cas.umkc.edu/socialwork/pdfs/2012-2013-Student-Handbook.pdf
  e. UMKC University Application for Admission and its application fee are required. In addition you are required to submit all of the School of Social Work application material.
- **Application Checklist**
  Please refer to the following checklist before sending materials:
  a. **Send to the School of Social Work:**
  - Social Work Application for Admission: Online application for both the regular and advanced standing programs is available at http://cas.umkc.edu/socialwork.
  - Statement of Values and Ethics Narrative
  - Preparation for Professional Training Narrative
  - Advanced Standing Narratives (if applicable)
  - Letters of Reference (3): References are submitted with the name of the applicant written across the flap of the envelope.
  - Mailing Address:

    University of Missouri-Kansas City
    School of Social Work
    5053 Cherry Street
    Cherry Hall Room 225
    Kansas City, MO 64110-2499

  1. **Send to UMKC Office of Admissions:**

- All undergraduate and graduate transcripts.[1]
- University Application for Admission: Go to https://www.umkc.edu/apply to begin the online application process.
- Application fee
- **Mailing Address:**
  UMKC Office of Admissions
  120 Administrative Center
  5100 Rockhill Rd, Kansas City
  MO 64110-2499

1 **You must personally request transcripts from previous schools you have attended.** Requests for official transcripts should be made as soon as possible to ensure timely receipt of these documents. In addition, applicants who either currently attend or have attended UMKC must make a new request for transcripts to be reported to the School of Social Work. For transcript assistance, please call (816) 235-1125. Individuals with speech or hearing impairments may call Relay Missouri at (800) 735-2966 (TT) or (866) 735-2460 (voice).

Application Deadlines

Advanced Standing

- October 1 to begin courses in Spring Semester
- February 1 to begin courses in Summer Semester

Regular Program

- March 1 to begin courses in Fall Semester

Note: All completed applications will be reviewed on a first-come, first-served basis

Midwest Student Exchange Program (MSEP)

MSEP is an interstate initiative established by the Midwestern Higher Education Commission to increase educational opportunities for students in its member states. MSEP enables residents of Kansas, Michigan, Minnesota, Missouri, Nebraska and North Dakota to enroll in designated institutions and selected programs outside their home state at reduced tuition levels.

Student Advising

Upon admission into the program, students must:

1. Read student handbook available on our website: cas.umkc.edu/socialwork. (http://cas.umkc.edu/socialwork)
2. Attend student orientation in the Fall/Spring semester.
3. Schedule a meeting with their academic advisor during the academic year to develop a plan of study.
4. Report any changes they make to the plan of study to their advisor.
5. Full-time students must meet the Director of Field Education and complete a field application form to select and finalize field placement.
6. Part-time students must meet the Director of Field Education at the end of their first year in the program, fill out the field application form and finalize field placement before the beginning of their second year in the program.

Professional Status

After graduation, students are well prepared to accept professional social work positions with populations at-risk in a variety of human service, mental health, medical, or community settings.

Both Missouri and Kansas offer an exam to license specialist clinical social workers after two years of supervised practice in direct services. For social workers who plan to practice at this level, Kansas statutes require completion of graduate or continuing education courses in psychopathology and diagnostic skills. Students who are considering clinical licensure in Kansas are encouraged to take SOC-WK 5560 as an elective prior to graduation from the MSW program.

Both Missouri and Kansas offer the following licenses for professional social workers:

- LBSW-Licensed Bachelor’s Social Worker
- LMSW-Licensed Master Social Worker

Missouri also offers:

- LAMSW - Licensed Advanced Macro Social Worker

Faculty

Rosalyn M. Bertram Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bertram); Associate Professor of Social Work; B.A. (San Francisco State University); M.S.W. (San Francisco University); Ph.D. (University of South Florida).

Betty Blackmon Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=blackmon); Assistant Professor of Social Work; B.A. (Northeastern State University); M.S.W., J.D. (University of Kansas).

J. Larry Dyer Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dyer); Assistant Teaching Professor and Interim Educational program Director; B.A. (University of Texas); M.A. (North Texas State University); M.S.W. (University of Kansas); Ph.D. (University of Kansas).

Ile Haggins Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=haggins); Assistant Teaching Professor and Coordinator of Field Education; BA (Oterbein University); MSW (University of Kansas).

Bob Prue; Assistant Professor of Social Work; M.S.W., Ph.D. (University of Kansas)

Lee Rathbone-McCuan Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rathbone); Professor of Social Work; B.A. (University of Kentucky); M.S.W., Ph.D. (University of Pittsburg).

Patricia Scott; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=scott); Assistant Professor of Social Work; M.S.W., Ph.D. (University of Wisconsin).

Elaine Spencer-Carver Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=spencer-carver); Assistant Clinical Professor and Director of Field Education School of Social Work; B.S. (Stephen F. Austin State University in Nacogdoches, Texas); M.S.W. (University of Kansas); Ph.D. (Kansas State University).

[1] Associate or Adjunct Graduate Faculty

[2] Members of UMKC Graduate Faculty

[3] Members of UMKC Doctoral Faculty

[4] Located at UM-St. Louis campus

Graduate

Graduate Degree:

- Master of Social Work (p. 241)

Master of Social Work

Student Learning Outcomes

Upon graduating from the MSW Advanced Generalist program at UMKC, students will be able to:

1. Conduct and articulate ongoing, autonomous self-evaluation of professional practice.
2. Articulate and demonstrate the NASW Code of Ethics in professional practice.
3. Assess and apply multiple sources of knowledge and information to make practice and program decisions.
4. Demonstrate diversity-related knowledge, values, and skills to improve practice and practitioner growth.
5. Promote social and economic justice in practice through policy and programmatic advocacy.
6. Evaluate practice and use results of research and evaluation to improve programs, policy, and service delivery.
7. Use a theoretical framework addressing context, population, and culture in order to analyze, evaluate, assess, and intervene with client systems.
8. Integrate policy practice within and across systems to make intervention more effective and comprehensive.
9. Provide leadership to recognize and respond to ever-changing population needs.
10. Establish a process that encourages participants to be equal partners.
11. Select and modify multi-systemic assessment of contributing factors to a practice situation.
12. Demonstrate the use of appropriate interventions to address assessed contributing factors to a practice situation.
13. Use evaluation of process and outcomes to refine or develop evidence-based practice interventions.
14. Utilize personal power and professional privilege for ethical leadership.

Plan of Study

The following course of study is a typical schedule for a full-time student. A student must complete all foundation level courses before taking any electives and concentration level courses. The plan of study is subject to change.

Regular Program

Foundation Level Courses		
SOC-WK 5510	Foundation Field Practicum I	3
SOC-WK 5511	Foundation Field Practicum II	3
SOC-WK 5532	Foundations Of Social Work Practice I	3
SOC-WK 5533	Foundations Of Social Work Practice II	3
SOC-WK 5530	Human Behavior: Individuals In The Social Environment	3
SOC-WK 5531	Human Behavior: Families, Groups, Organizations, And Communities	3
SOC-WK 5534	Social Welfare Programs And Policies	3
SOC-WK 5535	Social Welfare Policy Practice	3
SOC-WK 5536	Social Work Research Methods	3
SOC-WK 5537	Quantitative Social Work Research Methods	3

Concentration (Advanced Generalist) Courses		
SOC-WK 5512	Advanced Field Practicum I	3
SOC-WK 5513	Advanced Field Practicum II	3
SOC-WK 5540	Advanced Social Work Practice I	3
SOC-WK 5541	Advanced Social Work Practice II	3
SOC-WK 5550	Program Evaluation and Management	3
SOC-WK 5579	Integration Seminar In Advanced Generalist Practice	3
Electives [1]		
SOC-WK 5542	Social Services With Older Adults	3
SOC-WK 5544	Families, Communities and Child Welfare	3
SOC-WK 5546	Mental Health and Substance Abuse in Social Work Practice	3
SOC-WK 5547	Grief and Loss in Social Work Practice	3
SOC-WK 5560	Psychopathology: A Competency Based Assessment Model in Social Work Practice	3
SOC-WK 5562	Family Organization and Development	3
SOC-WK 5563	Life Span Issues in Developmental Disabilities [2]	3
SOC-WK 5564	Advanced Group Interventions in Social Work	3
SOC-WK 5565	Systemic Oppression and Social Justice Advocacy	3
SOC-WK 5566	Family and Community Violence	3
SOC-WK 5567	Collaborative Strengths-Based Practice: Multi-System Interventions	3
SOC-WK 5568	School Social Work Practice	3
SOC-WK 5569	Core Concepts of Child and Adolescent Trauma	3
SOC-WK 5575	Advanced Generalist Community Practice	3
SOC-WK 5580	Special Topics In Social Work	1-3
SOC-WK 5590	Readings And Investigations In Social Work	1-3
LAW 8815S	Leadership In Disability Studies: A Multidisciplinary Approach	3-4
PUB-ADM 5526	The Politics Of Administration [3]	3
PUB-ADM 5548	Leadership For Public Service [3]	3

1 Open only to concentration year students.

2 Course taken with Institute for Human Development students and approved by the School of Social Work as meeting the knowledge, values, and skills content requirements of a masters-level social work elective course

3 Course taken with Public Administration students and approved by the School of Social Work as meeting the knowledge, values, skills and content requirements of a masters level social work elective course

Advanced Standing Program

Advanced standing students must enroll in the following required spring or summer courses:

SOC-WK 5538	Advanced Standing Seminar: Contemp Trends In Social Work Practice	3
SOC-WK 5539	Adv Standing Sem: Emerging Iss In Soc Welfare Policy And Research	3

Advanced standing students then complete concentration level courses.

The graduate social work program grants the M.S.W. degree when students have completed the following degree requirements:

1. 60 credit hours of class (48 hours) and field (12 hours) for regular program students.
2. 36 credit hours of class (30 hours) and field (6 hours) for advanced standing students.
3. To remain in good standing, students must maintain a cumulative GPA of 3.0.
4. Part-time students must complete the program within four years.
5. Students take four electives (12 credit hours) in the concentration year.

Note: For students with disabilities or special learning needs, the program works closely with the Office of Disabled Student Services regarding special accommodations.

Department of Sociology

Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), Room 208
5120 Rockhill Road
(816) 235-1116
Fax: (816) 235-1117
hayesra@umkc.edu
http://cas.umkc.edu/soc

Mailing Address
University of Missouri-Kansas City
Department of Sociology
HH 208
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Deborah B. Smith Email

Professors:
Miguel A. Carranza, Clovis Semmes

Associate Professors:
Jeffrey S. Bennett (Principal IPh.D. Advisor), Marc Garcelon (Coordinator, Sociology Program), Jennifer Huberman, Shannon Jackson (Coordinator, Anthropology Program), Deborah Smith, Sookhee Oh (Principal Graduate Advisor, Sociology), Theresa Torres

Assistant Professors:
Michelle Smirnova

Teaching Assistant Professors:
Ann Marie Wood, Ricardo Marte

Administrative Assistant:
Rita Hayes

Professors Emeriti:
Linda Breytspraak, Thomas Carroll, Burton Halpert, Philip G. Olson, Peter Singelmann

Department Description

The Department of Sociology offers programs of study leading to:

- Bachelor of Arts in Sociology - two options:
  - General Sociology
  - Cultural Anthropology Emphasis
- Master of Arts in Sociology

Program minors are available in:

- Sociology
- Anthropology

The mission of the department is to extend knowledge about the nature of social life. In the process of learning about social life, students will have opportunities to develop critical thinking and research skills and to apply classroom learning through experiences in community organizations and agencies. Department faculty members are committed to excellence in teaching and work to assist students in developing a foundation for moving into a career.

Department Activities

Academic Advising

Student academic advising is a continuous process in the department. Undergraduate advisors are available for consultation throughout the academic year. The department recommends that students check the program requirements in the department office before filing the Declaration of Major form. Undergraduate majors are encouraged to consult with the department to establish a tentative plan of study and to meet with a department advisor each

semester. Students should leave their mail and e-mail addresses with the department office so that they can receive notifications concerning the class time table, new classes, and other departmental information of interest to majors.

Financial Assistance

Students can receive financial assistance through various campus scholarships, loan programs, grants and the work-study program. Students who are interested should contact the Financial Aid and Scholarships Office.

Sociology Club and Honor Society

The Sociology Club is open to all students majoring in Sociology as well as students who are interested in this field but have not yet declared a major. Club activities include service projects in the community, sponsorship of community speakers on campus, participation in local and regional professional meetings, and learning about internships and research opportunities. The department has a chapter of Alpha Kappa Delta, a national honorary society for Sociology students.

Undergraduate Student Award

A special award was established as a memorial to Edward Tomich, Ph.D., professor of Sociology from 1964 to 1976. Students must submit an application to the department to be considered for the award. On the recommendation of the department faculty, the Edward Tomich Award is given annually to a senior student majoring in Sociology who exemplifies an indomitable spirit; a commitment to the struggle for human welfare; an unquenchable thirst for knowledge and personal growth; an unwillingness to be cowed by authority or the superficialities of status; a readiness to ask the more difficult questions while being ready to accept the uncertainty of answers; and an appreciation of the value of theoretical knowledge about human interaction in everyday life.

Cooperative Programs

The department cooperates with other programs frequently by jointly listing courses at the undergraduate level. Students may benefit from combining one of these areas of study with their major in sociology:

- Black Studies
- Family Studies
- Gerontology
- Honors
- Latina/Latino Studies
- Women’s and Gender Studies

Undergraduate Admission Requirements

High school students are encouraged to take a general college preparatory curriculum. Additional courses in Mathematics, English, foreign languages and the social sciences, such as Economics, Anthropology, Psychology and Sociology are recommended. Students planning to transfer from a community college are encouraged to take at least 6 credit hours of Sociology (including introductory Sociology), and college Algebra. A maximum of 12 hours of transfer credits, including introductory Sociology, can be counted toward satisfaction of the major field requirements.

Faculty

Jeffrey S. Bennett[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bennett); associate professor of anthropology and religious studies; B.A. (University of Washington); M.A., Ph.D. (University of Chicago).

Linda M. Breytspraak[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=breytspraak); professor emeritus of sociology and medicine; department of sociology; B.A. (Colorado College); M.A., Ph.D. (Duke University).

Miguel A. Carranza[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=carranza); professor of sociology and latina/latino studies program; B.A. (Kearney State College); M.A., Ph.D. (University of Notre Dame).

Thomas E. Carroll Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=carroll); associate professor emeritus of sociology; B.A. (Indiana University); M.A., Ph.D. (University of Minnesota).

Marc Garcelon[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=garcelon); associate professor of sociology; B.A. (University of Washington); M.A., Ph.D. (University of California at Berkeley).

Burton Halpert[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=halpert); associate professor emeritus of sociology and medicine; B.A. (Drake University); M.A. (University of Manitoba); Ph.D. (University of Minnesota).

Jessica Hardie[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hardie); assistant professor of sociology; B.A. (Wellesley College); M.S.T. (Pace University); M.A., Ph.D. (University of North Carolina-Chapel Hill).

Jennifer Huberman[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=huberman) ; associate professor of anthropology; B.A. (Boston University); M.A., Ph.D. (University of Chicago).

Shannon Jackson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jackson); associate professor of anthropology; B.A., M.A. (University of Connecticut); Ph.D. (University of Chicago).

Ricardo Marte[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=marte); assistant teaching professor of sociology; B.A. (State University of New York at Binghamton); M.A., Ph.D. (University of Nevada, Reno).

Sookhee Oh[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=oh); associate professor of sociology; B.A. (Ewha Woman's University, Korea); M.C.P. (Seoul National University, Korea); Ph.D. (Milano Graduate School of Management and Urban Policy, The New School).

Philip G. Olson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=olson); professor emeritus of sociology; B.A., M.A. (University of Arizona); Ph.D. (Purdue University).

Clovis Semmes[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=semmes); professor of sociology and black studies; director of black studies program; B.A., Ph.D. (Northwestern University); M.A. (University of Illionis, Chicago).

Peter M. Singlemann[2,3]; professor emeritus of sociology; B.A. (University of Hamburg-Germany); Ph.D. (University of Texas).

Michelle Smirnova; assistant professor of sociology; B.A. (Washington University); M.A. (University of Maryland); Ph.D. (University of Maryland).

Deborah Smith[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); chair; department of sociology; associate professor of sociology and director of family studies; B.S., Ph.D. (Cornell University); M.A. (University of Minnesota).

Theresa L. Torres[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=torres); associate professor of sociology and latina/latino studies; B.A. (Benedictine College); M.A. (Boston College); O.S.B. (Order of St. Benedict); Ph.D. (Catholic University of America).

Ann Wood[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wood); assistant teaching professor of sociology; B.A. (Grinnell College); M.A., Ph.D. (University of Kansas).

1 Associate or Adjunct Graduate Faculty
2 Members of UMKC Graduate Faculty
3 Members of UMKC Doctoral Faculty
4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Sociology (p. 245)
- Bachelor of Arts: Sociology with (p. 245)Cultural Anthropology Emphasis
- Minor in Sociology (p. 248)
- Minor in Anthropology (p. 247)

Graduate

Graduate Degrees:

- Master of Arts: Sociology (p. 248)

Bachelor of Arts: Sociology

Career Implications

The B.A. curriculum in sociology is designed to prepare students for a variety of career paths, including:

- Future graduate work in sociology in order to become a professor, researcher, or applied sociologist.
- Entry-level positions throughout the business, human services, and government sectors. Employers look for people with the skills that an undergraduate education in sociology provides.
- Careers in journalism, politics, public relations, business, or public administration--fields that involve the kind of investigative skills and ability to work with diverse groups that students encounter in the curriculum our faculty's expertise.
- Professions such as law, education, medicine, social work, and counseling--fields that all draw on the rich fund of knowledge from sociology.

Student Learning Outcomes

Graduates of the Bachelor of Arts in Sociology degree program will be able to:

- **Examine** the role and relevance of the sociological perspective for contemporary social life. Thus students will gain knowledge of the fundamentals in Sociology, such as the foundations of human practice, belief, and organization.
- **Reflect on** contemporary issues and controversies in the academic discipline of Sociology. Thus students will be able to examine issues of inequality, cultural difference, and social stratification from a comparative perspective, applying sociological principles and concepts to their own lives.
- **Explore** the basic theoretical and methodological perspectives, both in the social sciences and in a chosen specialty area. Thus students will have the capacity to critically evaluate and engage contemporary issues, trends in theory, and instruments of social analysis.
- **Advance** the critical research, thinking, and writing skills that are integral to professional development and civic engagement. Thus students will apply the fundamentals of sociology to both experience and an enhanced interest in community engagement.

Bachelor of Arts: Sociology Degree Core Requirements

The bachelor of arts degree in sociology requires a total of 33 credit hours in addition to the general requirements for a degree in the College of Arts and Sciences.

Courses required for Bachelor of Arts in Sociology:

SOCIOL 101	Sociology: An Introduction	3
ANTHRO 103	Introduction To Cultural Anthropology	3
SOCIOL 263	Introduction to Statistics in Sociology/Criminal Justice [1]	3
SOCIOL 361	Social Theory	3
SOCIOL 362	Methods Of Sociological Research	3
SOCIOL 404WI	The Sociology Capstone: Senior Seminar [2]	3

1 STAT 235 is not a substitute for SOCIOL 263.

2 All majors are required to take a writing intensive course within the Department of Sociology (SOCIOL 404WI fulfills this requirement).

Other degree requirements include:

1. A minimum grade of C- in all required courses listed above.
2. A 2.0 grade-point average in the 33 major credit hours.
3. Completion of the general degree requirements of the College of Arts and Sciences with a minimum GPA of 2.0.
4. No more than three one-credit courses of Special Topics in Sociology (SOCIOL 300__) may be used to fulfill sociology elective requirements.
5. Students may apply a maximum of 12 credit hours of Sociology courses from other schools toward the major (introductory sociology, introductory cultural anthropology, and/or sociology electives).
6. Students are restricted to 6 credit hours of any combination of field experience, directed individual study and/or research toward the 33 hours required in the sociology major.

Bachelor of Arts: Sociology Electives

To earn the undergraduate degree in sociology with no emphasis, in addition to the core requirements students take 15 elective credits. Six of the 15 electives must be at the 300-level or higher.

Bachelor of Arts: Sociology with Cultural Anthropology Emphasis Electives

Starting Fall Semester 2014 sociology majors can earn a cultural anthropology emphasis within the undergraduate degree. As the comparative study of human societies, a cultural anthropology emphasis is uniquely poised to develop diversity awareness which is increasingly critical as the world becomes more global. To earn the cultural anthropology emphasis, in addition to the core major requirements, students must take 15 elective credit hours from the course list below. Nine of these 15 creidt hours must be at the 300-level or higher. Completion of the emphasis is recorded on the student's transcript

ANTHRO 205	The Social Life of Things	3
ANTHRO 207	Writing Culture: The Craft of Ethnography	3
ANTHRO 212	Global Health	3
ANTHRO 280	Empire	3
ANTHRO 302	Social Stratification	3
ANTHRO 303CN	Cluster Course: Terrorism, Civil War and Trauma	3
ANTHRO 305	Language and Culture	3
ANTHRO 306	Culture, Emotion, and Identity	3
ANTHRO 314	Anthropology of Gender	3
ANTHRO 322	Race And Ethnic Relations	3
ANTHRO 324	Diversity And You	3
ANTHRO 326	Consumer Society	3
ANTHRO 328	Body and Society	3
ANTHRO 331	Urban Anthropology	3
ANTHRO 340R	Social Change	3
ANTHRO 341R	The Anthropology Of Economic Institutions	3
ANTHRO 343	Societies And Cultures Of Latin America	3
ANTHRO 348	Latin American Immigrants & Refugees in the U.S.	3
ANTHRO 373	Anthropology of Religion	3
ANTHRO 374	Anthropology of Childhood	3
ANTHRO 384	North American Prehistory	3
ANTHRO 385	Archaeology as Anthropology: The Development of Human Societies	3
ANTHRO 397	Independent Readings in Anthropology	1-3
ANTHRO 414	Feminist Theories	3
ANTHRO 441	Globalization and Development	3
One-credit courses that can be used for Cultural Anthropology Emphasis:		
ANTHRO 327	US Government’s Indian Policies: Practices Of A Colonizing Nation	1
ANTHRO 329	The Imagery Of The American Indian In Film	1
ANTHRO 339	American Indian Leaders: Past And Present	1
ANTHRO 347	The American Indian Image: Stereotype Vs. Reality	1

Field Experience and Directed Individual Study

Several courses at the 300 and 400 level are set aside for individual study--either as readings or research courses. The readings course (SOCIOL 397/ANTHRO 397) has variable credit from 1 to 3 credit hours, and individual contracts are made with faculty members prior to a student selecting the course. The individual research course, SOCIOL 398, has variable credit from 1 to 6 credit hours, and individual contracts must be made with faculty prior to enrolling in the course. The department also offers internship courses (SOCIOL 390R and SOCIOL 391), which require considerable work outside the classroom, often in an agency setting. Students are restricted to 6 credit hours of any combination of field experience, directed individual study and research toward the 33 hours required in the sociology major.

Tools for Planning and Fulfilling Academic Requirements

UMKC’s Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student’s evaluation of progress and major “fit”. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC’s Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student’s officially recorded (Office of Registration and Records) and “what if” plans of study. This evaluation is used to certify all graduation requirements.

Minor in Anthropology

Students are urged to confer with a department advisor to plan a minor. To declare a minor in anthropology, students must file a completed declaration form with a current copy of their transcript with the Anthropology Program Coordinator. Completion of the minor is recorded on the student’s transcript

Student Learning Outcomes

Graduates with a minor in Anthropology will be able to:

- **Examine** the role and relevance of the sociological perspective for contemporary social life. Thus students will gain knowledge of the fundamentals in Sociology, such as the foundations of human practice, belief, and organization.
- **Reflect on** contemporary issues and controversies in the academic discipline of Sociology. Thus students will be able to examine issues of inequality, cultural difference, and social stratification from a comparative perspective, applying sociological principles and concepts to their own lives.
- **Explore** the basic theoretical and methodological perspectives, both in the social sciences and in a chosen specialty area. Thus students will have the capacity to critically evaluate and engage contemporary issues, trends in theory, and instruments of social analysis.
- **Advance** the critical research, thinking, and writing skills that are integral to professional development and civic engagement. Thus students will apply the fundamentals of sociology to both experience and an enhanced interest in community engagement.

Anthropology is a holistic and cross-culturally comparative science that is uniquely qualified to prepare students for multicultural work and social environments in the U.S. and abroad. Careers for Anthropologists, however, lie in all areas of human interaction. Anthropologists are especially attractive to companies and government agencies that work with and for national minorities and in foreign countries.

Students will be introduced to the subject and methods of cultural anthropology, examining its foundations and current trends in theory and applications. Students earning a minor in Anthropology take 6 credit hours of required coursework (ANTHRO 103) and 15 credit hours of elective courses, which result in a total of 18 hours. Electives can be planned around an area of specialization. At least 9 of the 18 credit hours must be in courses at the 300- or 400-level. Where courses are cross-listed in the major and minor, only 6 credit hours can be applied to both. Students should consult with the program coordinator to select the appropriate courses. A minimum grade of C in ANTHRO 103 and a minimum overall GPA of 2.0 in the minor must be attained. No more than 6 of the 18 credits may be transferred from another institution.

Minor in Sociology

Students are urged to confer with a department advisor to plan a minor. To declare a minor, students must file a completed declaration form with the College of Arts and Sciences Advising Office. Completion of the minor is recorded on the student’s transcript

Student Learning Outcomes

Graduates with a minor in Sociology will be able to:

- **Examine** the role and relevance of the sociological perspective for contemporary social life. Thus students will gain knowledge of the fundamentals in Sociology, such as the foundations of human practice, belief, and organization.
- **Reflect on** contemporary issues and controversies in the academic discipline of Sociology. Thus students will be able to examine issues of inequality, cultural difference, and social stratification from a comparative perspective, applying sociological principles and concepts to their own lives.
- **Explore** the basic theoretical and methodological perspectives, both in the social sciences and in a chosen specialty area. Thus students will have the capacity to critically evaluate and engage contemporary issues, trends in theory, and instruments of social analysis.
- **Advance** the critical research, thinking, and writing skills that are integral to professional development and civic engagement. Thus students will apply the fundamentals of sociology to both experience and an enhanced interest in community engagement.

Undergraduate students can complete an 18-credit minor in Sociology. Course work must include the introductory course, SOCIOL 101, and at least 9 credits at the upper-division (300 or 400) level. Where courses are cross-listed in the major and minor, only 3 credit hours can be applied to both. A minimum grade of C- in SOCIOL 101 and a minimum overall GPA of 2.0 in the minor must be attained. No more than 6 of the 18 credits may be transferred from another institution.

Master of Arts in Sociology

Career Implications of the M.A. in Sociology

Some M.A. recipients go directly into teaching at the community college or high school level. Others enter the corporate, nonprofit and government worlds in areas such as directors of research, policy analysis, consulting, human resource management and program management. Some may become a director in a social service agency. For outstanding students, the M.A. is preparation for doctoral level studies.

Admission Requirements

Regular admission to the Sociology Master’s program typically requires a baccalaureate degree from an accredited college or university in Sociology (or related discipline such as Political Science, Anthropology, or History) with a minimum overall undergraduate GPA of 2.75, and a GPA of 3.0 in both (a) the junior and senior years and (b) Sociology coursework.

Students who do not meet these above requirements may be accepted conditionally to the program. For students to gain full admission to the program, they must first demonstrate aptitude for coursework in Sociology by passing three critical undergraduate courses with at least a B- (80%): Introduction

to Sociology, Social Theory, Research Methods, and Statistics (equivalent to SOCIOL 101, SOCIOL 361, SOCIOL 362 and SOCIOL 363). We strongly advise applicants to have completed at least two(preferably all four) of these courses prior to applying to the program.

Application Procedures

Application Deadlines:

- **November 1**: Winter/Spring semester admission
- **February 15**: Fall semester admission. To be considered for departmental teaching or research assistant positions, **applicants must submit the GTA/GRA assistantship application *in addition to* the MA application packet by February 15**. The graduate assistantship application form is available at http://cas.umkc.edu/sociology/images/documents/gtagra-application.pdf.
- **April 1**: Fall semester admission (deadline for applicants who are not applying for a departmental teaching or research assistantship position).

A complete application packet includes the application fee, as required, and these materials submitted to the university's Office of Admissions:

- The UMKC general application form, available at http://www.umkc.edu/admissions
- All undergraduate transcripts;
- Three letters of recommendation, preferably from former instructors;
- One undergraduate written assignment that best illustrates your ability to think analytically; and
- A two to three page statement outlining your goals for graduate study, the nature of your interest in Sociology, and at least one current UMKC faculty member whose areas of expertise match your interests, any past experiences that are relevant, as well as your future plans. (This is in place of completing the statement of purpose section on the UMKC application.)

We strongly encourage the student to contact directly the principal graduate advisor, Dr. Sookhee Oh (ohso@umkc.edu), or other faculty members who share your research interests prior to or during the admission process.

Student Learning Outcomes

Students who earn a Master of Arts in Sociology should be able to:

- **Examine** the role and relevance of the sociological perspective for graduate students who will have the knowledge and skills necessary to pursue either a Ph.D. in a related field or to engage in enhanced study, research, and/or application of sociological method and theory.
- **Reflect on** contemporary issues and controversies in Sociology, and advance sociological research through their own creative engagement with social theories and methods.
- **Explore** the theoretical and methodological perspectives in a chosen specialty area to elaborate the historical development and contemporary manifestation of social inequalities.
- **Advance** critical research and writing skills for professional development and civic engagement such that graduate students will deepen their professional commitment to community.

Curriculum Requirements

This program requires 30 credit hours of coursework. The following core courses (15 credits) are required of all students and should be taken early in the program:

Required Courses

SOCIOL 5501	Social Theory I	3
SOCIOL 5502	Social Theory II	3
SOCIOL 5510	Sociological Methods I	3
SOCIOL 5511	Sociological Methods II	3
SOCIOL 5516	Intermediate Statistics	3
Total Credits		15

In addition to these required courses, students must complete an additional 15 credit hours, generally fulfilled by taking graduate-level courses from the Sociology curriculum. Specifically, these 15 hours beyond the core courses may include up to 6 credit hours of thesis research, up to 3 credit hours of independent/directed studies, up to 6 credit hours of 400-level coursework in the department, and/or up to 6 credit hours of graduate coursework from other disciplines with the approval of the Sociology principal graduate advisor. In no case can more than 3 one-credit courses be part of the program of study.

Students are expected to earn a GPA of 3.0 or above in the core courses and an overall GPA of 3.0. Those who do not meet this requirement will be subject to review by the departmental graduate standards committee. Students who do not perform at a satisfactory level during their time in the program may be reviewed by the Graduate Standards Committee and subsequently can be placed on probation and/or terminated from the program.

Students must complete at least 3 credit hours of graduate work each semester (fall and spring) for the first 2 years of the program and at least 1 credit hour each subsequent semester (fall and spring) to maintain their standing in the program.

By the midpoint of the program, a student should have selected at least 3 faculty members to serve on the master's committee and filed a program of study.

Students may complete the M.A. requirements in Sociology through either: (a) the thesis option, or (b) the comprehensive exam option. We strongly advise students to pursue the thesis option as this provides the greatest flexibility for future study and employment choices.

Thesis Option

For this option, 6 credits of the 30 required hours are used for the completion of the master's thesis. An oral defense of the thesis is required. Students who aspire to further study at the doctoral level should select the thesis option.

Comprehensive Exam Option

This option requires 30 hours of graduate coursework. Near completion of all coursework, students choosing this option must pass a comprehensive exam comprised of 3 parts:

1. sociological theory;
2. research methods and statistics; and
3. a substantive area of the student's choice in consultation with the principal graduate advisor or the student's committee chair.

If a student is unable to pass any component of the comprehensive exam on a second try, the graduate standards committee will evaluate the situation and decide if circumstances warrant a third attempt. Under no circumstances, will a student be given more than three attempts at passing the comprehensive exam.

Department of Theatre

Address:
4949 Cherry Street
Honorary Patricia McIlrath Street #404
Kansas City, MO 64110
(816) 235-**2702**
Fax: (816) 235-**6552**
theatre@umkc.edu
http://cas.umkc.edu/theatre

Department Description

The Department of Theatre offers the following degrees:

- Bachelor of Arts,
- Master of Arts centered in theatre history and dramatic literature or playwriting, either of which may include dramaturgy,
- Master of Fine Arts in acting or design and technology.

The department has a unique mandate. It is the only department in the state university system of Missouri empowered to grant the M.F.A. degree in theatre, the terminal degree for candidates preparing for a career in the professional theatre. Accordingly, the main thrust of the department is its master of fine arts programs that prepare professional actors, designers and technicians for the regional repertory and commercial production companies of the United States. Training in the master of fine arts programs is performance and production oriented. The unique arrangement by which the Department of Theatre and the Kansas City Repertory Theatre coexist, interact and support each other while using the same facilities provides ideal opportunities for candidates.

A training ensemble of experienced professionals is maintained to teach classes and address candidates' needs. In addition to the regular faculty, guest directors and visiting teachers are brought in from the professional world outside and from the ranks of the Kansas City Repertory Theatre to enhance training opportunities. Accreditation is by the National Association of Schools of Theatre. The Department is also a member of the University/Resident Theatre Association.

Faculty

Erika Bailey[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bailey); associate professor of theatre; B.A. (Williams College); M.F.A. (Brandeis University); M.A. (Central School of Speech and Drama).

Charles (Chaz) Bell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bell); teaching assistant professor of technical theatre; B.A. (Southwest Baptist University); M.F.A. (University of Missouri-Kansas City).

Lindsay Davis Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=davis); professor of theatre; B.A. (Harvard College); M.F.A. (New York University-Tisch School of the Arts).

Jeff Dreisbach; adjunct associate professor of theatre; B.F.A. (Wayne State University).

John Ezell[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ezell); Hall Family Foundation Professor of Design; B.F.A. (Washington University); M.F.A. (Yale University).

Gene Friedman[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=friedman); associate professor of theatre.

Charles Hayes[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hayes); teaching professor of theatre; B.A. (Augustana College); M.F.A. (University of Iowa).

Ricardo Khan Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=khan); visiting professor of theatre (director, new project development); honorary doctorate (Rutgers University).

Felicia Londré[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=londre); curators' professor of theatre; B.A. (University of Montana); M.A. (University of Washington-Seattle); Ph.D. (University of Wisconsin-Madison).

Greg Mackender Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mackender); teaching assistant professor of theatre sound.

Tom Mardikes[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mardikes); chair, department of theatre, and professor of theatre sound; B.A., M.F.A. (University of Missouri-Kansas City).

Jennifer K. Martin[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=martin); Hall Family Foundation Professor of Movement; B.S. (Bowling Green State University); M.F.A. (University of North Carolina-Greensboro); Ph.D. (University of Michigan).

Patricia A. McCorkle; adjunct professor of theatre; B.A. (Douglass College-Rutgers University); M.A. (New York University).

Carla Noack Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=noack); assistant professor of theatre; B.A. (College of St. Benedict); M.F.A. (University of Missouri-Kansas City).

Stephanie Roberts[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=roberts); assistant professor of theatre; B.F.A. in acting (Cornish University); M.F.A. in ensemble-based physical theatre (Dell' Arte International School of Physical Theatre).

Ronald Lee Schaeffer[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schaeffer); teaching professor of theatre; B.S. (Bradley University); M.A. (University of Missouri-Kansas City).

Scott Stackhouse Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stackhouse); teaching assistant professor of theatre in acting; B.A. (University of Missouri-Kansas City); M.F.A. (University of California-Los Angeles).

Theodore Swetz[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=swetz); The Patricia McIlrath Endowed Professor of Theatre Arts in Acting; B.A. (Lehman College of the City University of New York).

Erica Sword Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sword); teaching assistant professor of theatre; B.F.A. (Kansas City Art Institute); M.F.A. (University of Missouri-Kansas City).

Victor Tan[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=tan); professor of theatre.

Cal Pritner; professor emeritus of theatre.

Vincent Scassellati; associate professor emeritus of theatre.

Douglas C. Taylor; professor emeritus of theatre.

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Arts: Theatre (p. 252)
- Minor in Theatre (p. 253)

Graduate

Graduate Degrees:

- Graduate Assistantships (p. 253)
  - Master of Arts: Theatre (p. 254)
  - Master of Fine Arts: Acting and Directing
  - Master of Fine Arts: Design and Technology (p. 255)

Bachelor of Arts in Theatre

Student Learning Outcomes

Upon completion of the B.A. in Theatre, a student will have:

- demonstrated an ability to communicate ideas in clear and correct writing.
- studied a sampling of world dramatic literature.
- experienced an overview of the working theatre: in performance, design, direction, and technical production.
- learned the basic skills that will make it possible to pursue an advanced degree in performance, design, technical production or theatre history.
- assimilated the etiquette and ethics of interacting with others in the theatrical profession.

Program Requirements

The main objective of the B.A. in Theatre is to give students a broad education. The degree requirements for the B.A. in Theatre furnish our majors with a well-rounded education in all aspects of theatre. While the program is broad in its scope, it allows students the opportunity to develop specific areas of interest by choosing from one of three tracks.

General THEATRE Track

The general Theatre track is for students who want the flexibility to explore all areas of theatre. They can choose from a wide variety of courses including stage management, design, performance and playwriting.

Performance Track

Students interested in performance may select the performance track. Courses are geared toward students who want a professional career as an actor or want to prepare for placement in a top graduate program. Students receive instruction in voice, movement, acting, Shakespeare and specialty areas such as stage combat or physical theatre.

Design/Tech Track

The design/tech track offers students interested in areas of technical theatre and design the opportunity to develop the skills necessary to work in the professional theatre or attend a top graduate school. Within this track students might choose to emphasize a particular area of design. Students can focus their studies in scenic design, costume design, lighting design, sound design or stage management.

All Tracks

Production experience as well as internship opportunities give undergraduate theatre majors the chance to apply classroom theory to practical situations. Taking part as a crewmember, designer or performer in one of the departmental productions is an integral part of the theatre experience at UMKC. In a typical year there are two undergraduate productions in addition to as many as seven department productions, providing plenty of opportunity. The department also has relationships with many professional theatres. Internships and job opportunities frequently occur from these relationships.

Departmental Requirements

Required Courses		
THEATRE 113	Introduction To Technical Production [1]	3
THEATRE 130	Foundations Of Fine Arts Theatre	3

THEATRE 210	Introduction To Design For The Theater	3
THEATRE 350	Theatre History I	3
THEATRE 351WI	Theatre History II	3
THEATRE 378	Stage Management I [1]	3
THEATRE 403	Theatre Company & Production	8
THEATRE 415	Beginning Directing	3
THEATRE 497	Repertory Theatre	3-6
Track Requirements		
Undergraduates can choose from the following tracks: [2]		18
General Theatre		
Performance		
Design/Technology		
Total Credits		50-53

1 Due to the number of shop/production hours required, THEATRE 113 and THEATRE 378 should be taken in different semesters.

2 Contact the Theatre Department for track requirements.

Non-Departmental Requirements

Six credits total in music and art (three hours each):

ART-HIST 110	Introduction to the History of Art: Pyramids to Picasso	3
CONSVTY 120	Music Appreciation	3
Total Credits		6

Minimum Grade Requirements

Students must earn a grade of C (-) or above in all courses required by the major.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Theatre Minor

A minor in theatre consists of a minimum of 18 credit hours, including THEATRE 130[1], and 15 additional hours approved by the theatre academic advisor. A minimum of nine hours must be completed at the 300-400 level.

It is the intention of the theatre faculty that the minor be general with courses from various areas of theatre, rather than a speciality in one area.

Students must earn a grade of C(-) or above in all courses required by the minor.

1 Theatre minors must enroll in the "for majors" section of THEATRE 130 130 offered in the Spring semester. For a class permission to enroll, contact academic advisor Cindy Stofiel, (816) 235-6683, stofielc@umkc.edu, 120 PAC.

Graduate Assistantships

Graduate assistantships are available in the following areas: acting, costume, lighting, stage management, scene shop carpentry, scene painting, sound, property construction, house management, technical direction, publicity and departmental assistance with THEATRE 130.

Master of Arts in Theatre

Student Learning Outcomes

Upon completion of the M.A. in Theatre, students will:

- Be well-read, appreciative of, and able to discuss a broad sampling of world dramatic literature
- Be able to converse about and teach a survey of theatre history, as well as some specialized knowledge of a chosen era, aesthetic movement or artist in a historical-cultural context
- Demonstrate research skills that will make it possible to pursue the Ph.D.
- Communicate ideas in clear and correct writing and spoken English
- Be familiar enough with various components of the art of the stage to be able to interact with theatre professionals.

Program Requirements

The M.A. degree in theatre is a research-oriented, two-year degree that will prepare students for admission to Ph.D. programs. A minimum of 36 hours is required. Students may plan their programs centered on theatre history and dramatic literature or on playwriting, either one with an optional component in dramaturgy. Opportunities exist for M.A. students to serve as dramaturg or assistant to the director of academic and professional productions. A thesis is required to complete the degree. M.A. students are subject to the General Graduate Academic Requirements of the University for graduate study.

M.A. candidates are expected to maintain at least a 3.0 grade point average.

Master of Fine Arts in Acting and Directing

Student Learning Outcomes

Students graduating with an M.F.A. in Acting from UMKC should be expected to demonstrate the following:

- A detailed understanding of their individual processes as actors through which they find the physical, vocal, emotional and intellectual availability to meet the requirements of a given role. This shall include but not be limited to:
  - A working knowledge of the human voice as a primary means of communication.
  - A working knowledge of the human body as a primary means of communication.
  - A working knowledge of the human psyche as a primary means of motivation.
  - A working knowledge of research methods through which to gain an understanding of the circumstantial life of a character.
- An experiential knowledge of theatrical performance genres from classical roots through contemporary theatre.
- A strong familiarity with a wide range of dramatic literature.
- The ability to work with directors of varying working processes and communication styles.
- The ability to work in collaboration with an ensemble of artists.

Program Requirements

The acting program is a three-year, minimum 60-credit-hour professional actor-training program interacting with the Kansas City Repertory Theatre, a professional Equity LORT B Theatre. M.F.A. students are subject to the General Graduate Academic Requirements (http://cat-edit.umkc.edu/~/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=54138) of the University for graduate study.

First Year

The first year of training is a highly disciplined, process-oriented period of study including: a morning group warm-up; collaboration class which integrates students and faculty from each area of study; intensive breath and vocal production; basic speech work; introductory dialect work; text analysis; individualized fitness and nutritional programs, alignment and self-use process; physical approaches to characterization including physical isolations and effort shape; neutral, extreme and character mask work; ballroom dance. We pursue intensive exploration of creative technique, based on Constantin Stanislavski, Stella Adler and Morris Carnovsky’s principles of theatrical truth; building a character; and ensemble play. Performance work includes the first-year "Creativity Project", that usually is inspired by classical material. Other projects may center around social issues of the day or character searches.

Second Year

In the second year of training the student actor continues with a morning warm-up; collaboration class; Fitzmaurice voice production along with continued speech and dialect work and a focus on heightened text and extended voice; private and ensemble singing tutorials; stage combat (unarmed, rapier, dagger, broad sword and quarter staff); subtle energy work; period-style movement including social convention and dance; Commedia dell’ arte characterization, mask work and personal clown; continued work on acting Shakespeare; intensive work on Moliere verse text integrated with the period-style movement and comic technique; restoration or other heightened language text; and application of the actor’s process to audition technique and

contemporary text. Essential Meisner work is folded into exploration of creative technique. Second-year actors begin public performance work with guest and faculty directors on new, contemporary and period plays chosen specifically for the training. Occasionally, roles at the Kansas City Repertory Theatre, and other professional theatres in town, are available for second-year actors.

Third Year

Third year actors continue to apply their craft to challenging studies in many styles of plays; they deepen their understanding and application of Meisner technique and work on ongoing solo and ensemble exploration in personal clown; foil and saber fencing; singing; tutorials in speech and movement as well as voiceover workshops and acting for the camera. Public performance work intensifies with specific productions chosen to challenge the actor's art within the training program. Actors also, when applicable, audition for Kansas City Repertory productions and are cast, when appropriate, in roles or as understudies. Actors also audition and perform, when appropriate, in other Kansas City professional Equity theatres. In May, the actors are showcased in New York, as part of the New League Showcase sponsored by the Alliance for the Development of Theatre Artists, Inc., and sometimes showcased in Chicago and/or Los Angeles. All students who are considered "in good standing" participate in showcase.

Retention

In addition to being expected to maintain at least a 3.0 grade-point average, all M.F.A. acting candidates will be evaluated by the performance faculty at the end of each semester to determine whether they have shown satisfactory progress to warrant continuation in the program.

Master of Fine Arts in Design and Technology

Student Learning Outcomes

Students graduating with an M.F.A. in Design and Technology from UMKC will have a detailed understanding of their individual processes as designers through:

- Design - mastering interpretation, collaboration and idea development; developing the graphic tools needed to superlatively communicate design ideas visually.
- Technical Skills - mastering the tools of production, and the processes associated within each design/technology discipline.
- History - mastering research, text analysis and dramatic history.
- Production - mastering the artistic merging of design, history and technical skills through the experiences of numerous and varied productions.
- Entrepreneurship - mastering the business of the profession and career growth.

Upon completion of the course of study, graduates will have created portfolios of such quality as to effectively introduce themselves to the profession as artists ready for assignments.

Program Requirements

This is a three-year program requiring a minimum of 60 credit hours.
Students majoring in design and technology may choose to specialize in:

- Design (scenic design, costume design and technology, lighting design, sound design).
- Technical direction.
- Stage management.

Design Emphasis

Those choosing a design emphasis will be prepared to compete for United Scenic Artist Local 829 membership as scenic designers, lighting designers, costume designers or sound designers. They also will be prepared to design in professional theatre centers and in major universities and colleges.

Technology Emphasis

Technical Direction

Candidates specializing in technology will be trained to compete for jobs as technical directors or assistant technical directors and other supervisory technical positions, or other entertainment-business-related positions.

Stage Management

Stage management candidates serve as assistant stage managers the first semester or first year, as stage managers the second year, and serve a residency in the last semester. They also work as production assistants for the Kansas City Repertory Theatre shows. Candidates in stage management are trained to compete for jobs as Actors' Equity stage managers and take classes on the Actors' Equity LORT rule book.

General Requirements

The portfolio to be presented for admission should include:

1. Artistic renderings.
2. Drafted materials.
3. Photographs and slides.
4. Resume and references.

MFA candidates are expected to maintain at least a 3.0 grade point average.

Only students who have demonstrated satisfactory progress in required skills and professional discipline during the first year (or sooner at faculty discretion) will be invited by the faculty to continue the program. During the second year, the design and technology students will concentrate on areas of interest, choosing advanced courses and working in the appropriate production areas. Third-year residency allows students to continue to emphasize design or technology coursework while undertaking major design or technology projects with productions in the Department of Theatre, the Kansas City Repertory Theatre or other professional environments. The concluding requirements of the M.F.A. degree for the design and technology candidate will be classroom projects, produced work and final presentations of portfolios. M.F.A. students are subject to the General Graduate Academic Requirements (p. 774) of the University for graduate study.

Women's and Gender Studies

(816) 235-5854
wgs@umkc.edu
http://cas.umkc.edu/wgs

Mailing Address
Dr. Brenda Bethman, Director
Women’s and Gender Studies Program
University of Missouri-Kansas City
Haag Hall, Room 204
5100 Rockhill Road
Kansas City, MO 64110-2499

Program Description

First established in the 1980s, Women’s and Gender Studies (WGS) at UMKC is one of 650 such programs in the United States. WGS is both an inter- and multi-disciplinary academic program devoted to the critical analysis of how gender, race, class, ethnicity, and sexuality contribute to the diversity of women’s and men’s experiences. The program’s interdisciplinary nature and cross-cultural academic training broadens students’ understanding of gender and the experiences of women and men, girls and boys, in all cultures and societies. By placing gender at the center of scholarly inquiry, we not only examine the assumptions, methods, insights, and claims of the traditional academic curriculum but broaden it through our research interests, publications, and courses to add cutting edge feminist research, scholarship, and activism.

The WGS program offers an undergraduate minor and concentration, as well as an internship. WGS courses are offered by numerous UMKC departments, and a full list of courses scheduled is available every semester from the WGS office. In addition, Women’s and Gender Studies is available as an informal focus area for the MALS program (Master of Arts in Liberal Studies).

A minor in Women’s and Gender Studies requires 18 credits. Nine credits must be in upper division courses (that is, 300 and 400) and no more than nine credits may overlap with your major. Reading courses on selected topics may be arranged with individual faculty members.

More information is available at the Women’s and Gender Studies program website at http://cas.umkc.edu/wgs.

Educational Goals and Student Learning Outcomes

The educational goals for students in the Women’s and Gender Studies program are:

- To explore the historical development and contemporary manifestation of gender-based inequalities.
- To generate new knowledges about women’s lives and resistances in U.S. and global contexts.
- To advance critical research, thinking and writing skills as integral to professional development and political engagement.
- To foster understandings about how to transform inequalities of race, class, gender and nations through direct engagement with communities in service learning.

Specifically, students will have the opportunity to acquire certain knowledge, skills and experience:

Knowledge

Students studying Women’s and Gender Studies will acquire knowledge about:

- The multidisciplinary nature and interdisciplinary methods of Women’s and Gender Studies scholarship.
- The historical and contemporary cultural, social, political and economic contexts of gender in the United States and globally.
- The interaction of gender with other culturally constructed categories, such as race, age, etc., in order to foster a greater understanding of diversity.

Skills

Students studying Women’s and Gender Studies will have the skills to:

- Think across disciplines.
- Understand and utilize the theories and methods of the various disciplines that contribute to Women’s and Gender Studies.
- Apply their knowledge to a variety of careers in business, nonprofit work and the public sector, as well as be qualified for graduate studies in any social science.
- Be knowledgeable activists for the human rights of all women and men, irrespective of cultural biases and stereotypes.

Experience

Students studying Women’s and Gender Studies will be experienced in:

- Academic research and analysis in a variety of academic fields and disciplines.
- Professional and respectful interactions with disagreeing others in public discussions of gender issues (students will become teachers).
- Maintaining a recognition of human diversity and analyzing each human issue from a race, class and gender perspective (at a minimum).

Undergraduate

Undergraduate Degrees:

- Concentration in Women’s and Gender Studies (p. 257)
- Minor in Women’s and Gender Studies (p. 260)
- Interdisciplinary Women’s and Gender Studies Course Listing (p. 258)

Concentration in Women's and Gender Studies

Educational Goals and Student Learning Outcomes

The educational goals for students in the Women’s and Gender Studies program are:

- To explore the historical development and contemporary manifestation of gender-based inequalities.
- To generate new knowledges about women’s lives and resistances in U.S. and global contexts.
- To advance critical research, thinking and writing skills as integral to professional development and political engagement.
- To foster understandings about how to transform inequalities of race, class, gender and nations through direct engagement with communities in service learning.

Specifically, students will have the opportunity to acquire certain knowledge, skills and experience:

Knowledge

Students studying Women’s and Gender Studies will acquire knowledge about:

- The multidisciplinary nature and interdisciplinary methods of Women’s and Gender Studies scholarship.
- The historical and contemporary cultural, social, political and economic contexts of gender in the United States and globally.
- The interaction of gender with other culturally constructed categories, such as race, age, etc., in order to foster a greater understanding of diversity.

Skills

Students studying Women’s and Gender Studies will have the skills to:

- Think across disciplines.
- Understand and utilize the theories and methods of the various disciplines that contribute to Women’s and Gender Studies.
- Apply their knowledge to a variety of careers in business, nonprofit work and the public sector, as well as be qualified for graduate studies in any social science.
- Be knowledgeable activists for the human rights of all women and men, irrespective of cultural biases and stereotypes.

Experience

Students studying Women's and Gender Studies will be experienced in:

- Academic research and analysis in a variety of academic fields and disciplines.
- Professional and respectful interactions with disagreeing others in public discussions of gender issues (students will become teachers).
- Maintaining a recognition of human diversity and analyzing each human issue from a race, class and gender perspective (at a minimum).

The WGS concentration provides greater depth and breadth than the 18-credit minor while still preserving the flexibility and focus of an interdisciplinary approach to the study of women and changing notions of gender. The concentration also serves as a valuable complement to any major field of study leading to a bachelor of arts or science degree.

Unlike the traditional discipline-based major, the Women's and Gender Studies Concentration encourages students to pursue their studies systematically across the Arts and Sciences curriculum by providing a broad range of courses on women, gender, girls and masculinities. The three required courses are designed to introduce students to:

1. The study of women.
2. Theories of gender.
3. The diverse methods of inquiry employed by gender scholars.

The concentration also requires students to take classes in no less than three different disciplines (e.g., history, English and sociology) in order to:

- Identify the parallels between disciplines.
- Foster critical thinking about accepted categories and constructs.
- Acquire key concepts and knowledge of fundamental issues.
- Develop a basic vocabulary.
- Expand familiarity with major works, thinkers and directions in the field of Women's and Gender Studies.

Students may choose from an approved list of courses in which women and/or gender are the central category of analyses. Individualized readings courses on selected topics also may be arranged with WGS faculty members. And, as new courses with a significant Women's Studies component are offered, students pursuing the concentration may request course approval from the UMKC Advisement Center.

Requirements for the Concentration

Required Courses		
WGS 201	Introduction To Women's & Gender Studies	3
WGS 301	Introduction to Feminist Theory	3
WGS 499	Women's And Gender Studies: Senior Seminar (or other research course)	3
Additional Courses		
Courses selected from a variety of disciplines		15
Total Credits		24

Students are also encouraged to take WGS 484 and the Critical Issues in Women's and Gender Studies cluster course (offered through the departments of English and Sociology).

Interdisciplinary Women's and Gender Studies Course Listing

Art and Art History

ART-HIST 315	The Arts Of African and New World Cultures	3
ART-HIST 497H	Sp St In The Art Of African, Oceanic, And New World Cultures	1-6

Black Studies

BLKS 321/5521	The Black Family and Male-Female Relationships	3
BLKS 338/5538	Women's Literature in Africa and the African Diaspora	3

Classics

CLASSICS 300CB/HISTORY 300CO	CC: Women In The Ancient World	3

Communications Studies

COMM-ST 320	Mass Media, Culture And Society	3

Criminal Justice and Criminology

CJC 440	Hate & Bias Crimes	3
CJC 450	Women, Crime And Criminal Justice	3
CJC 488	Mentoring Juvenile Justice System-Involved Youth	3

English Language and Literature

ENGLISH 123	True Lives: Autobiographical Arts and Acts	3
ENGLISH 141	Women and Literary Culture/The Heroine in Literature	3
ENGLISH 242/CLASSICS 283/ HISTORY 230	Women Writing/Women Reading	3
ENGLISH 283/HISTORY 231	Women in the Ancient World	3
ENGLISH 284/WGS 286	Women in the Medieval World	3
ENGLISH/WGS 286	Critical Issues in Women's and Gender Studies	3
ENGLISH 342WI	Women And Rhetoric	3
ENGLISH 344WI	Women & Literary Culture: Genre Focus	3
ENGLISH 345WI	Women And Literary Culture: Historical Focus	3
ENGLISH 350	The 18th Century Novel	3
ENGLISH 410	Black Women Writers	3
ENGLISH 426	The Victorian Period	3
ENGLISH 433	Histories Of Writing, Reading, And Publishing	3
ENGLISH 441	Girls And Print Culture	3
ENGLISH 450	Special Readings	1-3
ENGLISH 455	Studies In The Novel 1740-1900	3
LLS 380	Introduction to Latina/Latino Literature	3

Environmental Studies

ENV-STDY 334	Gender and the Environment	3

History

HISTORY 300CO	CC:Women In the Ancient World	3
HISTORY 300G	Special Studies	1-3
HISTORY 300H	Special Studies	1-3
HISTORY 354R	Women in Modern America	3
HISTORY 368	Children and Youth in American History	3
HISTORY 369	Women and Work in Early America	3
HISTORY 412A	Medieval Women & Children	3
HISTORY 428A	History Of The Body	3

Latina Latino Studies

LLS 201	Introduction to Latina/o Studies	3

Law

LAW 8714C	Gender and Justice: Selected Topics	1

Psychology

PSYCH 305	Psychology Of Women	3
PSYCH 5543	Adult Development And Aging	3

Sociology

SOCIOL 310R	Families And The Life Course	3
SOCIOL 318	Sociology Of The Aging Woman	3
SOCIOL 351	Gender, Work And Social Change	3
SOCIOL 411	Sociology Of Human Sexuality	3
SOCIOL 418	Feminist Theories	3

Women’s and Gender Studies

WGS 201	Introduction To Women’s & Gender Studies	3
WGS 268	Queer in the City/An Introduction to LGBT Studies	3
WGS 286	Critical Issues in Women’s and Gender Studies	3
WGS 301	Introduction to Feminist Theory	3
WGS 314CC	Weimar Culture: Gender and Modernity in Central Europe	3
WGS 408	Gender, Health, and Development in Senegal	3
WGS 460CC	CC: Queer in the City: An introduction to Lesbian and Gay Studies	3
WGS 484	Women’s & Gender Studies Internship	1-4
WGS 499	Women’s And Gender Studies: Senior Seminar	3

Minor in Women's and Gender Studies

The minor in WGS offers an excellent inter- and multi-disciplinary curriculum that examines women, girls and gender throughout history and across cultures. WGS courses teach critical thinking through an examination of the historical and contemporary problems facing women locally, nationally and globally. Students expand their understanding of gender difference, cultural diversity and social change as they complete an 18-hour program of study from among a wide variety of classes in numerous fields and disciplines. WGS courses in history, sociology, psychology, criminal justice, English, religion, political science, law and other areas enable students to pursue a specialized focus which enhances their major in the humanities, social sciences or natural sciences. The minor also provides sufficient flexibility to allow for the creation of a course of study especially suited to the individual interests of students.

Student Learning Outcomes

The educational goals for students in the Women’s and Gender Studies program are:

- To explore the historical development and contemporary manifestation of gender-based inequalities.
- To generate new knowledge about women’s lives and resistances in U.S. and global contexts.
- To advance critical research, thinking and writing skills as integral to professional development and political engagement.
- To foster understandings about how to transform inequalities of race, class, gender and nations through direct engagement with communities in service learning.

Specifically, students will have the opportunity to acquire certain knowledge, skills and experience:

Knowledge

Students studying Women’s and Gender Studies will acquire knowledge about:

- The multidisciplinary nature and interdisciplinary methods of Women’s and Gender Studies scholarship.
- The historical and contemporary cultural, social, political and economic contexts of gender in the United States and globally.
- The interaction of gender with other culturally constructed categories, such as race, age, etc., in order to foster a greater understanding of diversity.

Skills

Students studying Women’s and Gender Studies will have the skills to:

- Think across disciplines.
- Understand and utilize the theories and methods of the various disciplines that contribute to Women’s and Gender Studies.
- Apply their knowledge to a variety of careers in business, nonprofit work and the public sector, as well as be qualified for graduate studies in any social science.
- Be knowledgeable activists for the human rights of all women and men, irrespective of cultural biases and stereotypes.

Experience

Students studying Women's and Gender Studies will be experienced in:

- Academic research and analysis in a variety of academic fields and disciplines.
- Professional and respectful interactions with disagreeing others in public discussions of gender issues (students will become teachers).
- Maintaining a recognition of human diversity and analyzing each human issue from a race, class and gender perspective (at a minimum).

Requirements for the Minor

A minor in Women's and Gender Studies requires 18 credits. Nine credits must be in upper division courses (that is, 300 and 400) and no more than nine credits may overlap with your major. Reading courses on selected topics may be arranged with individual faculty members.

Required Courses		
WGS 201	Introduction To Women's & Gender Studies	3
WGS 301	Introduction to Feminist Theory	3
Additional Courses		
Approved social sciences and humanities courses [1]		12
Total Credits		18

[1] The remaining 12 hours must be evenly split between the social sciences and humanities and chosen from an approved list of courses. A list of approved courses is published every semester.

Students are encouraged to take WGS 484: Women's & Gender Studies Internship.

Student Services

- Advising System (p. 261)
- PACE (p. 262)
- Study Abroad (p. 264)
- General Undergraduate Degree Requirements & Information (p. 265)
- Major and Minor Requirements (p. 267)
- Degree Requirements (p. 268)
- Credit by Examinations (p. 271)

Advising System

Scofield Hall, Room 9
711 E. 51st Street
(816) 235-1148
http://cas.umkc.edu/advising

Our Vision

Guiding, supporting, and inspiring students to achieve academic excellence

Our Mission

The mission of the UMKC College of Arts and Sciences Academic Advising Office is to guide students toward academic success in higher education.

Advisors within the College are directly responsible for advising current and prospective Arts and Sciences students on general education requirements and how to apply them to their degree program. Advisors assist students with selecting majors, monitoring academic progression, and fulfilling graduation requirements while educating them on campus resources, university policies and procedures, and options for graduate or professional schools. Advisors are role models who teach students how to navigate through the educational journey, encouraging students to actively engage themselves in their education. The Academic Advising Office creates an atmosphere promoting autonomous life-long learning where students accept responsibility and ownership for their personal academic progression, degree completion, and goal achievement.

Advisors within the College are committed to serve as a bridge among students, faculty, and staff. The Academic Advising Office provides training and development for professional and faculty advisors to ensure they are effectively meeting the needs of students. Advisors support the College's commitment to educate students in the arts and sciences, providing them with a breadth of knowledge valuable to the intellectual and social community. Advising allows for the promotion of understanding of these general education goals which play a key role in the development of students becoming

productive contributors to society. Due to the unique relationship between advisors and students, advisors play an integral role in recruitment, retention, and student success for the College of Arts and Sciences and UMKC as a whole.

As students progress through their higher education journey at UMKC, the Academic Advising Office fosters and encourages students toward achieving academic success.

Faculty and Staff Advisors

- Assist students in choosing majors and planning their academic programs.
- Inform students about the general education requirements of the College and relate them to their major requirements.
- Advise students on class selection and registration.
- Offer advice on educational and career goal setting.
- Assist students in locating support services on campus.
- Perform degree audits and graduation status checks.
- Connect students with faculty on campus.
- Review academic policies and procedures with students.
- Help students with other related issues and problems of an academic nature.

Academic advising responsibilities are distributed among faculty advisors and professional advisors in the College of Arts and Sciences in the following manner:

- Undergraduate and graduate faculty advisors in each department or program:
  - Advise students in their major field of study.
  - Advise students about departmental student organizations as well as internship or undergraduate research opportunities within the department.
  - Advise students concerning graduate study requirements.
- Professional and graduate-student advisors in the Arts and Sciences Academic Advising Office:
  - Advise students for general education and overall degree requirements.
  - Advise bachelor of liberal arts students, including students in the Program for Adult College Education (PACE).
  - Advise students who have not yet declared a major or are on probation.
  - Help all undergraduates with special requests and problems.
  - Evaluate transfer courses.
  - Conduct degree audits prior to graduation on all bachelor’s degree-seeking students.
  - Communicate with individual students and with the Registration and Records Office to confirm that all degree requirements will be met in the graduating semester.

While academic advising is not required for all students, it is recommended that students seek academic advising each semester to avoid problems later. Certain undergraduate majors do require academic advising each semester. Students required to secure an advisor’s approval and release before enrolling include:

- All freshmen.
- All sophomores with 45 or fewer credit hours.
- General studies with 60 or more credit hours.
- Probationary students.
- Students requesting overloads or credit/no credit option.
- Undergraduate majors in art, chemistry, physics and theatre.
- Graduate majors in chemistry, English, geosciences, sociology, and theatre.

When the next semester’s course schedule is published on the UMKC Web site, students should contact their academic advisor. Students who promptly seek academic advising have a better chance of securing their first choice of courses and times. While the Arts and Sciences Advising Office sees students on an appointment as well as walk-in basis, most faculty advisors require an appointment.

Faculty advisors in each department assist students in planning their academic programs and inform them about the degree requirements of the programs. Graduate students required to secure an advisor’s approval before enrolling include majors in chemistry, English, geosciences, sociology and theatre.

PACE/Program for Adult College Education

Scofield Hall (http://www.umkc.edu/virtualtour/scofield-hall.asp), Room 104
711 E. 51st Street

(816) 235-**1588**
Fax: (816) 235-**5760**
http://cas.umkc.edu/pace

Mailing Address
University of Missouri-Kansas City
Program for Adult College Education
SH 104
5100 Rockhill Road
Kansas City, MO 64110-2499

Program Description

The Program for Adult College Education (PACE) provides an alternative for students who have difficulty pursuing a bachelor's degree due to employment, family responsibilities or other obligations. PACE provides nontraditional course offerings and comprehensive student services support; tailored to the needs of adult students. Many PACE courses are presented in 12-hour blocks, arranged by theme or issue. These courses are offered in a special weeknight, weekend and independent study format. There are also numerous Internet, web-assisted, first and second eight week courses.

Bachelor of Liberal Arts Degree (B.L.A.)with a Minor

The B.L.A. with a minor is the most popular degree offered through PACE. This degree program allows enhanced flexibility in selection of academic areas of study for students whose aspirations are not served by a traditional major. Research has shown that individuals with the breadth of knowledge and skills provided by a liberal arts education are in demand by employers. The B.L.A. provides:

- Broad knowledge and understanding of the natural sciences, social sciences, arts and humanities.
- Maximum flexibility in course selection.
- Critical thinking and problem-solving abilities.
- Personal satisfaction and self-esteem.
- Multicultural issues awareness.
- Ability to adapt and work as a team.
- Increased awareness of values and ethical questions.
- Interpersonal skills.
- Written and oral communication skills.

The B.L.A. with a minor is designed to allow all the advantages of a liberal arts education while providing students with an academic specialization. Minors earned in conjunction with the B.L.A. are reflected on official transcripts. Typically it is necessary for students pursuing a minor to take a required course outside of the PACE curriculum. However, select academic departments within the College of Arts and Sciences endeavor to offer their Minor requirements through PACE or as regular eveninig/online courses. Generally, 18 to 24 credit hours are required for a Minor. Before embarking on a BLA with a Minor through this program; students should consult with both a PACE and the respective departmental academic advisor. The following minors are recommended in conjunction with PACE course offerings:

- Black Studies
- Chemistry
- Commercial Economics
- Communication Studies
- Criminal Justice and Criminology
- Economics
- English
- Environmental Studies
- Family Studies
- Gerontology
- History
- Political Science
- Psychology
- Sociology
- Spanish
- Studio Art

Bachelor of Arts or Bachelor of Science Majors in Conjunction with PACE

Students can meet many of the B.A./B.S. general degree requirements through the PACE program and, in conjunction with designated disciplines, pursue a major. Degrees associated with an academic unit's evening division or online courses are also recommended for this process. Students should refer to the requisite departmental requirements in the UMKC undergraduate catalog and consult a Department Advisor as well as a PACE Student Services Coordinator or Academic Advisor.

Entry into Graduate/Professional Degree Programs and PACE

The PACE Program provides to students the ability to achieve rigorous academic preparation for graduate and professional degree programs. The B.L.A. is recognized as an appropriate degree for a number of graduate/professional programs at UMKC and elsewhere (e.g., Master of Arts in Liberal Studies, Accounting, Law, Education, Public Administration, Business Administration (MBA), Medicine and Health degrees). Many PACE students continue their studies in graduate degree programs.

PACE Academic Advising

The PACE program takes a highly personalized and comprehensive approach to the needs of nontraditional students. Students will work with a student services coordinator who will assist them from admissions, through the academic process, to graduation. Students can consult the Student Services Coordinator from the PACE Office, on nearly any issue which might impact their academic success. Students wishing to combine PACE coursework with other academic programs and degrees should consult an academic advisor in the College of Arts and Sciences Advising Office and a PACE Student Services Coordinator.

Faculty

Director:
Reginald Bassa Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bassa)

Study Abroad Programs

International Academic Programs
Student Success Center, Room 120
(816) 235-**5759**
http://www.umkc.edu/international

In collaboration with International Academic Programs, the College helps make available to its students a variety of study abroad programs that provide an exciting way to add a global dimension to their UMKC education through exploring and sharing the cultures of other countries.

Study abroad programs are available for a summer, a semester or an academic year. Students can earn credit towards their degree, and with careful planning, they should lose no time toward graduation. Study abroad is affordable since financial aid and scholarships are applicable to many programs, and other grants and scholarships are available specifically for study abroad.

The exchange university consortium, Mid-American Universities International, InterFuture, foreign exchanges offered through the Department of Foreign Languages and Literatures, and the Missouri-London program are among the many program choices available. Among the possible destinations are:

- Argentina
- Australia
- Austria
- Belgium
- Chile
- Costa Rica
- Czech Republic
- Denmark
- England
- Finland
- France
- Germany
- Greece
- Iceland
- Ireland
- Italy
- Korea

- Lithuania
- Malta
- Mexico
- Netherlands
- New Zealand
- Norway
- Portugal
- Scotland
- Slovenia
- South Africa
- Spain
- Sweden
- Switzerland

For more information regarding study abroad and related scholarships, please visit http://www.umkc.edu/international. Additionally, the UMKC Study Abroad Coordinator is available at (816) 235-**5790**.

General Undergraduate Degree Requirements & Information

Registration Approvals

In addition to the information below, see the earlier College section entitled Advising System.

All new students and freshmen are required to secure an advisor's approval to register for classes. In addition, undergraduate majors in studio art, chemistry, physics and theatre, and graduate students in chemistry, English, geosciences, sociology and theatre must secure an advisor's approval to register.

Any student on academic probation, requesting an overload, or requesting the credit/no credit option, must secure an advisor's approval before completing registration.

Students must have permission of the instructor or faculty advisor before they are allowed to register in Directed Field Experience, Directed Readings, Individual Research or any other courses specified by a department.

All students in the College are also subject to any special signatures required by other academic units at UMKC.

Repeated Courses

If a course is repeated at one of the four UM campuses, the hours and grade points of both the original and repeated courses are used in computing the grade-point average. Only the earned hours from the last repeated enrollment will apply toward degree requirements or total hours required for graduation.

Hour and GPA Requirement

A minimum of 120 hours is required for graduation. Of those hours, 36 must be at the 300-400 level. A minimum cumulative grade-point average of 2.0 is required as well as a 2.0 in the major. (Some majors have additional GPA requirements. Students should consult the appropriate section of this catalog for their major.)

Professional School Credit

A maximum of 30 acceptable semester hours (2.0 GPA or better) of study in professional schools may be applied toward the bachelor's degree. Acceptable professional schools for this purpose are law and medicine. This credit is elective credit and does not satisfy any specific degree requirement.

Residence Requirement

The general minimum residence requirement for the undergraduate degree is the final 30 consecutive semester hours of coursework. In the case of students using 30 hours in a UMKC professional school to complete their undergraduate degree, the residence requirement becomes the final consecutive 30 hours of the College's coursework prior to entrance into the professional school.

Writing Intensive Requirement

Writing Intensive courses, designated with WI, PW, or LW following the course number, are intended to help students learn to express themselves formally and coherently in discursive prose. Writing in this connection is to be regarded not as a corpus of art or information to which students should be

exposed, but as a crucial skill, the teaching of which is among the primary missions of the College. It is assumed that extended and intensive writing can be equated with contemplation and concentration on the subject matter; students learn by writing in any field.

Each Writing Intensive course includes several writing assignments and these assignments form an integral part of students' efforts to progress in the course. A review and revision cycle is used with systematic feedback. The students' writing might address philosophical concerns, methods, or specific topics, but their work is always based on exposure to published expository writing. While the exercises may take different forms, they may include:

1. Prewriting; e.g., outlines, journals, free-writing exercises and organizational notes.
2. Submission of preliminary drafts for oral and written responses by the instructor (peer response also might be incorporated).
3. Revision of content, organization, mechanics and style.

Students will prepare a number of different assignments of varying lengths and intent. An extended essay or term paper is expected in all Writing Intensive classes. Examinations may incorporate essay questions.

Students enrolling in Writing Intensive courses must have completed the RooWriter Assessment, which must be taken after successful completion of Discourse II or equivalent.

RooWriter Assessment

Candidates for all baccalaureate degrees must take the UMKC RooWriter writing assessment before they have completed 90 credit hours. Students may take the RooWriter at any time while enrolled at UMKC as a personal diagnostic, but it will only satisfy the undergraduate graduation requirement after a student has completed Discourse II (or equivalent).

Certain Colleges, Schools, Departments, Majors, Writing Intensive courses, etc. may also require the RooWriter to be taken multiple times, and some might further require a certain minimal level of achievement be attained for advancement. The RooWriter supports and is supported by the University-wide General Education Core requirements.

The RooWriter is offered online. Students should visit the RooWriter website for contact information, writing improvement resources, and other general information.

Graduation Procedure

After completion of 90 credit hours, students should file an "Application for Graduation" form in the Arts and Sciences Academic Advising Office, Scofield 9. After the application is filed, a review of the student's transcript is prepared, and the student is contacted through UMKC student e-mail to come to the Advising Office for an audit of the general education requirements. During this degree audit process, the following are checked:

- The student's transcript is compared to the general education requirements. All remaining general education requirements are outlined and discussed.
- The student's information is reviewed to insure all majors and minors, as appropriate, have been declared.
- The student's total hours, junior/senior level hours, residence requirements, the minimum major and minor hours, and grade-point average are reviewed.

After the general education portion of the degree audit is complete, the student is given a major degree audit form and a copy of his/her transcript to take to the major advisor for completion. When the major portion of the degree audit has been completed, the student is responsible for returning it to the Arts and Sciences Advising Office. This process is repeated for any additional majors and/or minors.

There are several other important components of the graduation process that the student is solely responsible for completing:

- All students are required to take the MAPP, administered by the Assessment Office.
- Students with majors must also check with their department to see if a Major Field Exam is required.
- Students should have their degree audit updated every semester to make sure they are still making progress towards graduating during the semester for which they have applied.
- Students are responsible for making sure their address and telephone numbers are correct in the student information system. This should be checked each semester.
- Students must check their UMKC e-mail account regularly for important and relevant graduation and other information.
- Any incomplete grade on a student's transcript must be completed and recorded in the Registrar's Office by the end of the semester in which he/she is graduating.
- Any missing transcripts must be received by the Office of Admissions by the end of the semester in which a student is graduating.

Reapplying for Graduation

If a student does not graduate in the semester for which he/she has applied, he/she must reapply for graduation in the Arts and Sciences Advising Office. The College cannot extend a student's application to the next semester without written notification from the student.

Exceptions

Exceptions to academic regulations must be approved by the Academic Standards Committee of the College of Arts and Sciences. To seek exceptions, students must file a "Petition for Exception" form in the Arts and Sciences Advising Office, 9 Scofield Hall.

Major and Minor Requirements

Students pursuing the bachelor of arts and bachelor of science degrees must complete a major. Students pursuing the bachelor of liberal arts degree must complete a minor. The College strongly encourages students to consult faculty advisors and the UMKC Career Services Office counselors for assistance in choosing suitable academic and career goals. To select a major or minor, students must file a "Declaration of Major" form in the Arts and Sciences Academic Advising Office, 9 Scofield Hall. For specific major or minor requirements, see the program requirements described in the appropriate academic departmental section of the catalog.

Degree Program Major

The undergraduate degree-seeking student in the College must fulfill the requirements for a degree program (major) as specified in the appropriate part of this catalog. The minimum is 26 semester hours.

A minimum of 12 semester hours in the degree program (major) must be earned in the major department at UMKC. A minimum of a C average in the major is required.

The College encourages students to seek advising early in their academic careers regarding choice of a major. Students must file a formal "Declaration of Major" form in the Arts and Sciences Academic Advising Office.

Multiple Majors

See Multiple Major & Double Degree Policy (p. 761) under Undergraduate Regulations and Information.

Combined and Double Degree Programs

For information on Double Degree, see Multiple Major & Double Degree Policy (p. 761) under Undergraduate Regulations and Information.

In coordination with several of the professional schools, the College of Arts and Sciences students may earn combined degrees. Combined degree programs are offered in law and medicine. In the combined degree program, 30 credit hours in the professional schools may count toward the fulfillment of the baccalaureate degree. All degree requirements of the College must be fulfilled. The professional hours are generally considered upper-level elective (blanket) credit. In this manner, the two degrees are earned concurrently and the student’s program is accelerated considerably. Students are advised to check with the advising offices of the appropriate schools before making their plans.

Earning a Second Bachelor’s Degree

Students wishing to earn a second bachelor’s degree, whether or not the first was earned at UMKC or another college or university, must complete a minimum of 30 additional hours. Of those 30 additional hours, a minimum of 12 must be taken in the major department. The student must also fulfill any additional major and degree-specific requirements in effect when the student is admitted or readmitted to pursue the second bachelor’s degree.

Minor Program

An academic minor in the College of Arts and Sciences is required for the bachelor of liberal arts program, but is optional for the bachelor of arts and bachelor of science programs, and must be declared no later than the beginning of the student’s senior year.

A minimum of 18 hours is required in a minor area. At least nine of those hours must be upper-division courses. The courses and total number of hours are determined by the College department or interdisciplinary program granting the minor. A minimum of nine hours for the minor must be earned at UMKC.

A student interested in a minor should consult a departmental advisor. Minors offered in the College include the following: anthropology; art history; astronomy; studio art; bioethics and medical humanities; black studies; chemistry; classical and ancient studies; communication studies; criminal justice and criminology; economics; English creative writing; English language and literature; English manuscript, print culture, and editing; English writing; environmental studies; family studies; film studies; French; geography; geology; German; German studies; gerontology; history; healing and the humanities; Judaic studies; mathematics; philosophy; physics; political science; sociology; Spanish; sustainability; theater; urban studies; and women’s and gender studies.

Exceptions

Exceptions to A&S policies must be approved by the Academic Standards Committee of the College of Arts and Sciences. To seek exceptions, students must file a "Petition for Exception" form in the Arts and Sciences Academic Advising Office, 9 Scofield Hall.

Pre-Professional Programs

Prerequisites for advanced professional programs in law and the health professions can be satisfied as a part of any degree program in the College of Arts and Sciences.

Pre-Medicine, Pre-Dentistry and Pre-Health Advising

Please see the additional catalog section on *Pre-Medicine/Pre-Health* for more detailed information on pre-medicine, pre-dentistry and pre-health.

Program Director:

Dennise Todd
Scofield Hall (http://www.umkc.edu/virtualtour/scofield.asp), Room 9
711 East 51st Street
(816) 235-**6270**
todddn@umkc.edu

Some of the most popular pre-professional programs in health care include:

- Pre-Dental Hygiene
- Pre-Dentistry
- Pre-Medicine (allopathic and osteopathic)
- Pre-Occupational Therapy
- Pre-Optometry
- Pre-Pharmacy
- Pre-Physical Therapy
- Pre-Respiratory Therapy
- Pre-Veterinary Medicine

Pre-Law Advising

Specific details on the College's pre-law program can be found in the *Pre-Law* section of this catalog.

Program Coordinator:

Carla Oppenheimer, J.D.
Scofield Hall (http://www.umkc.edu/virtualtour/scofield.asp), Room 9
711 East 51st Street
(816) 235-**6094**
oppenheimerc@umkc.edu

Degree Requirements

Requirements for Bachelor's Degrees

The College values the distinctive benefits of a traditional liberal arts education for students and society and therefore adds these degree requirements to work in tandem with the **UMKC General Education Core** (p. 758).

The College offers three degree options: the bachelor of arts, the bachelor of liberal arts, and the bachelor of science.

General Differences between B.A., B.L.A and B.S. General Requirements

The CAS degree requirements for the bachelor of arts and bachelor of liberal arts degrees are the same, with one exception:

- The bachelor of liberal arts requires a minor, not a major.

The CAS degree requirements for the bachelor of arts, bachelor of liberal arts, and bachelor of science degrees are the same, with two exceptions:

- The bachelor of science degree requires a minimum of 60 hours in math and science.
- The bachelor of science degree does not require any foreign language.

Students may earn a bachelor of science degree in the following disciplines:

- Chemistry
- Environmental Science

- Geography
- Geology
- Mathematics and Statistics
- Physics

In all instances, students should contact the appropriate department concerning its requirements for a bachelor of science degree.

CAS Degree Requirements

1. **Six (6) credit hours in the Social & Behavioral Sciences Division of CAS.**
2. **Six (6) credit hours in the Arts & Humanities Division of CAS.** (ENGLISH 110, ENGLISH 225, COMM-ST 110, and foreign language courses at 211 or below are not eligible to fulfill this requirement.)
3. **Six (6) credit hours in the Science & Math Division of CAS.**
   PLEASE NOTE:
   a. See table below for the College of Arts and Sciences degree programs identified by Division.
   b. Courses taken to fulfill the CAS degree requirements are to be taken outside of the major department (for B.A. and B.S. degrees). However, if the major requires courses outside of the major department, those courses may count toward the CAS degree requirements.
   c. Classes may not be double-counted for both UMKC general education core and CAS degree requirements.
4. **Junior/Senior-level Writing Intensive Course.**
   Upper-level (300/400 level) Writing Intensive courses are designated with WI, PW or LW following the course number. Writing Intensive courses should be completed during the junior or senior year and after completion of Discourse II (or its equivalent) and the RooWriter.
5. **Foreign Language**
   Bachelor of arts and bachelor of liberal arts students are required to demonstrate competence at the third-semester level of a foreign language.
   a. Students with high school or other foreign language experience are strongly recommended to take the language placement exam, which can be accessed on the Department of Foreign Languages and Literatures website (http://cas.umkc.edu/foreignlanguages).
   b. Students who have satisfactorily completed two years of a foreign language in high school will be exempt from the 110 college-level course and will be required to complete only two additional courses (120 college-level and above) in the same foreign language. Students who completed four years of the same foreign language in high school must complete only one additional sophomore level (211 or above) course in the same language.
   c. Credits earned in HSCP dual enrollment courses in high school count as courses taken in the Foreign Languages and Literatures department.
   d. UMKC currently recognizes specific scores on the AP and IB foreign language exams to count as credit earned, so these credits would be recognized as fulfilling the first year (110 and 120) of the language requirement. Inquiries may be directed to an academic advisor in the Arts and Sciences Academic Advising Office, 9 Scofield Hall.
   e. Students whose education through eighth grade or the equivalent has been in a language other than English shall be exempt from the foreign language requirement for the CAS degree requirements. Students must contact the Department of Foreign Languages and Literatures to obtain a letter of exemption. Other speakers of a foreign language (i.e., heritage speakers) do not automatically qualify for a complete exemption.
   f. Students will not receive college credit towards a degree for any of the above exemptions. If a student skips over a class, for whatever reason, the student will not get credit as if the class had been taken.
   g. Students who have had more than two years of a foreign language in high school may not enroll in the 110-level course of that language at UMKC without specific permission of either the section head/coordinator for that language or the chair of the Department of Foreign Languages and Literatures in cases where there is no course coordinator (i.e., students who have taken three or more years of French may not enroll in FRENCH 110, those who have taken three or more years of Spanish may not enroll in SPANISH 110, and the same for all other languages taught at UMKC).
   h. Heritage speakers may not enroll in 110-level courses without permission of the language coordinator or section head for their language, or the chair of the Department of Foreign Languages and Literatures in cases where there is no course coordinator. (Note: A heritage speaker is someone who grows up with a certain family language in the home which is different from the dominant language in the country. In the case of the United States, the dominant language is English. A student who grows up in a family in which they speak Spanish, Chinese, Arabic, Russian, etc., would be a heritage speaker of that language.)
6. **Capstone Course**
   All students in a major must complete a course designated as a capstone course in their major.
7. **The following requirements may be fulfilled by courses from either the UMKC General Education Core or the College of Arts and Sciences Degree Requirements.**
   a. MATH 110, MATH 116 or any 200-level or above MATH/STAT course
   b. Laboratory Science experience
   c. Missouri Constitution course. Every student must fulfill the Missouri state requirement to take a course covering the United States Constitution and the Missouri State Constitution before graduation. Courses that satisfy this requirement are:

- CJC 320;
- HISTORY 101, HISTORY 102, HISTORY 360R;
- POL-SCI 210, or POL-SCI 409.

8. **Additional Requirements and Restrictions:**
   a. A minimum of 120 total credit hours is required for graduation.
   b. The final 30 consecutive credit hours of coursework must be taken at UMKC.
   c. At least 36 credit hours must be at the 300/400 level.
   d. A 2.0 overall GPA is required for graduation. However, the required major GPA may be higher, as determined by each department individually.
   e. A maximum of 3 hours of one-credit activity courses in physical education may be applied toward the 120 credit-hour minimum.
   f. The RooWriter Assessment.

The College offers the following degree programs identified by Division:

Anthropology	Social and Behavioral Sciences
Architecture	Arts & Humanities
Art/Art History	Arts & Humanities
Black Studies	Social and Behavioral Sciences (selected courses) and Arts & Humanities (selected courses)
Chemistry	Science & Math
Classical/Ancient Studies	Social and Behavioral Sciences (selected courses), Arts & Humanities (selected courses), and Science & Math (selected courses)
Communication Studies	Arts & Humanities
Criminal Justice/Criminology	Social and Behavioral Sciences
Economics	Social and Behavioral Sciences
English Language/Literature	Arts & Humanities
Environmental Science	Science & Math
Environmental Studies	Social and Behavioral Sciences
Family Studies	Social and Behavioral Sciences
Foreign Language/Literatures	Arts & Humanities
Geography	Social and Behavioral Sciences (selected courses) and Science & Math (selected courses)
Geology	Science & Math
Gerontology	Social and Behavioral Sciences
History	Social and Behavioral Sciences
Humanities	Arts & Humanities
Latina/Latino Studies	Social and Behavioral Sciences (selected courses) and Arts & Humanities (selected courses)
Mathematics and Statistics	Science & Math
Natural Science	Science & Math
Philosophy	Arts & Humanities
Physical Science	Science & Math
Physics and Astronomy	Science & Math
Political Science	Social and Behavioral Sciences
Psychology	Social and Behavioral Sciences
Religious Studies	Arts & Humanities
Social Science	Social and Behavioral Sciences
Social Work	Social and Behavioral Sciences
Sociology	Social and Behavioral Sciences
Theatre	Arts & Humanities
Urban Planning & Design	Social and Behavioral Sciences
Urban Studies	Social and Behavioral Sciences

Women’s & Gender Studies	Arts & Humanities (selected courses) and Social and Behavioral Sciences (selected courses)

Transfers with Certified 42-hour block from another Missouri Institution

Students transferring into the College of Arts and Sciences with an Associate of Arts degree or a certified 42-hour block of general education credit from another Missouri institution must complete the following requirements for baccalaureate degrees in the College:

Bachelor of Arts and Bachelor of Liberal Arts

- Foreign Language 211 (or equivalent).
- RooWriter Assessment.
- Junior/senior-level Writing Intensive course.

Bachelor of Science

- RooWriter Assessment.
- Junior/senior-level Writing Intensive course.
- 60 credit hours minimum (including hours in the major) in math and science.

UMKC’s 42-Credit Hour Certified General Education Core for Students Transferring to Another Missouri Institution

College of Arts and Sciences students wishing to complete the 42-hour core should consult with an academic advisor in the Arts and Sciences Academic Advising Office, 9 Scofield Hall.

Credit by Examination

Students may gain credit by any or all of the four methods listed below:

- International Baccalaureate (IB) (http://www.umkc.edu/registrar/transfer-credit/default.asp).
- Advanced Placement (AP) (http://www.umkc.edu/registrar/transfer-credit/default.asp).
- College Level Examination Program (CLEP) (http://www.umkc.edu/registrar/transfer-credit/default.asp).
- Departmental Exam (http://www.umkc.edu/registrar/transfer-credit/default.asp).

See the General Undergraduate Academic Regulations and Information section of this catalog for additional information.

Special Opportunities

Fellowships and Awards

International Academic Programs (IAP) assists students who want to apply for major fellowships that support continued undergraduate study and graduate school. The IAP Web site identifies an extensive list of these fellowships for both national and international study, including, but not limited to the Truman, Goldwater, Udall, Fulbright, Rhodes, Marshall, Jack Kent Cooke, NSEP Boren, and Rotary. These are highly competitive awards that demand careful planning and a commitment of time and effort. All fellowships require applicants to have a high GPA. In addition, typical eligibility criteria include a record of community service, evidence of undergraduate research or original work, strong faculty references, and a commitment to future academic or public service. A number of the fellowships require an on-campus review and nomination before a candidate can move forward to the national competition. Most of these fellowships provide substantial financial support as well as opportunities for travel and specialized seminars with fellow grantees. For additional information please call (816) 235-5759 or visit http://www.umkc.edu/international.

Honors Program

Details of the Honors Program can be found in the **Honors Program** section of the College’s portion of this catalog.

Dual Credit High School/College Partnerships (HSCP)

The College offers advanced students in many Kansas City area high schools the opportunity to earn UMKC credit prior to high school graduation through High School/College Partnerships (http://www.umkc.edu/hscp). Qualified students may enroll in introductory college courses that meet general requirements for a bachelor's degree.

Independent Study

The opportunity to undertake independent study is offered by many departments in the College to students who qualify. Generally, the student receives the individual attention of a professor in the chosen field of study and completes a project that may involve any topic considered appropriate by that professor to the academic needs of the student. Typical kinds of independent study include: special reading topics, creative work in the humanities, research projects, performances in the arts or fieldwork experiences.

Scholarships

For scholarship information please visit http://cas.umkc.edu/scholarships/

Arts and Sciences Student Council

The council aims to provide an interdisciplinary body in which Arts and Sciences students can provide input on decisions and policies of the College. The council works to enhance student-faculty interaction and communication; allocate its authorized budget; and ensure that Arts and Sciences students' needs, desires and attitudes are correctly represented to the administration.

Study Abroad

International Academic Programs
Student Success Center, Room 120
(816) 235-**5759**
http://www.umkc.edu/international

In collaboration with International Academic Programs, the College helps make available to its students a variety of study abroad programs that provide an exciting way to add a global dimension to their UMKC education through exploring and sharing the cultures of other countries.

Study abroad programs are available for a summer, a semester or an academic year. Students can earn credit towards their degree, and with careful planning, they should lose no time toward graduation. Study abroad is affordable since financial aid and scholarships are applicable to many programs, and other grants and scholarships are available specifically for study abroad.

The exchange university consortium, Mid-American Universities International, InterFuture, foreign exchanges offered through the Department of Foreign Languages and Literatures, and the Missouri-London program are among the many program choices available. Among the possible destinations are:

- Argentina
- Australia
- Austria
- Belgium
- Chile
- Costa Rica
- Czech Republic
- Denmark
- England
- Finland
- France
- Germany
- Greece
- Iceland
- Ireland
- Italy
- Korea
- Lithuania
- Malta

- Mexico
- Netherlands
- New Zealand
- Norway
- Portugal
- Scotland
- Slovenia
- South Africa
- Spain
- Sweden
- Switzerland

For more information regarding study abroad and related scholarships, please visit http://www.umkc.edu/international. Additionally, the UMKC Study Abroad Coordinator is available at (816) 235-**5790**.

Undergraduate Research

Undergraduate research opportunities are available in many disciplines within the College. Interested students should speak with faculty members in their major department. When selecting a faculty mentor for undergraduate research, students should consider their own research or creative project ideas, courses they have taken, as well as faculty research interests.

School of Biological Sciences

Biological Sciences Building (http://www.umkc.edu/virtualtour/biological-sciences.asp), Room 013
5007 Rockhill Road
(816) 235-2580
Fax: (816) 235-2577
sbs-undergrad@umkc.edu
http://sbs.umkc.edu/

Mailing Address
University of Missouri-Kansas City
School of Biological Sciences
5100 Rockhill Road
Kansas City, MO 64110-2499

Dean:
Theodore White

Graduate Programs Officer:
Karen Bame

Associate Dean for Academic Affairs:
Lynda S. Plamann

Interim Head, Division of Cell Biology and Biophysics:
Marilyn Yoder

Inteirm Head, Division of Molecular Biology and Biochemistry:
Xiao-Qiang (Sean) Yu

History and Description

The School of Biological Sciences was established (originally as the School of Basic Life Sciences) in 1985. The School's vision is "to better the quality of life through excellence in education and research." This vision is realized through the provision of quality education at the undergraduate and graduate levels, the expansion of knowledge through scientific research, and the application of scientific information for the advancement of human welfare. The School has been designated as an eminence program by the curators of the University of Missouri, and as such is a unit targeted for expansion and development.

Research by faculty, as well as graduate and undergraduate students, is focused on cellular and molecular aspects of modern biology, with emphases in molecular genetics, cell biology and structural biology. Advances in these areas will provide fundamental knowledge for biotechnology, molecular

medicine, environmental remediation and computational biology. Students are encouraged to gain hands-on research experience, involving them in the process of creating knowledge and equipping them to shape the future.

Quality curriculum combined with research-active faculty and state-of-the-art equipment, provide students with an outstanding opportunity to expand critical thinking and problem solving skills while developing an in-depth understanding of the molecular, cellular, and genetic foundations of biological sciences.

Laboratories

The School of Biological Sciences has modern, well-equipped laboratories organized into the following divisions:

Division of Cell Biology and Biophysics

This division houses the laboratories of anatomy, biophysics, developmental biology, cell biology, microbiology, neurobiology, structural biology and virology.

Division of Molecular Biology and Biochemistry

This division houses the laboratories of biochemistry, genetics, genetic engineering, membrane biochemistry, molecular biology, macromolecular structure, neurophysiology and cellular and molecular physiology.

Organizations and Activities

A campus wide biological sciences seminar program is organized and administered by the school. Throughout the year, weekly advanced research seminars are held, featuring presentations by nationally recognized visiting scientists and campus faculty.

The School of Biological Sciences has both graduate and undergraduate student organizations that meet periodically for scientific discussions and social events.

Faculty

Karen J. Bame[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bamek); graduate programs officer and associate professor of biological sciences; B.S. (University of California-Santa Barbara); Ph.D. (University of California-Los Angeles).

James M. Benevides Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=benevidesj); research assistant professor of biological sciences; B.S. (University of Massachusetts); M.S., Ph.D. (University of Rhode Island).

Donald J. Black Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=black); research instructor in biological sciences; B.S. (Fresno State University); Ph.D. (Ohio State University).

Samuel Bouyain[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bouyain); assistant professor of biological sciences; Diploma of Engineer (École Nationale Supérieure de Chimie de Paris); D.Phil. (University of Oxford).

Raymond L. Burich Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=burichr); associate professor emeritus of biological sciences; B.S., M.S. (Kent State University); Ph.D. (Iowa State University).

Gerald M. Carlson; adjunct professor of biological sciences; B.S. (Washington State University); Ph.D. (Iowa State University).

Julia Chekonova[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=chekonova); assistant professor of biological sciences; M.S. (Moscow State University); Ph.D. (USSR Academy of Sciences, Moscow).

Leonard L. Dobens, Jr.[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dobens); associate professor of biological sciences; B.S. (Boston College), Ph.D. (Dartmouth College).

Lawrence A. Dreyfus2,3 Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dreyfus); dean, school of biological sciences, and professor of biological sciences; B.A. (University of Kansas); M.S. (Michigan State University); Ph.D. (University of Kansas).

Alfred F. Esser Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=esser); professor emeritus; M.S., Ph.D. (J.W. Goethe University, Germany).

Mark T. Fisher[1]; adjunct professor of biological sciences; Ph.D. (University of Illinois-Urbana).

David R. Garris Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=garris); teaching associate professor of biological sciences; B.S. (Eastern Michigan University); Ph.D. (Wayne State University).

Brian V. Geisbrecht[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=geisbrecht); associate professor of biological sciences; B.S. (St. Vincent College); Ph.D. (The Johns Hopkins University School of Medicine).

Erika R. Geisbrecht; assistant professor of biological sciences; B.S. (University of Wisconsin-Madison); Ph.D. (The Johns Hopkins Univerisity School of Medicine).

Edward P. Gogol[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gogol); associate professor of biological sciences; A.B. (Cornell University); M. Phil., Ph.D. (Yale University).

Regina R. Grindstaff; teaching assistant professor of biological sciences; B.S. (Missouri Southern State University); Ph.D. (University of Missouri-Columbia).

R. Scott Hawley; adjunct professor of biological sciences; Ph.D. (University of Washington).

Saul M. Honigberg[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=honigberg); associate professor of biological sciences; B.S. (University of Georgia), Ph.D. (Yale University).

Chi-Ming Huang[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=huang); associate professor of biological sciences; B.S. (National Taiwan University, Taiwan); M.S., Ph.D. (University of California-Los Angeles).

Alexander Idnurm[2,3]**;** assistant professor of biological sciences; B.S., Ph.D. (University of Melbourne).

Ana J. Iriarte Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=iriarte); associate professor emeritus of biological sciences; M.S., Ph.D. (University of Navarre, Spain).

Chris L. Jordan Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jordan); research instructor in biological sciences; B.S. (Central Missouri State University), M.S. (Purdue University); Ed.S. (University of Missouri-Kansas City).

Tamas Kapros Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kapros); teaching associate professor of biological sciences; B.S., Doctor Universitatis in Genetics, Ph.D. (Jozsef Attila University of Sciences, Szeged, Hungary).

J. Andrew Keightley Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=keightley); research associate professor of biological sciences; B.S., Ph.D. (University of New Mexico-Albuquerque).

Peter Koulen; adjunct professor of biological sciences; m.s., ph.D. (Johnnes Gutenberg University, Germany).

John H. Laity[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=laity); associate professor of biological sciences; B.A. (Rutgers University), M.S. (Columbia and Cornell Universities), Ph.D. (Cornell University).

Douglas Law Contact information (http://www.umkc.edu/lookup/search.cfm?LastName=law); teaching associate professor of biological sciences; B.S., Ph.D. (Duke University).

Lee Likins Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=likins); research instructor in biological sciences; B.S. (University of West Florida-Pensacola); M.A. (University of Kansas).

Ronald A. MacQuarrie Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=macquarrie);professor emeritus of biological sciences; B.S. (University of California-Berkeley); Ph.D. (University of Oregon).

Marino Martinez-Carrion; professor and dean emeritus of biological sciences; B.A., M.A., Ph.D. (University of California-Berkeley).

Joseph R. Mattingly, Jr. Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mattingly); teaching assistant professor of biological sciences; B.A. (Bellarmine College); Ph.D. (University of Notre Dame).

Malcolm McCallum Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mccallum); assistant teaching professor of biological sciences; B.s. (Illinois State University); M.S. (Eastern Illinois University); Ph.D. (Arkansas State University).

Kevin McCluskey Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mccluskey); research associate professor in biological sciences; B.S., M.S. (Stanford University); Ph.D. (Oregon State University).

Denis Medeiros Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=medeiros); professor of biological sciences; B.S. (Central Connecticut State University); M.S. (Illionnis State University); Ph,D, (Clemson University).

Thomas M. Menees[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=menees); associate professor of biological sciences; B.S., M.S. (University of California Irvine); Ph.D. (Yale University).

Henry M. Miziorko[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=miziorko); head, molecular biology and biochemistry division, Marion-Merrell-Dow Missouri professor and professor of biological sciences; B.S. (St. Joseph's University); Ph.D. (University of Pennsylvania).

William T. Morgan; professor emeritus of biological sciences; B.S. (University of Pittsburgh); Ph.D. (University of California-Santa Barbara).

Michael O'Connor[2,3]; associate professor of biological sciences; B.A. (Trinity College Dublin); Ph.D. (National University of Ireland).

Anthony Persechini[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=persechini); professor of biological sciences; B.A. (University of New Hampshire), Ph.D. (Carnegie-Mellon University).

Lynda S. Plamann Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=plamann); associate dean for academic affairs and associate professor of biological sciences; B.A. (Augustana College); Ph.D. (University of Iowa).

Michael Plamann[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=plamann); associate professor of biological sciences; B.S. (University of Wisconsin); Ph.D. (University of Iowa).

Jeffrey L. Price[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=price); associate professor of biological sciences; B.S. (College of William and Mary), Ph.D. (Johns Hopkins University).

G. Sullivan Read[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=read); professor of biological sciences; B.A. (Williams College); M.S. (Yale University); Ph.D. (Pennsylvania State University).

Aaron Reed; research assistant professor of biological sciences; B.S. (Kansas State University); M.S. (University of Memphis); Ph.D. (Kansas State University).

Garth E. Resch Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=resch); associate professor of biological sciences; B.A., M.A., Ph.D. (University of Missouri-Columbia).

Ann Smith[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); professor of biological sciences; B.Sc. (University of Hull, England); Ph.D. (University of London, England).

Salvatore L. Stella Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stella); adjunct assistant professor of biological sciences; B.S (University of Nebraska Medical Center); Ph.D. (San Diego State University).

George J. Thomas, Jr.[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thomas); professor emeritus; B.S. (Boston College); Ph.D. (Massachusetts Institute of Technology).

Jakob H. Waterborg[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=waterborg); associate professor of biological sciences; B.S., M.S., Ph.D. (Katholieke Universiteit Nijmegen, The Netherlands).

Tammy S. Welchert Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=welchert); student services coordinator in biological sciences; B.S., M.S. (Southwest Missouri State University); Ed.S. (University of Missouri-Kansas City).

Theodore C. White; head, cell biology and biophysics division, Marion Merrell Dow professor in biological sciences; B.S. (Cornell University); Ph.D. (University of Michigan).

Gerald J. Wyckoff[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wyckoff); associate professor of biological sciences; B.S. (Cornell University); Ph.D. (University of Chicago).

Xiaolan Yao[2,3]; assistant professor of biological sciences; B.S., M.S. (Zhenghou University, China); Ph.D. (Iowa State University).

Lynwood R. Yarbrough[1]; adjunct professor of biological sciences; Ph.D. (Purdue University).

Marilyn Yoder[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=yoder); associate professor of biological sciences; B.S. (University of Kentucky); Ph.D. (University of California-Riverside).

Yu, Xiao-Qiang(Sean)[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=yu); associate professor of biological sciences; Ph.D. (Kansas State University).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

[3] Members of UMKC Doctoral Faculty

[4] Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Bachelor of Science in Biology (p. 281)
- Bachelor of Science in Biology, Biomedical Sciences Emphasis (p. 286)
- Bachelor of Science in Biology, Bioinformatics Emphasis (p. 284)
- Bachelor of Science in Biology, Biotechnology Emphasis (p. 288)
- Bachelor of Science in Biology, Cellular and Molecular Basis of Health and Disease Emphasis (p. 291)
- Bachelor of Science in Biology, Clinical Laboratory Science Emphasis (p. 293)
- Bachelor of Science in Biology, Pre-Dentistry Concentration (p. 295)
- Bachelor of Arts in Biology (p. 297)
- Bachelor of Arts in Biology, combined BA/MD dual degree (p. 299)
- Biology Honors Program (p. 301)
- Minor in Biology (p. 302)
- Elective Courses for the Non-Biology Major (p. 303)

Courses taught by the School of Biological Sciences support academic programs within the schools of Nursing, Dentistry, Medicine, Pharmacy and Education, and departments within the College of Arts and Sciences. An undergraduate minor in biology and a variety of courses that may interest non-biology majors are available to complement other fields of study, or to satisfy general education requirements of other academic units. A background in biology combined with non-science skills creates many career possibilities.

Students interested in pursuing undergraduate degree programs offered by the School of Biological Sciences are admitted through the UMKC Office of Admissions (http://www.umkc.edu/admissions). Transfer students should contact the University admissions office and the School of Biological Sciences for information about transfer admissions and evaluation of transfer coursework. Transfer admission eligibility includes an overall grade-point average of at least 2.0 for all college-level coursework attempted at previous institutions, an overall GPA of at least 2.0 in courses used to fulfill School of Biological Sciences major requirements, and a University of Missouri Biology GPA of at least 2.0.

General Information About Undergraduate Programs

Career Implications of a Bachelor’s Degree in Biology

Our programs prepare students for a variety of career opportunities. Some students choose careers in the pharmaceutical or biotech industries, while others opt for graduate study in areas such as bioinformatics, forensics, or cell biology. In addition, a biology major is an excellent choice for students planning careers in medicine, veterinary medicine, dentistry, optometry, physical therapy, and other health professions.

The bachelor of science in biology curriculum fulfills the admissions requirements for most medical schools and dental schools and incorporates intermediate and upper-level biology courses specifically recommended by medical/dental school admissions officers. Those who wish to follow the pre-med track have the option to pursue the bachelor of science in biology with the cellular and molecular basis of health and disease emphasis, or apply in Spring of their Sophomore year for admission to the competitive biomedical sciences emphasis. Students pursuing admission to dental school may earn a bachelor of science in biology while completing coursework in the a pre-dentistry concentration. Those who are interested in a career as a clinical laboratory scientist/medical technologist may choose to pursue the bachelor of science in biology with the clinical laboratory science emphasis.

Undergraduate Advising

The School of Biological Sciences’ team of well-trained academic advisors assists undergraduate students in developing individual plans of study. As teaching faculty, the advisors are uniquely qualified to help students understand and address course selection and professional development issues. Students will find the School of Biological Sciences Undergraduate Programs Handbook, which contains the latest information about degree requirements, academic rules, and related matters, on Blackboard under Biological Sciences Advising. Information on time management, reading and note-taking skills, communicating with professors, and taking exams can also be found on the Biological Sciences Advising site in Blackboard. To facilitate progress toward the student’s degree, and to ensure that courses selected provide an appropriate academic program, students are required to participate in advising each semester before registering for classes.

Students enrolled in double majors or degree programs are advised by both academic units. The primary academic unit generally has the major advising responsibility. However, for issues pertaining specifically to a biology degree, an advisor at the School of Biological Sciences must be consulted.

Students are responsible for becoming familiar with all academic regulations of the campus as outlined in the catalog and in other University documents, including the SBS Undergraduate Programs Handbook.

Pre-Medicine, Pre-Dentistry and Pre-Health Professions Academic Advising

The School of Biological Sciences' experienced team of advisors is knowledgeable about admission requirements and application processes for health profession programs. It is important for students considering eventual application to medical, dental, or veterinary school or other professional programs to consult early and often with a School of Biological Sciences advisor about appropriate course selection and additional preparation.

Advisors assist the student in investigating programs throughout the country and in planning an individualized undergraduate course of study. In addition they host informational meetings/workshops about aspects of planning for a health professions career, provide information on admission exam preparation, assist in the application process and in developing a personal statement, and help the student work with Career Services to compile a letter of recommendation file. Each student receives support and encouragement during all phases of the application process. Students are strongly encouraged to take advantage of advisor expertise by discussing their career plans beginning with their first semester at UMKC. Please see the additional catalog section on Pre-Medicine/Pre-Health (p. 741) for other information.

Graduate

Graduate Degrees:

- Master of Science in Cellular and Molecular Biology (p. 304)
  - Emphasis in Bioinformatics (p. 304)
- Master of Arts in Biology (p. 305)
- Doctor of Philosophy Study (p. 306)

The School of Biological Sciences offers programs of study leading to a master of science degree in cellular and molecular biology. In addition, a master of arts degree in biology is offered. The school participates in UMKC's Interdisciplinary Ph.D. program in Cell Biology/Biophysics and Molecular Biology/Biochemistry.

Graduates with research experience in cell biology and biophysics or molecular biology and biochemistry may enter careers in many areas, including biotechnology, pharmaceutics, academia or governmental research involving the environment, agriculture, energy, defense or health.

General Information About Graduate Programs

Advising

New students will be advised by the principal graduate advisor until they have selected their permanent research advisor. The graduate programs office will contact students in advance of their first semester for information about advising and registration.

Students are responsible for becoming familiar with all academic regulations of the campus as outlined in the catalog and in other University documents.

Graduate Admission

Admission to the school's graduate programs is competitive and students are encouraged to apply early. Applications are reviewed by an admissions committee that evaluates students on the basis of past performance and evidence of ability to pursue graduate studies successfully. The school admits students to its doctoral and master's degree programs throughout the year; however, early application (by Feb. 15) is advised to receive consideration for assistantships and other financial support.

Information on admission to master's or Ph.D. degree programs may be found at the Graduate Programs Web site at http://www.umkc.edu/sbs/graduate/, in the Graduate Academic Regulations and Information (p. 774) section of this catalog, by e-mail to sbs-grad@umkc.edu, or by writing to our graduate programs office at the mailing address at the beginning of this section.

Graduate teaching assistantships, graduate research assistantships and fellowships are available through the school and are awarded on a competitive basis. Currently, all fully admitted, full-time doctoral students receive financial support.

To be eligible for admission to the School of Biological Sciences' graduate programs, the applicant must:

- Possess a bachelor's degree in biological sciences or a related field with a minimum of 120 credit hours, or possess an advanced degree in a health sciences field.
- Have an undergraduate GPA of at least 3.0.
- Have sufficient background coursework to undertake graduate studies in biological sciences.
- Have acceptable scores in the Graduate Record Examination aptitude tests.
- Submit three letters of recommendation from individuals familiar with the student's academic performance and scientific abilities.

Students may be admitted with certain deficiencies, with the stipulation that these can be removed early in the course of study.

Requirements for Retention

General requirements for retention of graduate students are described in the Graduate Academic Regulations and Information section of this catalog. For all graduate students, a 3.0 (B) GPA is required for satisfactory progress. No F grades are permitted.

Any doctoral student who receives more than one C grade in a basic course will be dropped from the doctoral program.

Any master's student who receives more than two C grades or more than one C and one D grade in graduate courses will be dropped from the program.

General Education Requirements

To earn a bachelor's degree in a program administered by the School of Biological Sciences, students must satisfy requirements in each of the areas listed below:

1. **Communicating (9 credit hours)**
   To develop students' effective use of the English language and quantitative and other symbolic systems essential to their success in school and in the world. Students should be able to read and listen critically, and to write and speak with thoughtfulness, clarity, coherence and persuasiveness.
   a. Writing and Critical Analysis: Students must satisfactorily complete ENGLISH 110 and ENGLISH 225. In addition, students must pass the Written English Proficiency Test (WEPT) or satisfactorily complete ENGLISH 299. A student earning a score of 30 or better on the ACT English subtest or 690 or better on the SAT Verbal, may be exempt from the ENGLISH 110 requirement.
   b. Oral Augmentation/Speech: Students must satisfactorily complete COMM-ST 110 or COMM-ST 140.
2. **Higher Order Thinking, Managing Information, and Valuing (6 credit hours)**
   To develop students' ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments; and to solve problems by applying evaluative standards. To develop students' abilities to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions. To develop students' abilities to understand the moral and ethical values of a diverse society and to understand that many courses of action are guided by value judgments about the way things ought to be. Students should be able to make informed decisions through identifying personal values and the values of others and through understanding how such values develop. They should be able to analyze the ethical implications of choices made on the basis of these values. Students must successfully complete 6 hours from at least two different fields, chosen from the following list:

PHILOS 210	Introduction to Philosophy	3
or PHILOS 222	Foundations Of Logic and Scientific Reasoning	
History:		3
HISTORY 201	European History to 1600	
HISTORY 202	European History since 1600	
HISTORY 206	World History To 1450	
HISTORY 208	World History since 1450	
ANTHRO 103	Introduction To Cultural Anthropology	3
SOCIOL 101	Sociology: An Introduction	3
COMP-SCI 100	Computer Fundamentals and Applications (or above)	3
Mathematics and Statistics:		3
MATH 210	Calculus I	
MATH 216	Biomath I: Calculus and Modeling	
STAT 235	Elementary Statistics	

   These courses, in addition to the remainder of the general education block of 42 hours, satisfy the three skill area goals of Higher Order Thinking, Managing Information, and Valuing. Courses chosen from this list may also be used to satisfy other general education requirements where appropriate.

3. **Social and Behavioral Sciences (9 credit hours)**
   To develop students' understanding of themselves and the world around them through study of content and the processes used by historians and social and behavioral scientists to discover, describe, explain and predict human behavior and social systems. Students must understand the diversities and complexities of the cultural and social world, past and present, and come to an informed sense of self and others. (Students must fulfill the state statute requirements for the United States and Missouri constitutions.)

   a. Constitution course:

Select one of the following:		3
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	

HISTORY 360R	Constitutional History of the United States	
POL-SCI 210	American Government	
Total Credits		3

b. Six additional credit hours from at least one field other than above, chosen from economics, history, political science, psychology, sociology, social science, geography, criminal justice (6 hours).

4. **Humanities and Fine Arts (6 credit hours)**
To develop students' understanding of the ways in which humans have addressed their condition through imaginative work in the humanities and fine arts; to deepen their understanding of how that imaginative process is informed and limited by social, cultural, linguistic, and historical circumstances; and to appreciate the world of the creative imagination as a form of knowledge.

   a. One 3 credit hour course chosen from English, communication studies, foreign Language, or philosophy.

   b. One 3 credit hour course chosen from art/art history, conservatory or theater.

5. **Mathematics (3 credit hours)**
To develop students' understanding of fundamental mathematical concepts and applications. Students should develop a level of quantitative literacy that would enable them to make decisions and solve problems, and which could serve as a basis for continued learning. (The mathematics requirement for general education should have the same prerequisite(s) and level of rigor as college algebra.)

   a. MATH 110 or higher (including MATH 116).

   b. Students majoring in Biology will fulfill this requirement with the biology major's mathematics requirement:

Select one of the following:		3
MATH 210	Calculus I	
MATH 216	Biomath I: Calculus and Modeling	
STAT 235	Elementary Statistics	
Total Credits		3

6. **Life and Physical Sciences (8 credit hours)**
To develop students' understanding of the principles and laboratory procedures of life and physical sciences and to cultivate their abilities to apply the empirical methods of scientific inquiry. Students should understand how scientific discovery changes theoretical views of the world, informs our imaginations, and shapes human history. Students should also understand that science is shaped by historical and social contexts.

   a. One life science and one physical science, to include at least one laboratory component.

   b. Students majoring in biology will fulfill this requirement as a part of their major.

7. **Total Credit Hours**
In addition to the specific area requirements listed above, students must meet other University graduation requirements including, but not limited to, 120 total credit hours, 60 credit hours from a four-year institution if coursework is transferred from a non-Missouri institution, unless described otherwise in a specific articulation agreement with the School of Biological Sciences; 36 junior/senior level credit hours, taking the EPP Exam and the Major Field Exam, residency requirements, minimum GPA standards, and other requirements that may be specified.

Graduate Admissions

Admission to the school's graduate programs is competitive and students are encouraged to apply early. Applications are reviewed by an admissions committee that evaluates students on the basis of past performance and evidence of ability to pursue graduate studies successfully. The school admits students to its doctoral and master's degree programs throughout the year; however, early application (by Feb. 15) is advised to receive consideration for assistantships and other financial support.

Information on admission to master's or Ph.D. degree programs may be found at the Graduate Programs Web site athttp://www.umkc.edu/sbs/graduate/, in the Graduate Academic Regulations and Information (p. 774) section of this catalog, by e-mail tosbs-grad@umkc.edu, or by writing to our graduate programs office at the mailing address at the beginning of this section.

Graduate teaching assistantships, graduate research assistantships and fellowships are available through the school and are awarded on a competitive basis. Currently, all fully admitted, full-time doctoral students receive financial support.

To be eligible for admission to the School of Biological Sciences' graduate programs, the applicant must:

- Possess a bachelor's degree in biological sciences or a related field with a minimum of 120 credit hours, or possess an advanced degree in a health sciences field.
- Have an undergraduate GPA of at least 3.0.
- Have sufficient background coursework to undertake graduate studies in biological sciences.
- Have acceptable scores in the Graduate Record Examination aptitude tests.
- Submit three letters of recommendation from individuals familiar with the student's academic performance and scientific abilities.

Students may be admitted with certain deficiencies, with the stipulation that these can be removed early in the course of study.

Bachelor of Science in Biology

Student Learning Outcomes

Plan of Study (p.)

Students who complete an undergraduate degree in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
   a. the relationship between structure and function at all levels of biological organization,
   b. evolution and the role of natural selection in the process,
   c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

The B.S. degree program is a rigorous curriculum designed for students interested in preparing for graduate studies or a professional school, or pursuing entry level employment in a science-related field.

Program Requirements

In addition to the UMKC General Education Core (http://www.umkc.edu/core) requirements, students pursuing the B.S. degree in biology must meet the following requirements:

1. **Biology Course Requirements**
   a. The following core courses are required:

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
LS-BIOC 341	Basic Biochemistry	3
Total Credits		17

   b. Two of the following laboratory courses are required for a minimum of 5 credit hours. One of these courses must be a Writing Intensive (WI) course. The second may be taken using the non-WI option.

Select two of the following:		5-6
BIOLOGY 302L	Ecology Laboratory	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	
LS-MCRB 313L	Laboratory in Microbiology (WI)	
or LS-MCRB 313WL	Laboratory in Microbiology	
BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure (WI)	
or BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure	
LS-BIOC 360WL	Laboratory in Biochemistry and Molecular Biology (WI)	
or LS-BIOC 360L	Laboratory in Biochemistry and Molecular Biology	

LS-ANATO 118L	Introductory Anatomy Laboratory	
Total Credits		5-6

c. Biology Synthesis requirement:

Select from the following for a total of three credit hours:

BIOLOGY 498WI	Critical Analysis of Biological Issues (WI)
LIFE-SCI 499A	Undergraduate Research-Bioinformatics
LIFE-SCI 499B	Undergraduate Research-Genetics
LIFE-SCI 499C	Undergraduate Research-Microbiology
LIFE-SCI 499D	Undergraduate Research-Physiology
LIFE-SCI 499E	Undergraduate Research-Biochemistry
LIFE-SCI 499F	Undergraduate Research- Biophysics
LIFE-SCI 499G	Undergraduate Research-Cell Biology
LIFE-SCI 499H	Undergraduate Research-Neuroscience
LIFE-SCI 499I	Undergraduate Research-Botany
LIFE-SCI 499J	Undergraduate Research-Zoology
LIFE-SCI 499K	Undergraduate Research-Ecology
LIFE-SCI 499L	Undergraduate Research-Biological Sciences
LIFE-SCI 499M	Undergraduate Research-Biological Sciences Honors
LIFE-SCI 499P	Undergraduate Research-Biotechnology
LIFE-SCI 497A	Special Topics-Bioinformatics
LIFE-SCI 497B	Special Topics-Genetics
LIFE-SCI 497C	Special Topics-Microbiology
LIFE-SCI 497D	Special Topics-Physiology
LIFE-SCI 497E	Special Topics - Biochemistry
LIFE-SCI 497F	Special Topics - Biophysics
LIFE-SCI 497G	Special Topics-Cell Biology
LIFE-SCI 497H	Special Topics: Neuroscience
LIFE-SCI 497I	Special Topics-Botany
LIFE-SCI 497J	Special Topics-Zoology
LIFE-SCI 497K	Special Topics-Ecology
LIFE-SCI 497L	Special Topics-Biological Sciences
LIFE-SCI 497P	Special Topics-Biotechnology
LIFE-SCI 497BB	Special Topics: Behavioral Biology

d. Students must complete additional biology majors coursework for a total of 42 credit hours of biology courses with grades of C- or better. 26 of these hours must be junior/senior level. A minimum of 21 credit hours of biology courses must be taken from the School of Biological Sciences.

2. **Physical Sciences and Mathematics Course Requirements**
The following courses must be completed with grades of C- or better.

MATH 216	Biomath I: Calculus and Modeling	4
or MATH 210	Calculus I	
Select one of the following:		3-4
MATH 226	Biomath II: Statistics and Modeling	
MATH 220	Calculus II	
STAT 235	Elementary Statistics	
PHYSICS 210	General Physics I	4-5
or PHYSICS 240	Physics For Scientists and Engineers I	
PHYSICS 250	Physics For Scientists and Engineers II [1]	4-5
or PHYSICS 220	General Physics II	
CHEM 211	General Chemistry I	4

CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
Total Credits		33-36

[1] Students may choose LIFE-SCI 401 as an alternative to PHYSICS 250.

Suggested Plan of Study

This is a general plan that may be adjusted to accommodate individual background interests, abilities and career objectives.

Freshman Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 108[1]	3	BIOLOGY 109[1]	3
BIOLOGY 108L[1]	1	BIOLOGY 109L[1]	1
CHEM 211	4	CHEM 212R	4
CHEM 211L	1	CHEM 212LR	1
Anchor I[GE]	3	Anchor II[GE]	3
DISC 100	3	DISC 200	3
	15		**15**

Sophomore Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 202	3	BIOLOGY 206	3
CHEM 321	3	CHEM 322R	3
CHEM 321L	1	CHEM 322L	1
MATH 210	4	MATH 220 or STAT 235	3-4
Focus A[GE]	3	Focus C[GE]	3
	14		**13-14**

Junior Year

Fall Semester	Credits	Spring Semester	Credits
LS-BIOC 341	3	BIOLOGY ___ Biology Elective	3
PHYSICS 210 or 240	4-5	BIOLOGY ___ Biology Lab Elective	3
BIOLOGY ___ Biology Elective	3	PHYSICS 220 or 250	4-5
BIOLOGY ___ Biology Elective	3	Anchor III[GE]	3
BIOLOGY ___ Biology Elective Lab	2-3	DISC 300	3
	15-17		**16-17**

Senior Year

Fall Semester	Credits	Spring Semester	Credits
BIOLOGY ___ Upper Level Biology Elective	3	BIOLOGY ___ Biology Synthesis	3
BIOLOGY ___ Upper Level Biology Elective	3	BIOLOGY ___ Upper Level Biology Elective	3
BIOLOGY ___ Upper Level Biology Lab Elective	3	Elective	3

Upper Level Elective	3	Elective	3
Elective	3	Elective	3
	15		**15**

Total Credits: 118-122

[1] General Biology II may be taken before General Biology I if desired.

GE See list of Anchor and Focus courses at the UMKC General Education Core website (http://www.umkc.edu/core/courses).

Students must complete a total of 42 credit hours of biology courses with grades of C- or better and maintain a cumulative UM Biology GPA of at least 2.0. 26 of these credit hours must be junior/senior level and must include LS-BIOC 341, a biology synthesis course, and two laboratory courses. One Biology Lab must be Writing Intensive.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Biology Bioinformatics Emphasis

Student Learning Outcomes

Students who complete an undergraduate degree in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
    a. the relationship between structure and function at all levels of biological organization,
    b. evolution and the role of natural selection in the process,
    c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

Program Requirements

This instructional program incorporates courses from biology, computer science and mathematics. Students will obtain skills for the analysis of complex data, extraction of information from genomic and proteomic databases, and the design and development of software and algorithms to support these activities.

The curriculum of UMKC General Education Core (http://www.umkc.edu/core) and biology majors courses, combined with the mathematics, chemistry and physics components is designed to provide undergraduate students with a clear program for the undergraduate background needed for a career in bioinformatics or to provide them with a solid, biologically oriented curriculum to pursue graduate level research in this area.

1. **Biology course requirements**
    a. The following core courses:

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3

LS-BIOC 341	Basic Biochemistry	3
Total Credits		17

b. Emphasis course requirements:

LS-BIOC 425	Bioinformatics	3
LS-BIOC 430	Molecular Biology and Genetic Engineering	3
BIOLOGY 405	Introduction to Evolution	3
Total Credits		9

c. Biology laboratory courses:

LS-BIOC 360WL	Laboratory in Biochemistry and Molecular Biology (WI)	3
Select one of the following:		2-3
BIOLOGY 302L	Ecology Laboratory	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology (WI)	
LS-MCRB 313WL	Laboratory in Microbiology (WI)	
or LS-MCRB 313L	Laboratory in Microbiology	
BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure (WI)	
or BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure	
LS-ANATO 118L	Introductory Anatomy Laboratory	
Total Credits		5-6

d. Biology Synthesis requirement:

Select from the following for a total of three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues (WI)	
LIFE-SCI 497A	Special Topics-Bioinformatics	
LIFE-SCI 497B	Special Topics-Genetics	
LIFE-SCI 497BB	Special Topics: Behavioral Biology	
LIFE-SCI 497C	Special Topics-Microbiology	
LIFE-SCI 497D	Special Topics-Physiology	
LIFE-SCI 497E	Special Topics - Biochemistry	
LIFE-SCI 497F	Special Topics - Biophysics	
LIFE-SCI 497G	Special Topics-Cell Biology	
LIFE-SCI 497H	Special Topics: Neuroscience	
LIFE-SCI 497I	Special Topics-Botany	
LIFE-SCI 497J	Special Topics-Zoology	
LIFE-SCI 497K	Special Topics-Ecology	
LIFE-SCI 497L	Special Topics-Biological Sciences	
LIFE-SCI 497P	Special Topics-Biotechnology	
LIFE-SCI 499A	Undergraduate Research-Bioinformatics	
LIFE-SCI 499B	Undergraduate Research-Genetics	
LIFE-SCI 499C	Undergraduate Research-Microbiology	
LIFE-SCI 499D	Undergraduate Research-Physiology	
LIFE-SCI 499E	Undergraduate Research-Biochemistry	
LIFE-SCI 499F	Undergraduate Research- Biophysics	
LIFE-SCI 499G	Undergraduate Research-Cell Biology	
LIFE-SCI 499H	Undergraduate Research-Neuroscience	
LIFE-SCI 499I	Undergraduate Research-Botany	
LIFE-SCI 499J	Undergraduate Research-Zoology	
LIFE-SCI 499K	Undergraduate Research-Ecology	
LIFE-SCI 499L	Undergraduate Research-Biological Sciences	
LIFE-SCI 499M	Undergraduate Research-Biological Sciences Honors	

LIFE-SCI 499P	Undergraduate Research-Biotechnology	
Total Credits		3

e. Students must complete additional biology majors coursework for a total of 42 credit hours of biology courses with grades of C- or better. At least 26 of these must be at the 300- or 400-level. A minimum of 21 credit hours of biology courses must be taken from the School of Biological Sciences. The UM Biology GPA must be 2.0 or higher.

2. **Physical sciences and mathematics requirements:**
All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

COMP-SCI 101	Problem Solving and Programming I	3
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R	Problem Solving and Programming II	3
MATH 216	Biomath I: Calculus and Modeling	4
or MATH 210	Calculus I	
MATH 226	Biomath II: Statistics and Modeling	3-4
or MATH 220	Calculus II	
STAT 235	Elementary Statistics	3
PHYSICS 210	General Physics I	4-5
or PHYSICS 240	Physics For Scientists and Engineers I	
PHYSICS 250	Physics For Scientists and Engineers II [1]	5
or PHYSICS 220	General Physics II	
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
Total Credits		46-48

[1] Students may choose LIFE-SCI 401, as an alternative to PHYSICS 250.

A minimum of 120 credit hours is required; and 36 of these must be at the junior/senior level. Electives may be taken from any area once other degree requirements have been met.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Biology, Biomedical Sciences Emphasis

Biomedical Sciences Emphasis

The B.S. Biology, Biomedical Sciences Emphasis is designed to prepare highly motivated students for entrance into medical school, dental school, physician assistant programs, anesthesia assistant programs, and other graduate or professional programs in the life and health sciences. Entrance into the emphasis is competitive. Students seeking the B.S. in Biology may apply for admission to the Biomedical Sciences Emphasis during the Spring semester of their sophomore year. Please contact the Undergraduate Programs Office in the School of Biological Sciences at (816) 235-2580 for more information.

In addition to the UMKC General Education Core (http://www.umkc.edu/core) requirements, students pursuing the B.S. Biology, Biomedical Sciences Emphasis must meet the following requirements:

A. Biology course requirements

1. The following core courses (17 credit hours)

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
LS-BIOC 341	Basic Biochemistry	3

2. Emphasis course requirements

LS-ANATO 118	Introductory Anatomy	3
LS-ANATO 118L	Introductory Anatomy Laboratory	2
LS-MCRB 313	Microbiology	3
LS-MCRB 313WL	Laboratory in Microbiology	3
LS-PHYS 316	Principles of Physiology	3
LIFE-SCI 310	Human Lifecycle I	2
LIFE-SCI 320	Human Lifecycle II	2
LIFE-SCI 330	Human Lifecycle III	2
LIFE-SCI 340	Human Lifecycle IV	2
MEDICINE 9115	Medical Terminology	1
LIFE-SCI 201	Healthcare Professions Seminar	1
LIFE-SCI 202	Exploring Healthcare Professions	1

3. Biology Synthesis requirement (Choose a total of 3 credit hours)

BIOLOGY 498WI	Critical Analysis of Biological Issues	3
LIFE-SCI 499A	Undergraduate Research-Bioinformatics	1-3
or LIFE-SCI 499B	Undergraduate Research-Genetics	
or LIFE-SCI 499C	Undergraduate Research-Microbiology	
or LIFE-SCI 499D	Undergraduate Research-Physiology	
or LIFE-SCI 499E	Undergraduate Research-Biochemistry	
or LIFE-SCI 499F	Undergraduate Research- Biophysics	
or LIFE-SCI 499G	Undergraduate Research-Cell Biology	
or LIFE-SCI 499H	Undergraduate Research-Neuroscience	
or LIFE-SCI 499I	Undergraduate Research-Botany	
or LIFE-SCI 499J	Undergraduate Research-Zoology	
or LIFE-SCI 499K	Undergraduate Research-Ecology	
or LIFE-SCI 499L	Undergraduate Research-Biological Sciences	
or LIFE-SCI 499M	Undergraduate Research-Biological Sciences Honors	
or LIFE-SCI 499P	Undergraduate Research-Biotechnology	
LIFE-SCI 497A	Special Topics-Bioinformatics	1-3
or LIFE-SCI 497B	Special Topics-Genetics	
or LIFE-SCI 497BB	Special Topics: Behavioral Biology	
or LIFE-SCI 497C	Special Topics-Microbiology	
or LIFE-SCI 497D	Special Topics-Physiology	
or LIFE-SCI 497E	Special Topics - Biochemistry	
or LIFE-SCI 497F	Special Topics - Biophysics	
or LIFE-SCI 497G	Special Topics-Cell Biology	
or LIFE-SCI 497H	Special Topics: Neuroscience	

or LIFE-SCI 497I	Special Topics-Botany
or LIFE-SCI 497J	Special Topics-Zoology
or LIFE-SCI 497K	Special Topics-Ecology
or LIFE-SCI 497L	Special Topics-Biological Sciences
or LIFE-SCI 497P	Special Topics-Biotechnology

4. Students must complete additional biology majors coursework for a total of 42 credit hours of biology courses with grades of C- or better. At least 26 of these must be at the 300- or 400-level. A minimum of 21 credit hours of biology courses must be taken from the School of Biological Sciences. The UM Biology GPA must be 2.0 or higher.

B. Physical Sciences and Mathematics Course Requirements

The following courses must be completed with grades of C- or better.

MATH 216	Biomath I: Calculus and Modeling	4
or MATH 210	Calculus I	
MATH 226	Biomath II: Statistics and Modeling	3
or MATH 220	Calculus II	
or STAT 235	Elementary Statistics	
PHYSICS 210	General Physics I	4
or PHYSICS 240	Physics For Scientists and Engineers I	
PHYSICS 220	General Physics II	4
or PHYSICS 250	Physics For Scientists and Engineers II	
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1

Students may choose LIFE-SCI 401 Biophysical Principles as an alternative to PHYSICS 250. A minimum of 120 credit hours is required; and 36 of these must be at the junior/senior level. Electives may be taken from any area once other degree requirements have been met.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Biology Biotechnology Emphasis

Student Learning Outcomes

Students who complete an undergraduate degree in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
    a. the relationship between structure and function at all levels of biological organization,
    b. evolution and the role of natural selection in the process,
    c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.

6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

The curriculum of UMKC General Education Core and biology majors courses, combined with the mathematics, chemistry and physics components is designed to provide undergraduate students with a clear program for the undergraduate background needed for a career in biotechnology or to provide them with a solid, biologically oriented curriculum to pursue graduate level research in this area.

1. **Biology course requirements**
   a. Core courses:

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
LS-BIOC 341	Basic Biochemistry	3
Total Credits		17

   b. Emphasis course requirements:

LS-MCRB 313	Microbiology	3
BIOLOGY 409	Developmental Biology	3
LS-BIOC 425	Bioinformatics	3
LS-BIOC 430	Molecular Biology and Genetic Engineering	3
Total Credits		12

   c. Laboratory course requirements (9 credit hours; 6 of these must be WI):

LS-MCRB 313L	Laboratory in Microbiology	3
or LS-MCRB 313WL	Laboratory in Microbiology	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	3
LS-BIOC 360L	Laboratory in Biochemistry and Molecular Biology	3
or LS-BIOC 360WL	Laboratory in Biochemistry and Molecular Biology	
Total Credits		9

   d. Biology synthesis requirement:

Select from the following for a total of three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues (WI)	
LIFE-SCI 497A	Special Topics-Bioinformatics	
LIFE-SCI 497B	Special Topics-Genetics	
LIFE-SCI 497BB	Special Topics: Behavioral Biology	
LIFE-SCI 497C	Special Topics-Microbiology	
LIFE-SCI 497D	Special Topics-Physiology	
LIFE-SCI 497E	Special Topics - Biochemistry	
LIFE-SCI 497F	Special Topics - Biophysics	
LIFE-SCI 497G	Special Topics-Cell Biology	
LIFE-SCI 497H	Special Topics: Neuroscience	
LIFE-SCI 497I	Special Topics-Botany	
LIFE-SCI 497J	Special Topics-Zoology	
LIFE-SCI 497K	Special Topics-Ecology	
LIFE-SCI 497L	Special Topics-Biological Sciences	
LIFE-SCI 497P	Special Topics-Biotechnology	
LIFE-SCI 499A	Undergraduate Research-Bioinformatics	
LIFE-SCI 499B	Undergraduate Research-Genetics	
LIFE-SCI 499C	Undergraduate Research-Microbiology	

LIFE-SCI 499D	Undergraduate Research-Physiology	
LIFE-SCI 499E	Undergraduate Research-Biochemistry	
LIFE-SCI 499F	Undergraduate Research- Biophysics	
LIFE-SCI 499G	Undergraduate Research-Cell Biology	
LIFE-SCI 499H	Undergraduate Research-Neuroscience	
LIFE-SCI 499I	Undergraduate Research-Botany	
LIFE-SCI 499J	Undergraduate Research-Zoology	
LIFE-SCI 499K	Undergraduate Research-Ecology	
LIFE-SCI 499L	Undergraduate Research-Biological Sciences	
LIFE-SCI 499M	Undergraduate Research-Biological Sciences Honors	
LIFE-SCI 499P	Undergraduate Research-Biotechnology	
LIFE-SCI 5899	Required Graduate Enrollment	
Total Credits		3

e. Students must complete additional biology majors coursework to total at least 42 credit hours of biology courses with grades of C- or better. At least 26 of these must be at the 300- or 400-level. A minimum of 21 credit hours of biology courses must be taken from the School of Biological Sciences. The UM Biology GPA must be at least 2.0.

2. **Physical sciences and mathematics requirements**
All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

COMP-SCI 101	Problem Solving and Programming I	3
STAT 235	Elementary Statistics	3
MATH 216	Biomath I: Calculus and Modeling	4
or MATH 210	Calculus I	
MATH 226	Biomath II: Statistics and Modeling	3-4
or MATH 220	Calculus II	
PHYSICS 210	General Physics I	4-5
or PHYSICS 240	Physics For Scientists and Engineers I	
PHYSICS 250	Physics For Scientists and Engineers II [1]	4-5
or PHYSICS 220	General Physics II	
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
Total Credits		39-42

[1] Students may choose LIFE-SCI 401, as an alternative to PHYSICS 250.

A minimum of 120 credit hours is required, and 36 of these must be at the junior/senior level. Electives may be taken from any area once other degree requirements have been met.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Biology Cellular and Molecular Basis of Health and Disease Emphasis

This instructional program fully prepares individuals for admission to a professional school in medicine, including allopathic, osteopathic or podiatric medicine programs. By completing the requirements of the bachelor's of science in biology with the cellular and molecular basis of health and disease emphasis, students will complete all of the minimum prerequisites and the upper level biology electives which are highly recommended by most medical schools.

The courses selected provide a foundation of knowledge in modern cellular and molecular biology, essential for understanding medical science. The curriculum of general education and biology majors courses, combined with the mathematics, chemistry and physics components, provides the background essential to understanding the latest diagnostic and treatment technologies.

UMKC General Education Core (http://www.umkc.edu/core) requirements are the same as for all students seeking a bachelor's degree in biology. Completion of the emphasis requirements will be noted on the UMKC transcript. Through proper planning with a School of Biological Sciences advisor, biology majors can use their electives and general education requirements to complete the healing and humanities minor.

Student Learning Outcomes

Students who complete an undergraduate degree in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
   a. the relationship between structure and function at all levels of biological organization,
   b. evolution and the role of natural selection in the process,
   c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

Program Requirements

1. **Biology course requirements**
   a. Core courses:

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
LS-BIOC 341	Basic Biochemistry	3
Total Credits		17

   b. Emphasis course requirements:

LS-PHYS 316	Principles of Physiology	3
LS-MCRB 313	Microbiology	3
BIOLOGY 409	Developmental Biology	3
LS-BIOC 430	Molecular Biology and Genetic Engineering	3
LS-MCRB 431	Virology	3
or LS-MCRB 435	Immunology	
Total Credits		15

   c. Laboratory course requirements:

LS-MCRB 313WL	Laboratory in Microbiology (WI)	3
Select one of the following:		2-3
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	
BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure	

or BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure	
LS-BIOC 360L	Laboratory in Biochemistry and Molecular Biology	
or LS-BIOC 360WL	Laboratory in Biochemistry and Molecular Biology	
LS-ANATO 118L	Introductory Anatomy Laboratory	
Total Credits		5-6

d. Biology Synthesis requirement:

Select from the following to total three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues	
LIFE-SCI 497A	Special Topics-Bioinformatics	
LIFE-SCI 497B	Special Topics-Genetics	
LIFE-SCI 497BB	Special Topics: Behavioral Biology	
LIFE-SCI 497C	Special Topics-Microbiology	
LIFE-SCI 497D	Special Topics-Physiology	
LIFE-SCI 497E	Special Topics - Biochemistry	
LIFE-SCI 497F	Special Topics - Biophysics	
LIFE-SCI 497G	Special Topics-Cell Biology	
LIFE-SCI 497H	Special Topics: Neuroscience	
LIFE-SCI 497I	Special Topics-Botany	
LIFE-SCI 497J	Special Topics-Zoology	
LIFE-SCI 497K	Special Topics-Ecology	
LIFE-SCI 497L	Special Topics-Biological Sciences	
LIFE-SCI 497P	Special Topics-Biotechnology	
LIFE-SCI 499A	Undergraduate Research-Bioinformatics	
LIFE-SCI 499B	Undergraduate Research-Genetics	
LIFE-SCI 499C	Undergraduate Research-Microbiology	
LIFE-SCI 499D	Undergraduate Research-Physiology	
LIFE-SCI 499E	Undergraduate Research-Biochemistry	
LIFE-SCI 499F	Undergraduate Research- Biophysics	
LIFE-SCI 499G	Undergraduate Research-Cell Biology	
LIFE-SCI 499H	Undergraduate Research-Neuroscience	
LIFE-SCI 499I	Undergraduate Research-Botany	
LIFE-SCI 499J	Undergraduate Research-Zoology	
LIFE-SCI 499K	Undergraduate Research-Ecology	
LIFE-SCI 499L	Undergraduate Research-Biological Sciences	
LIFE-SCI 499M	Undergraduate Research-Biological Sciences Honors	
LIFE-SCI 499P	Undergraduate Research-Biotechnology	
Total Credits		3

e. A total of 42 credit hours of biology courses must be completed with grades of C- or better. At least 26 of these must be at the 300- or 400-level. A minimum of 21 credit hours of biology courses must be taken from the School of Biological Sciences. The Microbiology laboratory course must be writing intensive. The UM Biology GPA must be at least 2.0.

2. **Physical sciences and mathematics requirements**

All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

MATH 216	Biomath I: Calculus and Modeling	4
or MATH 210	Calculus I	
Select one of the following:		3-4
MATH 226	Biomath II: Statistics and Modeling	
MATH 220	Calculus II	
STAT 235	Elementary Statistics	
PHYSICS 210	General Physics I	4-5
or PHYSICS 240	Physics For Scientists and Engineers I	

PHYSICS 250	Physics For Scientists and Engineers II [1]	4-5
or PHYSICS 220	General Physics II	
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
Total Credits		33-36

[1] Students may choose LIFE-SCI 401, as an alternative to PHYSICS 250.

A minimum of 120 credit hours is required; and 36 of these must be at the junior/senior level. Electives may be taken from any area once other degree requirements have been met.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Biology, Clinical Laboratory Science Emphasis

The SBS offers a program leading to a BS degree in Biology with the Clinical Laboratory Science emphasis. The typical student spends the first three years on the UMKC campus completing the general education and basic science course requirements of the baccalaureate degree. A final 12 month course of clinical studies is completed in an affiliated hospital clinical program, which is approved by the Council on Medical Education of the American Medical Association and accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Affiliated clinical programs are located at North Kansas City Memorial and Saint Luke's hospitals. After completing the clinical program and earning a bachelor's degree, students are eligible to take a national certification board examination. Passing the certification examination is not a condition for receiving the BS degree in Biology with the Clinical Laboratory Science emphasis but is often required for employment in the field.

Acceptance into a hospital clinical program is competitive. Admission into the BS degree in Biology with the Clinical Laboratory Science emphasis at UMKC does not guarantee acceptance of the student by an affiliated hospital
clinical program. Clinical instruction in the hospital is a 12-month, full-time day program.

Application to the clinical program is made directly by the student to any (or all) of the affiliated hospitals. The student should apply during the summer or fall of his/her junior year. A list of program contacts is available from an SBS Advisor. Hospital programs differ in admission criteria, application deadlines and early admission options. Early application is advised.

Student Learning Outcomes

Students who complete an undergraduate degree in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
    a. the relationship between structure and function at all levels of biological organization,
    b. evolution and the role of natural selection in the process,
    c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

Program Requirements

1. **General education requirements** are the same as for all students pursuing a Bachelor's degree in SBS.

2. **Physical sciences and mathematics requirements.** The following are required. A grade of C- or better is required in each course used to fulfill these requirements.

MATH 210	Calculus I	3-4
or MATH 216	Biomath I: Calculus and Modeling	
or STAT 235	Elementary Statistics	
PHYSICS 210	General Physics I	4
PHYSICS 220	General Physics II	4
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 320	Elementary Organic Chemistry	4
CHEM 320L	Experimental Organic Chemistry	1
CHEM 341	Analytical Chemistry I: Quantitative Analysis	4

3. **Biology course requirements.** Biology courses that fulfill the BS in Biology with the Clinical Laboratory Science emphasis requirements are listed below. A total of 32 credit hours of biology courses is required and at least 16 of these must be at the 300 or 400 level. A minimum of 16 credit hours of Biology courses must be earned from UMKC SBS. A grade of C- or better is required in each course used to fulfill these requirements.

A. The following courses are **required** of all students seeking the BS degree in Biology with the Clinical Laboratory Science emphasis.

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
LS-BIOC 341	Basic Biochemistry	3
LS-MCRB 313	Microbiology	3
LS-MCRB 313WL	Laboratory in Microbiology	3
LS-MCRB 435	Immunology	3
LS-PHYS 316	Principles of Physiology	3

B. In addition, students must take 3 or more additional hours to be chosen from:

BIOLOGY 328	Histology	2
BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure	3
LIFE-SCI 401	Biophysical Principles	3
LS-ANATO 118	Introductory Anatomy	3
LS-ANATO 118L	Introductory Anatomy Laboratory	2
LS-BIOC 360WL	Laboratory in Biochemistry and Molecular Biology	3
LS-BIOC 430	Molecular Biology and Genetic Engineering	3
LS-MCRB 431	Virology	3

4. Satisfactory completion of a clinical program at an affiliated hospital. This will allow the student to eam 30 credit hours toward the bachelor's degree. Ten of the clinical hours are allowed as upper level biology toward the 42 hours required for the BS. Twenty of the clinical hours are allowed as upper level general science credit. Completion of the clinical program also fulfills the Biology Synthesis requirement.

5. The UM Biology GPA must be at least 2.0.

6. A total of **120** credit hours (minimum) is required; these may be taken from any area once other degree requirements have been met. For most students, more than 120 credit hours will be needed to meet all requirements.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Biology Pre-Dentistry Concentration

Student Learning Outcomes

Students who complete an undergraduate degree in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
   a. the relationship between structure and function at all levels of biological organization,
   b. evolution and the role of natural selection in the process,
   c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

This instructional program fully prepares individuals for admission to a professional school in dentistry. By completing the requirements of the bachelor's of science in biology with the pre-dentistry concentration, students will complete all of the minimum prerequisites and upper level electives suggested by dental schools across the United States. The courses selected provide a foundation of knowledge in modern dentistry, essential for understanding dental science. The curriculum of general education and biology majors courses, combined with the mathematics, chemistry and physics components, provides the background essential to understanding the latest diagnostic and treatment technologies.

UMKC General Education Core (http://www.umkc.edu/core) requirements are the same as for all students seeking a bachelor's degree in biology. Through proper planning with a School of Biological Sciences advisor, biology majors can use their elective general education requirements to complete the healing and humanities minor.

1. **Biology course requirements**
   a. Core courses

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
LS-BIOC 341	Basic Biochemistry	3
Total Credits		17

   b. Concentration course requirements

LS-ANATO 118	Introductory Anatomy	3
LS-PHYS 316	Principles of Physiology	3
LS-MCRB 313	Microbiology	3
BIOLOGY 409	Developmental Biology	3
BIOLOGY 328	Histology	2
LS-MCRB 435	Immunology	3
or LS-BIOC 430	Molecular Biology and Genetic Engineering	
Total Credits		17

c. Required laboratory courses (BIOLOGY 328WL must be taken using the writing intensive option.)

BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure (WI)	3
LS-ANATO 118L	Introductory Anatomy Laboratory	2
Total Credits		5

d. Biology Synthesis requirement

Select from the following to total three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues	
LIFE-SCI 497A	Special Topics-Bioinformatics	
LIFE-SCI 497B	Special Topics-Genetics	
LIFE-SCI 497BB	Special Topics: Behavioral Biology	
LIFE-SCI 497C	Special Topics-Microbiology	
LIFE-SCI 497D	Special Topics-Physiology	
LIFE-SCI 497E	Special Topics - Biochemistry	
LIFE-SCI 497F	Special Topics - Biophysics	
LIFE-SCI 497G	Special Topics-Cell Biology	
LIFE-SCI 497H	Special Topics: Neuroscience	
LIFE-SCI 497I	Special Topics-Botany	
LIFE-SCI 497J	Special Topics-Zoology	
LIFE-SCI 497K	Special Topics-Ecology	
LIFE-SCI 497L	Special Topics-Biological Sciences	
LIFE-SCI 497P	Special Topics-Biotechnology	
LIFE-SCI 499A	Undergraduate Research-Bioinformatics	
LIFE-SCI 499B	Undergraduate Research-Genetics	
LIFE-SCI 499C	Undergraduate Research-Microbiology	
LIFE-SCI 499D	Undergraduate Research-Physiology	
LIFE-SCI 499E	Undergraduate Research-Biochemistry	
LIFE-SCI 499F	Undergraduate Research- Biophysics	
LIFE-SCI 499G	Undergraduate Research-Cell Biology	
LIFE-SCI 499H	Undergraduate Research-Neuroscience	
LIFE-SCI 499I	Undergraduate Research-Botany	
LIFE-SCI 499J	Undergraduate Research-Zoology	
LIFE-SCI 499K	Undergraduate Research-Ecology	
LIFE-SCI 499L	Undergraduate Research-Biological Sciences	
LIFE-SCI 499M	Undergraduate Research-Biological Sciences Honors	
LIFE-SCI 499P	Undergraduate Research-Biotechnology	
Total Credits		3

e. Students must complete additional biology majors coursework to total 42 credit hours of biology courses with grades of C- or better. At least 26 of these must be at the 300- or 400-level. A minimum of 21 credit hours of biology courses must be taken from the School of Biological Sciences. The UM biology GPA must be at least 2.0.

2. **Physical sciences and mathematics requirements**
All of the following courses are required. A grade of C- or better is required in each course used to fulfill these requirements.

MATH 216	Biomath I: Calculus and Modeling	4
or MATH 210	Calculus I	
Select one of the following:		3-4
MATH 226	Biomath II: Statistics and Modeling	
MATH 220	Calculus II	
STAT 235	Elementary Statistics	
PHYSICS 210	General Physics I	4-5
or PHYSICS 240	Physics For Scientists and Engineers I	

PHYSICS 250	Physics For Scientists and Engineers II [1]	5
or PHYSICS 220	General Physics II	
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
Total Credits		34-36

[1] Students may choose LIFE-SCI 401 as an alternative to PHYSICS 250.

A minimum of 120 credit hours is required; and 36 of these must be at the junior/senior level.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts in Biology

Student Learning Outcomes

Students who complete an undergraduate degree in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
    a. the relationship between structure and function at all levels of biological organization,
    b. evolution and the role of natural selection in the process,
    c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

The B.A. degree program in biology is designed to accommodate students who want a solid background in the biological sciences, but who need less rigorous studies in the supporting sciences of chemistry, mathematics and physics. It is also recommended for students who plan to pursue double majors.

Degree Requirements

In addition to meeting the UMKC General Education Core (http://www.umkc.edu/core) requirements outlined previously, students pursuing the B.A. degree in biology must meet the following requirements:

Biology Course Requirements		
BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3

BIOLOGY 206	Genetics	3
LS-BIOC 341	Basic Biochemistry	3
Biology Laboratory Courses		
Select one of the following (minimum 2 credit hours):		2-3
BIOLOGY 302L	Ecology Laboratory	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	
LS-MCRB 313L	Laboratory in Microbiology	
or LS-MCRB 313WL	Laboratory in Microbiology	
BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure	
or BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure	
LS-BIOC 360L	Laboratory in Biochemistry and Molecular Biology	
or LS-BIOC 360WL	Laboratory in Biochemistry and Molecular Biology	
LS-ANATO 118L	Introductory Anatomy Laboratory	
Biology Synthesis Requirement		
Select from the following for a total of three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues (WI)	
LIFE-SCI 497A	Special Topics-Bioinformatics	
LIFE-SCI 497B	Special Topics-Genetics	
LIFE-SCI 497BB	Special Topics: Behavioral Biology	
LIFE-SCI 497C	Special Topics-Microbiology	
LIFE-SCI 497D	Special Topics-Physiology	
LIFE-SCI 497E	Special Topics - Biochemistry	
LIFE-SCI 497F	Special Topics - Biophysics	
LIFE-SCI 497G	Special Topics-Cell Biology	
LIFE-SCI 497H	Special Topics: Neuroscience	
LIFE-SCI 497I	Special Topics-Botany	
LIFE-SCI 497J	Special Topics-Zoology	
LIFE-SCI 497K	Special Topics-Ecology	
LIFE-SCI 497L	Special Topics-Biological Sciences	
LIFE-SCI 497P	Special Topics-Biotechnology	
LIFE-SCI 499A	Undergraduate Research-Bioinformatics	
LIFE-SCI 499B	Undergraduate Research-Genetics	
LIFE-SCI 499C	Undergraduate Research-Microbiology	
LIFE-SCI 499D	Undergraduate Research-Physiology	
LIFE-SCI 499E	Undergraduate Research-Biochemistry	
LIFE-SCI 499F	Undergraduate Research- Biophysics	
LIFE-SCI 499G	Undergraduate Research-Cell Biology	
LIFE-SCI 499H	Undergraduate Research-Neuroscience	
LIFE-SCI 499I	Undergraduate Research-Botany	
LIFE-SCI 499J	Undergraduate Research-Zoology	
LIFE-SCI 499K	Undergraduate Research-Ecology	
LIFE-SCI 499L	Undergraduate Research-Biological Sciences	
LIFE-SCI 499M	Undergraduate Research-Biological Sciences Honors	
LIFE-SCI 499P	Undergraduate Research-Biotechnology	
Additional Biology Majors Course work [1]		16
Total Credits		38

[1] Students must complete additional biology majors coursework to total at least 38 credit hours of biology courses with grades of C- or better. At least 24 of these must be at the 300- or 400-level. One of these courses must be writing intensive. A minimum of 21 credit hours of biology courses must be taken from the School of Biological Sciences. The UM Biology GPA must be at least 2.0.

Additional Science and Mathematics Course Requirements

The following courses must be completed with grades of C- or better:

MATH 216	Biomath I: Calculus and Modeling	3-4
or MATH 210	Calculus I	
or STAT 235	Elementary Statistics	
PHYSICS 210	General Physics I	4
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 320	Elementary Organic Chemistry	4
CHEM 320L	Experimental Organic Chemistry	1

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts in Biology for combined BA/MD Dual Degree Program

Student Learning Outcomes

Students who complete an undergraduate degree in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
   a. the relationship between structure and function at all levels of biological organization,
   b. evolution and the role of natural selection in the process,
   c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

Degree Requirements

1. UMKC General Education Core (http://www.umkc.edu/core) requirements are the same for all students pursuing a Bachelor's degree in SBS. Students in the 6 yr BA/MD program will apply specific courses required by the medical program to fulfill these requirements.
2. Physical sciences and mathematics requirements: All of the following courses are required.
   A grade of C- or better is required in each course used to fulfill these requirements.

Select one of the following:		3-4
MATH 216	Biomath I: Calculus and Modeling	
MATH 210	Calculus I	
STAT 235	Elementary Statistics	
PHYSICS 210	General Physics I	4-5
or PHYSICS 240	Physics For Scientists and Engineers I	
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1

CHEM 320	Elementary Organic Chemistry	4
CHEM 320L	Experimental Organic Chemistry	1
Total Credits		22-24

3. Biology course requirements. Biology courses that fulfill the BA degree requirements are listed below. A total of 38 credit hours of biology courses is required and at least 24 of these must be at the 300 or 400 level. A minimum of 21 credit hours of biology courses must be earned from UMKC SBS. A grade of C- or better is required in each course used to fulfill these requirements.
   a. All of the following courses are required of all students seeking the BA degree in Biology. These core curriculum requirements constitute a total of 17 credit hours plus 2 credit hours of elective upper level biology.

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BMS 9265	Human Biochemistry 1 - Medical	5
Total Credits		19

   b. The following courses are required for 10 credit hours.

LS-MCRB 313	Microbiology	3
All of the following:		7
BMS 9296	Human Structure Function I	
BMS 9297	Human Structure Function II	
BMS 9298	Human Structure Function III	
Total Credits		10

   c. The following laboratory courses are required.

LS-MCRB 313WL	Laboratory in Microbiology	3
LS-ANATO 118L	Introductory Anatomy Laboratory	2
Total Credits		5

   d. Dual Degree requirement

LS-ANATO 119	Functional Anatomy I	3

   e. Biology Synthesis Requirement

Select from the following for a total of three credit hours:		3
BIOLOGY 498WI	Critical Analysis of Biological Issues	
LIFE-SCI 497A	Special Topics-Bioinformatics	
LIFE-SCI 497B	Special Topics-Genetics	
LIFE-SCI 497BB	Special Topics: Behavioral Biology	
LIFE-SCI 497C	Special Topics-Microbiology	
LIFE-SCI 497D	Special Topics-Physiology	
LIFE-SCI 497E	Special Topics - Biochemistry	
LIFE-SCI 497F	Special Topics - Biophysics	
LIFE-SCI 497G	Special Topics-Cell Biology	
LIFE-SCI 497H	Special Topics: Neuroscience	
LIFE-SCI 497I	Special Topics-Botany	
LIFE-SCI 497J	Special Topics-Zoology	
LIFE-SCI 497K	Special Topics-Ecology	
LIFE-SCI 497L	Special Topics-Biological Sciences	
LIFE-SCI 497P	Special Topics-Biotechnology	
LIFE-SCI 499A	Undergraduate Research-Bioinformatics	
LIFE-SCI 499B	Undergraduate Research-Genetics	

LIFE-SCI 499C	Undergraduate Research-Microbiology	
LIFE-SCI 499D	Undergraduate Research-Physiology	
LIFE-SCI 499E	Undergraduate Research-Biochemistry	
LIFE-SCI 499F	Undergraduate Research- Biophysics	
LIFE-SCI 499G	Undergraduate Research-Cell Biology	
LIFE-SCI 499H	Undergraduate Research-Neuroscience	
LIFE-SCI 499I	Undergraduate Research-Botany	
LIFE-SCI 499J	Undergraduate Research-Zoology	
LIFE-SCI 499K	Undergraduate Research-Ecology	
LIFE-SCI 499L	Undergraduate Research-Biological Sciences	
LIFE-SCI 499M	Undergraduate Research-Biological Sciences Honors	
LIFE-SCI 499P	Undergraduate Research-Biotechnology	
Total Credits		3

f. Additional 3 credit hours of upper level biology coursework is needed to complete the total of 38 required credit hours in biology, 24 of which must be junior/senior level and one of which must be a writing intensive course.

4. The UM Biology GPA must be at least 2.0.

5. A minimum of 120 credit hours is required (with a maximum of 30 credit hours of professional credit allowed toward the degree) and 36 of these must be at the junior/senior level. Electives may be taken from any area once other degree requirements have been met.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Honors Program

The School of Biological Sciences offers a biology honors program for bachelor of science undergraduate students interested in pursuing rigorous preparation for advanced professional training and scientific careers. The program combines a requirement for high levels of academic achievement with hands-on undergraduate research with a faculty mentor. Biology honors students are included in all scholarly and social events of the School of Biological Sciences graduate program. Students are encouraged to apply by contacting the School of Biological Sciences Undergraduate Programs Office.

Freshman students may be accepted into the honors program if they are in the top 10 percent of their high school graduating class and have a composite score greater than 1300 on the SAT, 1350 on the recentered SAT, or 30 on the ACT. Eligible students may also be accepted at the end of their freshman year or later (until the beginning of their junior year or 70 credit hours). Requirements for admission at the end of the freshman or sophomore year for UMKC students or transfer students include:

1. A 3.5 minimum undergraduate GPA.
2. A 3.5 undergraduate GPA in sciences/mathematics.
3. Satisfactory progress to that point in the B.S. degree program, including completion (minimally) of the following (with grades of B or better):

CHEM 211	General Chemistry I	4
CHEM 212R	General Chemistry II	4
MATH 210	Calculus I	4
or MATH 216	Biomath I: Calculus and Modeling	
BIOLOGY 108	General Biology I (or equivalent)	3
BIOLOGY 109	General Biology II (or equivalent)	3

4. An interview to explore the student's interests and identify an appropriate faculty mentor.

Graduation with a B.S. in biology with honors will be noted on the official university transcript and records of those students who:

1. Complete all of the B.S. degree requirements.
2. Complete at least two semesters (4 credit hours total) of LIFE-SCI 499M with a grade of B or better.
3. Maintain a 3.5 UM GPA; 3.5 science/mathematics UM GPA.
4. Successfully complete a semester of LIFE-SCI 490WI.
5. Satisfactory completion of of an undergraduate (senior) research thesis.

Requirements for retention in the Biology Honors Program include the following:

1. Students must maintain a 3.5 minimum UM cumulative GPA and a 3.5 minimum Math-Science GPA to be in good standing in the biology honors program.
2. Should either the cumulative or Math-Science GPA drop below 3.5, but not below 3.2 in any given semester, the student will be retained in the biology honors program for an additional semester. The student must restore the GPA to the 3.5 minimum at the end of that semester. A student who has less than a 3.2 cumulative UM GPA at the end of any semester will be dropped from the biology honors program.
3. Students must make satisfactory progress in the biology honors program, as determined by the SBS Academic Standards Committee, in order to be retained in the program.

Minor in Biology

Student Learning Outcomes

Students who complete a minor in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
    a. the relationship between structure and function at all levels of biological organization,
    b. evolution and the role of natural selection in the process,
    c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

Program Requirements

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
Select one of the following laboratory courses:		2-3
LS-ANATO 118L	Introductory Anatomy Laboratory	
BIOLOGY 302L	Ecology Laboratory	
BIOLOGY 312WL	Laboratory in Developmental Biology, Genetics and Cell Biology	
LS-MCRB 313L	Laboratory in Microbiology	
LS-MCRB 313WL	Laboratory in Microbiology	
LS-BIOC 360L	Laboratory in Biochemistry and Molecular Biology	
LS-BIOC 360WL	Laboratory in Biochemistry and Molecular Biology	
BIOLOGY 328L	Laboratory in Histology and Cellular Ultrastructure	
BIOLOGY 328WL	Laboratory in Histology and Cellular Ultrastructure	

Upper-level Biology Majors Courses [1]	7
Total Credits	23-24

[1] The seven hours may include any of the upper-level lab courses listed above.

Total Biology hours:21

Standards that must be met for the minor:

1. Only grades of C- or better will be allowed to count toward fulfillment of the required 21 hours of biology coursework.
2. Students seeking a biology minor must have a minimum cumulative 2.0 UM biology GPA in courses used to fulfill the minor requirements.
3. At least 11 of the 21 required hours must be earned from the School of Biological Sciences.
4. At least 4 of the 7 hours of junior/senior level coursework must be earned from the School of Biological Sciences.

Teacher Certification in Biology

Student Learning Outcomes

Students who complete a teacher certification in biology will be able to:

1. Identify fundamental concepts in the biological sciences, including
   a. the relationship between structure and function at all levels of biological organization,
   b. evolution and the role of natural selection in the process,
   c. ecological relationships between organisms and their environment.
2. Describe cellular structure and explain the major biochemical processes that occur in cells.
3. Describe and explain the mechanisms of heredity and the flow of genetic information.
4. Apply knowledge in basic mathematics, chemistry, and physics to solve biological problems.
5. Employ techniques and procedures commonly used in modern biology laboratories.
6. Analyze and critically evaluate scientific data.
7. Write clearly about topics in the biological sciences for a peer or professional audience.

Program Requirements

Certification as a middle school (grades 5-9) or secondary (grades 9-12) Biology teacher in either Kansas or Missouri requires that a student complete specific requirements in Biology, Chemistry, Environmental Science, Geology, Physics and the School of Education. A separate application for teacher education is required. For further information about the program, consult the School of Education section (p. 408) of this catalog or contact the Education Student Services Office at (816) 235-**2234**.

Elective Courses for the Non-Biology Major

Students in other academic units are encouraged to select courses in the School of Biological Sciences to meet their general education requirements and to complement their major area of study. Suggested courses include:

BIOLOGY 102	Biology and Living	3
BIOLOGY 102L	Biology and Living Laboratory	1
LS-ANATO 118	Introductory Anatomy	3
LS-ANATO 118L	Introductory Anatomy Laboratory	2
LS-MCRB 112	Microbiology and Living	3
LS-PHYS 117	Human Physiology	3
BIOLOGY 108	General Biology I	3
BIOLOGY 109	General Biology II	3
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3

Upper-level Courses [1]

[1] Upper-level courses for which prerequisites have been satisfied are recommended for those students who wish to gain a strong foundation in biological sciences.

Students enrolling in these biology majors' courses should have a solid background in high school biology and chemistry.

Master of Science in Cellular and Molecular Biology

Student Learning Outcomes

Students who complete a master of science in cellular and molecular biology will be able to:

1. Describe structures and functions of key biological molecules
2. Describe storage, transmission and expression of genetic information
3. Develop oral and written communication skills
4. Understand and develop approaches to test hypotheses about biological mechanisms

Degree Requirements

Thesis Option

LS-MBB 5561 & LS-MBB 5562	General Biochemistry I and General Biochemistry II	6
LS-CBB 5530 & LS-CBB 5520	Cell and Molecular Biology I and Cell and Molecular Biology II	6
LS-MBB 5611	Seminar in Molecular Biology and Biochemistry	1
or LS-CBB 5612	Seminar in Cell Biology and Biophysics	
LS-MBB 5599	Thesis Research in Molecular Biology and Biochemistry	6
or LS-CBB 5599	Thesis Research in Cell Biology and Biophysics	
Electives		
Select eleven credit hours from the following: [1]		11
BIOLOGY 5519	Principles of Evolution	
BIOLOGY 5525	Bioinformatics and Data Analysis	
BIOLOGY 5528	Human Genomic Epidemiology	
BIOLOGY 5593	Master of Science Topics	
LS-CBB 5501	Graduate Biophysical Principles	
LS-CBB 5504	Gradute Virology	
LS-CBB 5505	Molecular and Cellular Neurobiology	
LS-CBB 5566	Membrane Biochemistry and Biophysics	
LS-CBB 5569	Structural Biology, Methods and Strategies	
LS-CBB 5596	Advanced Experimental Cell Biology I	
LS-CBB 5597	Advanced Experimental Cell Biology II	
LS-MBB 5509	Graduate Developmental Biology	
LS-MBB 5565	Structure And Function Of Proteins	
LS-MBB 5567	Physical Biochemistry	
LS-MBB 5596	Advanced Experimental Molecular Biology I	
LS-MBB 5597	Advanced Experimental Molecular Biology II	
Total Credits		30

[1] Elective courses may also be selected from other alternatives approved by the School of Biological Sciences Graduate Programs Committee. A limited number of credit hours of upper-level undergraduate courses may be allowed.

Students pursuing the thesis option must also satisfactorily complete written and oral thesis exams.

Non-Thesis Option

LS-MBB 5561 & LS-MBB 5562	General Biochemistry I and General Biochemistry II	6
LS-CBB 5530 & LS-CBB 5520	Cell and Molecular Biology I and Cell and Molecular Biology II	6
LS-MBB 5611	Seminar in Molecular Biology and Biochemistry	1
or LS-CBB 5612	Seminar in Cell Biology and Biophysics	

Electives		
Select seventeen credit hours from the following: [1]		17
BIOLOGY 5519	Principles of Evolution	
BIOLOGY 5525	Bioinformatics and Data Analysis	
BIOLOGY 5528	Human Genomic Epidemiology	
BIOLOGY 5593	Master of Science Topics	
LS-CBB 5501	Graduate Biophysical Principles	
LS-CBB 5504	Gradute Virology	
LS-CBB 5505	Molecular and Cellular Neurobiology	
LS-CBB 5538	Molecular Recognition in Cellular Biology	
LS-CBB 5566	Membrane Biochemistry and Biophysics	
LS-CBB 5569	Structural Biology, Methods and Strategies	
LS-CBB 5596	Advanced Experimental Cell Biology I	
LS-CBB 5597	Advanced Experimental Cell Biology II	
LS-MBB 5509	Graduate Developmental Biology	
LS-MBB 5538	Molecular Recognition in Molecular Biology	
LS-MBB 5565	Structure And Function Of Proteins	
LS-MBB 5567	Physical Biochemistry	
LS-MBB 5596	Advanced Experimental Molecular Biology I	
LS-MBB 5597	Advanced Experimental Molecular Biology II	
Total Credits		30

[1] Elective courses may also be selected from other alternatives approved by the School of Biological Sciences Graduate Programs Committee. A limited number of credit hours of upper-level undergraduate courses may be allowed.

Emphasis in Bioinformatics

The emphasis in bioinformatics is a degree option with specific requirements.

This degree option trains students in the fundamental principles of bioinformatics and prepares them for careers in research, medical and corporate settings. Students will learn how to manage and analyze data stored in databases, become familiar with the various computational tools and techniques available to analyze biological data, become familiar with the types of questions and problems within biology that lend themselves to bioinformatics analysis and gain proficiency with a variety of statistical techniques necessary to analyze genomic, proteomic and integrated biological data sets.

Emphasis requirements, in addition to the specified degree requirements.

Required Electives

BIOLOGY 5519	Principles of Evolution	3
MEDB 5501	Biostatistics I	3
or MIS 5552	Data Base Management	
BIOLOGY 5525	Bioinformatics and Data Analysis	3
Total Credits		9

Master of Arts in Biology

Student Learning Outcomes

Students who complete a master of arts in biology will be able to:

1. Understand basic fundamentals of biology and apply them to clinical anesthesia
2. Describe principles of anesthesia in the clinical setting
3. Perform clinical procedures necessary to be practicing nurse anesthetist

Degree Requirements

The master of arts program of study requires a minimum of 36 credit hours. No more than 40 percent of the program may be at the 300- to 400-level; the balance must be at the 5500-level or above. BIOLOGY 5592, is required on an approved topic for an extensive investigation with oral presentation. This

investigation may be accomplished through literature search or laboratory experimentation. No more than six hours of BIOLOGY 5591, may be applied to this program.

Students typically pursue the master of arts in biology and a certificate in the Truman Medical Center Nurse Anesthesia Program concurrently. For information about admission and degree requirements, students interested in the CRNA certificate should first contact the School of Nurse Anesthesia (http://www.trumed.org/crna) at Truman Medical Center, and then contact the School of Biological Sciences. Admission by both programs is required.

Doctor of Philosophy Study

Degree Requirements

The Ph.D. program at UMKC is interdisciplinary. Students interested in studies at the doctoral level in the disciplines of cell biology and biophysics, *or* molecular biology and biochemistry, should apply to the Interdisciplinary Ph.D. program in the School of Graduate Studies. Students interested in a combination of cell biology and biophysics *with* molecular biology and biochemistry should apply to our graduate programs at http://sbs.umkc.edu/graduate_application.cfm or by writing to the mailing address at the beginning of this section (p. 273).

Detailed information on the general and discipline-specific admission requirements for the Ph.D. is found in the School of Graduate Studies (p. 480) section of this catalog, with specific details on the school's Web site at http://www.umkc.edu/iphd.

Students pursuing Interdisciplinary Ph.D. studies who have selected cell biology and biophysics, or molecular biology and biochemistry as one of their disciplines should consult the School of Graduate Studies (p. 480) section of this catalog for degree requirements and other academic regulations applicable to their degree program.

School of Computing and Engineering

Robert H. Flarsheim Science and Technology Hall (http://www.umkc.edu/virtualtour/flarsheim-hall.asp)
5110 Rockhill Road, Room 534, Kansas City, MO 64110
Phone: (816) 235-2399
Fax: (816) 235-5159
sce@umkc.edu
http://sce.umkc.edu/

Mailing Address
University of Missouri-Kansas City
School of Computing and Engineering
534 Flarsheim Hall
5110 Rockhill Road
Kansas City, MO 64110-2499

Dean:
Kevin Z. Truman

Associate Dean of Academics
Jerry Place

Department of Civil and Mechanical Engineering:
Chair:
Mark McClernon
352 Flarsheim Hall
(816) 235-5550

See CME Catalog (p. 311) and CME Website (http://sce.umkc.edu/cme)

Department of Computer Science Electrical Engineering:
Chair:
Ghulam M. Chaudhry
546 Flarsheim Hall
(816) 235-1193

See CSEE Catalog (p. 325) **and CSEE Website** (http://sce.umkc.edu/our-school/csee-department.asp)

History

The University has offered engineering degree programs since 1956. Increased technology demands during the mid-80s, combined with a generous gift from United Telecom (now Sprint Nextel), led to the development of UMKC's high-tech Computer Science and Telecommunications Program in 1984. These programs were combined in 2001 to form the School of Computing and Engineering (SCE).

Mission

The mission of the School of Computing and Engineering is to provide competitive educational opportunities and focused research in computing and engineering generating the technical work force and research needed for economic development.

Departments and Degree Programs

The School of Computing and Engineering has two departments:

- Civil and Mechanical Engineering (http://www.sce.umkc.edu/cme)
- Computer Science Electrical Engineering (http://sce.umkc.edu/our-school/csee-department.asp)

Each department offers undergraduate and graduate degrees. The Civil and Mechanical Engineering Department offers B.S. in Civil Engineering, B.S. in Mechanical Engineering -- both accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org, M.S. in Civil Engineering, and M.S. in Mechanical Engineering. The Computer Science Electrical Engineering Department offers B.A./B.S. in Computer Science, B.S. in Electrical & Computer Engineering, Bachelor of Information Technology (B.I.T), M.S. in Computer Science, and M.S. in Electrical Engineering. The B.S. in Computer Science and the Bachelor of Information Technology degrees are accredited by the Computing Accreditation Commission of ABET, http://www.abet.org. The B.S. in Electrical & Computer Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

The School also participates in UMKC's Interdisciplinary Ph.D. program through four disciplines: computer science, electrical and computer engineering, engineering (for civil and mechanical engineering) and telecommunications and computer networking. (See the School of Graduate Studies section of this catalog for details about the Interdisciplinary Ph.D. Program.)

Financial Assistance

The University has several financial aid programs, scholarships and awards for the benefit of our students: see http://sfa.umkc.edu/site for opportunities available to all UMKC students. There are several School of Computing and Engineering scholarships available exclusively for SCE students. To be eligible, applicants must be accepted to both UMKC and and SCE degree program. All award recipients must maintain full-time student enrollment (minimum 12 credit hours/semester for undergraduate; 9 credit hours/semester per graduate) throughout the academic year of the award.

Applications are due by January 31 for full consideration for the next fall semester's scholarship awards; however applications are accepted and kept on file year-round should additional awards become available. Current SCE scholarship recipients must re-apply each year before January 31 to be considered for the next academic year. For the most current list of scholarships, qualifications and applications please visit the SCE Scholarship Web page at http://sce.umkc.edu/scholarships/sce-scholarships.asp or e-mail UMKC-SCEScholarships@umkc.edu for additional information.

Undergraduate Scholarships

SCE scholarships include:

- Ankit Agarwal Computer Science Scholarship
- James E. Allen Engineering Scholarship
- John & Phyllis Anderson Engineering Scholarship
- American Society of Civil Engineers (ASCE), Kansas City Section, GeoTechnical Group/Peck-Williams-Garstang Scholarship
- Bayer Scholarship
- Black & Veatch Scholarship
- Dr. C. Quinton Bowles Memorial Scholarship Endowment
- Building A World of Difference Scholarship
- Newton A. Campbell Engineering Excellence Scholarship
- Computing and Engineering Alumni Scholarship
- Dean's Excellence Scholarship
- DST Systems Computer Science Scholarship
- JE Dunn Scholarship
- EyeVerify Scholarship

- FIRST Robotics Scholarship
- Robert C. Harmon Engineering Scholarship
- HDR Engineering Scholarship
- Henderson Engineers Scholarship
- Dave Hermance Memorial Scholarship
- Richard G. & Terry Hetherington Scholarship
- Hill Family Scholarship
- Information Products, Inc. Scholarship
- Kansas City Association of Healthcare Engineers (KCAHCE) Scholarship
- Kansas City Power & Light Engineering Scholarship
- Kiewit Power Scholarship
- Kristin Jane Loeffelholz Memorial Scholarship in Engineering
- Forrest & Joan Lowe Scholarship
- National Action Council for Minorities in Engineering (NACME) Scholars Program
- Dr., & Mrs. Stanley Niu Engineering Scholarship
- Olsson Associates Scholarship
- Mary Anne and William Osborne Scholarship
- Project Lead the Way (PLTW) Scholarship
- Saravan Rajendran Scholarship
- Lee & Mary Louise Rankin Memorial Scholarship
- SCE Faculty/Staff Scholarship
- Jerrold F. Stach Memorial Scholarship
- Doris Markham Swinney Scholarship
- Martin Ashton Swinney Memorial Scholarship
- Western Chapter Missouri Society of Professional Engineers Auxiliary Scholarship

Other scholarships are available through the UMKC Financial Aid and Scholarship Office. For more information, refer to http://www.sfa.umkc.edu.

Graduate Scholarships and Awards

The following are available to SCE students::

- Chandra Scholarship
- Mahatma Ghandi Scholarship
- Balaji Krithikaivasan Memorial Graduate Fellowship Fund

Additionally, the following are available to first-time, full time degree applicants to UMKC:

- The Chancellor’s Nonresident Award (CNR) is available to new SCE domestic nonresident applicants. The CNR is not available to international SCE students.
- The Dean’s International Scholar Award (DISA) is available to new SCE international applicants.

Both CNR and DISA awards are decided when the admission decision is made; therefore, no specific application form is required. The CNR and DISA are competitive awards and awarded only to the best prepared and qualified applicants. Decisions are made on the basis of the applicant’s academic record, performance and preparation in core courses, GRE and TOEFL scores, the strength of the undergraduate program and institution, and the timing of the application. CNR and DISA awards are renewable for students in good academic and disciplinary standing. Awardees must carry and complete a full load (minimum 12 credit hours/semester for undergraduate; 9 credit hours/semester for graduate) and maintain a GPA of at least 3.00 (for undergraduate students) or at least 3.50 (for graduate students.) Student progress and performance is reviewed in September, February and June.

The amount of the DISA scholarship for 2014-2015 is $4,000.00/semester (Graduate) and $4,250.00/semester (Undergraduate).

For the value of the CNR award, please see http://www.umkc.edu/isao/cnr_info.cfm .

In addition to the CNR and DISA awards, mentioned above, there are assistantships.

There are Graduate Research Assistantships available through various faculty conducting funded research, and information on these can be obtained from individual faculty. Most faculty with funded research programs will award research assistantships to students whose performance they have been able to observe in the class room.

A limited number of graduate assistantships are available to fully-enrolled graduate students with excellent academic performance and solid communications skills.

Typically, awards are for quarter-time, three-eights, or half-time support, and may include tuition fee waivers. Priority will be given to students with excellent communication skills and to students in the Interdisciplinary Ph.D. program. International students who wish to be considered for a Graduate Assistantship must have TOEFFL SPEAK score 24 and higher and must attain IGTA certification from the School of Graduate Studies during their first semester at UMKC. Students must apply for these opportunities by sending their application materials to the Department of Civil and Mechanical Engineering (alberts@umkc.edu) or to the Department of Computer Science Electrical Engineering (griffiths@umkc.edu). International students can be considered for a Graduate Research Assistantship during their first semester of enrollment, but cannot be considered for a Graduate Assistant or Graduate Teaching Assistant position.

Faculty

Department of Civil and Mechanical Engineering

Bryan R. Becker[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=becker); professor; B.S. (University of Missouri-Rolla); M.S. (University of Missouri-Columbia); Ph.D. (University of Tennessee-Knoxville); P.E.

Katherine H. Bloemker Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bloemker); associate teaching professor; B.S., M.S. (Stanford University); Ph.D. (University of Missouri-Kansas City)

ZhiQiang Chen[2,3]; assistant professor; B.S. (Southeast University, Nanjing, China); M.S. Michigan Technological University); Ph.D. (University of California-San Diego).

Travis Fields[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=fields); assistant professor; B.S., M.S., Ph.D. (University of Nevada, Reno).

Ceki Halmen[2,3]; assistant professor; B.S. (Bogazici University, Istanbul, Turkey); M.S., Ph.D. (Texas A&M University).

John T. Kevern[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kevern); assistant professor; B.S. (University of Wisconsin-Platteville); M.S., Ph.D. (Iowa State University); LEED AP.

Greg King[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=king); assistant professor; B.S., M.S., Ph.D. (University of Kansas).

Forrest G. Lowe Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lowe); visiting associate professor; B.S. (Northwest Missouri State University); M.S. (Texas Christian University); Ed.D. (Nova Southeastern University); P.E. (Retired).

Mark F. McClernon Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mcclernon); chair, department of civil and mechanical engineering, and associate professor; B.S. (Rockhurst University); M.S., Ph.D. (University of Notre Dame); P.E.

Deborah J. O'Bannon[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=obannon); professor; B.S. (Massachusetts Institute of Technology); M.Eng. (Manhattan College); Ph.D. (University of Iowa); P.E.

Jerry E. Richardson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=richardson); associate professor; B.S., M.S., Ph.D. (Colorado State University); P.E.

William E. Stewart, Jr.; professor emeritus; B.S., M.S., Ph.D. (University of Missouri-Rolla); P.E. (Retired).

Ganesh Thiagarajan[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thiagarajan); professor; B.Tech., M.Tech. (Indian Institute of Technology-Madras); Ph.D. (Louisiana State University-Baton Rouge).

Kevin Z. Truman[2,3]; dean, professor, School of Computing & Engineering, B.A. (Monmouth College); B.S., M.S. (Washington University); Ph.D. (University of Missouri-Rolla).

Department of Computer Science and Electrical Engineering

Cory Beard[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=beard); associate professor; B.S., M.S. (University of Missouri-Columbia); Ph.D. (University of Kansas).

Eddie Burris Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=burris); associate teaching professor; M.S. (Michigan State University).

Deb Chatterjee[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=chatterjee); associate professor; B.E.Tel.E. (Jadavpur University, India); M.Tech. (India Institute of Technology-Kharagpur, India); M.A.Sc. (Concordia University, Canada); Ph.D. (University of Kansas).

Ghulam M. Chaudhry[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=chaudhry); chair, dept. of computer science electrical engineering; professor; B.S. (University of Punjab, Pakistan); M.S. (B.Z. University, Pakistan); M.S., Ph.D. (Wayne State University).

Baek-Young Choi[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=choi); associate professor; B.S. (Pusan National University, Korea); M.S. (Pohang University of Science and Technology, Korea); Ph.D. (University of Minnesota).

Masud H. Chowdhury[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=chowdhury); associate professor; B.S. (Bangladesh U. of Engineering & Technology, Dhaka 1000, Bangladesh); Ph.D. (Northwestern University).

Reza Derakhshani[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=derakhshani); associate professor; B.S. (Iran University of Science and Technology); M.S., Ph.D. (West Virginia University).

Deendayal "Dinakar" Dinakarpandian[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dinakarpandian); associate professor; M.D. (Jawaharlal Institute of Post-Graduate Medical Education and Research, Pondicherry, India); Ph.D. (Case Western Reserve University); M.S. (University of Missouri-Kansas City).

Yijie Han[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=han); associate professor; B.S. (University of Science and Technology of China), Ph.D. (Duke University).

Brian Hare Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hare); associate teaching professor; M.S. (University of Houston and University of Missouri-Kansas City).

Lein Harn[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=harn); professor; B.A. (National Taiwan University); M.S. (University of New York at Stony Brook); Ph.D. (University of Minnesota).

Richard G. Hetherington Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hetherington); founding director, computer science program, and professor emeritus; B.A. (Brothers College, Drew University); M.S., Ph.D.(University of Wisconsin-Madison).

Kevin Kirkpatrick Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kirkpatrick); associate teaching professor; B.S. (University of Missouri-Rolla); M.S. (University of Missouri - Columbia).

Jerome Knopp Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=knopp); associate professor; B.S., M.S., Ph.D. (University of Texas-Austin).

Mohammad Kuhail Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kuhail); assistant teaching professor; B.S., (Islamic University of Gaza); M.S. (University of York, York, UK); Ph.D. (University of Copenhagen).

Vijay Kumar[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kumar); professor; B.S., M.S. (Ranchi University); Graduate Dipl. (Cambridge University); M.S. (Manchester University); Ph.D. (Southampton University).

Yugyung Lee[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lee); associate professor; B.S. (University of Washington); Ph.D. (New Jersey Institute of Technology).

Deepankar (Deep) Medhi[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=medhi); curators' professor; B.Sc. (Cotton College, Gauhati University); M.Sc. (University of Delhi); M.S., Ph.D. (University of Wisconsin-Madison).

Ken Mitchell[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mitchell); associate professor; B.M., M.M. (Indiana University); M.S., Ph.D. (University of Missouri-Kansas City).

Praveen Rao[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rao);associate professor; B.Tech (University of Pune, India); M.S., Ph.D. University of Arizona-Tucson).

Xiaojun Shen[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=shen); professor; B.S. (Quinghua University); M.S. (East China Institute of Technology); Ph.D. (University of Illinois-Urbana).

Jesse Sherwood Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sherwood); assistant teaching professor; B.S. (University of Missouri-Rolla); B.S. (University of Missouri-Columbia); MBA (Rockhurst University); Ph.D. (University of Missouri-Kansas City).

David G. Skitek; assistant professor emeritus; B.S. (University of Missouri-Rolla); M.S.E., Ph.D. (Arizona State University); P.E. (Retired)

Sejung Song[2,3]; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=song); associate professor; B.S. (Pusan National University, Korea); M.S., Ph.D. (University of Minnesota - Twin Cities).

Khosrow Sohraby[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sohraby); curators' professor; B.E., M.E. (McGill University); Ph.D. (University of Toronto).

Appie van de Liefvoort[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=van%20de%20liefvoort); professor; Kandidaats; Doctorandus (Katholieke Universiteit, Nijmegen, The Netherlands); M.S., Ph.D. (University of Nebraska-Lincoln).

Yang (Cindy) Yi;[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=yi); assistant professor; B.S., M.S. (Shanghai Jiao tong U.); Ph.D. (Texas A&M University).

Yongjie Zheng[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=zheng); assistant professor; B. Eng. (Tsinghua University, Beijing, China); M. Phil. (The Hong Kong Polytechnic University, Hong Kong); Ph.D. (University of California, Irvine).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Civil Engineering and Mechanical Engineering Department

Robert H. Flarsheim Science and Technology Hall (http://www.umkc.edu/virtualtour/flarsheim-hall.asp)
5110 Rockhill Road, Room 352
(816) 235-**5550**
Fax: (816) 235-**1260**
cme@umkc.edu
http://www.sce.umkc.edu/our-school/cme-department.asp

Mailing Address
University of Missouri-Kansas City
Civil and Mechanical Engineering
352 Flarsheim Hall
5100 Rockhill Road
Kansas City, MO 64110-2499

Department Chair:
Mark McClernon

Professors:
Bryan Becker, Deborah O'Bannon, Kevin Truman (Dean)

Associate Professors:
Mark McClernon (Department Chair), Jerry Richardson, Ganesh Thiagarajan

Assistant Professors:
ZhiQiang Chen, Travis Fields, Ceki Halmen, John Kevern, Greg King

Assistant Teaching Professor:
Katherine Bloemker

Instructors:
Bob Hanlin, Greg Muleski

Research Associates:
Antonis Stylianou

Visiting Professors:
Trent Guess, Forrest Lowe, Amber Stern, Walter Rychlewski

Adjunct Assistant Professor:
Megan Hart

Adjunct Faculty:

Donald Baker, Anthony Black, John Blancett, David Christianson, Larry Drbal, Doug Hill, Jacque Hoisington,Dan Justice, Bob Lambrechts, Curt Mader, James Mahoney, Una Nowling, Dennis Randolph, Marc Richardson, Harold Sprague, Chuck Williams

Professors Emeriti:
Rudolph L. Leutzinger, Sr., Donald R. Smith, William E. Stewart, Jr.

Academic Advisors:
Jo Ann Day, Thuy Guess

Administrative Assistant:
Selena Albert

Educational Objectives (PEOs)

The Civil Engineering program educational objectives (PEOs) support the missions of the institution and SCE. The PEOs are published on the Civil & Mechanical Department web-site (http://sce.umkc.edu/our-school/cme-department.asp) under the CME mission statement.

The Civil Engineering Program at UMKC expects the graduates within a few years of graduation to attain the following:

- Graduates are successfully employed in an engineering or related field or accepted into a graduate program.
- Graduates apply the necessary problem-solving, design, and application skills for successful careers in Civil Engineering.
- Graduates utilize their educational foundation and communication skills to effectively lead, work, and communicate in diverse career paths.
- Graduates succeed in the complex social, business, and technical environment in which their engineering contributions will be utilized.

The Mechanical Engineering program educational objectives (PEOs) support the missions of the institution and SCE. The PEOs are published on the Civil & Mechanical Department web-site (http://sce.umkc.edu/our-school/cme-department.asp) under the CME mission statement.

The Mechanical Engineering Program at UMKC expects the graduates within a few years of graduation to attain the following:

- Graduates are successfully employed in an engineering or related field or accepted into a graduate program.
- Graduates apply the necessary problem-solving, design, and application skills for successful careers in Mechanical Engineering.
- Graduates utilize their educational foundation and communication skills to effectively lead, work, and communicate in diverse career paths.
- Graduates succeed in the complex social, business, and technical environment in which their engineering contributions will be utilized.

Scholarships

A list of scholarships and financial aid is available on the Financial Aid webpage at http://www.sfa.umkc.edu/. Application information regarding these scholarships is available from the department office. Engineering students are also eligible to apply for SCE Scholarships (http://sce.umkc.edu/scholarships/default.asp). Information regarding these scholarships may also be obtained from the Department office.

Advising and Registration

The civil and mechanical engineering programs assign a faculty member to be the student's academic advisor throughout the duration of their study. Students may request a change of advisor assignment. Students are required to meet with their faculty advisor every semester prior to registration for the following semester. The faculty advisor guides the student in selecting courses that are necessary for completion of degree requirements, and answers questions regarding elective course programs and options. During the advising period, the faculty advisor determines whether the student is meeting degree requirements by reviewing the program advisement form. Any exceptions to the normal procedure must be approved by written petition. Specific information regarding registration is found in the UMKC Class Schedule and on the UMKC Web site.

Program Activities

Students enjoy many group activities outside the classroom. They participate in regional and national competitions, design and erect bridges and concrete canoes, and participate in Engineers' Week activities. They have been winning their share of awards and have had fun doing it.

The School of Computing and Engineering has a number of societies open to all engineering students. These include the SCE Student Council, and the student chapters of the American Society of Civil Engineers (ASCE), the Missouri Society of Professional Engineers (MSPE), the National Society of Black Engineers (NSBE), the Society of Women Engineers (SWE) and the Structural Engineering Association of Kansas and Missouri (SEAKM). In these organizations, students have an opportunity to develop their career through association with other civil engineering students, the faculty, and active members of the profession. The chapters hold monthly meetings, field trips and other activities such as competing in the steel bridge and concrete canoe competitions. Membership is open to all engineering students.

Several national engineering honorary societies have also been established to recognize academic excellence. Tau Beta Pi is for all engineering majors. Assembly of Civil Engineering Scholars (ACES) is an honorary society for civil engineering students.

Undergraduate

Undergraduate Degrees:

- Bachelor of Science in Civil Engineering
- Bachelor of Science in Mechanical Engineering

Admissions

First-Time Admission

First-time college student applicants to the undergraduate program will be admitted if they obtain: (1) an ACT mathematics score of at least 25; and (2) an ACT composite score of at least 24, or a high school class rank in the upper 25 percent.

First-time college student applicants who do not meet the standard criteria but do meet UMKC general admission requirements, and have other indicators that demonstrate potential for success, may be conditionally admitted to the Civil and Mechanical Engineering Department. The student may apply for acceptance into the civil or mechanical engineering discipline after meeting the terms of the conditional admission.

High school students planning to apply to the civil or mechanical engineering program should pursue a college preparatory program that emphasizes mathematics, science and communication skills.

Re-admission

Students seeking re-admission into either civil or mechanical engineering must have been in good academic standing in the CME degree program when last enrolled, otherwise, re-admission requires a formal review by the department upon written appeal by the student.

Transfer Admission

Students with 24 or more transferrable credits (transfer students) will be admitted based upon the general UMKC transfer policy and must have completed coursework equivalent to MATH 210, CHEM 211, and either PHYSICS 240 or MATH 220, with a grade of ’C’ or better. The minimum overall GPA of transferrable engineering degree coursework must be 2.5 or higher. The 2.5 GPA is computed using all degree applicable attempts from all institutions when determining admission of transfer students. Students must also meet UMKC’s general admission requirements including the 2.0 or higher cumulative GPA from all institutions attended.

Transfer students not meeting the above criteria may be admitted based on a formal review by the departmental academic committee. A written appeal by the prospective student is required by the academic committee in order to be considered for admission.

Transfer credits of engineering courses will be accepted provided they are either from an ABET-accredited engineering program or have been approved as part of a transfer articulation agreement. All transferable coursework applicable towards the degree must have a grade of ’C’ or higher.

International Transfer Credit

Unless the international institution is recognized by ABET, only sophomore level (200 level) or below coursework may be transferred by petition and review of the academic committee. Final acceptance of transfer credit by petition requires completion of one academic year of probation. Any identified deficiencies during that probation period will, on the review of the academic committee, require remedial coursework.

Visiting Student Admission

Visiting students must meet the Civil & Mechanical Engineering Department (CME) regular admission requirements. Visiting students who wish to take undergraduate civil or mechanical engineering coursework will be required to show proof of having met prerequisites to the course desired to be taken with a grade of "C" or better. Registration requires permission from the department. Enrollment of visiting students in undergraduate civil or mechanical coursework will be done the week before the start of the semester (for summer semester, registration will be done two weeks before the start of the semester) on a space available basis unless an exception is approved by the CME Department. Visiting undergraduate students cannot use the KCASE program for SCE classes.

Academic Regulations for Civil and Mechanical Engineering

Transfer of General Education Credits

Students Transferring from Other Missouri Institutions with a Certified 42-Hour General Education Core Curriculum

Students transferring into an undergraduate engineering program with a certified 42-hour block of general education credit from another Missouri institution typically would be required to complete additional degree specific coursework for baccalaureate degrees depending on the different degree programs pursued. A student should consult with an academic advisor to obtain the specific details.

UMKC's General Education Core (p. 758) for Students Transferring to Another Missouri Institution

Civil Engineering students wishing to complete the General Education core should also consult with an academic advisor by contacting the Department Office at (816) 235-**5550**.

Minimum Grade Requirement

A grade of "C" (2.0) or better must be earned in every course required in the civil or mechanical engineering degree programs.

Audits

A student cannot take a course for audit and later expect to take the same course for credit in the degree program. For that reason, students must not audit any courses required in their program, unless credit has already been established. To audit an elective course, written consent from both the student's advisor and the instructor of the course is required. After the first week of classes, a student cannot change from credit to audit or audit to credit.

Repeat of Courses

No courses taken within the University of Missouri system may be repeated if a grade of C or better has been obtained. All grades in each attempt count toward cumulative grade-point calculation.

Petitions

To receive an exception from stated departmental guidelines or curriculum, the student must file a petition in the Department Office. To receive transfer credit for courses taken at another institution after admission to Civil Engineering, the student must file a petition in the Department Office. If the petition is denied by the CME Academic Appeals Committee, the student may appeal the decision to the Dean of the School of Computing & Engineering.

Withdrawals

A student may withdraw from a course without academic assessment by completing a Drop/Add form before the deadline given in the UMKC Schedule of Classes.

Academic Standing

The University tries to assure that students progress satisfactorily toward their goals and receive clear warning when they do not. To this end, engineering adheres to a clear policy, but provides for exceptions in unusual cases. The interest of the student is paramount.

A student is in good academic standing when term and cumulative grade-point averages (GPA) from the University of Missouri system are 2.0 or higher in courses necessary for an engineering degree. Students will be placed on academic probation if, when in good academic standing, they earn a term GPA of less than 2.0 but greater than 1.0. Students may also be placed on academic probation at the time of initial admission or readmission because they do not fully meet the minimum standards. Students earning a term GPA of less than 1.0, or a term GPA of less than 2.0 while on academic probation become ineligible for continuation of studies. The academic standing statements found at the top of semester grade reports are defined as follows:

- Now In Good Standing - Term and cumulative GPA greater than 2.0.
- Now On Probation - Term or cumulative GPA less than 2.0.
- Academically Ineligible - Term GPA less than 1.0 or two consecutive semesters with term or cumulative GPA less than 2.0.

When a student becomes academically ineligible, the student is not allowed to continue academic studies. Any pre-registration of course work will be canceled. In order to continue academic studies, the student must appeal to the Civil and Mechanical Engineering Department in writing.

Now in Good Standing

A student whose term and cumulative grade-point averages (GPA) from the University of Missouri system are 2.0 or higher, in courses necessary for an engineering degree, is in good academic standing. A term is defined as a fall semester, spring semester or summer session.

Now on Probation

A student will be placed on academic probation if, when in good academic standing, the student earns a term GPA of less than 2.0 but greater than 1.0. A student may also be placed on academic probation at the time of initial admission or readmission because the student does not fully meet the minimum requirements.

Probationary Term

After being placed on academic probation, the student's next semester of enrollment (the probationary term) must result in the completion of at least 12 hours of course work necessary for an engineering degree. A student will be returned to good standing if, at the end of the probationary term, the student's term and cumulative GPAs are 2.0 or higher in courses necessary for an engineering degree.

Academically Ineligible

A student will become academically ineligible if any of the following apply:

- The student receives a term GPA of less than 1.0.
- The student receives a term GPA of less than 2.0 for the probationary term.
- The student receives a cumulative GPA of less than 2.0 for the probationary term.
- The student fails to complete at least 12 hours of course work necessary for an engineering degree during the probationary term.

Satisfactory Academic Progress

Students will be expected to maintain continuous satisfactory academic progress and can be removed from the civil or mechanical engineering program after evaluation by the Civil and Mechanical Engineering Academic Committee if it finds that satisfactory academic progress is not being made (see CME Student Handbook for details).

Academic Appeals

If a student has become academically ineligible, the student may be allowed to continue academic studies, provided that the student successfully appeals to the Academic Appeals Committee. The primary concern of the Appeals Committee is the likelihood of the student's future success. Accordingly, any appeal should include causes for the student's past poor performance and reasons for expecting better performance in the future. When the Appeals Committee allows a student to re-enroll, it may set conditions such as courses to be taken, minimum grades, total hours, etc. to which the student must adhere.

If a student has become academically ineligible and wishes to enroll on a part-time basis, the student must appeal to the Academic Appeals Committee and document the reasons for part-time enrollment. Such documentation might include a written doctor's statement for medical reasons or a written employer's statement for work reasons. If work is given as the reason for part-time enrollment, the following guidelines shall apply:

Work Hours/Week	Minimum Credit Hours
40+	3
30+	6
20+	9
0-19	12

Application for Graduation

Students should apply for graduation when they register for their final semester's course work. Requirements for graduation include the following:

1. The student's last 30 hours must be taken at the University of Missouri-Kansas City.
2. The overall grade-point average in all enrollments in all University of Missouri course work must be at least 2.0.
3. The grade-point average in the last enrollment in all engineering course work (CE, ECE, ME) must be at least 2.0.

A grade-point average deficiency may be removed by repeating a course or by taking additional courses that qualify as eligible electives in the curriculum.

Students are required to take the Academic Profile Test, which is a general education test, before they can graduate. This test is administered by the UMKC Office of Testing Services (816) 235-5820 and may be taken any time after the student has completed a total of 80 credit hours from any institution. The object of this test is to assess the effectiveness of university course work and the score is not part of the student's permanent record.

Students are also required to complete a department exit interview in the last semester that they are enrolled.

Graduate

- Graduate Programs
  - Engineering and Construction Project Management Certificate (p. 320)
  - Master of Science in Civil Engineering
  - Doctoral Studies in Civil Engineering
  - Graduate Courses in Civil Engineering (CIV-ENGR)
- Civil Engineering Specialty Areas
- Mechanical Engineering
  - Career Opportunities in Mechanical Engineering
  - Program Description in Mechanical Engineering
  - Graduate Programs

- Master of Science in Mechanical Engineering
- Doctoral Studies in Mechanical Engineering
- Mechanical Engineering Specialty Areas

Admissions

Engineering and Construction Project Management Certificate

The Engineering and Construction Project Management Certificate is a 12 credit hour graduate certificate offered through the School of Computing & Engineering at the University of Missouri-Kansas City. The certificate is especially appropriate for post-baccalaureate working professionals in the Kansas City area who wish to pursue further studies in engineering project management, specifically in construction management. The certificate consists of 9 credit hours of required courses and 3 credit hours of an elective course at the 5500-level or above. Students must maintain 3.0 graduate grade point average (GPA) while enrolled.

Admission Requirements

Either a baccalaureate degree in engineering or a baccalaureate degree in another field combined with construction-related work experience is required. A grade point average (GPA) of at least 3.0 in the last 60 credit hours of undergraduate coursework is required. Pre-program requirements may be specified in case the Bachelor's degree is not in civil or mechanical engineering. The following documents are required for admission consideration:

- Application for admission
- Official transcripts of all college coursework

In addition, a statement of purpose is required for admission.

CONDITIONAL admission may be granted when minimum GPA requirements are not met; however, other indicators promise applicant's success in the program.

After admission, the student is required to meet with a faculty advisor.

Master's Program in Civil or Mechanical Engineering

The UMKC Civil & Mechanical Engineering Master's Programs offer graduate students the opportunity to get a state-of-the-art education in dynamic, challenging and professionally significant specialty areas.

Degrees Offered

- Master of Science in Civil Engineering (MSCE)
- Master of Science in Mechanical Engineering (MSME)

Assistantships

The school has numerous assistantship positions available each semester. Typically, awards are for quarter-time or half-time support and may include tuition fee waivers.

Admission Requirements

A baccalaureate degree in civil or mechanical engineering or related disciplines with a grade point average (GPA) of at least 3.0 in the last 60 hours of undergraduate engineering coursework is required. Pre-program requirements may be specified in case the Bachelor's degree is in a discipline different to which the candidate is applying.

The following documents are required for admission consideration:

- Application for admission
- Official transcripts of all college coursework
- TOEFL scores are required for international students without prior U.S. degrees. The minimum required score is 80. *TOEFL requirements may be waived for applicants with a baccalaureate degree from an ABET-accredited program.*
- Official results of the Graduate Record Exam (GRE) are required for all applicants. A cumulative score of at least 302 (verbal + quantitative) and a minimum of 158 on the quantitative portion of the examination is required. *GRE requirements may be waived for applicants with a baccalaureate degree from an ABET-accredited program who have passed the Fundamentals of Engineering (FE) exam.*

In addition, three letters of recommendation from professors at previous institutions or mentors at work are highly encouraged.

CONDITIONAL admission may be granted when the minimum GPA and GRE requirements are not met; however, other indicators promise applicant's success in the program. To be fully admitted as a "Regular Master's Degree Seeking" student, the candidate must obtain a grade of "B" or better in the

first nine-hours of coursework; submit a satisfactory GRE score or an FE certificate, as specified above, within the first semester of their program; and complete any other conditions.

International Students: Use the international application form and return the application, along with required supporting materials, to the University of Missouri-Kansas City, Office of International Student Affairs, 5100 Rockhill Road, Kansas City, MO 64110-2499, USA. The telephone number is (816) 235-1113.

After admission, the student is required to attend a departmental orientation session and meet with a faculty advisor.

Doctoral Program in Civil or Mechanical Engineering

For the Doctoral Program in Civil or Mechanical Engineering, admission information can be found at the School of Graduate Studies website under the link for prospective students: http://sgs.umkc.edu. The telephone number is (816) 235-1111.

UMKC offers an Interdisciplinary Ph.D. (IPHD) program which consists of two disciplines:

- Primary Discipline
- Co-Discipline

Students in civil or mechanical engineering are encouraged to choose *Engineering* as the Primary Discipline. Admission requirements and Co-Discipline options can be found at the School of Graduate Studies website under the link for *Engineering*.

Graduate Academic Regulations

- With permission of the student's graduate advisor, up to six credit hours of transfer graduate coursework may be transferred from other non-University of Missouri institutions.
- With permission of the student's graduate advisor, up to 14 credit hours of transfer graduate coursework may be transferred from other University of Missouri institutions.
- However, at least 16 credit hours of graduate coursework must be taken at UMKC.

A graduate student must maintain a cumulative GPA of 3.0 for all graduate coursework taken during the course of graduate studies. Should the cumulative GPA fall below 3.0, the student will be placed on probation. A student on probation must bring the cumulative GPA to a 3.0 by the end of the next semester or face possible dismissal. Students should apply for graduation when they register for their final semester of coursework. All students must complete and file with the Department Office both the UMKC Application for Graduation form and the Departmental Program of Study form. Students selecting the *project* or *thesis* option must also file a Departmental Report of the Master's Examining Committee form. Students selecting the *thesis* option must file a Master's Thesis Report form and have their thesis approved by the UMKC Graduate School.

Transfer of Graduate Credits

- With permission of the student's graduate advisor, up to six credit hours of transfer graduate coursework may be transferred from other non-University of Missouri institutions.
- With permission of the student's graduate advisor, up to 14 credit hours of transfer graduate coursework may be transferred from other University of Missouri institutions.
- However, at least 16 credit hours of graduate coursework must be taken at UMKC.

Academic Standing

A graduate student must maintain a cumulative GPA of 3.0 for all graduate coursework taken during the course of graduate studies. Should the cumulative GPA fall below 3.0, the student will be placed on probation. A student on probation must bring the cumulative GPA to a 3.0 by the end of the next semester or face possible dismissal.

Application for Graduation

Students should apply for graduation when they register for their final semester of coursework. All students must complete and file with the Department Office both the UMKC Application for Graduation form and the Departmental Program of Study form. Students selecting the *project* or *thesis* option must also file a Departmental Report of the Master's Examining Committee form. Students selecting the *thesis* option must file a Master's Thesis Report form and have their thesis approved by the UMKC Graduate School.

Civil Engineering

The American Society of Civil Engineers (ASCE) defines civil engineering as "the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize economically, the materials and forces of nature for the progressive well-being of humanity in creating, improving and protecting the environment, in providing facilities for community living, industry and transportation, and in providing structures for the use of humankind". The CE program aims to prepare students with a breadth and depth in the technical

knowledge so that they can work immediately in most areas of the profession including geotechnical engineering; hydraulics, hydrology, environmental engineering; structural engineering; and transportation/ traffic engineering.

Bachelor of Science in Civil Engineering

Student Learning Outcomes

The Bachelor of Science in Civil Engineering prepares students with a breadth and depth in the technical knowledge so that they can work immediately in most areas of the profession including geotechnical engineering; environmental engineering; hydraulics; and structural engineering. **Engineering programs must demonstrate that their students attain:**

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Curriculum Requirements

The civil engineering curriculum requires a minimum of 127 hours of coursework and satisfies the UMKC General Education requirements.

Year I

Fall Semester	Credits	Spring Semester	Credits
MATH 210[2]	4	MATH 220	4
CHEM 211 & 211L	5	PHYSICS 240 (Focus B)[GE]	5
DISC 100[GE]	3	MEC-ENGR 130	3
Anchor I[GE,1]	3	DISC 200[GE]	3
		Anchor II[GE,1]	3
	15		**18**

Year II

Fall Semester	Credits	Spring Semester	Credits
MEC-ENGR 270 or MATH 250	4	MEC-ENGR 272 or MATH 345	4
PHYSICS 250 (Focus Elective)[GE]	5	CIV-ENGR 276	3
CIV-ENGR 275	3	MEC-ENGR 220	3
MEC-ENGR 219	3	MEC-ENGR 285	3
Focus C[GE]	3	MEC-ENGR 299	3
	18		**16**

Year III

Fall Semester	Credits	Spring Semester	Credits
CIV-ENGR 319	3	CIV-ENGR 318	3
CIV-ENGR 321	4	CIV-ENGR 323	3
CIV-ENGR 335	3	CIV-ENGR 342	3
CIV-ENGR 351	3	CIV-ENGR 357	3

CIV-ENGR 467	3	CIV-ENGR 378WI	3
	16		**15**
Year IV			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
CIV-ENGR 411	2	CIV-ENGR 412	3
CIV-ENGR 422WI	3	CIV-ENGR 4XX::CIV-ENGR Elective	3
CIV-ENGR 481	3	DISC 300[GE]	3
CIV-ENGR 497	3	Focus A[GE]	3
CIV-ENGR 4XX::CIV-ENGR Elective	3	Anchor III[GE]	3
	14		**15**

Total Credits: 127

GE All students must take or establish credits for the following General Education Course Requirements: Discourse I, Discourse II, Discourse III, Anchor I, Anchor II, Anchor III, Focus A, Focus B, Focus C, and Focus Elective for a total of 30 credit hours of GenEd. Go to www.umkc.edu/core/courses (http://www.umkc.edu/core/courses) for a list of GenEd courses.

1 The Civil & Mechanical Engineering Department recommends the following courses for Anchor I: SCE 101 and Anchor II: SCE 201.

2 Enrollment restricted. Students must pass the online Math Entrance Test prior to enrolling (http://cas.umkc.edu/math/ (http://cas.umkc.edu/math)) or show prerequisite requirements have been met.

Notes: Civil engineering students must complete three (3) applied skills requirements before the start of their junior year. (Machine Shop Safety class must be completed prior to using any tools in university sponsored activities and facilities.)

RooWriter must be taken following the successful completion of DISC 200 and is a requirement in order to graduate (http://www.umkc.edu/RooWriter/logon.aspx).

All UMKC students must take the ETS-PP or MAPP Assessment Test after completing 70 credit hours and before applying for graduation (www.umkc.edu/testingservices/assessment.asp (http://www.umkc.edu/testingservices/assessment.asp)). Engineering students take the Fundamentals of Engineering exam in lieu of the Major Field Exam (http://pr.mo.gov/engineerinterns.asp and www.ncees.org (http://www.ncees.org)).

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Civil Engineering Career Opportunities

Kansas City is one of the premier centers of engineering design in the country. Numerous civil infrastructure design and construction firms with national and international reputation are headquartered in Kansas City. This offers a unique opportunity to our students, many of whom participate actively as interns or as employees with these firms during the course of their study, thereby, getting a balanced blend of course work and practical experience.

Job opportunities abound for engineering majors. In terms of starting salaries and the number of job offers, engineering graduates compare favorably with all other graduates. In addition, the civil engineering curriculum at UMKC equips the graduate with the analytic decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Civil Engineering Program Description

The program offers the bachelor's degree and the master's degree in civil engineering and participates in the UMKC Interdisciplinary Ph.D. program. The Bachelor of Science in Civil Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/.

The Master of Science in Civil Engineering has both thesis and non-thesis options. Students interested in pursuing a doctoral degree in civil engineering may select engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program.

The civil engineering program has a rich history in Kansas City. The University of Kansas City offered a General Engineering degree in the 1950's. The master's program in civil engineering was started in 1964 and later the undergraduate program was added in the early 1970s. Since 1977,

the undergraduate program in civil engineering has been independently accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/. The program became a part of the School of Computing and Engineering (SCE) in January 2001 and is housed in Flarsheim Hall.

Civil Engineering Specialty Areas

UMKC's Civil Engineering Program has faculty members who are active in research with funding from numerous local and national industries and government agencies.

Research and study are available in the following specialty areas:

- Environmental and Water Resources
- Structures
- Materials
- Construction Management

For more information, visit our website at http://sce.umkc.edu.

Doctoral Studies in Civil Engineering

Civil Engineering participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City as part of the engineering (p. 512) discipline. Students interested in pursuing a doctoral degree in civil engineering may select engineering as the primary discipline when applying for admission into the Interdisciplinary Ph.D. Program (p. 484). See the School of Graduate Studies (p. 480) section of this catalog for general and discipline-specific admission requirements and regulations for Interdisciplinary Ph.D. study with engineering as one of the desired disciplines.

Engineering and Construction Project Management Certificate

Student Learning Outcomes

Engineering programs must demonstrate that their students attain:

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Requirements

The Engineering and Construction Project Management Certificate is a 12 credit hour graduate certificate program offered through the School of Computing & Engineering. Engineering and construction companies are increasingly requiring project management skills for those who hold technical degrees to successfully complete projects and to be promoted in their organizations. This graduate certificate program is designed to meet this need and enable students holding a Bachelor's degree in an appropriate discipline to learn higher-level project management skills that are critical to the successful planning and completion of projects across the spectrum of engineering, construction, and related disciplines. The certificate is intended for post-baccaluareate professionals working in the Kansas City area in lower- and mid-level engineering, construction, and management positions. The certificate requires a minimum of 12 credit hours at the 5500-level or above. Students must maintain 3.0 graduate grade point average (GPA) while enrolled. Students who have a Bachelor of Science degree in Civil Engineering and who complete the Engineering and Construction Project Management Certificate courses may be eligible to have up to 12 credit hours applicable to the Master of Science degree in Civil Engineering with an emphasis in Construction Management.

Master of Science in Civil Engineering

Student Learning Outcomes

Engineering programs must demonstrate that their students attain:

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Requirements

The civil engineering program offers graduate students an opportunity to get a state-of-the-art education in dynamic, challenging and professionally significant specialty areas. With written approval from the faculty advisor, master's students are allowed to take credits in other fields to encourage them to broaden their education beyond the civil engineering field. There are three degree options for earning a master's in civil engineering: coursework only, project or thesis options. For further information call (816) 235-**5550** or e-mail sce@umkc.edu.

- Master of Science with *coursework only* requires the completion of a minimum of 30 credit hours of approved graduate coursework (300-level or higher). The graduate coursework must include at least 18 credit hours of 5500/5600-level courses.
- Master of Science with *project* requires the completion of a minimum of 30 credit hours, which includes 27 credit hours of approved graduate coursework (300-level or higher) and three credit hours of independent project (CIV-ENGR 5500). At least 18 credit hours must be at the 5500/5600-level. The candidate must submit a report prepared per the advisor's guidelines and present the project work in front of a three-member project examining committee.
- Master of Science with *thesis* requires the completion of a minimum of 30 credit hours, which includes 24 credit hours of approved graduate coursework (300-level or higher) and six credit hours of thesis work (CIV-ENGR 5599). At least 18 credit hours must be at the 5500/5600-level. The candidate must submit a thesis prepared per the graduate school guidelines and orally defend the thesis work in front of a three-member thesis examining committee.

A minimum of three credit hours of advanced mathematics from an approved course list is required for the M.S. degree in Civil Engineering. Exceptions are available by petition to the CME Graduate Committee.

Other specifications for students pursuing the project or thesis option:

1. The student must request to schedule a project or thesis defense in the first half of the semester in which the student plans to defend.
2. The written part of the project/thesis must be completed and given to all the committee members at least ten days prior to the defense date.
3. The defense date and an abstract must be advertised to the CME faculty and students at least one week prior to the scheduled defense date.

Mechanical Engineering

Mechanical engineering (ME) is one of the broadest of the engineering disciplines, therefore, mechanical engineers are the generalists of the engineering profession. Mechanical engineers design, construct, test and operate many types of mechanical, thermal and biological devices. They are involved in almost every industry, including aerospace, automotive, bioengineering, communications, electronics, energy, food processing, HVAC, manufacturing, power generation and refrigeration, as well as business, government and academia. The ME program aims to prepare students with a breadth and depth in technical knowledge so that they can work immediately in most areas of the profession.

Bachelor of Science in Mechanical Engineering

Student Learning Outcomes

The Bachelor of Science in Mechanical Engineering prepares students with a breadth and depth in technical knowledge so that they can work immediately in most areas of the profession. **Engineering programs must demonstrate that their students attain:**

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

The mechanical engineering curriculum requires a minimum of 127 hours of coursework and satisfies the UMKC General Education requirements.

Year I

Fall	Credits	Spring	Credits
MATH 210[2]	4	MATH 220	4
CHEM 211 & 211L	5	PHYSICS 240 (Focus B)[GE]	5
DISC 100[GE]	3	MEC-ENGR 130	3
Anchor I[GE,1]	3	DISC 200[GE]	3
		Anchor II[GE,1]	3
	15		**18**

Year II

Fall	Credits	Spring	Credits
MEC-ENGR 270 or MATH 250	4	MEC-ENGR 272 or MATH 345	4
PHYSICS 250 (Focus Elective)[GE]	5	CIV-ENGR 276	3
CIV-ENGR 275	3	MEC-ENGR 220	3
MEC-ENGR 219	3	MEC-ENGR 285	3
		MEC-ENGR 299	3
	15		**16**

Year III

Fall	Credits	Spring	Credits
CIV-ENGR 319	3	MEC-ENGR 306	3
CIV-ENGR 351	3	MEC-ENGR 352WI	5
MEC-ENGR 324	4	MEC-ENGR 380	3
MEC-ENGR 356	3	MEC-ENGR 385	3
MEC-ENGR 360	3	MEC-ENGR 399	3
	16		**17**

Year IV

Fall	Credits	Spring	Credits
MEC-ENGR 415	3	MEC-ENGR 457	3
MEC-ENGR 4XX MEC-ENGR Technical Elective or Energy System Design Requirement [3]	3	MEC-ENGR 496WI	3

DISC 300[GE]	3	MEC-ENGR 4XX MEC-ENGR Technical Elective or ME ESD Requirement[3]	3
Focus C[GE]	3	MEC-ENGR 4XX MEC-ENGR Technical Elective	3
Anchor III[GE]	3	Focus A[GE]	3
	15		**15**

Total Credits: 127

GE All students must take or establish credits for the following General Education Course Requirements: Discourse I, Discourse II, Discourse III, Anchor I, Anchor II, Anchor III, Focus A, Focus B, Focus C, and Focus Elective for a total of 30 credit hours of GenEd. Go to www.umkc.edu/core/courses for a list of GenEd courses.

1 The Civil & Mechanical Engineering Department recommends the following courses for Anchor I: SCE 101 and Anchor II: SCE 201.

2 Enrollment restricted. Students must pass the online Math Entrance Test prior to enrolling (http://cas.umkc.edu/math/) or show prerequisite requirements have been met.

3 One ESD course required. MEC-ENGR 451 (Fall) or MEC-ENGR 440 (Spring) fulfills this requirement.

Notes: Mechanical engineering students must complete three (3) applied skills requirements before the start of their junior year. (Machine Shop Safety class must be completed prior to using any tools in university sponsored activities and facilities.)

RooWriter must be taken following the successful completion of Discourse II and is a requirement in order to graduate (http://umkc.edu/RooWriter/logon.aspx).

All UMKC student must take the ETS-PP or MAPP Assessment Test after completing 70 credit hours and before applying for graduation (www.umkc.edu/testingservices/assessment.asp (http://www.umkc.edu/testingservices/assessment.asp)). Engineering students take the Fundamentals of Engineering exam in lieu of the Major Field Exam (http://pr.mo.gov/engineerinterns.asp and www.ncees.org (http://www.ncees.org)).

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Doctoral Studies in Mechanical Engineering

Mechanical Engineering participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City as part of the engineering (p. 512) discipline. Students interested in pursuing a doctoral degree in mechanical engineering may select engineering as the coordinating discipline when applying for admission into the Interdisciplinary Ph.D. Program (p. 484). See the School of Graduate Studies (p. 480) section of this catalog for general and discipline-specific admission requirements and regulations for Interdisciplinary Ph.D. study with engineering as one of the desired disciplines.

Master of Science in Mechanical Engineering

Student Learning Outcomes

Engineering programs must demonstrate that their students attain:

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.

- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Program Requirements

The mechanical engineering program offers graduate students an opportunity to get a state-of-the-art education in dynamic, challenging and professionally significant specialty areas. With written approval from the faculty advisor, master's students are allowed to take credits in other fields to encourage them to broaden their education beyond the mechanical engineering field. There are three degree options for earning a master's in mechanical engineering: coursework only, project or thesis options. For further information call (816) 235-**5550** or e-mail sce@umkc.edu.

- Master of Science with *coursework only* option requires the completion of a minimum of 30 credit hours of approved graduate coursework (300-level or higher). The graduate coursework must include at least 18 credit hours of 5500/5600-level courses.
- Master of Science with *project* requires the completion of a minimum of 30 credit hours, which includes 27 credit hours of approved graduate coursework (300-level or higher) and three credit hours of independent project (MEC-ENGR 5500). At least 18 credit hours must be at the 5500/5600-level. The candidate must submit a report prepared per the advisor's guidelines and present the project work in front of a three-member project examining committee.
- Master of Science with *thesis* option requires the completion of a minimum of 30 credit hours of approved graduate coursework (300-level or higher). The graduate coursework must include at least 24 credit hours of approved graduate coursework (300-level or higher) and six credit hours of thesis work (MEC-ENGR 5599). At least 18 credit hours must be at the 5500/5600-level. The candidate must submit a thesis prepared per the graduate school guidelines and orally defend the thesis work in front of a three-member thesis examining committee.

A minimum of six credit hours of advanced mathematics from an approved course list is required for the M.S. degree in Mechanical Engineering. Exceptions are available by petition to the CME Graduate Committee.

Other specifications for students pursuing the project or thesis option:

1. The student must request to schedule a project or thesis defense in the first half of the semester in which the student plans to defend.
2. The written part of the project/thesis must be completed and given to all the committee members at least ten days prior to the defense date.
3. The defense date and an abstract must be advertised to the CME faculty and students at least one week prior to the scheduled defense date.

Mechanical Engineering Career Opportunities

Kansas City is one of the premier engineering centers in the country. Numerous engineering and manufacturing firms with national and international reputation are headquartered in Kansas City. This offers a unique opportunity to our students, many of whom participate actively as interns or as employees with these firms during the course of their study, thereby getting a balanced blend of course work and practical experience.

Job opportunities abound for engineering majors. In terms of starting salaries and the number of job offers, engineering graduates compare favorably with all other graduates. In addition, the mechanical engineering curriculum at UMKC equips the graduate with the analytic decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Mechanical Engineering Program Description

The program offers the bachelor's degree and the master's degree in mechanical engineering and participates in the UMKC Interdisciplinary Ph.D. program. The Bachelor of Science in Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/.

The Master of Science in Mechanical Engineering has both thesis and non-thesis options. Students interested in pursuing a doctoral degree in mechanical engineering may select engineering as a discipline when applying for admission into the Interdisciplinary Ph.D. program.

The mechanical engineering program has a rich history in Kansas City. The University of Kansas City offered a General Engineering degree in the 1950's. The master's program in mechanical engineering was started in 1964 and later the undergraduate program was added in the early 1970s. Since 1977 the undergraduate program in mechanical engineering has been independently accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org/. The program became a part of the School of Computing and Engineering (SCE) in January 2001 and is housed in Flarsheim Hall.

Mechanical Engineering Specialty Areas

UMKC's Mechanical Engineering Program has faculty members who are active in research with funding from numerous local and national industries and government agencies.

Research and study are available in the following specialty areas:

- Biomechanics
- Materials & Manufacturing
- Thermal Sciences & Renewable Energy
- Vibrations & Controls

For more information, visit our website at http://sce.umkc.edu.

Department of Computer Science Electrical Engineering

Address
University of Missouri-Kansas City
Department of Computer Science Electrical Engineering
546 Robert H. Flarsheim Science and Technology Hall (http://www.umkc.edu/virtualtour/flarsheim-hall.asp)
5110 Rockhill Road
Kansas City, MO 64110-2499

(816) 235-**1193**
Fax: (816) 235-**5159**
csee@umkc.edu
http://sce.umkc.edu/our-school/csee-department.asp

Chair:
Ghulam M. Chaudhry

Curators' Professor:
Khosrow Sohraby, Deep Medhi

Professors:
Ghulam M. Chaudhry (Chair), Lein Harn, Vijay Kumar, Xiaojun Shen, Appie van de Liefvoort

Research Professor:
Mary Lou Hines Fritts (CIO and Vice Provost for Academic Programs)

Professor Emeritus:
Richard Hetherington

Associate Professors:
Cory Beard, Baek-Young Choi, Deb Chatterjee, Masud Chowdhury, Reza Derakhshani, Deendayal Dinakarpandian, Yijie Han, Jerome Knopp, Yugyung Lee, Ken Mitchell, Jerry Place (Associate Dean of Academics), Praveen Rao, Sejun Song

Associate Teaching Professor:
Eddie Burris, Brian Hare, Kevin Kirkpatrick

Assistant Professors:
Yang (Cindy) Yi, Yongjie Zheng

Assistant Teaching Professors:
Mohammed Kuhail, Jesse Sherwood

Instructors:
Michael Kelly,

Adjunct Instructors:
William Allyn, Saleh Bleha. Marian Cote, Robert Cotter, Gerald Doutt, Fred Granville, Richard Henderson, Reza Jafari, Dennis Owens, Jihad Qaddour, Soundrapandian Sankar, Mahbube Siddiki

Assistant Professor Emeritus:
David Skitek

CSEE Administrative Staff:
Coretta Carter-Muhammad
Debby Dilks
Sharon Griffith
Nan Lorenz

Department Description

The CSEE Department has 27 full-time faculty members, including two Curators' professors, a UMKC Trustee's professor and one Fulbright Senior Specialist. Our faculty is at the forefront in research with funding from NSF and industries. We have strong partnerships with:

- Black & Veatch
- Burns & McDonnell
- Cerner
- Cisco
- Commerce Bank
- Creative Capsule
- Garmin
- General Electric
- Henderson Engineers
- Honeywell
- Intel
- Netchemia, Inc.
- NMR
- OpenMethods
- Phonefactor
- Sprint Nextel
- Starent Networks
- 21Concepts

Most of our corporate supportors are headquartered in the Kansas City area. Additionally, within UMKC, there are ongoing collaborations with other schools. In the life sciences area, we have partnerships with life and health sciences schools at UMKC and life sciences partners in the Kansas City area through the Kansas City Area Life Sciences Institute (KCALSI).

We have research and teaching strengths in the following areas:

- Networking and Telecommunications (design, protocols, routing, security, teletraffic modeling and analysis, monitoring, performance modeling, RF/wireless communication, optical, mobile computing, sensors, queueing theory, etc.).
- Software Engineering and Systems (object-oriented design and analysis, database/information management, middleware, intelligent agents, peer-to-peer computing, mobile databases, data mining, knowledge discovery, intrusion detection, etc.).
- Biomedical Informatics (machine learning and data mining methods for biological and medical data, modeling biological systems, biomedical information representation and sequence & structural analyses of biomolecules).
- Communications, Signal and Image Processing (digital signal processing, computational electromagnetics, RF and antenna theory and design, biomedical image processing, biometrics, neural networks, etc.).
- Computer Engineering (VLSI and mixed-signals chip design, performance and design of low power devices, embedded systems, System-On-Chip (SOC) and ASIC/FPGA design.
- Algorithms (complexity, distributed and parallel computations, graph, optimization, and combinatorial algorithms).
- Power Engineering

The CSEE department is committed to excellence in teaching. We stay on the top of the technology curve and continually offer new courses in emerging/hot topics. Our graduates are sought after by regional as well as national companies.

Approximately 875 students were enrolled in the CSEE department in the fall 2013 semester: 490 at the undergraduate level (all degree programs), 350 at the masters level (both CS and EE), and 35 students participated in UMKC's Interdisciplinary Ph.D. program through a discipline in CSEE.

Advising and Registration

For advising in regard to their degree programs, students need to contact the CSEE Department Office. Each student is assigned a faculty and staff advisor. The goal is to have the same faculty and staff member be the student's academic advisors throughout the duration of his/her study. Students are required to meet with their faculty and staff advisor every semester prior to registration for the following semester. The student may call the CSEE Department office to schedule this appointment. The faculty advisor guides the student in selecting courses that are necessary for completion of degree requirements and answers questions regarding elective course options as well as giving career guidance. The staff advisor assists students with day-to-day university operations in admissions, registration and records guidance. During the advising period, the faculty advisor determines whether the student is meeting degree requirements by reviewing the program advisement form. The staff advisor reviews the Degree Audit Report (DARS) and

determines if the student is meeting the university requirements. Any deviations by a student are corrected immediately. Specific information regarding registration is found in the UMKC Class Schedule found in Pathway and on the UMKC Web site at http://www.umkc.edu/registrar.

Student Organizations

CSEE encourages every student to actively participate in a student organization that matches his or her interests. The SCE **Student Council** addresses the needs of the students within the School of Computing and Engineering. These organizations include:

SCE Student Council (http://sce.umkc.edu/students/student-organizations/sce-student-council.cfm), who represents, supports and provides an orderly method for government for all students enrolled in the School of Computing and Engineering.

ACM (Association for Computing Machinery) is the leading professional organization in Computer Science and Information Technology and its student chapter is very active. Among others, it sponsors and participates in numerous programming and web design contests taking home awards from Consortium for Computing Sciences in Colleges (CCSC) and recognition in IEEE Extreme Programming Competition. Twice a year ACM has a book sale to fund their events.

AITP (Association of Information Technology Professionals) caters to the interest of both information technology students and business students. Their office is in the Henry W. Bloch School of Business and Public Administration.

EWB (http://sce.umkc.edu/students/student-organizations/ewb.cfm) (Engineers Without Borders) The UMKC chapter of EWB has a focus of Local and Global engineering projects. These projects are teamed with the professional chapter of EWB-Kansas City. The UMKC chapter of EWB has a global project focus right now in the Dominican Republic. They are working on sanitation solutions to provide clean drinking water to a village known as Kilometer 6. A Local Project focus is in working with the Urban Agriculture group in Kansas City to create rain collectors on roofs and buildings all across the KC area.

IEEE (Institute of Electrical and Electronics Engineers) is the world's leading professional association for the advancement of engineering and technology. As such, many (if not most) electrical and computer engineers, computer scientists, and information technology professionals are members of IEEE. Formed in 1980, our student branch, won the prestigious *Region 5 RAB Student Branch Membership Growth and Leadership Award*, the *Region 5 Student Branch Web Site Contest* and was *Runner Up* in the *IEEE International Student Branch Web Site Contest*. Individual students have also received various other IEEE Region 5 awards. The UMKC student branch hosts monthly meetings, company tours and SPACS during the academic year and also sponsors the UMKC Robotics Team. The Robotics Team is involved in several community outreach activities throughout the year.

Eta Kappa Nu (Theta Pi Chapter) is the Honor Society in Electrical and Computer Engineering. The student chapter at UMKC was installed in 1980. Members also participate in community outreach activities teaching K-12 students about science, technology, engineering and math.

MSPE/NSPE (http://sce.umkc.edu/students/student-organizations/mspe-nspe.cfm) (Missouri Society of Professional Engineers) is an engineering organization dedicated to emphasizing the importance of professional engineering licensure, encouraging the safe and ethical practice of engineering and facilitating interaction between student chapter members and members of the profession.

NSBE (http://sce.umkc.edu/students/student-organizations/nsbe.cfm) (National Society of Black Engineers) NSBE seeks "to increase the number of culturally responsible Black Engineers who excel academically, succeed professionally, and positively impact the community."

SWE (http://sce.umkc.edu/students/student-organizations/swe.cfm) (Society of Women Engineers) The purpose is to stimulate women to achieve full potential in careers as engineers and leaders, expand the image of the engineering profession as a positive force in improving the quality of life, and to demonstrate the value of diversity.

TBP (Tau Beta Pi Mo-Delta Chapter) is the honor society for all engineering majors.

Upsilon Pi Epsilon is the International Honor Society for the computing and information discipline. A UPE student chapter was founded in 2004. They organize field trips to local organizations and industries with a strong CS/IT presence. In addition, they provide tutoring assistance to undergraduate students.

Undergraduate

Undergraduate Degrees:

- Bachelor of Information Technology (p. 331)
- Bachelor of Science in Computer Science (p. 334)
- Bachelor of Arts in Computer Science (p. 337)
- BS/MS Computer Science Program (p. 340)
- Minor in Computer Science
- Bachelor of Science in Electrical and Computer Engineering (p. 341)
- BS/MS Electrical and Computer Engineering Program (p. 344)

A BS/MS Option for completing both an undergraduate degree and a masters degree within five years is available for CS and ECE/EE, as described below. Furthermore, a minor in computer science is available as well.

The two degrees in computer science are the bachelor of arts in computer science (B.A. with a liberal arts perspective), and bachelor of science in computer science (B.S. with a more thorough technical perspective). The B.S. degree has optional concentrations or emphasis areas in software engineering, computer networking and bioinformatics. The degree prepares the student for work in these industries, as well as for pursuing further graduate education in these areas. The bachelor of science in electrical and computer engineering (B.S.) is for students wanting to pursue a career in electrical engineering or electrical and computer engineering. The bachelor of information technology (B.I.T.) degree caters to the needs of the IT industry and uniquely blends both computer science and business coursework.

Certified General Education Core at Another Missouri Institution

Students wanting to transfer into the CSEE department with a certified 42-hour block of general education credit from another Missouri institution are strongly encouraged to consult an academic advisor in our department in addition to the advisor at their home institution. Contact the department office at (816) 235-**1193**. This ensures coursework taken in this block also satisfies specific degree requirements in our department.

Undergraduate Academic Regulations - All Students Pursuing an Undergraduate Degree

Academic Regulations

All students pursuing an undergraduate degree in the Department of CSEE, i.e. the Bachelor in Information Technology (IT), B.A. in Computer Science (CS), B.S. in Computer Science (CS), or B.S. in Electrical and Computer Engineering (ECE), must follow all academic regulations as specified in the following sections.

Academic Load

For a student to complete the degree in four years, it is imperative that the student takes approximately 15 credit hours worth of coursework each semester (not including summer). The 4-year program samples shown for each degree can be found in the UMKC Major Maps. http://sfa.umkc.edu/majormaps/ They are intended as a planning guideline for students. For a student wanting to complete **both an undergraduate degree and a graduate degree** in five years, they should consult the appropriate section on our Fast Track Program.

Academic Standing

The University tries to assure that students progress satisfactorily toward their goals and receive clear warning when they do not. To this end, this academic program adheres to a clear policy, but provides for exceptions in unusual cases. The interest of the student is paramount.

Good Academic Standing

A student is in good academic standing when term grade-point average (T-GPA), cumulative grade-point average (C-GPA), and grade-point average in courses necessary for their degree program (D-GPA) from the University of Missouri system are all 2.0 or higher. If a student starts a semester in good academic standing, and receives a T-GPA or D-GPA less than 2.00 (but higher than 1.00), then the student is placed on *academic probation*. If a student starts a semester in good academic standing, and receives a T-GPA or D-GPA less than 1.00, then the student becomes *ineligible* to continue their degree objective.

Academic Probation

A student who is placed on probation must return to good academic standing in one or two semesters, under the following restrictions: If the T-GPA, D-GPA, and C-GPA are all 2.0 or higher at the end of the first probationary semester, then the student is returned to Good Academic Standing. If the T-GPA is 2.0 or higher for the first probationary semester, then the student will be allowed to enroll for a second and final probationary semester. If the T-GPA is less than 1.0, the student becomes *ineligible* to continue their degree objective. Note: Students may also be placed on academic probation at the time of initial admission or readmission because they do not fully meet the minimum standards.

Academic Ineligibility

Students become *ineligible* to continue their degree objective if either T-GPA or D-GPA is less than 1.0, or if the T-GPA is less than 2.0 in a probationary semester.

Grade Reports

The academic standing statements found at the top of semester grade reports are only calculated from T-GPA and C-GPA (the D-GPA is not incorporated and will be calculated by your advisor) and are defined as follows:

- Now In Good Standing - Term and cumulative GPA greater than 2.0.
- Now On Probation - Term or cumulative GPA less than 2.0.
- Academically Ineligible - Term GPA less than 1.0 or two consecutive semesters with term or cumulative GPA less than 2.0.

Repeating a Course and Grade Replacement

Please see the Request for *GPA Adjustment Form* (http://www.umkc.edu/registrar/forms/UGRAD_Repeat_Form.pdf) available at the Registrar's website about retaking a course for which a D+ or less was earned. Repeating a Course and Grade Replacement

Auditing a Course

A student cannot take a course for audit and later expect to take the same course for credit in the degree program. For that reason, students must not audit any courses required in their program, unless credit has already been established.

To audit an elective course, written consent from both the student's advisor and the instructor of the course is required. After the first week of classes, a student cannot change from credit to audit or audit to credit.

Academic Dishonesty

A student enrolling in any UMKC course is expected to exhibit high standards of academic honesty in all works, and are expected to refrain from cheating and plagiarism. Rules governing any suspected violation are clearly spelled out elsewhere in the UMKC catalog. Instructors are obligated to report any cases of suspected academic dishonesty, and any violation will result in sanctions being imposed on the student, ranging from a warning, probation, loss of financial aid, loss of privileges, suspension, and dismissal. Please note that both receiving and giving unauthorized assistance is considered academically dishonest.

Petitioning

Any exception to academic policy and regulations regarding the degree requirements (e.g. transfer courses taken elsewhere, course waivers, waivers of residency) must be requested through a written petition. The petition form is available from the CSEE Department Office. The completed petition that includes an explanation for the petition should be submitted to the CSEE Department Office with any necessary documents attached. The Degree Program Coordinator or his/her designee will review such petitions and will communicate the result to the student.

Graduation Requirement

For students to obtain an undergraduate degree in the Department of CSEE, they must have passed the courses as specified in various categories under the header Curriculum Requirement for the desired degree, B.I.T, B.A. in CS, B.S. in CS, or B.S. in ECE. In addition, there are a number of University-wide degree requirements and a number of restrictions that apply:

1. A minimum of 36 credit hours from junior/senior level courses must be included.
2. The GPA from all courses attempted at the University of Missouri must be at least 2.0.
3. The GPA from all courses attempted in the major must be at least 2.0.
4. Can count individual coursework in CS, ECE, or IT toward the degree if at least a C (2.0) is earned.
5. Can transfer individual coursework in CS, ECE, or IT toward the degree if the student received at least a C (2.0), and the coursework is from an ABET-accredited degree program in either computing or engineering or if the coursework is part of a transfer articulation agreement.
6. The final 30 consecutive credit hours of course work must be taken at UMKC.
7. Participation in University-sponsored assessment tests is a prerequisite for graduation; a degree completion survey and exit interview may also be required.

Students who have completed 90 hours of credits should file an application for graduation and make an appointment for a degree check. Appointments may be made by calling (816) 235-**1193**. Students who are pursuing a second undergraduate degree or a second major must complete a minimum of 30 additional credit hours from UMKC, of which a minimum of 12 credit hours are from junior/senior level courses.

Graduate

Graduate Degrees:

- Master of Science in Computer Science (p. 345)
- BS/MS Computer Science Program (p. 340)
- Master of Science in Electrical Engineering (p. 351)
- BS/MS Electrical Engineering Program (p. 344)
- Doctoral Studies in Computer Science or Electrical Engineering

Graduate Academic Regulations

For smooth completion of the degree program, a student must follow various academic regulations as described below. Should a student want to switch from the MS in CS program to the MS in EE program (or vice versa), then the student needs to petition the graduate committee to have the record evaluated for admissibility. The DICE award status will not be effected. For information on financial aid, DICE awards and graduate assistantships please refer to the SCE Financial Assistance (p. 306) page.

Program of Study

A graduate degree indicates mastery of a coherent program in a chosen field and the ability to engage in creative projects in that specialty. The program of study is vital in assuring the completion of a formal program of study designed to ensure the mastery of specified knowledge and skills.

Forms for the program of study specification may be obtained from the CSEE Department Office. It is required that the program be approved by the student's graduate advisor and the graduate committee chair in the semester in which the student will complete 12 credit hours toward the degree, which is usually during the second semester of enrollment. It is then forwarded to the graduate officer for further approval and handling.

Once a program of study has been approved, it is the student's responsibility to ensure that all curricular requirements and prerequisites are satisfied. If a change in the approved program is needed, a petition must be submitted to the student's advisor who forwards it to the graduate committee for approval. It is not expected that more than four courses will change from the original program of study. If more than four courses are changed, then a new program of study should be filed.

Advising

Initially, the student will be advised by the academic advisor assigned to them during the first semester of enrollment. In order to enroll in any course, the student must have the signature of the advisor. No student can enroll without such a signature. If a student enrolls in a class without their advisor's signature or approval, that class may not count toward graduation requirements. Also see the section "Starting the Program".

In the semester that results in 12 hours of credit toward the master's degree, students should decide between a thesis option and a non-thesis option. If students decide on a non-thesis option, they should consult with their advisor and submit a plan of study for approval. If students decide on a thesis option, they should seek a thesis advisor, who then also becomes the academic advisor. The thesis advisor must be a full member of the graduate faculty and, in collaboration with the student, will then appoint two other graduate or associate graduate faculty members to be on the student's thesis committee. The thesis committee may consist of more than three members, but the majority of committee members must have full graduate faculty status. Again, a plan of study must be submitted for approval.

Academic Loads

A graduate student enrolled in the fall or spring semester in nine or more credit hours is considered full time. A graduate student enrolled in the summer semester in five or more credit hours is considered full time. Any student enrolled in less than the above number of hours is considered part time. A student who is enrolled for six credit hours during a regular semester may be considered full time if the student has at least a quarter-time graduate assistantship. A student's academic load may be restricted as deemed fit by the student's graduate advisor or the CSEE master's committee.

International students will be required to take an English Proficiency Test administered by the International Student Affairs Office. Performance on the test may result in the requirement that the student take one or more English language courses during the first semester.

Students holding graduate assistantships should take a minimum of six credit hours during each of the fall and spring semesters and a minimum of three credit hours during the summer session. However, GA/GTA/GRAs who have completed all coursework and who are working on research need to enroll in only one credit hour. International students must abide by the requirements of the U.S. Immigration Service and should consult the International Student Affairs Office regarding this matter.

Enrollment Policies

To remain in good standing, the student must enroll for at least one semester during each calendar year until all the courses in the program of study are completed. After this time, the student must be continuously enrolled each fall and spring semester until the degree is awarded. The student must be enrolled in the semester in which the degree will be received. Students working as graduate assistants during the summer must be enrolled during the summer semester. Failure to follow the above policies will result in a need to apply for new admission to the program under the degree requirements in effect at the time of re-admission.

Academic Standing

The student must maintain at least a 3.0 GPA every semester. Deficiency courses, if any, must be passed with a B (3.0) or higher. A 400-level course in which the student receives a grade lower than B (3.0) can not be used to satisfy the degree requirements. Similarly, a 5000-level course in which the student receives a grade lower than C (2.0) can not be used to satisfy the degree requirements. However, all grades for courses taken for graduate credit shall be used in the calculation of the current GPA. No more than one grade below B (3.0) in a course taken for graduate credit can be applied toward the degree. If a student receives three grades below B (3.0) in courses taken for graduate credit or taken to fulfill a deficiency requirement, or if a student receives a grade below C (2.0) in a course taken for graduate credit or taken to fulfill a deficiency requirement, then the student will be ineligible to enroll.

Academic Dishonesty

A student enrolling in any UMKC course is expected to exhibit high standards of academic honesty in all works, and are expected to refrain from cheating and plagiarism. Rules governing any suspected violation are clearly spelled out elsewhere in the UMKC catalog (www.umkc.edu/umkc/catalog/html/append/policy/0040.html (http://www.umkc.edu/umkc/catalog/html/append/policy/0040.html).) Instructors are obligated to report any cases of alleged academic dishonesty, and any violation will result in sanctions being imposed on the student, ranging from a warning, probation, loss of financial

aid, loss of privileges, suspension, and dismissal. Please note that both receiving and giving unauthorized assistance is considered academically dishonest.

Petitions

Any exception to academic policy and regulations or to the degree requirements (e.g. deficiency waiver) must be requested through a written petition. The petition form is available from the CSEE Department Office and on the Web; the completed petition which includes an explanation for the petition should be submitted to the CSEE Department Office. The degree program coordinator or his/her designee will review petitions and communicate the result to the student. It is important that the petition include any necessary documents as attachments for a timely decision.

Ineligibility

Ineligible students may petition the CSEE graduate committee to be re-enrolled. Such petitions will be reviewed by the graduate committee whose ruling is final. An ineligible student will only be approved for further graduate study under the terms of a restrictive probation in the form of a written contract between the student and the CSEE department. The CSEE department may render a student ineligible regardless of the student's GPA. Such procedures are rare and will involve a recommendation to the dean of the School of Graduate Studies.

Auditing a Course

A graduate student should not take a course for audit if that student plans to take the course for credit. Once a course has been audited by a student, the student cannot take the course for credit later in the program.

A graduate student cannot change a course to audit after the eighth week of the fall and spring semesters or after the fourth week of the summer semester. Changes to audit status must have the permission of the course instructor, as well as be within the allowable period.

Bachelor of Information Technology

Program Description

The Bachelor of Information Technology is accredited by the Computing Accreditation Commission of ABET. http://www.abet.org.

The use of computers in commerce and industry keeps the college educated IT professional at the forefront of occupational demand. The Bachelor of Information Technology (B.I.T.) program prepares for a career path where the student contributes to the continued deployment of technology infrastructure (operating systems, browsers, applications, software, networking, etc.). It blends both CS, IT, and Business coursework and requires an internship for the completion of the degree. Please contact our department for more information. Please call (816) 235-**1193**, or e-mail to mailto:csee@umkc.edu.

Educational Objectives

The Bachelor of Information Technology degree is designed so that graduates will attain employment in an IT related field. Some graduates will achieve appropriate certifications and/or will pursue advanced study in business, IT or other fields. Graduates will be engaged in lifelong learning and thereby advance in their careers.

Career Implications

There remains a large and growing number of unfulfilled IT positions both nationwide and within the Kansas City area. B.I.T. graduates are typically employed as software developers, network specialists, web developers, information system operators, programmer analysts, digital media specialists and database administrators. The need of the future is for students with an analytic and problem solving mindset who are able to adapt quickly to an ever-changing environment.

Admission Requirements

High school students planning to apply to the information technology program are strongly urged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in information technology will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24 or
   a high school class rank in the upper 25 percent.

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements may be admitted on probation or into the University College.

Students without the prerequisite preparation must take the needed coursework before enrolling in courses required for the bachelor's degree. Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer student (p. 772) information is available in the Undergraduate Academic Regulations section of the catalog.

Student Learning Outcomes

We expect that the program will enable students to attain, by the time of graduation:

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security and social issues and responsibilities
- An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognition of the need for and an ability to engage in continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice.
- An ability to use and apply current technical concepts and practices in the core information technologies.
- An ability to identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems.
- An ability to effectively integrate IT-based solutions into the user environment
- An understanding of best practices and standards and their application
- An ability to assist in the creation of an effective project plan

Curriculum Requirements for the BIT Degree

The requirements for the BIT degree are categorized into several areas totaling at least 120 hours of study.

Computer Science/Information Technology		
COMP-SCI 101	Problem Solving and Programming I	3
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R	Problem Solving and Programming II	3
COMP-SCI 201L	Problem Solving and Programming II - Lab	1
COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 304WI	Ethics and Professionalism (Anchor III) [3, GE]	3
COMP-SCI 431	Introduction to Operating Systems	3
COMP-SCI 456	Human Computer Interface	3
COMP-SCI 420	Introductory Networking and Applications	3
or COMP-SCI 421A	Foundations of Data Networks	
COMP-SCI 470	Introduction to Database Management Systems	3
or COMP-SCI 371	Database Design, Implementation and Validation	
INFO-TEC 222	Multimedia Production and Concepts	3
INFO-TEC 321	Introduction to Computing Resources Administration	3
INFO-TEC Course Specialty I [2]		3
INFO-TEC Course Specialty II [2]		3
General Education Synthesis		
COMP-SCI 449	Foundations of Software Engineering	3
COMP-SCI 451R	Software Engineering Capstone	3
Anatomy of Business		
ECON 202	Introduction To Economics II	3
ACCTNG 210	Introduction To Financial Accounting	3
MKT 324	Marketing Concepts	3

DSOM 326	Production/Operations Management	3
Select two of the following:		6
MGT 306	Legal, Ethical And Regulatory Environment Of Business	
MGT 330	Understanding the Individual in the Organization	
FIN 325	Financial Management	
ENT 215	Introduction to Entrepreneurship	
Life and Physical Sciences:		8-10
One Life Science		
One Physical Science		
To include at least one laboratory component		
Mathematics		
MATH 210	Calculus I (Focus B) [1, GE]	4
STAT 235	Elementary Statistics (Focus B) [1, GE]	3
Internship Requirement		
Take 3 hours of the following:		3
INFO-TEC 491	Internship [4]	
General Electives		8-9
Total Credits		96

1 Students must take and pass the Math Entrance Test called ALEKS before enrolling in this course.

2 See advisor for course options.

3 RooWriter (go to https://umkc.edu/roowriter/ for more details)

4 **Students with appropriate CS/IT business experience may petition to replace the internship requirement with a 3 credit hour senior CS/IT course.**

GE UMKC General Education Core website (http://www.umkc.edu/core/courses/)

Specialty Areas

B.I.T. students may take courses from the following specialty areas:

Networking

INFO-TEC 321	Introduction to Computing Resources Administration	3
INFO-TEC 426	Practical Network Security	3
INFO-TEC 427	Network Analysis	3
COMP-SCI 420	Introductory Networking and Applications	3
COMP-SCI 421A	Foundations of Data Networks	3
COMP-SCI 490CR	Special Topics	1-3

Programming

INFO-TEC 350	Object-Oriented Software Development	3
COMP-SCI 423	Client/Server Programming and Applications	3
COMP-SCI 461	Introduction to Artificial Intelligence	3
COMP-SCI 475	Introduction to Computer Graphics	3

Other courses are routinely available as special topics courses, such as INFO-TEC 490. Please see your advisor or check the actual course offerings.

General Education Requirement (30 credit hours)

All students entering UMKC in the Fall 2014 semester are required to following the UMKC General Education guidelines outlined below. Go to http://www.umkc.edu/core for more details on courses that qualify for other Anchor and Focus requirements.

Anchor and Discourse

- DISC 100 and Anchor I: Reasoning and Values (SCE 101 recommended for Anchor I) = 6 credit hours
- DISC 200 and Anchor II: Culture and Diversity (SCE 201 recommended for Anchor II) = 6 credit hours

- DISC 300 and Anchor III: Civic/Community Engagement (COMP-SCI 304WI is required for Anchor III)= 6 credit hours

Focus Courses

- Focus A: Arts & Humanities
- Focus B: Scientific Reasoning and Quantitative Analysis (STAT 235 or MATH 210)
- Focus C: Human Actions, Values, and Ethics (Constitution requirement recommended for this Focus C area satisfied by taking either HISTORY 1100 HISTORY 1101, HISTORY 360R or POL-SCI 210.)
- Focus D: Electives

Some courses may count for both the General Education requirements and the specific degree requirements to keep the degree at 120 credit hours total.

Four Year Program Sample

For suggested four year plans, please see the registrar's website: http://www.sfa.umkc.edu/majormaps/.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science: Computer Science

Program Description

The Bachelor of Science in Computer Science is accredited by the Computing Accreditation Commission of ABET, http://www.abet.org.

Please note that accreditation for the Bachelor of Arts in Computer Science (BACS), which we also offer, has not been requested.

This degree program serves to give the student excellent preparation for careers in computer science, for graduate study, or for fields where CS is an important ingredient. Students receive a strong technical background in computer science, which is coupled with a broad, general education. The BS degree prepares for a career path where the student contributes to the continued development of technology infrastructure (operating systems, browsers, applications, softwares, networking, etc). A BS/MS Option for completing both a BS in CS and a MS in CS in five years is available, (see below) (http://www.umkc.edu/umkc/catalog/html/sce/cs-ee/cs-fast-track.html). Furthermore, a minor in Computer Science is available as well. Contact info: (816) 235-**1193**, or e-mail: csee@umkc.edu.

The faculty of CSEE approved several changes effective in the fall of 2012 for the degrees of BA in CS, the BS in CS, and the Bachelor of IT in reaction to feedback received from constituents and an analysis of assessment data. These changes center on a modernization of the curriculum and help to better prepare students for careers in computer science and information technology. Students who started their degree program prior to the fall 2012 term have the option to complete the degree requirements in effect at the time they first started their program, switch to the requirements in effect when they graduate, or petition to combine aspects of both. Students should consult with an advisor for full details.

Educational Objectives

The undergraduate degrees in CS are designed so that graduates will attain employment and advance their careers in industry, government and academia. BS students will find employment in CS related fields, and BA students will find employment in fields where computing is an important ingredient. Some graduates will achieve appropriate certifications and/or pursue advanced study in computer science or other graduate fields. Graduates will be engaged in lifelong learning and thereby advance in their careers.

Career Implications

Computers and processors of all sizes and descriptions appear in every area of the public and private sectors. Consequently, employment prospects for computer science degree holders remain steady. Current projections have the demand for computer science graduates exceeding the supply for many years to come. The range of opportunities open to the new graduate in computer science is impressive.

Computer science graduates are employed as members of technical staff, software engineers, programming or systems analysts, and scientific or application programmers by some of the nation's largest companies. These companies include internet based commerce and software based hi-tech industries, insurance, banks and financial institutions, computer and electronics manufacturers, the communications industry, the biomedical industry, the defense industry, and engineering firms.

Admission Requirements

High school students planning to apply to the computer science program are strongly urged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in computer science will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24 or a high school class rank in the upper 25 percent.

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements may be admitted on probation or into the University College.

Students without the recommended preparation must take prerequisite coursework in order to prepare for enrollment in courses required for the bachelor's degree.

Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer student (p. 772) information is available in the Undergraduate Academic Regulations section of the catalog.

Student Learning Outcomes

We expect that the program will enable students to attain, by the time of graduation:

1. An ability to apply knowledge of computing and mathematics appropriate to the discipline
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
4. An ability to function effectively on teams to accomplish a common goal
5. An understanding of professional, ethical, legal, security and social issues and responsibilities
6. An ability to communicate effectively with a range of audiences
7. An ability to analyze the local and global impact of computing on individuals, organizations, and society
8. Recognition of the need for and an ability to engage in continuing professional development
9. An ability to use current techniques, skills, and tools necessary for computing practice
10. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices
11. An ability to apply design and development principles in the construction of software systems of varying complexity

Curriculum Requirements

Curriculum requirements for both of the Computer Science degrees are categorized into several areas totaling at least 120 hours of study.

Computer Science		
COMP-SCI 101	Problem Solving and Programming I	3
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R	Problem Solving and Programming II	3
COMP-SCI 201L	Problem Solving and Programming II - Lab	1
COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 282	Assembler Language Programming	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 304WI	Ethics and Professionalism [1, GE]	3
COMP-SCI 394R	Applied Probability	3
COMP-SCI 404	Introduction to Algorithms and Complexity	3
COMP-SCI 421A	Foundations of Data Networks	3
or COMP-SCI 420	Introductory Networking and Applications	
COMP-SCI 431	Introduction to Operating Systems	3
COMP-SCI 441	Programming Languages: Design and Implementation	3
COMP-SCI 470	Introduction to Database Management Systems	3

or COMP-SCI 371	Database Design, Implementation and Validation	
COMP-SCI Electives (CS 300<497)	Three CS electives can be at the 300 or 400 level [2]	9
COMP-SCI Adv Elective (CS 400<499)	One advanced CS elective must be at the 400 level or above [2]	3
General Education Synthesis		
COMP-SCI 449	Foundations of Software Engineering	3
COMP-SCI 451R	Software Engineering Capstone	3
Mathematics		
MATH 210	Calculus I (Focus B) [3, GE]	4
MATH 220	Calculus II	4
MATH 300	Linear Algebra I	3
STAT 235	Elementary Statistics (Focus B) [3, GE]	3
Life and Physical Sciences		
PHYSICS 240 & PHYSICS 250	Physics For Scientists and Engineers I and Physics For Scientists and Engineers II [GE]	10
One Life Science course in one of the following: Chemistry or Biology		4-5
General Electives		
Additional coursework to complete the credit hours needed for graduation		6-7
Total Credits		95-97

1 RooWriter (go to https://umkc.edu/roowriter/ for more details)

2 See academic advisor for list of courses.

3 Students must take and pass the Math Entrance Test called ALEKS before enrolling in STAT 235 and MATH 210.

Specialty Areas

Students pursuing the B.S. degree in Computer Science are required to take four additional elective courses (at the 300 or 400 level including at least one 400 level course), with which they can tailor their degree to their specific needs. Students have the option to pursue the emphasis areas in *Bioinformatics* or Software Engineering. A concentration area in *Computer and Telecommunications Networking* is *also available.*

Bioinformatics

The courses required for the emphasis area in Bioinformatics are:

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
CHEM 211	General Chemistry I (Life Science Elective) [1]	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II (Life Science Elective)	1
COMP-SCI 490	Special Topics (Introduction to Bioinformatics)	1-3
COMP-SCI 371 or COMP-SCI 470	Database Design, Implementation and Validation Introduction to Database Management Systems	3
Life Science Elective [1]		3
Total Credits		31-33

1 An advisor approved junior or senior level course in Biology, Chemistry, Physics, Life Sciences, or other similar discipline.

Software Engineering

For the emphasis in Software Engineering, students may take CS advanced electives from the following list of courses:

COMP-SCI 456	Human Computer Interface	3
COMP-SCI 457	Software Architecture: Requirements & Design	3
COMP-SCI 458	Software Architecture: Testing & Maintenance	3
COMP-SCI 461	Introduction to Artificial Intelligence	3
COMP-SCI 464	Applied Artificial Intelligence	3

Computer and Telecommunications Networking

For the concentration in Computer and Telecommunications Networking, students may take CS advanced electives from the following list of courses:

COMP-SCI 411	Introduction to Telecommunications Systems	3
COMP-SCI 416	Telecommunications Systems: A Survey	3
COMP-SCI 420	Introductory Networking and Applications	3
COMP-SCI 421A	Foundations of Data Networks	3
COMP-SCI 423	Client/Server Programming and Applications	3

Courses offered as special topics (COMP-SCI 490) that are relevant to this concentration may also count as well as courses offered in Information Technology (such as INFO-TEC 426 and INFO-TEC 427) and Electrical and Computer Engineering.

General Education Requirement (30 credit hours)

All students entering UMKC in the Fall 2014 semester are required to follow the UMKC General Education guidelines outlined below. Go to http://www.umkc.edu/core/courses/ for more details on courses that qualify for Anchor and Focus requirements.

Anchor and Discourse

- DISC 100 and Anchor I: Reasoning and Values (SCE 101 recommended for Anchor I) = 6 credit hours
- DISC 200 and Anchor II: Culture and Diversity (SCE 201 recommended for Anchor II) = 6 credit hours
- DISC 300 and Anchor III: Civic/Community Engagement (COMP-SCI 304WI proposed as Anchor III)= 6 credit hours

Focus Courses

- Focus A: Arts & Humanities
- Focus B: Scientific Reasoning and Quantitative Analysis (STAT 235 or MATH 210)
- Focus C: Human Actions, Values, and Ethics (Constitution requirement recommended for this Focus C area satisfied by taking either HISTORY 101, HISTORY 102, HISTORY 360R or POL-SCI 210)
- Focus D: Electives

Some courses may count for both the General Education requirements and the specific degree requirements to keep the degree at 120 credit hours total.

Four Year Program Sample

For suggested four year plans, please see the registrar's website: http://www.sfa.umkc.edu/majormaps/.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Computer Science

Program Description

Please note that accreditation for the Bachelor of Arts in Computer Science (BACS), has not been requested.

This degree program serves to give the student excellent preparation for careers in computer science or for fields where CS is an important ingredient. Students receive a strong technical background in computer science, which is coupled with a broad, general education. The BA degree prepares for

a career path where the student contributes to advancing infrastructures tailored for specific areas, often outside the core areas of computer science. Furthermore, a Bachelor of Science in Computer Science as well as a minor in Computer Science are available.

Contact info: (816) 235-**1193**, or see our web page mail to: csee@umkc.edu.

The faculty of CSEE approved several changes effective in the fall of 2012 for the degrees of BA in CS, the BS in CS, and the Bachelor of IT in reaction to feedback received from constituents and an analysis of assessment data. These changes center on a modernization of the curriculum and help to better prepare students for careers in computer science and information technology. Students who started their degree program prior to the fall 2012 term have the option to complete the degree requirements in effect at the time they first started their program, switch to the requirements in effect when they graduate, or petition to combine aspects of both. Students should consult with an advisor for full details.

Educational Objectives

The undergraduate degrees in CS are designed so that graduates will attain employment and advance their careers in industry, government and academia. BA students will find employment in fields where computing is an important ingredient. Some graduates will achieve appropriate certifications and/or pursue advanced study in computer science or other graduate fields. Graduates will be engaged in lifelong learning and thereby advance in their careers.

Career Implications

Computers and processors of all sizes and descriptions appear in every area of the public and private sectors. Consequently, employment prospects for computer science degree holders remain steady. Current projections have the demand for computer science graduates exceeding the supply for many years to come. The range of opportunities open to the new graduate in computer science is impressive.

Computer science graduates are employed as members of technical staff, software engineers, programming or systems analysts, and scientific or application programmers by some of the nation's largest companies. These companies include internet based commerce and software based hi-tech industries, insurance, banks and financial institutions, computer and electronics manufacturers, the communications industry, the biomedical industry, the defense industry, and engineering firms.

Admission Requirements

High school students planning to apply to the computer science program are strongly urged to take a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in computer science will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24 or
   a high school class rank in the upper 25 percent.

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements may be admitted on probation or into the University College.

Students without the recommended preparation must take prerequisite coursework in order to prepare for enrollment in courses required for the bachelor's degree.

Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the undergraduate program committee.

Transfer student (p. 772) information is available in the Undergraduate Academic Regulations section of the catalog.

Student Learning Outcomes

We expect that the program will enable students to attain, by the time of graduation:

1. An ability to apply knowledge of computing and mathematics appropriate to the discipline
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
4. An ability to function effectively on teams to accomplish a common goal
5. An understanding of professional, ethical, legal, security and social issues and responsibilities
6. An ability to communicate effectively with a range of audiences
7. An ability to analyze the local and global impact of computing on individuals, organizations, and society
8. Recognition of the need for and an ability to engage in continuing professional development
9. An ability to use current techniques, skills, and tools necessary for computing practice

10. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices
11. An ability to apply design and development principles in the construction of software systems of varying complexity

Curriculum Requirements

Curriculum requirements for both of the Computer Science degrees are categorized into several areas totaling at least 120 hours of study.

Computer Science		
COMP-SCI 101	Problem Solving and Programming I	3
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R	Problem Solving and Programming II	3
COMP-SCI 201L	Problem Solving and Programming II - Lab	1
COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 282	Assembler Language Programming	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 304WI	Ethics and Professionalism (Anchor III) [2, GE]	3
COMP-SCI Electives (CS 300<497)	Two CS senior electives can be at the 300 or 400 level [4]	6
COMP-SCI Advanced Electives (CS 400<497)	One CS senior elective must be at the 400 level [4]	3
General Education Synthesis		
COMP-SCI 449	Foundations of Software Engineering	3
COMP-SCI 451R	Software Engineering Capstone	3
Mathematics		
MATH 210	Calculus I (Focus B) [1, GE]	4
MATH 220	Calculus II	4
STAT 235	Elementary Statistics (Focus B) [1, GE]	3
Life and Physical Sciences		7-10
One Life Science course		
One Physical Science course		
With a minimum of one lab [3]		
Foreign Language Requirement		
Students must take a two course sequence of one foreign language, or have taken a two year sequence at high school. If foreign language requirement is waived due to high school credit, then students need to add up to ten (10) credit hours of General Electives to total 120 credit hours total for the BA COMP-SCI degree		6-10
General Education Requirements [GE]		24-30
Additional coursework to complete the credit hours needed for graduation 12 hrs. at 300 level or above		22
Total Credits		110-123

1 Students must take and pass the Math Entrance Test called ALEKS before enrolling in this course.

2 RooWriter must be taken prior to enrollment in DISC 300 and Anchor 3 course. Go to www.umkc.edu/roowriter (https://www.umkc.edu/RooWriter/logon.aspx) for more details.

3 A minimum of one lab in either from one of the following areas: Biology, Chemistry, environmental Science, Geoscience, or Physics.

4 See academic advisor for list of course options.

GE UMKC General Education Core website (http://www.umkc.edu/core/courses/)

General Education Requirement (30 credit hours)

All students entering UMKC the Fall semester 2014 semester are required to following the UMKC General Education guidelines outlined below. Go to umkc.edu/core (http://www.umkc.edu/core) for more details on courses that qualify for the Focus requirements and other Anchor courses..

DISC 100 and Anchor I: Reasoning and Values (SCE 101 recommended for Anchor I) = 6 credit hours
DISC 200 and Anchor II: Culture and Diversity (SCE 201 recommended for Anchor II) = 6 credit hours
DISC 300 and Anchor III: Civic/Community Engagement (COMP-SCI 304WI required for Anchor III)= 6 credit hours

Focus A: Arts & Humanities
Focus B: Scientific Reasoning and Quantitative Analysis
Focus C: Human Actions, Values, and Ethics (Constitution requirement recommended for this Focus area satisfied by taking either HISTORY 1100 HISTORY 1101, HISTORY 360R or POL-SCI 210.)
Focus D: Electives

Some courses may count for both the General Education requirements and the specific degree requirements to keep the degree at 120 credit hours total.

Four Year Program Sample

For suggested four year plans, please see the registrar's website: http://www.sfa.umkc.edu/majormaps/.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

BS/MS Program in Computer Science

BS/MS CS in Five Years

The School of Computing and Engineering established the BS/MS program to offer students an opportunity to meet the full requirements of the existing BS and MS degree programs in a shorter time period than the separate degree programs by completing a B.S. degree within four years and then completing an M.S. degree in the fifth year.

Computer Science (BS)/(MS):

- Students admitted to the program will receive the SCE BS/MS Scholarship which will cover the difference between Graduate and Undergraduate tuition rates
- Students are required to maintain full-time undergraduate enrollment (minimum 12 hours/ semester)
- Must be continuously enrolled from BS to MS programs (must enter graduate program the semester following completion of BS degree requirements)
- Students are required to maintain full-time enrollment (minimum 9 hours/semester) in the graduate phase of the program to continue to receive the BS/MS Scholarship

Admission Requirements for BS/MS Program:

Students must meet the following requirements to be eligible:

- Students must indicate their interest and apply to the program no later than the end of their junior year
- Students must complete 30 hours at SCE prior to admission to BS/MS program
- Students are expected to follow the recommended curriculum (although deviations are possible) and must maintain:
- UMKC cumulative GPA of 3.00 or higher, and the GRE will be waived for students who meet the qualifications above and are planning to enroll in the BS/MS program

This program offers students an opportunity to meet the full requirements of the existing BS and MS degree programs in a shorter time period than the separate degree programs by completing a B.S. degree in Computer Science within four years, and then completing an M.S. degree in Computer Science in their fifth year. Please contact our department for additional information or clarification on the information below by calling (816) 235-**1193**, or sending an e-mail to mailto:csee@umkc.edu.

Requirements for Graduation

Credit Hour Requirements

The BS and MS program in Computer Science requires:

- 120 Undergraduate Credit Hours,
- 30 Graduate Credit Hours, and
- 150 Total Credit Hours.

Academic Requirements

The academic requirements for both degrees are identical to the requirements for the two degrees when considered separately, with a few additions and exceptions.

1. Students enrolled in the plan must maintain a 3.0 cumulative GPA for all UMKC coursework.
2. Students must receive a minimum grade of C (2.0) in every undergraduate course attempted in the CSEE Department.
3. Students must receive a minimum grade of B (3.0) for every graduate course attempted in the CSEE Department.
4. Students should follow the recommended sample program in order to graduate within five years, but variations are possible.

For additional details, please contact our Department by phone (816) 235-**1193** or by e-mail mailto:sce@umkc.edu.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Minor in Computer Science

Degree Requirements

For students to obtain a minor in Computer Science, they must satisfy all University degree requirements (see the General Undergraduate Academic Regulations and Information section in this catalog), satisfy the requirements as set forth by the major degree (major department, major academic unit) and obtain a GPA of 2.0 or higher in the eight courses specified below, with no individual computer science grade below a C (2.0).

There are no other requirements specifically required by the minor, although some of the courses do have prerequisites from outside of SCE. In particular, MATH 110 and MATH 210 are prerequisites for COMP-SCI 101, COMP-SCI 191 and COMP-SCI 303.

COMP-SCI 101	Problem Solving and Programming I	3
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201L	Problem Solving and Programming II - Lab	1
COMP-SCI 201R	Problem Solving and Programming II	3
COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 3xx/4XX	Two Jr./Sr Level Electives	6
Total Credits		25

Bachelor of Science in Electrical and Computer Engineering

Program Description

The Bachelor of Science in Electrical and Computer Engineering (ECE) is accredited by the Engineering Accreditation Commission of ABET http://www.abet.org/.

The ECE degree program is designed to provide the key elements of both an electrical engineering and a computer engineering curriculum. It also provides additional courses that involve the business and entrepreneurial aspects of engineering. Graduates of this program are prepared for larger breadth in job opportunities than are typically available in a traditional electrical engineering program. A BS/MS Program for completing both a BS in ECE and a MS in EE in five years is available (see below). For additional information or an advising appointment, please contact our office by phone (816) 235-**1193** or e-mail to mailto:csee@umkc.edu.

Educational Objectives

The undergraduate degree in ECE is designed so that graduates will attain employment in electrical and/or computer engineering and advance their careers in this field or achieve success in other areas. Some graduates will become registered professional engineers and/or pursue advanced studies.

Career Implications

Job opportunities abound for electrical and computer engineering majors. In terms of starting salaries and the number of job offers, ECE graduates compare favorably with other engineering graduates. In addition, the ECE curriculum at UMKC equips the graduate with the analytical decision-making skills necessary to pursue diverse technical, managerial and entrepreneurial career opportunities.

Admission Requirements

High school students planning to apply to the electrical and computer engineering program should pursue a college preparatory program that emphasizes mathematics, science and communication skills.

First-time college student applicants to the undergraduate program in electrical and computer engineering will be admitted if they obtain:

1. An ACT mathematics score of at least 25 and
2. An ACT composite score of at least 24 or
   a high school class rank in the upper 25 percent.

First-time college student applicants who do not meet the above criteria but do meet UMKC general admission requirements may be admitted on probation or into the University College.

Students seeking re-admission must have been in good academic standing when last enrolled. Otherwise, re-admission requires a formal review by the degree program committee.

Transfer student (p. 772) information is available in the Undergraduate Academic Regulations section of the catalog.

Student Learning Outcomes

Prior to graduation, students will have obtained the following.

- an ability to apply knowledge of mathematics, science, and engineering
- an ability to design and conduct experiments, as well as to analyze and interpret data
- an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- an ability to function on multidisciplinary teams
- an ability to identify, formulate, and solve engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- a recognition of the need for, and an ability to engage in life-long learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Curriculum Requirements

The curriculum requirements shown below are in effect for students entering the degree program in Fall 2013 or later. These include either new courses or slight modifications to existing courses, indicated with the footnotes in the listing below, where the anticipated title and credit hours are shown. Please ask your advisor for full details on all options available.

Electrical and Computer Engineering		
E&C-ENGR 130	Engineering Graphics	3
E&C-ENGR 216	Engineering Computation	4
E&C-ENGR 226	Logic Design	3
E&C-ENGR 227	Logic Design Laboratory	1
E&C-ENGR 228	Introduction to Computer Design	3
E&C-ENGR 229	Introduction to Computer Design Laboratory	1
E&C-ENGR 250	Engineering Mechanics and Thermodynamics	3
E&C-ENGR 276	Circuit Theory I	3
E&C-ENGR 277	Circuit Theory I Lab	1
E&C-ENGR 302	Electromagnetic Waves and Fields	4
E&C-ENGR 330	Electronic Circuits	3
E&C-ENGR 331	Electronic Circuits Laboratory	1

E&C-ENGR 358	Introduction to Control Systems	3
or E&C-ENGR 474	Introduction to Communication Systems	
E&C-ENGR 376	Circuit Theory II	2
E&C-ENGR 377	Circuit Theory II Lab	1
E&C-ENGR 380	Signals and Systems	4
E&C-ENGR 381	Signals and Systems Lab	1
E&C-ENGR 402WI	Senior Design I [4]	2
E&C-ENGR 403WI	Senior Design II [GE]	3
E&C-ENGR 420	Advanced Engineering Computation	2
E&C-ENGR 426	Microcomputer Architecture and Interfacing	3
E&C-ENGR 427	Microcomputer Laboratory	1
E&C-ENGR 428R	Embedded Systems	3
E&C-ENGR 429	Embedded Systems Laboratory	1
E&C-ENGR 430	Microelectronic Circuits	3
E&C-ENGR 431	Microelectronic Circuits Laboratory	1
E&C-ENGR 466	Power Systems I	3
E&C-ENGR 4XX	Senior Area Electives [5]	12
Mathematics		
MATH 210	Calculus I (Focus B) [1]	4
MATH 220	Calculus II	4
E&C-ENGR 241	Applied Engineering Analysis I	3
E&C-ENGR 341R	Applied Engineering Analysis II	3
COMP-SCI 394R	Applied Probability	3
Life and Physical Sciences		
CHEM 211	General Chemistry I (Focus B) [GE]	4
CHEM 211L	Experimental General Chemistry I (OR) [GE]	1
BIOLOGY 102 & 102L	Biology and Living and Biology and Living Laboratory (Focus B) [3]	4
PHYSICS 240	Physics For Scientists and Engineers I [GE]	5
PHYSICS 250	Physics For Scientists and Engineers II	5
Total Credits		111

1 Students must have passed with a "C" or better either PreCalculus or College Algebra and Trigonometry and passed the Math Entrance Test called ALEKS.

2 Requirement may be waived if students have an ACT English score of 30; or SAT Verbal score of 630; or AP English Lang/Comp score of 4.2

3 Either General Chemistry with lab or General Biology with lab can be used

4 Students must take the RooWriter at least one semester prior to enrolling in E&C-ENGR 402WI.

5 Three of the four courses must be from E&C-ENGR; the other course can be E&C-ENGR or another technical course outside of ECE (such as COMP-SCI or PHYSICS). See advisor for details. Furthermore, qualified students might be able to take graduate level courses.

GE UMKC General Education Core website (http://www.umkc.edu/core/courses/)

General Education Requirement (30 credit hours)

All students entering UMKC the Fall 2014 semester are required to follow the UMKC General Education guidelines outlined below. Go to http://www.umkc.edu/core for more details on courses that qualify for the Focus requirements and other Anchor courses.

Discourse and Anchor

- DISC 100 and Anchor I: Reasoning and Values (SCE 101 recommended for Anchor I) = 6 credit hours
- DISC 200 and Anchor II: Culture and Diversity (SCE 201 recommended for Anchor II) = 6 credit hours
- DISC 300 and Anchor III: Civic/Community Engagement = (E&C-ENGR 403WI Proposed as Anchor III) = 6 credit hours

Focus

- Focus A: Arts & Humanities
- Focus B: Scientific Reasoning and Quantitative Analysis (MATH 210 or PHYSICS 240 or CHEM 211 or BIOLOGY 102)
- Focus C: Human Actions, Values, and Ethics

  (Constitution requirement recommended for this Focus C area satisfied by taking either HISTORY 101 HISTORY 102, HISTORY 360R or POL-SCI 210.)

- Focus D: Electives

Some courses may count for both the General Education requirements and the specific degree requirements to keep the degree at 125 credit hours total.

Four Year Program Sample

For suggested four year plans, please see the registrar's website: http://www.sfa.umkc.edu/majormaps.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

BS/MS Electrical and Computer Engineering/Electrical Engineering

BS/MS Program in Electrical and Computer Engineering

The School of Computing and Engineering established the BS/MS program to offer students an opportunity to meet the full requirements of the existing BS and MS degree programs in a shorter time period than the separate degree programs by completing a B.S. degree within four years and then completing an M.S. degree in the fifth year.

Electrical and Computer Engineering (BS)/ (MS):

- Students are required to maintain full-time undergraduate enrollment (minimum 12 hours/semester)
- Must be continuously enrolled from BS to MS programs (must enter graduate program the semester following completion of BS degree requirements)
- Students admitted to the program will receive the SCE BS/MS Scholarship which will cover the difference between Graduate and Undergraduate tuition rates
- Students are required to maintain full-time graduate enrollment (minimum 9 hours/semester) to remain enrolled in the program and receive the BS/MS Scholarship

Admission Requirements for BS/MS Program:

Students must meet the following requirements to be eligible:

- The GRE will be waived for students who meet the qualifications above and are planning to enroll in the BS/MS program
- Students must indicate their interest and apply to the program no later than the end of their junior year
- Students must complete 30 hours at SCE prior to admission to the BS/MS program
- Students are expected to follow the recommended curriculum (although deviations are possible) and must maintain: UMKC cumulative GPA of 3.00 or higher

Please contact our department for additional info or clarification by phone (816) 235-**1193** or by e-mail mailto:csee@umkc.edu.

Requirements for BS/MS Graduation

Credit Hour Requirements

The BS/MS combination of a Bachelor of Science in Electrical and Computer Engineering and a Master of Science in Electrical Engineering requires:

- 126 Undergraduate Credit Hours (One additional credit hour of general elective added for the BS/MS degree)
- 24 Graduate Credit Hours, and

- 150 Total Credit Hours.

Academic Requirements

The curricular requirements for both degrees are identical to the requirements for the two degrees when considered separately, with a few additions and exceptions.

1. Students enrolled in the plan must maintain a 3.0 cumulative GPA for all UMKC coursework.
2. Students must receive a minimum grade of C (2.0) for every undergraduate course attempted in the CSEE Department.
3. Students must receive a minimum grade of B (3.0) for every graduate course attempted in the CSEE Department.
4. Students should follow the recommended sample program in order to graduate within five years, but variations are possible.

For additional details, please contact our Department by phone (816) 235-**1193** or by e-mail mailto:csee@umkc.edu.

Five Year Program Sample

Students should follow the sample program as listed for the BS in ECE degree and should apply for the graduate degree prior to enrolling for the fall semester of their fourth year. During their fifth year, they could enroll in 12 credit hours each semester or make use of the summer semester between their fourth and fifth year to take a course or special project, if offered.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Master of Science in Computer Science

Program Description

The University of Missouri-Kansas City has created an exciting and uniquely designed program of graduate study in computer science. Significant changes are always occurring within this discipline in recent years and our graduate program in computer science reflects those changes, providing in-depth education in the new technology and skills most in demand in this growing industry.

The UMKC graduate student has the unique opportunity to get a concentrated state-of-the-art education in some of the most dynamic, challenging and professionally significant specialty areas. This is made possible by unusual advantages which the UMKC program possesses:

- An interdisciplinary approach to new technology.
- Faculty who are each actively pursuing research in these areas.

Students can earn an M.S. degree in computer science with an emphasis or concentration in:

- Bioinformatics
- Database and Information Management
- Networking and Telecommunications
- Software Engineering

Many courses are offered in these emphasis areas. Contact us for more information by phone: (816) 235-**1193** or send an e-mail mailto:csee@umkc.edu

Admission Requirements

The University of Missouri-Kansas City's graduate program in computer science will accept college and university graduates whose past performance indicates an ability to succeed in graduate study in computer science. This ability can be demonstrated by the following undergraduate preparation.

1. A sound background in computer science as indicated by an above-average understanding (e.g. a cumulative GPA in CS coursework of 3.0 or better with no single course grade lower than 2.0) of the content of the following courses:

COMP-SCI 101	Problem Solving and Programming I	3
COMP-SCI 191	Discrete Structures I	3
COMP-SCI 201R	Problem Solving and Programming II	3
COMP-SCI 201L	Problem Solving and Programming II - Lab	1

COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 394R	Applied Probability	3
COMP-SCI 431	Introduction to Operating Systems	3
Select one of the following:		3
COMP-SCI 303 & COMP-SCI 404	Data Structures and Introduction to Algorithms and Complexity	
Or		
COMP-SCI 352	Data Structures and Algorithms	

2. A sound background in mathematics as indicated by an above average understanding (e.g. a GPA of 3.0 or better with no single course grade lower than 2.0) of calculus (minimum of 10 hours) and of the content of at least two additional upper-level courses in areas such as linear algebra, differential equations, abstract algebra, numerical analysis or mathematical logic.
3. An overall GPA of 3.0 or better in all undergraduate work.
4. Official results of the Graduate Record Exam (GRE) general test. The applicant must score in at least the 75th percentile on the quantitative portion of the GRE and it is recommended that the applicant score in at least the 30th percentile on the verbal portion of the GRE. Admission to our degree programs is competitive so higher scores are recommended.
5. For international students, a minimum test score of IELTS 6.5 or iBT 79 is needed. A higher score makes the application competitive for DISA (Dean's International Student Award) consideration.
6. Prospective students who want to be considered for acceptance to the M.S. degree program should submit the following documents:
   a. Transcripts for all graduate and undergraduate work completed so far; syllabi of these courses (or a URL to these) is strongly suggested.
   b. Copies of academic and scholarly diplomas received.
   c. GRE scores and, for international students, TOEFL scores, as well as a statement of purpose, i.e. a one- or two-page essay in which the prospective students indicate their career objectives.

It is possible that a prospective student has obtained a solid understanding of either computer science or mathematics through work or other experience rather than formal study. These students must submit a detailed description of such experience and ask a supervisor to write a letter of reference supporting the application.

Applications will be reviewed by the master's committee when all documentation is received. For full consideration for the semester indicated and priority for scholarship applications, it is recommended that completed applications be received by the following dates:

- For fall semester admission (semester starts in August):
  - U.S. students/permanent residents: June 1.
  - International students: Jan. 15.
- For spring semester admission (semester starts in January):
  - U.S. students/permanent residents: Nov. 1 of the preceding year.
  - International students: Oct. 1 of the preceding year.

U.S. citizens or permanent residents may apply online at www.umkc.edu/admissions or submit application forms and required supporting materials to:

Mailing Address
University of Missouri-Kansas City
Office of Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

Their telephone number is (816) 235-**1111** and their e-mail address is admit@umkc.edu.

International students may apply online at www.umkc.edu/isao (http://www.umkc.edu/isao) or fax application to (573) 884-4894 and send all supporting documents to:

Mailing Address
University of Missouri-Kansas City
Office of International Student Affairs
5100 Rockhill Road
Kansas City, MO 64110-2499

Their telephone number is (816) 235-**1113** and their e-mail address is isao@umkc.edu.

Prospective students can request additional information or request information regarding their application by contacting UMKC at the above addresses or by sending e-mail to: csee@umkc.edu.

Starting the Program

When accepted into the program, the student's first contact is with the computer science principal graduate advisor or with members of the CSEE graduate degree program committee during the orientation session. The most immediate concern is for the courses to be taken in the first semester. The principal graduate advisor will help the student select those initial courses. At this initial meeting, a review will be made of the student's status in the program and the student will be required to provide a tentative program of study within the first semester. Such a program should reflect the deficiency and prerequisite courses that have been prescribed and may have to be taken prior to taking courses for graduate credit.

Within the first semester, the student will be assigned a graduate advisor (faculty) who will then become the primary contact person for that student until a thesis advisor (for thesis option) is selected. The CS co-chair of the CSEE graduate degree program committee or his/her designee will notify the student of the identity of the specific graduate advisor. It will be the responsibility of students, in conjunction with their advisors/chairs, to devise a program of study using the degree requirements worksheet and the course planning worksheet. This should be submitted to the graduate committee, usually by the end of the second semester. The CSEE graduate degree program committee is in charge of handling procedural issues related to the M.S. program in computer science. Any request for exception to rules, regulations or policies should be directed to this committee.

Deficiencies

The CSEE graduate degree program committee reviews and evaluates all applications for admissions to the M.S. degree programs. Frequently, they review applications from students whose past academic record show strong positive indications for success as a graduate student, yet have not satisfied all courses needed for full admission. Students with an undergraduate degree in computer science from an ABET accredited program are well prepared. Others may have deficiencies in their preparation. The committee may offer these students admission to the program on a conditional basis and compile a list of "deficiency courses". The successful completion of these courses with a grade of B or better will be a condition of full admission to the program. The student is then required to complete all such deficiencies as a contractual obligation at the earliest opportunity.

The committee creates this list based on the transcripts and syllabus submitted by the applicant. However, it is possible that applicants have indeed satisfied one or more of their listed deficiencies. In these cases, the student should contact their academic advisor as soon as possible in the first semester to initiate a petition to waive the deficiencies in question. The written petition with all the needed supporting documentation (such as course syllabus) attached, must be submitted no later than six weeks (two weeks for summer) after the start of the first semester of enrollment. The decision of the committee is final and can be one of three:

- The waiver is granted.
- The waiver is denied and the student is allowed to take an examination.
- The waiver is denied and the student must pass the class with a B (3.0) or higher (usually the course of action if the student does not pass the examination).

The committee's decision is final, so it is important that students consult with their advisor to ensure that all the proper documentation supporting the waiver is submitted.

If the student is allowed to take an examination, it must take place no later than the second semester of enrollment. Deficiency examinations are offered once each semester and the student may take the exam only once. If the student does not perform satisfactorily on the exam, then the student must enroll in the course to satisfy the deficiency requirement.

All deficiencies shall be satisfied within three semesters of admission. If deficiencies are not satisfied within this time period, enrollment will be limited to deficiency courses until all deficiencies have been satisfied.

Graduate Course Prerequisites

Note that there are graduate level courses that have an undergraduate course as prerequisite and that not all undergraduate courses can be taken for graduate credit.

Student Learning Outcomes

Upon graduating, students will have demonstrated that they can apply the core technologies from computer science and from their chosen emphasis areas. They will have developed an analytical mindset and understand the limitations of current theories and technologies. They will be able to design a system under realistic constraints, which they are able to implement using modern tools and techniques. They will have had an opportunity to take in-depth course work in the area of computer networking, telecommunications, software engineering and bioinformatics.

Core Requirements

All students are required to complete a core curriculum of:

COMP-SCI 5592	Design and Analysis of Algorithms	3
Select two of the following:		6
CSEE 5110	Network Architecture I (formerly offered as COMP-SCI 5520)	
COMP-SCI 5551	Advanced Software Engineering	
COMP-SCI 5566	Introduction to Bioinformatics	
COMP-SCI 5570	Architecture of Database Management Systems	

CS-Emphasis and CS-Concentration Areas

All students are required to complete courses in a CS-emphasis and/or concentration areas. The approved areas and their associated courses are:

1. Bioinformatics Emphasis -

COMP-SCI 5566	Introduction to Bioinformatics	3
COMP-SCI 5567	Machine Learning in Bioinformatics	3
COMP-SCI 5590CI	Special Topics (Computational Intelligence)	1
COMP-SCI 5590NN/E&C-ENGR 5316	Special Topics (Artificial, Neural and Adaptive Systems)	1
COMP-SCI 5590SL/E&C-ENGR 5590	Special Topics (Supervised Learning & Feature Extraction with Applications to Biometrics & Biomedical Problems)	1-3
Total Credits		9-11

2. Database and Information Management Concentration -

COMP-SCI 5570	Architecture of Database Management Systems	3
COMP-SCI 5572	Mobile Computing	3
COMP-SCI 5573	Information Security and Assurance	3
COMP-SCI 5574	Large Scale Semistructured Date Management	3
COMP-SCI 5670		3
And others		
Total Credits		15

3. Networking and Telecommunications Emphasis -

CSEE 5110	Network Architecture I (formerly offered as COMP-SCI 5520)	3
CSEE 5112	Computer Network Design and Analysis (formerly offered as COMP-SCI 5522)	3
CSEE 5113	Network Routing (formerly offered as COMP-SCI 5526)	3
COMP-SCI 5521	Network Architecture II (CSEE 5111)	3
COMP-SCI 5523	Capacity Planning for Service-Oriented Architectures	3
COMP-SCI 5594	Introduction to Queuing Theory (CSEE 5130)	3
E&C-ENGR 5570	Principles of Digital Communication Systems	3
E&C-ENGR 5577	Wireless Communications	3
And others		
Total Credits		24

4. Software Engineering and System Emphasis -

COMP-SCI 5531	Advanced Operating Systems	3
COMP-SCI 5551	Advanced Software Engineering	3
COMP-SCI 5552A	Formal Software Specification	3
COMP-SCI 5554	Software Tools and Programming Environments	3
COMP-SCI 5560	Knowledge Discovery and Management	3
And others		
Total Credits		15

If a student desires a concentration other than these, a petition must be submitted to the graduate committee requesting that a concentration be recognized for the student's specific degree plan. It should specifically state which courses the student wants to include in this concentration, it should explain why these courses together form a coherent group and how these courses fit the student's academic goals. Students must petition before including other courses in their program of study.

Please note that many of our bioinformatics courses also count towards a MS in Bioinformatics, administered in the Department of Informatic Medicine and Personalized Health in the School of Medicine. Please contact Dr. Stan Edlavitch for more information, 1000 East 24th Street, 5th Floor, Phone: 816-235-6617, Email: edlavitchs@umkc.edu.

Degree Requirements

The curriculum requirements shown below (approved by the faculty in December 2012) are taking effect for students entering the degree program in Fall 2013. The changes are mainly in the emphasis and concentration courses, credit hours, and the counting of courses at the undergraduate level. All students already in the program can satisfy either the program requirements in effect when they entered the program, (available in the catalog archives or from your advisor), or the program requirements below. Please ask your advisor for full details.

To earn an M.S. degree in computer science, the student must satisfy both the general master of science degree requirements of the University of Missouri-Kansas City and the requirements of the CSEE Department for either the thesis or non-thesis option as outlined below.

Specific Requirements for the Thesis Option (30 cr. hrs.):

1. Complete a minimum of 24 hours of approved COMP-SCI coursework for graduate credit with a cumulative GPA of at least 3.0.
2. Additionally, complete a minimum of six additional graduate COMP-SCI hours, including at least three hours COMP-SCI 5599. The total number of hours of COMP-SCI 5597 or COMP-SCI 5599 should not exceed six.
3. Contact a thesis advisor in the semester in which the student completes 12 hours of graduate work.
4. Present evidence of research abilities in the form of a master's thesis resulting from enrollment in at least three hours of COMP-SCI 5599.
5. Pass a general oral examination which may cover all the work covered in the student's graduate program.
6. Satisfy the requirements listed under the common requirements, see below.

Specific Requirements for the Non-Thesis Option (30 cr. hrs.):

1. Complete a minimum of 27 hours of approved coursework for graduate credit with a cumulative GPA of at least 3.0.
2. Additionally, complete another 3 hours of approved course work, or 3 hours of approved COMP-SCI 5597. Only 3 hours of COMP-SCI 5597 can be applied toward the degree.
3. Contact an advisor after completing 12 hours of graduate work to complete the program of study.
4. Satisfy all common requirements, see below.

Common Requirements and Limitations for both MS-CS Thesis Option and Non-Thesis Option:

1. Satisfy the core requirement:

COMP-SCI 5592	Design and Analysis of Algorithms	3
Select two of the following:		6
CSEE 5110	Network Architecture I (formerly offered as CS 5520)	
COMP-SCI 5551	Advanced Software Engineering	

COMP-SCI 5566	Introduction to Bioinformatics
COMP-SCI 5570	Architecture of Database Management Systems

2. Complete a minimum of nine hours (if thesis) or twelve hours (if non-thesis) in one CS-emphasis or CS-concentration area and a minimum of six hours in another CS—emphasis or CS-concentration.
3. Each student must have a plan of study approved by both the student's supervisory committee and the graduate officer before the end of the semester in which the student completes 12 credit hours of graduate work.
4. No more than six credit hours total from any graduate coursework taken outside the CSEE department and from COMP-SCI 411, COMP-SCI 421A, COMP-SCI 423, COMP-SCI 457, COMP-SCI 470, and COMP-SCI 494R can be used to satisfy degree requirements. Each of these courses must be completed with a grade of "B" (3.0) or higher.
5. Courses cannot be identical to courses already taken for a prior degree.
6. No more than three hours of COMP-SCI 5597 can be used to satisfy degree requirements. All COMP-SCI 5597 hours to be applied to the master of science in Computer Science degree requirements must be approved by the CSEE Master's Committee at least six weeks before classes begin.
7. No more than one course grade below "B" or 3.0 may be applied toward the degree requirements.

Thesis Option

Master's degree candidates in computer science who decide to do the thesis option are required to demonstrate knowledge and maturity in the discipline by completing at least three hours of COMP-SCI 5599. Students may enroll in more than three hours of COMP-SCI 5599, however, only six hours combined from COMP-SCI 5597 and COMP-SCI 5599 may be applied toward the degree. The research program will be defined by the student in conjunction with the student's thesis committee. Under the direction of the thesis advisor, the student will investigate a topic of current interest in computer science and prepare a master's thesis on that topic.

The final requirement for conferral of the M.S. degree is defense of the thesis, where the supervisory committee is the examining body. The thesis must be submitted in complete typewritten form to the advisor and supervisory committee at least six weeks before the date the advanced degree is to be conferred. Also, the supervisory committee must have access to the thesis at least one week before the date of the defense. Students must comply with all rules and regulations governing theses outlined in the general catalog under General Graduate Academic Regulations and Information.

Directed Readings Courses

Up to three hours of COMP-SCI 5597 is allowed toward a master of science. Such a course must be approved in advance (i.e., before the student takes the course) by the professor supervising the course and the graduate committee. The following information must be furnished:

- Title of the course.
- Detailed syllabus for the course.
- Textbook and references.
- The manner in which the course will be conducted (i.e. meetings, assignments, etc.).
- The manner in which the students are assessed (i.e. how many exams, presentations, reports, etc.).
- The course which it replaces, if appropriate.
- Name(s) of the instructor(s).
- Name(s) of the student(s).
- Reasons for offering this course in a directed readings format.

Transfer Credit

Not more than six hours of graduate credit may be transferred from another recognized graduate school or from another academic unit within UMKC. Transfer credit may be applied toward the master's degree requirements on the approval of the student's graduate advisor and the Master's Committee. No credit hours may be transferred when those hours have been used toward the completion of any other degree program, graduate or undergraduate. The total amount of transfer credit and credit from approved COMP-SCI 400-level classes shall not exceed six hours.

BS/MS Computer Science Program

See the BS/MS section under Computer Science in the undergraduate catalog for information about the program (p. 340).

Master of Science in Electrical Engineering

Program Description

The University of Missouri-Kansas City has created an exciting and uniquely designed program of graduate study leading to the Master of Science in Electrical Engineering. This degree offers several options: thesis or non-thesis, with the latter available with an electric power focus area. In the thesis option, the student has the opportunity to engage in research that builds upon coursework to reach the forefront in the chosen area. This degree option prepares graduates for a wide variety of future opportunities, whether it is in corporate research, product development, management or entrepreneurial endeavors. It also prepares graduates for doctoral studies. The overall goal is to put graduates into a position to be leading technology developers and innovators. The MSEE degree program provides the student with opportunities to study topics such as wireless communications, signal processing, computer architectures, digital systems, VLSI design, embedded system design, low-power chip design, image processing, computational electromagnetics, antenna theory, computer networking and neural networks. Alternately, the student can select the focus area emphasizing electric power, designed to easily fit into the schedule of full-time working engineers. The various emphasis/focus areas have been developed in consultation with industry, engineering firms and utilities. Contact info: (816) 235-**1193**, csee@umkc.edu.

Admission Requirements

Applicants for master's level graduate studies in electrical and computer engineering should have a GPA of at least 3.0 on a 4.0 scale for the last 60 semester hours of relevant undergraduate coursework in Electrical Engineering and/or Computer Engineering. However, if the GPA is below 3.0 but more than 2.75, and if other academic indicators promise success in the program, rules may still allow probationary admission. The following documents are required for consideration for admission:

1. Completed application form for graduate (masters) admission.
2. Official transcripts of all college work.
3. Official results of the Graduate Record Examination (GRE) general test. The applicant must score *at least* 75th percentile in the *quantitative* portion of the GRE; a 30th percentile score in the *verbal* portion of the GRE is recommended.
4. For international applicants a minimum test score of 79 (IBT) or 6.5 (IELTS) is necessary. (The older TOEFL and CBT scores will no longer be acceptable.)
5. Two letters of recommendation are needed for applicants with an overall GPA less than 3.0 in the last 60 hours of their undergraduate degree program.

The complete application package is then carefully reviewed by the graduate admissions committee. The decision to admit an applicant to the graduate (MSEE) degree program with or without DISA (Dean's International Scholarship Award) rests on this graduate admissions committee. The chair of the graduate committee communicates the recommendations of the graduate committee to the CSEE department chair, who in turn formally notifies the applicant of the decision.

Applications will be reviewed by the master's committee when all the necessary documents are received. For full consideration for the semester indicated and priority for scholarship applications, it is recommended that completed applications be received by the following dates:

- For fall semester admission (semester starts in August):
  - U.S. students/permanent residents: June 1.
  - International students: January 15.
- For spring semester admission (semester starts in January):
  - U.S. students/permanent residents: November 1 of the preceding year.
  - International students: October 1 of the preceding year.

U.S. citizens or permanent residents may apply online at www.umkc.edu/admissions (http://www.umkc.edu/admissions) or submit application forms and required supporting materials to:

Mailing Address
University of Missouri-Kansas City
Office of Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

Their telephone number is (816) 235-**1111** and their e-mail address is admit@umkc.edu.

International students can apply online at www.umkc.edu/isao (http://www.umkc.edu/isao) or fax application to 573-884-4894 and send all supporting documents to:

Mailing Address

International Student Affairs Office
University of Missouri-Kansas City
Student Success Center, G-04
5000 Holmes Street
Kansas City, MO 64110-2499

Their telephone number is (816) 235-**1113** and their e-mail address is isao@umkc.edu.

Prospective students can request additional information or request information regarding their application by contacting UMKC at the above addresses or by sending e-mail to: csee@umkc.edu.

Acceptance or Denial

After thoroughly considering an applicant's record, one of the following actions will be taken:

Normal Acceptance

The student is accepted unconditionally.

Normal Acceptance with Pre-program Requirements

This category applies to an otherwise qualified applicant who has a bachelor of science degree from an approved program, but not in electrical engineering, computer engineering, or a similarly named engineering discipline. The student will be notified in writing of any make-up requirements specified by the master's committee.

Probationary Acceptance

Applicants with marginal credentials may be admitted conditionally. They will have to receive a B or better in each course in the first semester of graduate coursework. In addition, make-up requirements may be set forth by the master's committee.

Non-Acceptance

The student is not admitted. The student will be notified in writing of the admission denial. The letter may specify under what conditions a future application would be more favorably considered.

The master's committee is in charge of handling procedural issues related to the M.S. program in electrical engineering. Any request for exception to the rules should be handled as described below related to petitioning procedures.

Starting the Program

When accepted into the program, the student's first contact is with the electrical engineering principal graduate advisor. At this initial meeting, a review will be made of the student's status in the program and the student will be required to provide a tentative program of study within the first semester. Such a program should reflect the prerequisite courses that have been prescribed and that may have to be taken prior to taking courses for graduate credit.

The most immediate concern is for the courses to be taken in the first semester. The principal graduate advisor will help the student select those initial courses. Within the first semester, the student will be assigned an academic advisor who will be the primary contact for the student until the student graduates under the non-thesis option. If the student decides to follow the thesis option, a thesis advisor will replace the academic advisor. In either case, it is the responsibility of the student to devise, after consultation with their advisors, a program of study using the degree requirements and the course planning worksheet. This should be submitted to the graduate officer, usually by the end of the second semester.

The master's committee is in charge of handling procedural issues related to the M.S. program in electrical engineering. Any request for exception to the rules should be handled as described below related to petitioning procedures.

Student Learning Outcomes

Upon graduating, students will have demonstrated that they can apply the core technologies from their chosen concentrations or focus areas within electrical engineering and/or computer engineering. They will have developed an analytical mindset and acquired a skill set with engineering tools to design and implement solutions to overcome engineering challenges in society. They will also have had an opportunity for in-depth course work in the areas of *Computer Engineering*, *VLSI and Embedded Systems, R.F./Electromagnetics and Mixed-Signal Systems, Telecommunications, Networking, Digital Signal and Image processing, Power Systems Engineering*.

Degree Requirements

Concentration Areas

All students are required to complete courses in a concentration or focus areas. The approved EE-concentration (or focus) areas and the associated courses are listed below. All curricular designations are E&C-ENGR, unless indicated.

Computers, VLSI, and Embedded Systems

E&C-ENGR 5534	Computer Arithmetic	3
E&C-ENGR 5535	Hdl-Based Digital Systems Design	3
E&C-ENGR 5528	Advanced Embedded Systems	3
E&C-ENGR 5542	Introduction to VLSI Design	3
E&C-ENGR 5635	Vlsi Systems Design	3
E&C-ENGR 5642	Advanced VLSI Design	3

And others

RF/Electromagnetics and Mixed Signal Systems

E&C-ENGR 5513	Advanced Principles of RF/Microwave Engineering	3
E&C-ENGR 5518	Advanced Radar Systems & Techniques	3
E&C-ENGR 5533	Analog Integrated Circuit Design	3
E&C-ENGR 5537	Mixed-Signal Integrated Circuit Design	3
E&C-ENGR 5572	Antennas & Propagation For Wireless Systems	3
E&C-ENGR 5606	Electromagnetic Scattering and Antenna Theory	3

And others

Communications and Networking

E&C-ENGR 5570	Principles of Digital Communication Systems	3
E&C-ENGR 5577	Wireless Communications	3
CSEE 5110	Network Architecture I	3
CSEE 5112	Computer Network Design and Analysis	3
CSEE 5113	Network Routing	3
E&C-ENGR 5318	Dynamical Systems and Complex Networks	3

And others

Signal & Image Processing, and Biomedical Applications

E&C-ENGR 5580	Digital Signal Processing	3
E&C-ENGR 5316	Artificial Neural and Adaptive Systems	3
E&C-ENGR 5586	Pattern Recognition	3
E&C-ENGR 5590BP	Special Topics In Electrical And Computer Engineering (Biomedical Signal Processing)	1-4
E&C-ENGR 5590BB	Special Topics in Electrical and Computer Engineering (Machine Learning with Biomedical Applications)	1-4
E&C-ENGR 5590IP	Special Topics In Electrical And Computer Engineering (Digital Image Processing)	1-4
E&C-ENGR 5590B	Special Topics In Electrical And Computer Engineering (Biomedical Imaging)	1-4
E&C-ENGR 5590CI	Special Topics in Electrical and Computer Engineering (Computational Intelligence)	1-4

And others

Focus Areas in Electric Power

The department recognizes a **focus** area in **Electric Power**. The available courses in this *focus* area are as listed below.

E&C-ENGR 436	Power Electronics I	3
E&C-ENGR 5536	Power Electronics II	3
E&C-ENGR 5556	Instrumentation and Control	3
E&C-ENGR 5558	Automatic Control System Design	3
E&C-ENGR 5560	Electric Power Distribution Systems	3
E&C-ENGR 5567	Power Systems II	3
E&C-ENGR 5568	Economics of Power Systems	3
E&C-ENGR 5569	Reliability of Electric Power Systems	3
E&C-ENGR 5590EN	Special Topics In Electrical And Computer Engineering (Sustainable Energy Systems for Engineering)	3
E&C-ENGR 5590PL	Special Topics In Electrical And Computer Engineering (Electric Power Lab)	3
E&C-ENGR 5590PQ	Special Topics In Electrical And Computer Engineering (Power Quality)	3
E&C-ENGR 5590PS	Special Topics in Electrical and Computer Engineering (Power Systems II)	3

E&C-ENGR 5590SP	Special Topics In Electrical And Computer Engineering (Transmission System Planning & Impact Studies)	3
E&C-ENGR 5664	Lightning and Switching Surges in Power Systems	3
E&C-ENGR 5670	Direct Current Power Systems	3
E&C-ENGR 5672	Power Systems Relaying	3

Degree Requirements

Beginning Fall 2013 all MSEE students (both thesis and non-thesis options) are required to complete the following course requirements:

1. The student has to complete the requirement of 4 courses from one of the 5 areas (4 concentration and one focus area). The list of these fundamental courses from each concentration/focus area is given below.

Computers, VLSI and Embedded Systems		
E&C-ENGR 5642	Advanced VLSI Design (Computers, VLSI and Embedded Systems)	3
or E&C-ENGR 5528	Advanced Embedded Systems	
Communications and Networking		
E&C-ENGR 5570	Principles of Digital Communication Systems	3
or E&C-ENGR 5577	Wireless Communications	
RF/Electromagnetics & Mixed Signal Systems		
E&C-ENGR 5513	Advanced Principles of RF/Microwave Engineering	3
Signal & Image Processing, and Biomedical Applications		
E&C-ENGR 5580	Digital Signal Processing	3
Focus Areas in Electric Power		
E&C-ENGR 5567	Power Systems II	3

2. The student now has to further choose 2 courses (with the E&C-ENGR designator) from the list in the above concentration/focus areas. (There is room for flexibility on how these ECE courses may be chosen.)

3. The student now has the following options to exercise for either thesis and non-thesis option areas:

    a. Student may take all the remaining 4 courses that are cross-listed with a CSEE designation and does *not* need any approval from the graduate (MSEE) committee (non-thesis option).

    b. Student can take all the remaining 4 courses outside the MSEE degree program in which case they have to be *approved* by the graduate (MSEE) committee (non-thesis option).

    c. Student can take up to 2 courses, and depending on advisor's input, one of these two courses can be a directed reading course (thesis option).

Note: a MSEE thesis is a total of 6 credit hours (typically equivalent to 2 instructional/lecture courses).

For any option (thesis or non-thesis) the total number of credit hours needed for completion of the MSEE degree program is 30.

The preceding change in requirements towards completion of the MSEE degree program was approved and voted by the ECE graduate faculty on December 10, 2012. The changes to the degree program requirements were then further approved by the CSEE faculty in January 2013. **These changes will be effective Fall 2013**.

Thesis Option

The Comprehensive Final Examination is required of all candidates for the Master of Science degree under the thesis option. It is arranged by the graduate faculty advisor. It is to be conducted prior to the deadline date established by the Graduate School for the semester of intended graduation. Prior to the date of the examination, each member of the committee is furnished a copy of the candidate's final thesis for review and discussion at the time of the final examination.

If pursuing the thesis option, the thesis must be submitted in complete typewritten form to the advisor and supervisory committee at least six weeks before the date the advanced degree is to be conferred. Also, the supervisory committee must have access to the thesis at least one week before the date of the defense. Students must comply with all rules and regulations governing theses outlined in the general catalog under General Graduate Academic Regulations and Information.

Directed Readings

Up to three hours of E&C-ENGR 5597 is allowed toward the Master of Science in electrical engineering. Such a course must be approved in advance (i.e., before the student takes the course) by the professor supervising the course and the graduate committee. The following information must be furnished:

- Title of the course.
- Detailed syllabus for the course.
- Textbook and references.
- The manner in which the course will be conducted (i.e. meetings, assignments, etc.).
- The manner in which the students are assessed (i.e. how many exams, presentations, reports, etc.).
- The course which it replaces, if appropriate.
- Name(s) of the instructor(s).
- Name(s) of the student(s.)
- Reasons for offering this course in a directed readings format.

BS/MS Electrical and Computer Engineering/Electrical Engineering

See the BS/MS section under Electrical and Computer Engineering in the undergraduate catalog for information about the Program.

Doctoral Studies in Computer Science or Electrical Engineering

The Department of Computer Science Electrical Engineering also participates in the Interdisciplinary Ph.D. program of the University of Missouri-Kansas City. This program is administered through the School of Graduate Studies at the University of Missouri-Kansas City and requires a student to select both a coordinating discipline and a co-discipline. Many doctoral students choose both coordinating and co-disciplines in our department or the School of Computing and Engineering, but other disciplines can be taken as well. Three such disciplines are housed in our department:

- Computer Science
- Electrical and Computer Engineering
- Telecommunication and Computer Networking

These were formerly known as computer networking, software architecture and telecommunications networking. See the School of Graduate Studies (http://www.umkc.edu/umkc/catalog-grad/html/sgs/0000.html) section of this catalog for details about the Interdisciplinary Ph.D. program (http://www.umkc.edu/umkc/catalog-grad/html/sgs/iphd.html).

Financial Assistance for Doctoral Students

Graduate assistantships are available to prospective doctoral students, but are highly competitive. Currently, most full-time Ph.D. students in the CSEE department are supported either as a graduate assistant or as graduate research assistant, or as graduate teaching assistant.

Doctoral students already in the program are eligible to apply for several fellowships available from the School of Graduate Studies. Check the School of Graduate Studies Web site at www.umkc.edu/sgs/financial.asp for additional information.

Dual Degree Programs

The School of Computing and Engineering collaborates with other institutions in our dual-degree program which leads to undergraduate degrees in both a liberal arts major and a professional engineering, computer science or information technology degree. Students enter UMKC SCE following three (or four) years at their first institution. Students who follow the guidelines and meet the admission requirements will earn a degree from their first institution and a degree from UMKC following two years of study at SCE.

Students who complete the dual degree program experience the benefits of a liberal arts education, allowing them to become better communicators, develop strong study skills and explore additional academic interests, while also finishing a professional degree program.

Requirements

Students must complete the following requirements prior to enrolling at UMKC. Additional guidance regarding specific curriculum is available for dual degree students.

- Completion of a minimum of 60 credit hours of coursework
- Cumulative GPA greater than 3.00
- Calculus through differential equations
- One year of calculus-based physics
- One semester of general chemistry
- One course in computer science
- One constitution course in US or Missouri government
- Courses to satisfy the General Education requirements.

Current Dual-degree Partnerships

- Baker University, Baldwin, KS
- Blackburn College, Carlinville, IL
- Eureka College, Eureka, IL
- Fontbonne University, St. Louis, MO
- Maryville University, St. Louis, MO
- Missouri Western State University, St. Joseph, MO

School of Dentistry

School of Dentistry (http://www.umkc.edu/virtualtour/sod.asp)
650 E. 25th Street
(816) 235-**2100**
Fax: (816) 235-**2157**
(816) 235-**2080** (Admissions)
(800) 776-8652 (Toll-free admissions)
(816) 235-**2050** (Division of Dental Hygiene)
dentistry@umkc.edu
http://www.dentistry.umkc.edu/

Dean:
Marsha A. Pyle contact information (http://www.umkc.edu/lookup/search.cfm?LastName=pyle)

Associate Dean for Academic Affairs:
Pamela R. Overman contact information (http://www.umkc.edu/lookup/search.cfm?LastName=overman)

Director of Business Affairs:
Jeffrey L. Primos contact information (http://www.umkc.edu/lookup/search.cfm?LastName=primos)

Associate Dean for Clinical Programs:
Linda Wells contact information (http://www.umkc.edu/lookup/search.cfm?LastName=wells)

Assistant Dean for Community Relations and Communication:
Connie L. White contact information (http://www.umkc.edu/lookup/search.cfm?LastName=white)

Associate Dean for Instructional Technology and Faculty Development:
Cynthia C. Amyot contact information (http://www.umkc.edu/lookup/search.cfm?LastName=amyot)

Assistant Dean for Student Programs:
Richard H. Bigham contact information (http://www.umkc.edu/lookup/search.cfm?LastName=bigham)

Associate Dean for Research and Graduate Programs:
Mary P. Walker contact information (http://www.umkc.edu/lookup/search.cfm?LastName=walker)

Mailing Address
University of Missouri-Kansas City
School of Dentistry
650 E. 25th St.
Kansas City, MO 64108-2784

- General Information and History (p. 364)
- Vision and Mission Statements (p. 364)

- Facilities (p. 365)
- Research Programs (p. 365)
- Degrees Offered (p. 368)
- Academic/Student Support Services (p. 366)
- Academic Standards (p. 366)
- Outreach Programs (p. 368)

Faculty

Richard J. Ackerman; professor emeritus; D.D.S., M.S., Certificate, Pediatric Dentistry (University of Missouri-Kansas City); Certificate, Orthodontics and Dentofacial Orthopedics (Forsyth Dental Center); Certificate, Postdoctoral Research Fellowship (Harvard University).

Cynthia Amyot[1,2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=amyot); professor; B.S.D.H., M.S., Ed.D. (University of Missouri-Kansas City).

James L. Andrews; professor emeritus; D.D.S., Certificate, Oral and Maxillofacial Surgery (The Ohio State University).

Bruce F. Barker Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=barker); professor emerita; D.D.S. (University of Michigan); Certificate, Oral Pathology (University of Southern California).

Gerry J. Barker Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=barker); professor emeritus; B.S. (University of Michigan); M.A. (University of Missouri-Kansas City).

James Beatty Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=beatty); clinical assistant professor; D.D.S. (Ohio State University), Certificate GPR (VA Cleveland, OH); Certificate Prosthodontics (University of Missouri-Kansas City, VA Medical Center)

Melanie Simmer-Beck[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=simmer); associate professor; B.S.D.H. (University of Missouri-Kansas City); M.S. (University of Missouri-Kansas City); PhD (University of Missouri-Kansas City).

John Bellome Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bellome); clinical associate professor; D.D.S. (New York University) Certificate, Oral and Maxillofacial Surgery (Fordman Hospital Bellevue Affiliation, NY, NY).

Lianxiang Bi, Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bi) associate research professor; M.D., Hebei Medical University, Shijiazhuang, Hebei, P. R. China).

Robert E. Blundell, Jr., clinical associate professor; D.D.S., (University of Missouri-Kansas City); Certificate Endodontics (U.S. Navy Postgraduate Dental School, Bethesda, MD)

Brenda S. Bohaty[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bohaty); professor; D.D.S. (University of Nebraska); M.S.D., Certificate, Pediatric Dentistry (Baylor College of Dentistry).

Lynda F. Bonewald[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bonewald); Curators' Professor; Dr. William L. Lefkowitz/Missouri Endowed Professor in Oral Biology; B.S. (University of Texas, Austin); Ph.D. (Medical University of South Carolina-Charleston).

Bonnie Branson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=branson); professor; B.S. (University of South Carolina); M.S., Ph.D. (Southern Illinois University-Carbondale).

Kimberly S. Bray[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bray); professor; A.A. (Sinclair Community College); B.S.D.H., M.S. (University of Missouri-Kansas City).

Lorraine Forgas Brockmann Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brockmann); associate professor; A.A.S.-DH (Pueblo Community College); B.S.D.H., M.S. (University of Missouri-Kansas City).

William G. Brockmann Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brockmann); clinical associate professor; D.D.S. (Loyola University, Chicago); Ph.D. (University of Missouri-Kansas City).

Alan R. Brown Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brown); associate professor emeritus; D.D.S. (The Ohio State University); Certificate, Oral and Maxillofacial Surgery (Fitzsimmons Army Medical Center).

Diane Dyer-Chenoweth Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dyer-chenoweth); clinical assistant professor; BS (Kansas State University); DDS University of Missouri-Kansas City).

Barbara R. Clark Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=clark); professor emerita; Pharm.D. (University of California).

Charles M. Cobb[2]; professor emeritus; D.D.S., M.S. (University of Missouri-Kansas City); Ph.D. (Georgetown University).

Eileen L. Cocjin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cocjin); clinical associate professor; D.M.D. (Manila, Philipines); Certificate Pediatric Dentistry (University of Southern California-Los Angeles); D.D.S. (University Missouri-Kansas City).

David E. Cohen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cohen); clinical assistant professor, B.S., (Indiana University); D.D.S. (University of Missouri - Kansas City).

Ann Marie Corry[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=corry); associate professor emeritus; B.A. (Washburn University); M.A.L.S. (University of Denver); M.A. (University of Missouri-Kansas City).

John Cottrell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cottrell); clinical instructor; B.A. (Pittsburg State University); M.A. (University of Northern Iowa).

Tsau-Mau Chou Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=chou); associate professor emeritus; B.D.S. (Kaohsiung Medical College); D.Sc.D., M.Sc.D., D.M.D. (Boston University).

Robert D. Cowan professor emeritus; D.D.S. (University of Michigan); M.S., Certificate, General Dentistry (University of Texas-Houston).

Sarah L. Dallas[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dallas); professor; B.S. Anatomical Studies (University of Birmingham); Ph.D. (University of London).

Donna N. Deines Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=deines); associate professor; A.B. (Drury College); D.D.S., M.S., Certificate, Prosthodontics (University of Missouri-Kansas City).

Nidya O. De La Torre Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=delatorre); clinical assistant professor; D.D.S. (Pontificia Universidad Javeriana, Bogota, Colombia), Certificate – Pedodontics (Howard University).

Charles L. Dunlap Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dunlap); professor emeritus; D.D.S., Certificate, Oral Pathology (University of Missouri-Kansas City).

Shara M. Dunlap Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dunlap); clinical associate professor; D.D.S. (University of Missouri-Kansas City).

Diane Dyer-Chenoweth Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dyer-chenoweth); clinical assistant professor;

Robert R. Edwards Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=edwards); clinical assistant professor; B.A. (Kansas University; D.D.S. (University of Missouri-Kansas City); General Practice Residency (Veteran's Administration, Portland, OR); Certificate Endodontics and M.S. (Northwestern University, Evanston, IL).

J. David Eick[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=eick); Curators' professor emeritus; B.S. (University of Michigan); M.S. (George Washington University); Ph.D. (State University of New York).

Dean A. Elledge Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=elledge); associate professor; B.S. (Missouri Southern State College); D.D.S. (University of Missouri-Kansas City); M.S. (University of Minnesota).

Sally Elledge Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=elledge); clinical assistant professor;

C. Weldon Elrod Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=elrod); clinical professor; D.M.D. (Medical College of Georgia); Certificate, Prosthodontics (Walter Reed Army Medical Center).

Panagiotis (Notis) Emmanouilidis Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Emmanouilidis); DDS (Hellenic Republic Aristotle University of Thessaloniki); Certificate in Prosthodontics New York University College of Dentistry.

Harvey C. Eplee Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=eplee); associate professor emeritus; B.S. (Kansas State University); D.D.S. (University of Missouri-Kansas City); M.P.A. (University of Kansas); M.J. (Loyola University).

E. Grant Eshelman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=eshelman); clinical associate professor emeritus; A.B. (Franklin-Marshall College); M.S. (University Missouri-Kansas City); D.D.S. (Columbia University).

Philip H. Feil Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=feil); professor emeritus; B.A. (Sir George Williams University); M.S. (State University of New York); Ed.D. (Indiana University).

Brett L. Ferguson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ferguson); clinical associate professor; B.S.(Lane College); D.D.S., Certificate, Oral and Maxillofacial Surgery (University of Missouri-Kansas City).

David J. Ferguson; associate professor emeritus; D.D.S., Certificate Prosthodontics (University of Missouri-Kansas City).

Hayley Ferris; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ferris) clinical assistant professor; B.S.D.H. (University of Missouri-Kansas City).

Gerald L. Foley Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=foley); clinical assistant professor; D.D.S. (University of Missouri-Kansas City).

Kenneth Frick Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Frick); clinical assistant professor; BS (University of California, Davis); DDS (University of Missouri-Kansas City); Certificate General Practice Residency (USAF GPR Barksdale AFB); MS (Marquette University Graduate School); Certificate in Endodontics (Marquette University School of Dentistry).

Lynn Roosa Friesen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=friesen); clinical assistant professor; B.S. (Kansas State University); D.D.S., Certificate, Periodontics and M.S. (University of Missouri-Kansas City).

Sharon A. Furby Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=furby); clinical associate professor; RPh, D.D.S. (University of Texas-Houston).

Tanya Gibson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Gibson); clinical assistant professor; BA (Capital University); DDS (Meharry Medical College School of Dentistry); Certificate in Oral and Maxillofacial Pathology (Long Island Jewish Medical Center).

Ronald E. Gier; professor emeritus; B.S. (Kansas State University); D.M.D. (Washington University); M.S.D. (Indiana University).

John A. Gilbert; associate professor emeritus; D.M.D. (University of Oregon); (Washington University); M.L.A. (Baker University).

Alan G. Glaros[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=glaros); professor emeritus; A.B. (Stanford University); Ph.D. (State University of New York).

Jeffrey P. Gorski[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gorski); professor; B.Sc-Chemistry; Ph.D. - Biochemistry (University of Wisconsin-Madison); postdoctoral fellowship in molecular immunology (Scripps Clinic and Research Foundation.)

Eric Gottman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gottman); clinical associate professor; D.D.S. (University of Missouri-Kansas City); Certificate, Prosthodontics (University of Missouri-Kansas City).

Carrie Hanson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hanson) clinical associate professor; B.S.D.H., M.A., (Northern Arizona University).

Patrick K. Hardman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hardman); professor emeritus; B.S. (Fort Hays State University); D.D.S., M.S., Certificate, Oral Diagnosis/Oral Medicine (University of Missouri-Kansas City).

Terrance B. Harris; associate professor emeritus; B.S. (University of Kansas); D.D.S., M.S., Certificate, Oral Diagnosis/Oral Medicine (University of Missouri-Kansas City).

John I. Haynes Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=haynes); professor emeritus; B.S., D.D.S., M.A. (University of Missouri-Kansas City).

James K. Hocott; associate professor emeritus; B.S. (Kansas State University); D.D.S. (University of Missouri-Kansas City).

Tamara Jan Hoffman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hoffman); clinical instructor; B.S.D.H. (University of Missouri-Kansas City).

Lyndal G. Holmes Contact Information; (http://www.umkc.edu/lookup/search.cfm?LastName=holmes) associate professor emeritus; B.S. (Drury College); D.D.S., M.S., Certificate, Periodontics (University of Missouri-Kansas City).

Lori Holt Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=holt); associate professor; B.S., M.S. (University of Missouri-Kansas City).

Gregory C. Houston Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=houston); clinical assistant professor; B.S. (University of Missouri); D.D.S. (University of Missouri-Kansas City).

Shirley H. Hung Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hung); associate professor emeritus; D.D.S. (National Taiwan University); M.S. (University of Missouri-Kansas City); D.D.S. (University of Southern California-Los Angeles).

Laura R. Iwasaki[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=iwasaki); Leo Rogers Chair and professor; B.Sc., (University of Alberta, Edmonton, Alberta); Certificate - Orthodontics, M.S., Ph.D. (University of Manitoba, Winnipeg, Manitoba).

Gregory Johnson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=iwasaki); clinical associate professor; B.S. (Fort Hays State University); D.D.S. (University of Missouri-Kansas City); M.A. (Antioch University).

Mark Johnson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=johnson); professor; B.S. (University of Minnesota-Minneapolis); Ph.D. Biochemistry (University of Minnesota Mayo Graduate School of Medicine-Rochester).

Jay J. Jones Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jones); clinical associate professor; B.S., D.D.S. (University of Missouri-Kansas City).

Jerald O. Katz[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jones); associate professor; B.S. (Albright University); D.M.D. (University of Pittsburgh); M.S. (University of Texas).

Nancy Keselyak[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=keselyak); associate professor; B.S. (University of Maryland); M.A. (Simon Fraser University).

Beheshteh Khodakhast; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=khodakhast) clinical assistant professor; B.D.S. (Vokkaligara Sangha Dental School, Bangalore, India); certificate prosthodontics, M.S. (Medical College of Georgia, August, GA).

John W. Killip Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=killip); clinical professor emeritus; B.S. (Northern Arizona University); D.D.S. (University of Missouri-Kansas City).

William J. Killoy; professor emeritus; D.D.S. (Creighton University); M.S. (University of Texas-Houston).

Marvin Kramer; clinical associate professor; D.D.S. (Creighton University).

James C. Kulild[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kulild); professor emeritus; D.D.S. (University of Missouri-Kansas City); M.S. (George Washington University).

Vandana Kumar[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lee); associate professor; B.S.D. (Rotak, India), M.S. Conservative Dentistry (Punjab Government Dental College, India), M.S. oral and Maxillofacial Radiology (University of North Carolina-Chapel Hill).

Jodie Wing Lee Contact Information (http://client-snap.dev6.leepfrog.com/UMKC/external.html?link=http://www.umkc.edu/lookup/search.cfm?LastName=lee); clinical assistant professor; B.S. (University of CA-Los Angeles); D.M.D. (Howard School of Dental Medicine, Washington, DC); Certificate, general Practice Residency (Lutheran Medical Center, Brooklyn, NY).

Ying F. Liu[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=liu); clinical assistant professor; Bachelor's (Henan Normal University); Master's (Henan Normal University); MS (University of Rhode Island); PhD (Kansas State University).

Alison Louie Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=louie); clinical assistant professor; B.S., (University of California-Los Angeles), D.D.S., (University of Pacific School of Dentistry-San Francisco)

James W. Lowe; professor emeritus; A.B. (William Jewell College); D.D.S., M.S. (University of Missouri-Kansas City).

Simon R. MacNeill[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=macneill); professor; B.D.S. (King's College, London); D.D.S. (University of Missouri-Kansas City); Certificates, General Dentistry, General Practice, Periodontics (Louisiana State University).

William E. Mayberry; professor emeritus; A.B. (Washington University); M.S. (Southern Illinois University); Ph.D. (University of Illinois).

Carole P. McArthur[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mcarthur); professor; B.Sc., Ph.D. (University of Otago); M.D. (University of Missouri-Kansas City).

***Michael D. McCunniff**[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mccunniff); associate professor; B.S. (Creighton University); M.S. (University of Iowa); D.D.S. (University of Missouri-Kansas City).

Gary D. McReynolds Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mcreynolds); clinical assistant professor; B.S., D.D.S. (University of Missouri-Kansas City).

Tanya V. Mitchell[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mitchell); associate professor; B.S., M.S. (University of Missouri-Kansas City).

Behjat K.H. Moghadam[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=moghadam); professor; D.D.S. (Tehran University); D.S.D., Certificate, Advanced Graduate Study in Oral Medicine (Boston University); D.D.S. (University of Missouri-Kansas City).

David L. Moore; professor emeritus; B.S. (Oklahoma State University); D.D.S., M.A., M.S. (University of Missouri-Kansas City).

Dorsey J. Moore; HGB Robinson professor emeritus; D.D.S. (University of Missouri-Kansas City).

Jack Nelson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Nelson); clinical assistant professor; BA (Ottawa University); MPA (University of Missouri-Kansas City); DDS (University of Missouri-Kansas City); Geriatric Oral Health Fellowship Certificate (University of Missouri-Kansas City).

Gerald Ogilvie Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Oglivie); clinical assistant professor; BA (University of Kansas); DDS (University of Missouri-Kansas City).

Pamela R. Overman[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=overman); associate dean for academic affairs and professor; B.S.D.H., M.S. (University of Missouri-Kansas City); Ed. D. (University of Kansas).

Jeffrey C. Nickel[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=nickel); professor; D.M.D., M.S., Certificate - Orthodontics, Ph.D. (University of Manitoba, Winnipeg, Manitoba).

Tressa Parkinson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=parkinson); clinical associate professor; D.D.S. (University of Missouri-Kansas City); GPR (VA Leavenworth, KS).

James L. Parrott Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=parrott); clinical associate professor; B.S. (Devry Institute & Central Missouri State); D.D.S. (University of Missouri-Kansas City).

Douglas A. Pearson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pearson); clinical assistant professor; B.A. (University of KS); D.D.S. (University of Missouri-Kansas City); Certificate, General Practice Residency (Veteran's Administration, Kansas City, MO).

Cynthia S. Petrie[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=petrie); associate professor; D.D.S. (Athens, Greece); D.D.S., M.S., Certificate, Prosthodontics (University of Missouri-Kansas City).

David J. Pippin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pippin); associate professor emeritus; B.S., D.D.S., M.S., Certificate, Periodontics (University of Missouri-Kansas City).

Richard G. Prine Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=prine); clinical assistant professor; B.S., D.D.S. (University of Missouri-Kansas City).

John H. Purk[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=purk); professor; B.A. (University of Missouri-St. Louis); D.D.S., M.S., Ph.D. (University of Missouri-Kansas City).

Marsha A. Pyle, Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pyle) dean and professor; D.D.S., (Case Western Reserve University); Certificate General Practice Residency, (Veterans Administration Medical Center, Cleveland, OH); M.Ed., (Cleveland State University).

John W. Rapley[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rapley); professor; B.A. (University of Missouri-Columbia); D.D.S. (University of Missouri-Kansas City); M.S. (University of Texas-Houston); Certificate, Periodontics (Wilford Hall Air Force Medical Center).

G. Juliana Redford Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=redford); clinical assistant professor; D.D.S. (Universidad Santo Tomas De Aquino); Certificate, Pediatric Dentistry (Bogota, Columbia)

Ingrid Reed Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=reed); clinical assistant professor; D.D.S., certificate orthodontics, M.S. (SUNY-Buffalo).

Michael J. Reed Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=reed); professor and dean emeritus; B.Sc. Hons. (University of Durham); B.D.S. (University of Newcastle-upon-Tyne); Ph.D. (State University of New York at Buffalo).

Richard L. Reiff Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=reiff); associate professor emeritus; B.A. (William Jewell College); D.D.S., M.S. (University of Missouri-Kansas City).

Christopher D. Rice Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rice); associate professor; B.S., D.D.S. (Creighton University); M.A. (University of Missouri-Kansas City).

Ronald Riley Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=riley); clinical associate professor; B.A. (Wichita State); D.D.S. (University of Missouri-Kansas City).

Mabel Salas-Martinez, Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=salas) clinical assistant professor, D.D.S. (San Marcos University, Lima, Peru) certificate periodontology, M.S. (Ohio State University, Columbus, OH).

Keerthana Satheesh[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=satheesh); assistant professor; B.D.S. (Sharavathi Dental School, Kuvemp University, Shimoga, India); D.D.S. (University of Missouri-Kansas City), M.S. (University of Minnesota).

Catherine Saylor-Boles Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=saylor); assistant professor; B.S.D.H., M.S. (University of Missouri - Kansas City).

Sasha Schubert Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schubert); clinical assistant professor; B.A. (University of South FL-Tampa); D.M.D. (Boston University; M.D. (Saba University, Sabba, Netherlands, Antilles0; Certificates, Oral and Maxillofacial Surgery and Family Medicine (University of Missouri-Kansas City).

Rudane E. Shultz Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=shultz); professor emeritus; B.S., D.D.S. (University of Pittsburgh); Certificate, Oral and Maxillofacial Surgery (Walter Reed Army Medical Center).

Becky Smith Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); clinical associate professor; B.A., D.D.S. (University of Missouri - Kansas City).

Anton P. Soldan-Els, Jr.; associate professor emeritus; B.S., D.D.S. (University of Missouri-Kansas City).

#Paulette Spencer[3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=spencer); curators' professor emerita; D.D.S., Ph.D. (University of Missouri-Kansas City); M.S. (Rennselaer Polytechnic Institute).

Austin E. Stiles, Jr.; associate professor emeritus; B.A. (Gettysburg College); D.D.S. (Temple University).

John A. Stone, Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stone) clinical assistant professor; D.D.S. (University of Missouri-Kansas City).

Timothy S. Taylor Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stone); associate professor emeritus; B.A. (University of Missouri-Columbia); D.D.S. (University of Missouri-Kansas City).

David J. Thein Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thein); clinical assistant professor; B.A. (Southern Methodist University); D.D.S. (University of Missouri-Kansas City); Certificate, General Practice (Hennepin County Medical Center); M.S.D. (Baylor University).

Frank C. Theisen; associate professor emeritus; D.D.S. (The Ohio State University); Certificate, Oral and Maxillofacial Surgery (Walter Reed Army Medical Center).

John W. Thurmond Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thurmond); associate professor; D.D.S. (Creighton University); M.S. (University of Texas-Houston).

Daniel E. Tira; professor emeritus; B.S. (Benedictine University); Ph.D. (The Ohio State University).

Maxine N. Tishk; professor emerita; A.S. (State University of New York-Farmingdale); B.S.(Boston University); M.S.D.H.E. (University of Michigan).

James Trotter Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=trotter); clinical assistant professor; D.D.S. (University of Missouri – Kansas City).

Yesim Tunkuc Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=tunkuc); clinical assistant professor, B.D.S. (Istanbul University, Istanbul, Turkey); certificate prosthodontics, M.S. clinical research (New York University College of Dentistry, NYC, NY).

Yasuyoshi Ueki[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ueki); assistant professor; M.D., Molecular Biology and Human Molecular Genetics, Ph.D. (Okayama University Medical School, Japan)

Christopher J. Van Ness Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=van%20ness); research assistant professor; B.S. (Missouri Western State University), M.A., certificate clinical research (University of Missouri-Kansas City), Ph.D. General Psychology (Capella University, Minneapolis, MN).

Marsha Voelker Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=voelker); associate professor; B.S.D.H., M.S. (University of North Carolina-Chapel Hill).

Thomas A. Vopat Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vopat); clinical associate professor; B.S. (Fort Hays State University); D.D.S. (Creighton University).

Mary P. Walker[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=walker); associate dean for research and graduate programs and professor; M.S., (North Dakota State); D.D.S. (University of Nebraska); Ph.D. (University of Missouri-Kansas City).

Charles Walthall; professor emeritus; D.D.S. (University of Missouri-Kansas City).

Yong Wang[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wang); professor; M.S. Polymer Materials Science (University of Science and Technology Chengdu, China); Ph.D. Polymer Science (Sichuan University, China).

W. Kirk Weber Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=weber); clinical assistant professor; D.D.S. (University of Missouri-Kansas City).

Linda M. Wells Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wells); associate dean for clinical programs and clinical associate professor, B.A. biology, D.M.D. (Temple University School of Dentistry, Philadelphia, PA); certificate general practice residency (Cleveland Metro-Health Center, OH); M.B.A. management (Yale University School of Management, New Haven, CT).

Connie L. White Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=white); associate professor; B.A., D.D.S., Certificate, Oral Diagnosis/Oral Medicine (University of Missouri-Kansas City).

J. Craig Whitt[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=whitt); professor; D.D.S. (Virginia Commonwealth University); M.S.,(Bowie State University); MBA-Finance (Webster University); Certificate, Oral Pathology (National Naval Dental Center).

Brian J. Williams Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=williams); clinical assistant professor; B.S. (Loyola Marymount University); D.D.S. (University of Missouri-Kansas City).

Derek R. Williams Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=williams); clinical associate professor; B.S. (Rockhurst College); D.D.S. (University of Missouri-Kansas City); M.S. (University of Iowa).

Terry C. Williams Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=williams); clinical assistant professor; D.D.S. (University of Missouri-Kansas City).

Robert M. Wilson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wilson); clinical associate professor; B.S. (Kansas State University), D.D.S. (University of Missouri – Kansas City).

Gerald D. Woolsey Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=woolsey); professor emeritus; B.S. (University of Texas); D.D.S. (Baylor College of Dentistry); M.S. (University of Michigan); Certificate, Fixed Prosthodontics (Broke Army Medical Center).

Joy Wylie-Matthews Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=matthews); clinical associate professor; B.A. (Kansas State University); D.D.S. (University of Missouri-Kansas City).

Leslie Young, Jr.; associate professor emeritus; D.D.S. (University of Iowa); M.S. (University of Missouri-Kansas City).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Degrees:

- Division of Dental Hygiene
  - Dental Hygiene Clinical Entry Level program
  - Dental Hygiene Degree Completion Program

Graduate

Graduate Degrees:

- Master of Science in Oral and Craniofacial Sciences
- Master of Science in Dental Hygiene Education
- Oral and Craniofacial Sciences Interdisciplinary Ph.D.
- Advanced Education Programs
  - Advanced Education in General Dentistry
  - Endodontics
  - Oral and Maxillofacial Surgery
  - Orthodontics and Dentofacial Orthopedics
  - Periodontics

Professional

Professional Programs:

- Doctor of Dental Surgery Program

General Information and History

General Information

All statements in this section are announcements of present policies, requirements (admission and academic progress), curricula, fees and services. They are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

History

The UMKC School of Dentistry traces its roots to 1881, when the Kansas City Dental College was founded as a department of the Kansas City Medical College. In 1919 the Kansas City Dental College merged with Western Dental College to form the Kansas City Western Dental College. It became the School of Dentistry of the University of Kansas City in 1941. In 1963 the school became the School of Dentistry at UMKC.

Continuous and distinguished service for more than 100 years has established the School of Dentistry as an important institution throughout the nation.

Over the years, the school's educational standards and opportunities have increased as the school has consistently demonstrated its ability to educate well-qualified dentists and dental hygienists to contribute to the improvement of oral health. As an affirmation of this, the D.D.S., the graduate certificate programs: advanced education in general dentistry, periodontics, oral and maxillofacial surgery, endodontics, and orthodontics and dentofacial orthopedics, and the B.S. in dental hygiene are fully accredited by the Commission on Dental Accreditation of the American Dental Association.

The school is situated on the Hospital Hill campus, where Truman Medical Center, Children's Mercy Hospital and the UMKC schools of medicine, nursing, and pharmacy are also located.

Vision and Mission Statements

Vision Statement

UMKC School of Dentistry will be a model oral healthcare education institution that maintains the highest ethical and scientific standards of care, serving patients and the profession in an evolving healthcare environment.

Mission Statement

UMKC School of Dentistry serves as a leader in the advancement of oral healthcare through exceptional educational programs, scientific inquiry, patient care and service to society.

Core Values

Excellence

We will achieve excellence by:

- Developing professionals through rigorous academic education and practical training.
- Performing teaching and research that incorporates best-practice techniques, setting goals that are achievable and measurable, as well as by seeking feedback from our students, colleagues and community.
- Adhering to high standards of evidence-based dentistry and clinical judgment through collaboration and leadership.

Compassion

We will practice compassion by:

- Taking a genuine interest in the needs of those we serve in order to help them live healthy and productive lives through the services we deliver.
- Interacting with others as servant leaders.
- Promoting an environment of shared strength through humility and gratitude for our shared talents.

Integrity

We will act with integrity by:

- Demonstrating that ethical behavior is a lifelong habit of honest and sincere action that benefits the profession and society.
- Fulfilling our social contract to perform our work and serve our communities with the veracity and honor that undergird our profession.

- Committing ourselves to the highest moral and ethical standards that will hold us accountable to our own actions and those of our institution, our colleagues, our students, and our community.

Justice

We will act justly by:

- Being sensitive to the complexities inherent in the diversity of our community.
- Striving to allocate the School's limited resources in a manner that best meets the needs of our students, patients, faculty, and staff.
- Doing what is right through our exercise of collegiality, respect, and fairness in all our interactions.

Research Programs

Research plays a prominent role in the School of Dentistry. The Interdisciplinary Ph.D. program, M.S. degree programs (Oral Biology and Dental Hygiene Education) as well as the advanced dental programs all have strong research components. The intent of these programs is to expose the student to basic and translational research, and clinical application. Research and the scientific method are formal parts of the educational program of all dental school students, contributing to their education, as well as serving to advance science and dentistry. There is significant external grant funding supporting the research efforts. Many of the researchers who have obtained these grants serve as mentors for dental students participating in the Summer Scholars Program. In this selective program, a limited number of students participate in a nine-week research experience in the mentor's area of research interest and present their project results at a national meeting.

Facilities

Clinic

Occupies 16,000 square feet; 281 fully equipped dental operatories; approximately 68,000 patient visits per year; and home to a new state-of-the art innovation center for use by dental and dental hygiene students.ries. Each patient treatment cubicle is equipped with electronic treatment record computer terminals. The computer-based student/patient clinical record management system is central to the efficient operation of the dental clinic.

Classrooms

Three large lecture halls and thirteen smaller classrooms/seminar rooms. Lecture halls are equipped with networked computers and modern projection systems.

Laboratories

Two dental preclinical simulation facilities with fully equipped working stations; an anatomical model laboratory.

Library

Located on the third floor of the School of Dentistry, the Dental Library supports the curricular, scholarly and research activities of the students, faculty and staff of the School of Dentistry. There are seating areas to accommodate varying study habits and forty-eight computer stations available for creative work. Twenty-eight computers are arranged in a computer lab available for hands-on training. Housed within the library, physical collections include over four hundred journal titles and over seventeen thousand monographs.

Resources extend beyond the library walls through electronic resources offering nearly three hundred online databases, over two hundred online journal titles specific to Dentistry and thousands of journals in related Health Sciences, Chemistry, and Engineering that pertain to dental research and practice. The Dental Library is one of four libraries on the UMKC campus. All UMKC students have full access to all UMKC libraries, as well the opportunity to establish user accounts to the Linda Hall Library, the world's foremost independent research library devoted to science, engineering and technology, located adjacent to the Volker campus.

Hospital Affiliations

Teaching relationships exist with many area community health centers as well as area hospitals, including Children's Mercy Hospital, Saint Luke's Hospital, Truman Medical Center Hospital Hill, Richard Cabot Medical Clinic, Samuel Rodgers Community Health Center, and Swope Parkway Health Center.

Miscellaneous

The school also supports a full-service Biomedical Communication Department that contributes significantly to its educational and administrative missions. The Health Sciences Bookstore supplies all textbook, and some supply needs of the student body; it is housed on the Hospital Hill Campus.

Academic/Student Support Services

Academic Support Services

The School of Dentistry conducts a comprehensive academic support program which includes sessions to refine learning test taking skills and to provide assistance in coursework, as needed. An interceptive system of continuous academic monitoring is in effect. Students who may be experiencing academic difficulty during a term are identified and advised. This results in an individualized plan of action to overcome any deficiencies. In addition, personal counseling assistance is available to all students who state or demonstrate a need.

Office of Student Programs

The Dental School's Office of Student Programs is concerned with three primary areas of focus and responsibility:

- Admissions/recruitment
- Student records
- Student support services

The majority of student services are provided by this office. In other cases, the student is referred to the appropriate University student affairs offices if necessary. Student Support Services provide financial aid (initial assistance and referral), counseling services (initial assistance and referral), a housing file and referral, and other services.

Financial Aid

Financial assistance is available from a number of sources, primarily those programs supported by federal legislation (such as the Federal Direct Loan programs and Health Professions Student Loan). Information on most financial aid programs available to School of Dentistry students may be found in the School of Dentistry section of the Financial Aid Charts at http://www.umkc.edu/finaid/. Additional information may be gathered from

Office of Student Programs
School of Dentistry
(816) 235-**2080**

or from

University of Missouri-Kansas City
Financial Aid and Scholarships Office
101 AC
5100 Rockhill Road
Kansas City, MO 64110-2499
(816) 235-**1154**

or from

University of Missouri-Kansas City
Financial Aid and Scholarships Office
1418 Health Sciences Building (HSB)
2464 Charlotte
Kansas City, MO 64108-2718
(816) 235-**6783**

The student should apply for aid as soon as possible after acceptance into the particular program of study.

Academic Standards

Professional education in the health sciences manifests characteristics that are distinct from other advanced educational programs. Academic standards of the School of Dentistry are established to ensure that the public, whose health will be entrusted to graduates of the School's programs, will receive care of professionally acceptable quality and that the care will be provided in an ethical and professional manner. The School's academic requirements are described in the following two sets of standards, one for scholarly achievement and one for professional conduct.

Standards of Scholarship

1. Pre-doctoral dental and pre-baccalaureate dental hygiene students must maintain at least a 2.5 GPA each semester in dental school. Failure to attain a 2.5 GPA in any semester will result in the students being placed on probation for the next semester. All students who are placed on probation must review their academic progress with the chair of the Academic Standards Committee. A second consecutive semester with a GPA below 2.5 will result in dismissal from the School. A total of three semesters with GPAs below 2.5 will result in dismissal from the School. For a semester to count toward removing students from probation, they must be enrolled full-time (at least 5 hours in summer or 12 hours in fall or

spring semesters). Two semesters separated by a summer session in which the student is enrolled in less than five credit hours will be considered consecutive semesters.

2. Failure of any course (receiving a grade of F or No Credit) will necessitate additional work to remove or replace the F or No Credit. The course may be repeated at another dental school or dental hygiene program, with the approval of the associate dean for academic affairs, or during the next offering of the course at this school. Students will receive whatever grade they earn in the repeated courses and both grades will appear on their transcript and be included in the grade-point average. Students who fail only one course in a given semester may petition the course instructor for a remediation program if their failure was the result of performance slightly below acceptable standard (e.g., 60 percent where 65 percent is required for passing, or poor performance on one section of the course with acceptable performance in other sections). Any remediation program can take whatever form the course instructor deems appropriate. Possible examples:
   - Independent study for a number of weeks followed by an examination.
   - Remedial summer laboratory work followed by a laboratory examination.
   - A series of written exercises followed by an examination.

   If students successfully complete a remediation program, their grades of F or No Credit will be changed to grades of D or Credit. A second failure or No Credit in the remediated course will result in dismissal from the program.
3. Any student who fails a course will be required to meet with the Academic Affair dean to prepare an altered curriculum plan that includes the completion of this course for the Committee's approval. An approved altered curriculum plan may result in an extension of the academic program because the student has demonstrated difficulty in dealing with the standard curriculum and may need additional coursework, review and/or supplemental instruction to successfully complete the curriculum.

Standards of Professional Conduct

1. Dental and dental hygiene students must achieve and consistently demonstrate acceptable levels of personal hygiene and dress.
2. Dental and dental hygiene students must achieve and consistently demonstrate concern for patients, peers, and others. Dental and dental hygiene health care providers have a duty to ensure:
   a. That patients are treated according to their desires and must be included in treatment decisions.
   b. Patient confidentiality in the entire range of the provider-patient relationship which includes dental records.
   c. That no harm or potential harm is done to the patient either through intent, ignorance, lack of preparation for the patient encounter, lack of skill, personal impairment of any kind.
   d. That no patient is "abandoned" which is defined as discontinuance of care without just cause and without giving the patient adequate notice and the opportunity to obtain the services of another provider.
   e. That the patient's welfare (i.e. the provision of competent and timely delivery of dental care within the bounds of clinical circumstances as presented by the patient such as needs, desires and values) is paramount and takes precedence above all else. This also includes the obligation to: 1) identify and report perioral signs of abuse and neglect and to consult with faculty to report suspected cases to proper authorities as required by law; and, 2) report instances of faulty treatment whether intentional or not, to the appropriate faculty member.
   f. That all people including patients, staff, faculty and all other individuals are treated fairly, respectfully, and without prejudice.
   g. All standards and requirements of patient care established by the School of Dentistry are followed.
3. Dental and dental hygiene students' behavior must exemplify the highest moral and ethical standards. The following represent conduct that is incompatible with these standards:
   a. Any behavior that tends to gain an unfair advantage for any student in an academic matter. This includes, but is not necessarily limited to, the following guidelines:
      - No student shall during an examination have, use, or solicit any unauthorized information or material (written or oral), copy from another student's paper or discuss the examination with any other person.
      - No student shall during an examination knowingly give any unauthorized aid to another student.
      - No student shall acquire by any means knowledge of the contents of an examination yet to be given.
      - No student shall fraudulently claim for credit any classroom, clinical, laboratory, or other procedure or assignment performed by an unauthorized person, including a fellow student.
   b. Anyone who has reasonable cause to believe that a student has acted unethically is obligated to bring the matter to the attention of the assistant dean for student programs or his/her designee who will follow the process identified in the Preliminary Procedures section of the UMKC School of Dentistry Honor Council Due Process Procedures for Violations of the Standards of Professional Conduct, to determine whether there has been a violation and whether charges should be brought.
4. Serious deficiencies in conduct as listed in the School of Dentistry Standards of Professional Conduct, or as outlined in Section 200.010, Standards of Conduct, of the University of Missouri Collected Rules and Regulations, by a dental or dental hygiene student shall be reported to the assistant dean for student programs or his/her representative, who will initiate the process as listed under "Preliminary Procedures".

Grading System

The grading and grade-point system used by all academic programs in the School of Dentistry is defined by the University. It is outlined in the General Graduate Academic Regulations and Information section of this catalog. The School of Dentistry faculty do not use the + and - grading option; grades rendered are A, B, C, etc.

Incomplete Grades

An instructor may give an incomplete grade (I) to a student who, because of illness or other valid reasons beyond the student's control, has been unable to complete the work in a course. A student who receives an incomplete, and who subsequently does not elect to withdraw from the course, must complete the required work by a date specified by the instructor. Failure to complete required work by this date is cause for the incomplete to be changed to an F (failure without credit). This is exclusive of those courses that are considered directed individual studies, internships, special topics, practicums, and research and thesis courses.

An incomplete is appropriate when enough work in the course has been completed that the student can finish the remaining work without re-enrolling in the course in question or attending additional classes. Otherwise students should initiate withdrawal (but only with permission).

Students may not re-enroll in a course for which an incomplete remains on their records.

Degrees Offered

The School of Dentistry offers a four-year professional program leading to the doctor of dental surgery (D.D.S.) degree, and the bachelor of science degree in dental hygiene (B.S.). The School offers graduate programs leading to a master of science degree in oral and craniofacial sciences or in dental hygiene education (M.S.) (http://dentistry.umkc.edu/Future_Students/DHMasterScience.shtml), and graduate certificates in recognized dental clinical specialties. In addition, the school participates in UMKC's Interdisciplinary Ph.D. program (p. 399) through the discipline of oral and craniofacial sciences. Please refer to the School of Graduate Studies section of the catalog for information on admission criteria and degree requirements for the IPh.D program.

Outreach Programs

In keeping with its goal of developing in its students a sense of professional and societal responsibilities, and an awareness of community needs and problems, the school offers numerous outreach opportunities to students in all of its programs. Individuals associated with more than 30 community-based organizations, agencies or projects oral health care by UMKC students and faculty.

Representative of these are the University Academy, Kansas City Free Health Clinic, Give Kids a Smile (dental care for children in the Kansas City metro area), Mission of Mercy (MO and KS programs to provide dental care for children and adults), Students Take Action (student organization dedicated to compassion and comradeship through community service), Miles of Smiles (program that enables UMKC's dental hygiene students to deliver comprehensive preventive oral health services to low income children in the Olathe School District) and Miles of Elder Smiles (involves dental and dental hygiene students).

Advanced Education Programs

Chair, Advanced Education Committee:
Mary P. Walker, D.D.S., Ph.D.

Associate Dean for Research and Graduate Programs

The School of Dentistry offers advanced education curricula leading to graduate certificates in each of five clinical dental specialty areas (endodontics, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, and periodontics), certificates in general dentistry, and master of science degrees in either oral and craniofacial sciences or dental hygiene education. The School participates in the Interdisciplinary Ph.D. program through the Department of Oral and Craniofacial Sciences. Oral and Craniofacial Sciences's research focus areas are: Biomaterials/Bioengineering of Biological Tissues & Replacements, Mineralized Tissue Biology and Translational and Clinical Research.

Application Information & Deadlines

Application Information

All applicants to the advanced education certificate programs (advanced education in general dentistry, endodontics, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, and periodontics) require the Postdoctoral Application Support Services (PASS) application available at www.adea.org (http://www.adea.org). All sections of the PASS application should be completed fully. Official dental school transcripts should be submitted directly to PASS. National dental board scores should be reported in the PASS "institutional evaluation" form. Since the NBDE scores are reported on the "Institutional Evaluation" official scores do not need to be sent to UMKC.

Applicants applying to the Orthodontic, and Periodontics programs are required to take the GRE. Scores should be self-reported on the PASS application. Official GRE scores should be submitted to directly to UMKC (GRE code is 6872.) Be aware that approximately three weeks are required by the service to process PASS applications and deliver them to the designated programs. The length of this processing period should be considered by the candidate in order to meet relevant application deadlines. **An applicant copy of the PASS application should not be sent to UMKC.**

All applicants are required to submit the **Institutional Evaluation** AND **Personal Potential Index (PPI)** as part of their completed PASS application. A minimum of three professional evaluators (dental faculty) are required to submit evaluations for the PPI. Additional letters of recommendation should not be sent to UMKC.

Additional information, as identified below, must be submitted directly to the UMKC School of Dentistry, Office of Student Programs, 650 East 25th Street, Kansas City, MO 64108.

- Official transcripts from degree granting undergraduate and graduate institution(s). Additionally, if a large number of pre-dental prerequisites were taken outside the degree granting institution those transcripts should be submitted too. (Applicants do not need to submit dental school transcripts since they are provided to us through PASS).
- A copy of permanent resident card (if applicable).
- A copy of dental license (if applicable).
- A UMKC application and application fee are required of all applicants. Upon receipt of your PASS materials you will be emailed a link to the general UMKC application

International applicants should additionally submit the following

- International applicants must have a U.S. or Canadian D.D.S. or D.M.D. from an accredited CDA or CDAC program to be considered for advanced education programs, except the programs in Oral Biology.
- TOEFL scores (minimum of 550 on the paper test, or 80 on the internet based test) or a demonstrated proficiency in the English language (if English is not the primary language of the applicant).
- Financial statement (guarantee of full financial support or of sufficient financial resources for the entire cost of the program, including living expenses).

Additional resumes, CVs, personal photos, or information not received as part of the PASS application will be destroyed upon receipt.

The graduate certificate programs in oral and maxillofacial surgery AND orthodontics and dentofacial orthopedics participate in **the National Matching Services (MATCH)** process. Candidates to these programs must also register for this service within the ADEA PASS applicant portal (www.adea.org (http://www.adea.org)) There are two phases of the MATCH process, each with its deadline date for receipt of Rank Order List forms from applicants. The Phase I deadline (typically toward the end of November each year) is for applicants to the orthodontics and dentofacial orthopedics program. The Phase II deadline (typically in the middle of January annually) is for those applying for admission to the oral and maxillofacial surgery program.

General admissions questions concerning advanced education programs should be directed to the Office of Student Programs at (816) 235-6322. However, specific questions regarding any advanced education program should be directed to the pertinent program director. Graduate program directors along with their telephone numbers are identified in a subsequent section.

Application Deadline

Application deadline dates for graduate dental certificate programs are as follows:

Advanced Education in General Dentistry	October 1
Endodontics	August 1
Oral and Maxillofacial Surgery	October 1
Orthodontics	September 1
Periodontics	August 15

The deadline date for receipt of applications at the school is one year before the anticipated enrollment in program.

Financial Assistance

Please be advised that the information provided here is of a general nature only.

Newly admitted advanced dental education students (such as AEGD, Endodontics, Oral & Maxillofacial Surgery, Orthodontics, and Periodontics) will receive information regarding financial aid. Students who are interested in obtaining financial aid are advised to contact the Hospital Hill Financial Aid Office for more details and guidance.

Hospital Hill Financial Aid Office - Location Address: 1418 Health Sciences Building on UMKC Hospital Hill Campus.
Office Hours: 8:00am-5:00pm Monday-Thursday
(816) 235-6783

FinAidHospitalHill@umkc.edu

There are three types of financial aid for advanced education students:

1. Federal Stafford Unsubsidized Loans
2. Federal Graduate PLUS Loans
3. Private Student Loans

Separate financial aid applications are required for the summer term and for the fall/spring terms.Students apply for loans via the FAFSA website www.fafsa.gov (http://www.fafsa.gov). It advised that students consult the Hospital Hill Financial Aid Office for the priority application deadline and guidance in the application process.

Enrollment Fees

Below are outlined the various enrollment fees per term for all advanced education programs at the School of Dentistry except those for the M.S. in oral biology, the Interdisciplinary Ph.D. and the M.S. in dental hygiene education programs (see subsequent part of this catalog section). These fees assume enrollment in three or more credit hours for the summer session, and six or more credit hours for each of the fall and spring semesters. Most programs require fewer credit hours than those per term.
Note: Indicated fees are correct at time of printing. However, fees are subject to change without notice.

Summer Term

Educational Fee (Resident)	$3,058.71
Educational Fee (Non-resident)	$6,106.50
Activity/Building/Computing/Health Fees	$164.07
SOD Instructional Fee Deposit[1]	$500.00

Fall/Spring Semester (Each)

Educational Fee (Resident)	$6,117.48
Educational Fee (Non-resident)	$12,212.97
Activity/Building/Computing/Health Fees	$342.32
SOD Instructional Fee[1]	$2,112.00

1 **Endodontic, Orthodontic & Periodontic Programs**

Academic Standards/Procedures: Advanced Education/Graduate Students

The following academic standards and the procedures to be used in dealing with cases of academic difficulty apply to students in all advanced education/graduate programs of the School of Dentistry.

Standards of Scholarship

1. Graduate students, regardless of classification, must maintain a 3.0 (B) GPA for all coursework taken for graduate credit at UMKC.
2. Graduate students must maintain a 3.0 (B) GPA in their graduate dental certificate specialty coursework.[1]
3. Grades in graduate dental certificate specialty area coursework must be B or better. Any graduate dental certificate specialty area course that is graded below B must be repeated.[1]

1 Applies only to students enrolled in graduate dental certificate programs.

Probation

1. Whenever the overall GPA for UMKC courses taken for graduate credit by a graduate student of any classification falls below 3.0 (B), the student's status for the next term becomes "On probation - See principal graduate advisor." The principal graduate advisor will review the student's progress and provide counsel, and the following conditions apply:
   a. A graduate student on probation who is not restored to good academic standing by the end of two successive semesters will be declared ineligible to re-enroll.
   b. While on probation, a graduate student must achieve a 3.0 term GPA to enroll for the ensuing term.
   c. A graduate student on probation will not be restored to good standing until a cumulative graduate-credit GPA of at least 3.0 is achieved.
2. Whenever the overall GPA for courses taken in the student's graduate dental certificate specialty area falls below 3.0, the student will be placed on probation and the following conditions apply:[1]

a. A graduate student on probation who is not restored to good academic standing by the end of two successive semesters will be declared ineligible to re-enroll.
b. While on probation, a graduate student must achieve a 3.0 graduate dental certificate specialty area GPA to enroll for the ensuing term.
c. A graduate student on probation will not be restored to good standing until a graduate dental certificate specialty area GPA of at least 3.0 is achieved.

[1] Applies only to students enrolled in graduate dental certificate programs.

Dismissal

1. A graduate student who is on probation and fails to attain an overall GPA of at least 3.0 by the end of two successive semesters will be dismissed from the program.
2. A graduate student who is on probation and fails to attain a 3.0 term GPA for the succeeding term will be dismissed.
3. A graduate student who is on probation and fails to attain a graduate dental certificate specialty area GPA of at least 3.0 by the end of two successive semesters will be dismissed from the program.[1]
4. A graduate student who is on probation and fails to attain a 3.0 graduate dental certificate specialty area GPA for the succeeding term will be dismissed.[1]
5. A graduate student who receives more than four hours of 2.0 (C) grades or below for courses included in the student's graduate program of studies will be dismissed.[1]

[1] Applies only to students enrolled in graduate dental certificate programs.

Appeal

Any student who is dismissed from the program has the right to appeal that decision. Appeals must be made in writing to the associate dean for academic affairs within one week from the time the student receives a notice of dismissal. The associate dean for academic affairs in conjunction with the chair of the Advanced Education Committee shall select a hearing panel of five members of the Advanced Education Committee to hear the student's appeal. At least one member of the hearing panel will be a student. The program director of the program in which the appealing student is enrolled shall be ineligible to sit on the panel. The hearing panel will be chaired by the associate dean for academic affairs. A meeting of the hearing panel will be scheduled within two weeks of the receipt of the student's appeal. During the time the appeal process is being conducted the student shall be allowed to continue in the program.

The hearing panel shall be provided with written statements from the student and the program director as well as all relevant records and documents. The program director or designated substitute and the appealing student must attend the hearing to provide additional information and answer questions from the hearing panel. Other individuals who have information relevant to the situation may be invited to present their information and answer questions for the panel. The student may have an advisor present to advise the student, but this advisor shall be limited to providing advice to the student.

After reviewing the information and conducting the hearing, the hearing panel shall make its recommendation regarding disposition of the case to the dean. All five appointed members of the hearing panel shall have a vote. In case of a tie, the associate dean for academic affairs shall cast the deciding vote. The dean of the School of Dentistry will make the final decision and communicate that decision to the student and the program director.

Students in Cooperative Programs

Students enrolled in programs (e.g., Pediatric Dentistry, Oral and Maxillofacial Surgery) operated jointly by the School of Dentistry and other institutions, such as Children's Mercy Hospital and Truman Medical Center, must remain in good standing with both organizations cooperating in the program. A student who is dismissed by either of the cooperating institutions is ineligible to continue in the program.

Graduate

Graduate Certificate Programs

- Dental Graduate Certificate Programs
  - Graduate Certificate: Advanced Education in General Dentistry
  - Graduate Certificate: Endodontics
  - Graduate Certificate: Oral and Maxillofacial Surgery
  - Graduate Certificate: Orthodontics and Dentofacial Orthopedics
  - Graduate Certificate: Periodontics

Dental Graduate Certificate Programs

A graduate certificate program is offered in each of the following areas:

- Advanced Education in General Dentistry (p. 368)
- Endodontics (p. 373)
- Oral and Maxillofacial Surgery (p. 377)
- Orthodontics and Dentofacial Orthopedics (p. 380)
- Periodontics (p. 382)

General Nature of Programs

Each certificate program curriculum is designed to prepare the student for specialty practice and to help the student meet the educational training requirements for examination by the appropriate American dental specialty board. All programs begin with the summer term (the first week of July) except for graduate dental hygiene education, which begins with the fall semester. Programs vary in length from 12 to 72 months.

Admission to a graduate dental certificate program is competitive. Primary focus is on the applicant's academic record while in dental school, including national board scores. Emphasis is also placed on information gathered from PASS application materials and professional evaluations (such as quality of professional practice experience, continuing education experience, research activities, leadership and involvement and participation in professional societies and community service). Another fundamental source of information is supplied by a personal on-site interview that is required of most programs and is by invitation.

Applicants to a graduate dental certificate program must hold a D.D.S. degree or equivalent from a program accredited either by the Commission on Dental Accreditation (CDA) or the Canadian Dental Accrediting Commission (CDAC).

Admission

The Advanced Education Committee (AEC) serves as the admission review board for each of the graduate dental certificate programs. Each program has its own admission review board. At a minimum, the admission review board consists of the respective program director and at least two other full-time faculty members.

Each program's admission review board submits its recommendations for acceptance to the AEC for consideration. Recommendations for acceptance include those identified as prime candidates (equal in number to the number of available residencies in the program) and those who serve as "alternates." Acceptance or denial of each recommended candidate is made by the AEC.

Graduate Certificate in Advanced Education in General Dentistry

Program Description:

Director:
John W. Thurmond, D.D.S., M.S., Diplomate, American Board of General Dentistry

Faculty:
Dean A. Elledge, D.D.S., M.S., Sam E. Hayes, D.D.S., David L. Moore, D.D.S., M.D., David J. Thein, D.D.S., M.S.D., Bruce C. Cummings, D.D.S.

The advanced education in general dentistry residency program is a 12-month Council on Dental Accreditation (CODA) accredited program that begins in July of each year for eight residents. The program is designed to refine and advance knowledge, skills and clinical competency and proficiency in the practice of comprehensive general dentistry. The program bridges the gap between dental school and dental practice. Clinical instruction is offered in all of the clinical disciplines. The didactic component provides postgraduate training in the basic and behavioral sciences, as well as the clinical sciences and practice management. Upon completion of this program a certificate in "Advanced General Dentistry" will be awarded.

An optional second year residency is available for two of our current residents. The emphases during this year of the program are in advanced restorative and implant dentistry.

Eligibility

An applicant for this program must be a citizen of the United States or a foreign national having a visa permitting permanent residence in the United States. Applicants must also submit evidence of graduation from a school of dentistry accredited by the Commission on Dental Accreditation or the Canadian Dental Accrediting Commission, or verification from the dean of an accredited dental school that the applicant will graduate during the current academic year.

Tuition and Fees

Estimated school tuition can be obtained at the Advanced Education Enrollment Fees section of this catalog. If selected for the program there is a $500 nonrefundable acceptance fee which must be paid within two weeks of the time of acceptance of the position. There is also a partial tuition waiver. More information will be provided to the applicant once he/she is accepted into the program.

Financial Assistance

Up-to-date additional information on financial assistance can be obtained at http://www.sfa.umkc.edu/

Stipend

Residents will receive an annual stipend of $49,000.

Applications

Application to this program is through the Postdoctoral Application Support Services (PASS). Use the link http://dentistry.umkc.edu/Future_Students/AdvancedEd.shtml for greater detail on both. The deadline for receipt of application at the school is Oct. 1 of the year prior to planned enrollment.

Interview

Competitive applicants will be invited to Kansas City for an interview with the program director and other selected faculty and staff. If invited, the interview is a required part of the application process and funding is the responsibility of the applicant.

Point of Contact

To request further information, please contact either the Office of Student Programs at (816) 235-**2080** or dds@umkc.edu; or the program director, Dr. John W. Thurmond at (816) 235-**2164** or thurmondj@umkc.edu.

Student Learning Outcomes

Residents on completion of the AEGD program will have the knowledge and experience to provide comprehensive multidisciplinary oral health care at a level of skill and competency beyond that achieved in their pre-doctoral training. It is expected that they will be able to provide this care to a broad and diverse patient population which includes the medically compromised and those with special needs.

The objectives of the didactic and clinical experiences is to broaden and strengthen the scope and level of residents competencies and proficiencies in the practice of dentistry.

Patients are treated in a comprehensive manner with clinical emphasis on:

- Diagnosis and treatment planning of complex and multidisciplinary cares.
- Management of oral facial pain including the TMJ patient.
- The importance of occlusion in all aspects of dentistry.
- Comtemporary endodontics and periodontics.
- Oral surgery including surgical principles and techniques for dental implants.
- Current esthetic dentistry techniques.
- Advanced restorative/prosthodontic treatment including dental implants.

Educational formats used are: formal courses, lectures, seminars, literature reviews, assigned readings, hands-on courses, case presentation, attendance at continuing education, guest speakers, treatment planning conferences, clinical demonstrations and chairside clinical teaching.

Graduation Requirements

Requirements for a Certificate in Advanced Education in General Dentistry (AEGD)

Successful completion includes:

1. Maintaining a 3.0 GPA for all assigned didactic and clinical course work
2. Maintenance of all required clinical documentation
3. Maintenance of a program portfolio as designed by the program director
4. Progressively increase resident’s scope of practice and increase clinical competencies beyond that of a graduate of a four year D.D.S. (D.M.D.) program
5. Provide dental care to a diverse population in an ethical, competent, compassionate and professional manner
6. Achieve established program “goals and objectives” established by the Council of Dental Accreditation (CODA) of the American Dental Association
7. Coordinate and participate in community service projects
8. Comply with all policies established by UMKC, School of Dentistry and AEGD program director

Graduate Certificate in Endodontics

Program Description:

Director:

Kenneth J. Frick, D.D.S., M.S., Diplomate, American Board of Endodontics.

Faculty:
Robert Blundell, D.D.S., M.S., Diplomate, American Board of Endodontics; Ron Riley, D.D.S., Diplomate, American Board of Endodontics; Robert Edwards, D.D.S., Diplomate, American Board of Endodontics; Yasaman Ravandoust, D.D.S., M.S.; Robert H. Altomare, D.D.S.; Jim Tinnin, D.D.S., Diplomate, American Board of Endodontics

Program Overview

The endodontic postgraduate program is designed to prepare a dentist for a career in clinical endodontics, research and teaching. The overall goal is to educate dentists to become competent clinical endodontists who will serve the public and the profession at a high level of excellence. It stresses the importance of knowledge and skills in the diagnosis, prevention, and treatment of diseases associated with the dental pulp and related periapical tissues. Didactic and clinical training is also conducted in other related areas within the scope of practice of the field of endodontics as established by the Endodontic Standards of the Commission on Dental Accreditation. The correlation of basic sciences and clinical sciences is an integral part of the program. A research project is required and comprehensive oral examinations must be successfully completed. The program is also designed to prepare the graduate endodontist to challenge the requirements for certification as a Diplomate by the American Board of Endodontics. Individuals who successfully complete this advanced education program will be awarded a Certificate in Endodontics. Concurrent enrollment in the Department of Oral and Craniofacial Sciences is available to those wishing to earn a Master of Science Degree in Oral and Craniofacial Sciences. An additional time commitment of three to six months would be required.

Accreditation

The program in endodontics is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of "approval without reporting requirements". The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

Eligibility

An applicant for this program must be a citizen of the United States or permanent resident in the United States. **Applicants must also submit evidence of graduation from a school of dentistry accredited by the American Dental Association or the Canadian Dental Association**. International students must submit additional credentials through the International Student Affairs Office http://www.umkc.edu/isao/. Admission to the masters program requires successful completion of the GRE prior to admittance.

Program Duration

Beginning July 1st, the certificate program runs 24 months over six continuous semesters. Enrollment in the optional master’s program would require an additional three to six months to complete.

Number of Residents

There are generally two first-year and two second-year residents.

General Applicant Information

Application to this program is through the ADEA Postdoctoral Application Support Services (PASS). The deadline for receipt of application at the school is **August 1st** of the year prior to planned enrollment. Detailed application information is available at http://dentistry.umkc.edu/Future_Students/AdvancedEd.shtml

Graduate Medical Education (GME) Stipends

Currently, residents are eligible for GME stipends of approximately $21,000 per year. This is a federal, not School of Dentistry, program and is subject to current federal guidelines.

Program Stipend

Endodontic residents will receive an annual stipend of $20,000.

Tuition and Fees

Estimated school tuition costs can be found in the Fees section of this catalog. If selected for the program, there is a $2,000 nonrefundable acceptance fee which must be paid within two days of the time of acceptance of the position. More information will be provided to the applicant once he/she is accepted into the program. There is also a partial tuition waiver.

Instruments and Equipment

Residents will be required to lease their dental instruments through the school and purchase some other instruments and equipment. The school employs a centralized sterilization program for the lease instruments. Additionally, each resident is required to purchase an endodontic operating microscope head with beam splitter and attachment to accommodate a minimum 4 mega pixel digital camera which must also be purchased. A list of

other required instruments and textbooks will be provided when an applicant is selected to attend the program. Estimated cost for purchases for the 24-month program are approximately $20,000. All of these purchases go with the resident when he/she graduates from the program. Estimated lease expenses are approximately $8,800 for the 24-month program, $2,200 per each fall and spring semesters. Currently, there are no charges for leased instruments for the summer semesters.

Postgraduate Endodontic Clinic

The postgraduate endodontic clinic is a true state-of-the-art facility made possible by the generous donations of Mrs. Virginia Stowers, Dr. Ben Johnson, and other benefactors. All rooms are equipped with resident-purchased dental operating microscopes. Each room has its own x-ray head, 50" video monitor, Adec track light system, and ASI dental unit carts complete with air-driven high and low speed fiber optic handpieces, two electric handpieces, two ultrasonics, dual micro irrigators, micro air syringes, and curing light. The program is linked into the all-electronic paperless patient record management system which also integrates the digital x-ray sensors available in each operatory. Please go to the clinic web page at for a 360 degree photo tour. Also please see http://dentistry.umkc.edu/Patient_Information/stowers.shtml for more information about faculty, residents and staff.

Study Areas

Residents have excellent dedicated office space with high-speed computer and printer support connected to a high-speed LAN. The program also has a dedicated seminar room for literature reviews, case presentation, lectures, etc.

Financial Assistance

Up-to-date additional information on financial assistance can be found in the School of Dentistry portion of the Financial Aid Charts at http://www.sfa.umkc.edu

Interview

Selected applicants will be invited to Kansas City for an interview with the program director and other selected faculty and staff. If invited, the interview is a required part of the application process, and travel expenses are the responsibility of the applicant. Preference is given to those applicants who have both general practice experience and completion of an AEGD or GPR program.

Point of Contact

To request further information, please contact either the Office of Student Programs at (816) 235-**2080** or dds@umkc.edu or the program director, Dr. Kenneth J. Frick, at (816) 235-**2479** or frickk@umkc.edu

Student Learning Outcomes

The following listing of skills required by the Standards for Advanced Specialty Education Programs in Endodontics are assessed through seminars, examinations, one-on-one discussions, papers, presentations, laboratory exercises, mock board exercises, and clinical care on patients.

The graduate will demonstrate applied knowledge and clinical skills in the following areas:

1. Anatomy of soft and hard tissues of the head and neck with particular emphasis on the teeth and their supporting structures.
2. Embryology, histology and physiology of the pulpal/periradicular complex.
3. Microbial ecology of the oral flora and the microbiologic aspects of caries, and pulpal and periradicular diseases.
4. Infectious and immunologic processes in oral health and disease.
5. Pathophysiology as is relates to diseases of the pulpal/periradicular complex and orofacial pain.
6. Mechanisms of inflammation and wound healing with emphasis on the pulpal/periradicular/periodontal complex.
7. Oral medicine and pathology as they relate to the differential diagnosis and management of clinical conditions that may require endodontic treatment.
8. Pharmacotherapeutic agents used in the management of systemic diseases that may influence the management of patients requiring endodontic treatment.
9. Mechanisms, interactions and effects of drugs used in the prevention, diagnosis and treatment of pulpal and periradicular pathoses.
10. Principles of biostatistics, research design, research methodology, scientific writing, and critical evaluation of the literature.
11. Biomaterial science as it relates to endodontics.
12. Collect, organize, analyze and interpret data from the medical and dental histories and clinical evaluation to determine their relationship to the patient’s endodontic treatment.
13. Perform tests and clinical examinations and interpret the significance of the data in the differential diagnosis of clinical conditions arising from injury to the pathosis of pulp and periradicular tissues.
14. Expose, process and interpret radiographs and/or take and interpret digital images.
15. Establish differential interpretations of lesions and normal anatomic structures through radiographs or digital images.
16. Formulate a diagnosis, prognosis, and treatment plan for conditions that require endodontic treatment in support of the total oral health of the patient, requesting information/consultation from other healthcare professionals as needed.

17. Provide appropriate emergency treatment to relieve pain and resolve infections of endodontic origin.
18. Recognize and manage, or prevent, endodontic pain and associated anxiety using physical, chemical and psychological modalities.
19. Provide nonsurgical and surgical endodontic treatment.
20. Retreat endodontically-treated teeth using both non-surgical and surgical techniques.
21. Evaluate the results of endodontic treatment and determine whether additional evaluation/treatment is required.
22. Provide space for intraradicular restorations and cores in endodontically treated teeth.
23. Communicate to patients the nature of their endodontic conditions and the value of treatment to their overall oral health.
24. Communicate with other health care professionals, interpreting their assessments and integrating this information into the treatment of the patient.
25. Provide vital pulp therapy.
26. Perform root-end closure procedures.
27. Evaluate, diagnose and manage traumatic injuries to teeth and their supporting structures.
28. Provide endodontic treatment for the medically compromised patient.
29. Develop a differential diagnosis of orofacial pain.
30. Diagnose and treat periodontal disease and defects in conjunction with the treatment of the specific tooth undergoing endodontic therapy; treatment should be provided in consultation with the individuals who will assume the responsibility for the completion or supervision of any additional periodontal maintenance or treatment.
31. Place intraradicular restorations and cores in endodontically treated teeth; when the patient is referred, this treatment is accomplished in consultation with the restorative dentist.
32. Perform non-surgical and surgical endodontic procedures using microscopy.
33. Perform intracoronal bleaching procedures.
34. The history of endodontics, teaching methodology, ethics.
35. Exposure to osseointegrated implants treatment planning and techniques for placement of implants, and orthodontic extrusion procedures.

Program Requirements

ENDO 5701	Endodontology 1	1-6
ENDO 5702	Endodontology 2	1-6
ENDO 5703	Endodontology 3	1-6
ENDO 5704	Endodontology 4	1-6
ENDO 5705	Endodontology 5	1-6
ENDO 5706	Endodontology 6	1-6
BMS 9701	Clinical Anatomy of Head and Neck	2
BIO-SCI 5740	Oral Pathology I	2
RES-ME 5700	Introduction To Research Methodology	2
BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology	2
RES-ME 5704	Introduction to Biostatistics	2
PERIO 5719	Implantology	2
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	2
BIO-SCI 5759	Special Problems in Pharmacology	2
BIO-SCI 5739	Biomaterials for the Dental Specialist	1

Graduation Requirements

1. Satisfactory completion of all clinical and basic science core courses as outlined for the endodontic curriculum.
2. Satisfactory completion of all endodontic courses and seminars.
3. Achievement of clinical competency in endodontics.
4. Grades of at least "B" in all basic and clinical sciences and endodontic courses. Courses that are audited will require 100% attendance and residents will be tested on course content during the annual endodontic oral and written examinations. Failure by any resident to meet the 100% attendance requirement for any audited courses will result in written and/or oral examinations in those courses at the discretion of the Program Director. Residents are entitled to due process in accordance with guidelines contained in the Student Handbook on Academic and Other Policies.
5. The goal for each resident is to complete at least 200 clinical endodontic cases. These cases will include, but not be limited to, the following: nonsurgical, surgical, retreatment, vital pulp treatment, apexification, trauma, medically compromised, endo-perio, restoration of endodontically treated teeth, and bleaching. The cases treated should include as many and as varied types of cases, in order to give the broadest exposure and experience necessary to graduate as the best qualified endodontist. A list of all cases will be maintained by the resident. The completed cases will be reviewed on a monthly and quarterly basis by the Program Director. An annual report of all cases is due July 1.

6. Preparation of a Capstone Portfolio. This portfolio of endodontic cases will showcase the resident's best work. It will be presented in the ABE Portfolio format, with ten cases selected according to the guidelines published by the ABE. Each case will include a self assessment, completed by the resident, of CODA standards demonstrated within the case. A copy will be retrained in the Graduate Endodontic Seminar Room for future reference.
7. Documented research. A suitable project approved by the Research Advisors and the Program Director, conduct of the research, collection of data, analysis of results, and preparation of a manuscript suitable for submission to a refereed journal must be completed before the conclusion of the program. If, for whatever reason, a waiver is granted by the Program Director for an extension of the submission deadline date, the resident may forfeit the right of first-authorship. A request to submit the research findings at the oral research presentations at the Annual Session of the AAE is required.
8. Attendance at all scheduled classes, seminars, clinics, and meetings is mandatory. Attendance is also required for all consultant lecturers established by the Program Director or the person he has delegated this responsibility. This may involve an occasional evening or weekend event. Absences will not be acceptable and will be reflected in a lowering of course grades on the semester evaluation report, and could result in additional assignments such as written literature review reports.

Graduate Certificate in Oral and Maxillofacial Surgery

Program Description:

Director:
Brett L. Ferguson, D.D.S., Diplomate, American Board of Oral and Maxillofacial Surgery (ABOMS)

Faculty:
John Bellome, D.D.S., Diplomate, ABOMS; Matthew Hlavacek, D.D.S., M.D., Diplomate, ABOMS; Perrin S. Jungbluth, D.D.S., M.D., Diplomate; Ronald McAmis, D.D.S., Diplomate, ABOMS; Steve Prstovich, D.D.S., M.D., Diplomate, ABOMS; Rudane E. Shultz, D.D.S., Diplomate, ABOMS

Stipend

First Year	$44,000
Second Year	$45,500
Third Year	$47,000
Fourth Year	$48,500
Fifth Year	$50,000
Sixth Year	$52,000

This six-year program, which begins in July, is open to applicants who have a doctoral degree in dentistry from an ADA-accredited dental school, and who are interested in completing both a medical degree and certificate of residency training in oral and maxillofacial surgery.

The program divides the training between the oral and maxillofacial surgery residency program and the curriculum of the School of Medicine. This program provides in-depth coverage of orthognathic surgery, reconstructive surgery, implant surgery, temporomandibular joint surgery, trauma, dento-alveolar surgery and anesthesia, as well as all required basic science and clinical medicine courses for the doctor of medicine degree. A thesis is not required; however, publication in peer-reviewed journals is a requirement of the training program.

An interdisciplinary Ph.D. program is offered through the School of Graduate Studies as an elective for qualified and interested program residents. This will require additional years of study and clinical experience, and will also require a thesis. Separate application to this program will be made after beginning the residency.

Openings are limited to two individuals each year, and new residents must be prepared to begin their training on July 1. Applicants accepted into this program must have the necessary training to obtain a permanent dental license in the state of Missouri prior to the start of their training. Residents are required to enroll in both the UMKC School of Dentistry and UMKC School of Medicine, depending on course and residency requirements being fulfilled in a given term. Appropriate fees from both schools are applicable.

To be considered for admission to the UMKC School of Medicine, one must be a United States citizen or be a permanent resident of the United States; if the applicant holds a permanent resident visa, a copy should be included in your application materials.

Interested applicants must apply through the Postdoctoral Application Support Services (PASS); this program also participates in the National Matching Services (MATCH). Use the link http://dentistry.umkc.edu/Future_Students/AdvancedEd.shtml for more details regarding additional information to be supplied by the applicant.

Deadline for receipt of application at the school is October 1 of the year prior to anticipated enrollment. A by-invitation interview is a required part of the application process.

Please note that score results of the MCAT examination *are not* a requirement of this program.

Questions about this program may be answered by contacting the program director's office at (816) 404-4356.

Student Learning Outcomes

Oral and Maxillofacial Surgery is the specialty of dentistry which includes the diagnosis, surgical and adjunctive treatment of diseases, injuries and defects involving both the functional and aesthetic aspects of the hard and soft tissues of the oral and maxillofacial regions. The following learning outcomes have been developed and adopted by the Commission on Dental Accreditation and the faculty in oral and maxillofacial surgery at the University of Missouri – Kansas City Schools of Dentistry and Medicine. The goals, skills, and knowledge every graduate must demonstrate to qualify for graduation are assessed through the classroom, the outpatient clinic, hospital/surgicenter operating rooms, mock Board exercises, seminars, presentations, and one-on-one discussions. Hospitals included are Children's Mercy Hospital, St. Luke's Hospital of Kansas City, Truman Medical Centers Hospital Hill and Lakewood.

The graduate in oral and maxillofacial surgery will demonstrate applied knowledge and clinical skills in the following areas:

1. Continuous certification in Basic Life Support, Advanced Cardiac Life Support, Advanced Trauma Life Support, and Pediatric Advanced Life Support.
2. Minimum duration of 72 months of full-time study with a minimum of 30 months devoted to clinical oral and maxillofacial surgery.
3. Six months of the senior year with responsibilities of Chief Resident.
4. Present patients in a pre- and post-operative format.
5. Maintenance of a surgical log.
6. Coursework and training as requirements for the medical degree at the University of Missouri – Kansas City School of Medicine, to include a general surgery residency preliminary year within the integrated MD/oral and maxillofacial surgery training program.
7. Minimum duration of four months of anesthesia to include mandated daily attendance, daily lectures, on-call participation, and an intended workload of approximately 250 general anesthesia cases.
8. Medical service will include a minimum of two months of clinical medical experience and will be at the medical student/resident intern level or higher and may include rotations on medical specialty services.
9. Surgical service will include a minimum of four months of general surgery experience and will be at the surgery student/resident with a commensurate level of responsibility (operate at a PGY-1 level or higher and is on the regular on-call schedule).
10. Two additional months of clinical surgical or medical education will be assigned.
11. Weekly departmental seminars and conferences to provide instruction in the broad scope of oral and maxillofacial surgery and related sciences and will include retrospective audits, clinical pathological conferences, tumor conferences, and guest lectures. The resident will prepare and present departmental conferences.
12. Instruction in the basic biomedical sciences will include anatomy (including growth and development), physiology, pharmacology, microbiology, and pathology. This instruction will be met through the completion of the requirements for the MD as well as the certificate in oral and maxillofacial surgery. Anatomy lectures will include surgical approaches to the maxillofacial region and graft donor sites.
13. A physical diagnosis program will be started upon entrance into the residency. This will include a structure, didactic, and clinical course in physical diagnosis and will be provided by faculty privileged to perform history/physical exams. Competency in physical diagnosis will be documented and will occur in the first year of the program.
14. Clinical oral and maxillofacial surgery will include a complete, progressively graduated sequence of outpatient, inpatient, and emergency room experiences. Exposure to major and minor surgical principles will be integrated throughout the duration of the program. Outpatient oral and maxillofacial surgery experiences will include the management of traumatic injuries and pathologic conditions, dentoalveolar surgery, the placement of implant devices, augmentations, and other hard and soft tissue surgery including mucogingival surgery.
15. Ambulatory general anesthesia and deep sedation will include both the general anesthesia rotation of four months and the outpatient surgery experience which includes general anesthesia/deep sedation on adult and pediatric patients. This includes competence in managing the airway. In addition, all residents will obtain training and experience in all aspects of parenteral and inhalation sedation techniques. Inpatient surgical experience will include admission and management of patients.
16. Major surgery will include surgery on adults and children to include trauma, pathology, orthognathic surgery, reconstructive, and aesthetic surgery. In the trauma category, surgical management of mandibular fractures, maxillary fractures, zygomaticomaxillary fractures, nasal fractures, naso frontal orbital ethmoidal fractures, and repair of facial, oral, soft tissue injuries, and injuries to specialized structures. Pathology will include treatment of sinus procedures, TMJ pathology, cystectomy of bone and soft tissue, sialolithotomy, sialoadenectomy, management of head/neck infections, fifth-nerve surgery, and surgical management of benign and malignant neoplasms. Orthognathic surgery will include correction of functional and aesthetic orofacial and craniofacial deformities of the mandible, maxilla, zygoma, and other facial bones. Reconstructive and aesthetic surgery will include bone grafting and soft tissue grafting and insertion of implants. This includes competence in harvesting of bone and soft tissue grafts. Reconstructive surgery will also include augmentation procedures, TMJ reconstruction, insertion of craniofacial implants, and management of continuity defects. Dental implant training will include didactic and clinical experience in the management of implant placement, diagnosis, treatment planning, site preparation, grafting procedures, implant placement, and management of complications. Aesthetic surgery will include rhinoplasty, scar revision, blepharoplasty, genioplasty, and lipectomy.
17. Medical school curriculum will include formal courses in biostatistics, human gross anatomy, human microscopic and developmental anatomy, human neuroanatomy, medical microbiology, general/clinical pathology, pharmacology, clinical pharmacology, behavioral science and medicine,

correlative medicine, docent rotation, psychiatry, obstetrics/gynecology, pediatrics, surgery, family medicine, emergency medicine, and continuing care clinic.

Program Overview

The Graduate Training Program in Oral and Maxillofacial Surgery at the University of Missouri-Kansas City offers two tracks: a 72-month (six-year) MD-integrated postdoctoral program and a 48-month (four-year) certificate program, both accredited by the Commission on Dental Accreditation of the American Dental Association.

Number of residents each year:

- Two (2) appointments for 6-year residency positions
- One (1) appointment for 4-year residency position

Number of one-year interns each year:

- Two (2) appointments for hospital-based positions
- Two (2) appointments for dental school-based positions

Curriculum & Objectives

1. **The Educational Program Objectives**:
   - To develop the skills of the resident through didactic preparation, clinical experience, and hospital training; to ultimately engender a state-of-the-art maxillofacial surgeon
   - To foster the attitude of continued scientific inquiry, intellectual aspirations, and pursuit of excellence for the remainder of the individual's career
   - To develop a profound sense of responsibility to the academic community, and to one's patients
   - To share one's education, training and experience through participation in scientific meetings and through publications
2. **Acquired competencies**:
   a. diagnosis and surgical management of:
      i soft and hard tissue diseases of the oral cavity, head and neck
      ii precancerous lesions, benign and malignant neoplasms of the head and neck
      iii cranio-maxillo-facial trauma and post-traumatic reconstruction
      iv congenital and acquired cranio-maxillo-facial deformities with post-reconstructive rehabilitation
      v temporomandibular joint disorders
      vi life-threatening emergencies
   b. intravenous sedation and intubated general anesthesia
3. **These broad objectives are realized by specialty courses,** daily contact with the teaching staff, interactions with patients, requirements for scientific publications, and research.
4. **The program's objectives and academic plan** are reviewed on a continuing basis, and are modified as necessary to expand and enhance the learning experience. Faculty of both the University of Missouri-Kansas City School of Dentistry and Medicine participate in curriculum/program review.

Clinical Experience

The UMKC School of Dentistry, Truman Medical Center, Children's Mercy Hospital, Saint Lukes Hospital are the various sites employed for surgical clinical experience. Thirty-three (33) months are devoted to clinical oral and maxillofacial surgery. There is a comprehensive didactic curriculum consisting of weekly seminars, clinical pathologic conferences, morbidity reviews, case reviews, oral pathology seminars, trauma conferences, surgical-orthodontic conferences, journal club, medical decision making course and head and neck tumor board.

Didactic Activity

Literature review is mandatory; residents are required to regularly review textbooks, monthly issues of the Journal of Oral and Maxillofacial Surgery, and monitor all pertinent journals and articles to maintain a contemporary knowledge of maxillofacial surgery attendance at minimum of two scientific conferences annually is required preparation and submission for publication of at least two scientific manuscripts mandatory attendance at the annual Oral and Maxillofacial Surgery Test – a comprehensive 400 multiple choice question test, prepared by the American Board of Oral and Maxillofacial Surgery.

Resident Responsibilities, by Level of Training

The first-year resident spends the seven (7) months of his or her time on the oral and maxillofacial surgery service between the Truman Medical Center and the Children's Mercy Hospital. Remaining five (five) months are dedicated to anesthesia service at the Truman Medical Center. The resident works closely with the senior residents, providing both inpatient and outpatient care. The resident has primary responsibility for examining, diagnosing, and

treating patients in the outpatient clinic. The resident also assumes responsibility for inpatients under the supervision of the chief resident, and assists the chief resident and staff with operating room cases. First-year residents enrolled in the MD-integrated curriculum are required to pass the USMLE part 1 exam.

The second-year and third-year resident spends all of his or her time at the UMKC School of Medicine fulfilling the core rotation requirements, leading to MD degree.

The fourth-year resident spends his or her time functioning as General Surgery PGY-1 intern, rotating through trauma surgery, ENT, Plastics, Neurosurgery, Surgical Critical Care, and Maxillofacial Surgery.

The fifth-year resident functions as a Senior Resident and spends most of his or her time on the oral and maxillofacial surgery service assisting the Chief Resident in the operating room. One (1) month is spent at the Children's Mercy Hospital on the plastic and craniofacial surgery service and up to two (two) months on the pediatric anesthesiology service.

The sixth-year resident spends his or her time functioning as a Chief OMS resident, assuming the responsibility for the overall function of the Oral and Maxillofacial Service. The resident is expected to be the primary operating surgeon on all major cases. Up to two (2) months are spent in private practice setting with fellowship-trained OMS part-time attendings.

Senior and Chief Residents alternate to cover the Implantology clinic at the UMKC School of Dentistry.

Graduate Certificate in Orthodontics and Dentofacial Orthopedics

Program Description:

Director:
Jeff Nickel, D.M.D., MSc, Ph.D.

Faculty:
Laura Iwasaki, D.D.S., MSc, Ph.D., Leo Rogers Chair; Don Thompson, D.D.S., M.S.D, Co-Clinic Director; James Osborne, D.D.S., Co-Clinic Director; Steve Billings, D.D.S.; Dustin Burleson, D.D.S.; Frank Crist, D.D.S., M.S.; Vance Dykhouse, D.D.S., M.S.; Scott Hamilton, D.D.S., M.S.D.; Kurt Hoffman, D.D.S.; Mike Klein, D.D.S.; Steve Malmstrom, D.D.S.; Kurt Muehlebach, D.D.S.; Ingrid Reed, D.D.S., M.S.; Brad Smith, D.D.S.; Jeff Thompson, D.D.S., M.S.; Cameron Walker D.D.S., M.S., Ph.D.; Don Wilson, D.D.S.; Hiroshi Kurusaka, D.D.S., Ph.D..

Program Overview

The advanced education program in orthodontics and dentofacial orthopedics has existed since 1946. UMKC Orthodontics Alumni are located in many states and some foreign countries.

This is a full-time, 30 month program that begins in July. It is designed to prepare the student for community practice of orthodontics and dentofacial orthopedics. Curriculum emphasis is placed on the edgewise technique and on interceptive and functional treatment. Management of craniofacial anomalies is taught didactically and clinically in association with the craniofacial team at Children's Mercy Hospital. Objective inquiry and statistical validation are emphasized in all aspects of this program. Completion of an original research project and paper is required. The computerized clinic facility is a working-research model that simulates the private practice environment. Courses, clinics, and dedicated research time are organized to facilitate the completion of an M.S. or Ph.D. degree in oral and craniofacial sciences. A separate application is required for the M.S. or Ph.D. program.

Application and Acceptance

Applications are considered from the following groups:

- Fourth-year dental students from American Dental Association (ADA) or Canadian Dental Association (CDA) Accredited schools who are in the top 50 percent of their graduating class.
- Graduates of ADA or CDA accredited dental schools who ranked in the top 50 percent of their graduating classes and have satisfactorily completed a general practice residency or other dental specialty program prior to application.
- Graduates of a School of Dentistry who ranked in the top 50 percent of their class and has been in general practices.

Selection of candidates is a twofold process. First, candidates are stratified on the basis of academic and professional performance: national board scores, GRE scores, class standing, other specialty program, practice experience, leadership roles in organized dental groups, dental school teaching, research experience and recommendations are considered.

Secondly, applicants meeting screening criteria are invited for interviews. All interviews are conducted at the School of Dentistry on the same day and all invited candidates must attend this session to be eligible for final selection into the class. If offered a position in a class, this offer, like all offers from the University, is contingent upon a successful background screening. In order to begin the background screening, you must complete a Disclosure form and return it to Human Resources within two business days. Three residents are accepted into this program annually.

Application for admission **MUST** be through the ADEA PASS program and completed on or before September 1st of the year prior to planned enrollment. For more information, check the website http://dentistry.umkc.edu/patient_information/orthdentorthopedics.shtml or the Information Bulletin (http://dentistry.umkc.edu/asset/gradortho.pdf). (http://tempuri.org/tempuri.html) Each will provide information on the Graduate orthodontic Program.

Stipend

Orthodontic residents will receive a stipend of $20,000 per year during Program Year 1 and Year 2, and $10,000 for the last six months of the program.[1]

[1]Available to eligible program residents (i.e., those who have earned a D.D.S./D.M.D. degree from an American Dental Association or Canadian Dental Association accredited program).

Tuition and Fees

Estimated tuition costs may be found in the fees section of this catalog. There are additional fees for books, laptop computer and required meeting attendance associated with this program.

Instruments

Residents are required to pay an "instrument usage" fee to the school. All instruments are provided and are maintained by the Central Sterilization program of the school.

Financial Assistance

Up-to-date information on additional financial assistance may be found in the school financial aids charts at http://www.sfa.umkc.edu/.

Student Learning Outcomes

Residents enrolled in the Orthodontics and Dentofacial Orthopedics Advanced Education Program must complete the following requirements:

1. Complete a 30 month program of clinical training, didactic course work, and undergraduate teaching.
2. Complete a hypothesis driven research project and produce one of the following: an MS thesis which meets the requirements of the UMKC School of Graduate Studies; or a manuscript for submission to a scientific journal accessible through PUBMED®.
3. Maintain a 3.0 GPA for 39 credit hours of core curriculum (see below).
4. Meet Student Learning Outcomes of the Orthodontics and Dentofacial Orthopedics section of the UMKC School of Dentistry.
5. Take the Phase II examination of the American Board of Orthodontics during the second year of residency.

Program Requirements

The following learning outcomes have been developed and adopted by the faculty. These goals, skills and knowledge every graduate must demonstrate to qualify for graduation. The Department of Orthodontics and Dentofacial Orthopedics require these outcomes be assessed in the classroom, the laboratory, and through treatment of clinical cases over the 30-month program. Their competencies are assessed through examinations, presentations of papers, and clinical treatment comprehensive examinations.

1. Demonstrate a commitment to learning, professionalism, societal responsibility, and contributing to generalizable knowledge through research
2. Demonstrate a commitment to the addressing the concerns of patients and the delivery of quality care.
3. Demonstrate the level of proficiency expected of an orthodontic specialist in the areas of diagnosis, treatment planning, and analysis of treatment outcomes.

Required Core Curriculum

BIO-SCI 5706	Growth and Development I	1
BIO-SCI 5707	Growth and Development II	1
ORTHOD 5726	Cephalometric I	2
ORTHOD 5727	Cephalometric II	2
ORTHOD 5704	Orthodontics And Dentofacial Orthopedics I	1
ORTHOD 5705	Orthodontic and Dentofacial Orthopedics II	1
ORTHOD 5706	Orthodontics and Dentofacial Orthopedics III	1
ORTHOD 5707	Orthodontics and Dentofacial Orthopedics Iv	1
ORTHOD 5708	Orthodontic and Dentofacial Orthopedics V	2
ORTHOD 5709	Orthodontic and Dentofacial Orthopedics Vi	1
ORTHOD 5710	Orthodontic and Dentofacial Orthopedics Vii	2
ORTHOD 5711	Orthodontics and Dentofacial Orthopedics Viii	2
BIO-SCI 5739	Biomaterials for the Dental Specialist	1

BIO-SCI 5740	Oral Pathology I	2
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	2
BMS 9701	Clinical Anatomy of Head and Neck	2
RES-ME 5700	Introduction To Research Methodology	2
RES-ME 5704	Introduction to Biostatistics	3
BIO-SCI 5751	Elements of the Scientific Method	1
BIO-SCI 5752	Research Methods in Oral and Craniofacial Sciences	2
BIO-SCI 5799	Research And Thesis	6
RES-ME 5703	Thesis Writing	1
Total Credits		39

Graduate Certificate in Periodontics

Program Description:

Director:
Keerthana Satheesh, B.D.S., D.D.S, M.S., Diplomate, American Board of Periodontology

Faculty:
John W. Rapley, D.D.S., M.S., Department Chair, Diplomate, American Board of Periodontology; Charles M. Cobb, D.D.S., M.S., Ph.D., Diplomate, American Board of Periodontology; Nancy Newhouse, D.D.S., M.S., Diplomate, American Board of Periodontology; Mark Edwards, D.D.S.Diplomate, American Board of Periodontology; Simon R. MacNeill, B.D.S., D.D.S., Diplomate, American Board of Periodontology; David May, D.D.S., Diplomate, American Board of Periodontology; Mabel Salas, D.D.S., M.S., Diplomate, American Board of Periodontology; Richard Gillman D.D.S., M.S.; Laura Brown D.D.S., M.S., Diplomate, American Board of Periodontology

Program Overview

The periodontic postgraduate program is designed to prepare a dentist for a career in clinical periodontics, research and teaching. It enables the resident to acquire a depth of understanding in oral biology; to become acquainted with the problems in the biology and pathology of oral tissues, and to adequately treat these problems with the most current knowledge and techniques. Program students will be encouraged to use interdisciplinary approaches in the solution of research and clinical problems. The program is designed to provide for the profession and the community, competent bio-clinicians who will become key professionals in clinical practice, research, and teaching. Didactic and clinical training will also be conducted in other related areas within the scope of practice of the field of periodontics as established by the Periodontic Standards of the Council on Dental Accreditation. The correlation of basic sciences and clinical sciences is an integral part of the program. A research project is required and comprehensive examinations must be successfully completed. Original research leading to the Master of Science is possible. Admission into the M.S. program requires a separate application, and the student will apply for admission following successful enrollment into the periodontic program. Meeting all eligibility criteria of the M.S. program is necessary for acceptance into the periodontics program. The program is also designed to prepare the graduate periodontist to challenge the requirements for certification as a diplomate by the American Board of Periodontology. Individuals who successfully complete this advanced education program will be awarded a Certificate in Periodontics.

Eligibility

An applicant for this program must be a citizen of the United States or a foreign national having a visa permitting permanent residence in the United States. Applicants must also submit evidence of graduation from a school of dentistry accredited by the Commission on Dental Accreditation or the Canadian Dental Accrediting Commission, or verification from the dean of an accredited dental school that the applicant will graduate during the current academic year.

Program Duration

The 30-month program covers eight continuous semesters and begins on July 1.

Number of Residents

Two students are accepted into the program each year.

General Applicant Information

Application to this program is through the ADEA Postdoctoral Application Support Services (PASS). The deadline for receipt of application at the school is **August 15th** of the year prior to planned enrollment.

All applicants are required to submit the Institutional Evaluation AND Personal Potential Index (PPI) as part of their completed PASS application. A minimum of three professional evaluators (dental faculty) are required to submit evaluations for the PPI. Applicants must also submit GRE scores.

Scores should be self-reported on the PASS application; official GRE scores should be submitted to directly to UMKC (GRE code is 6872.) Detailed application information is available at http://dentistry.umkc.edu/Future_Students/index.shtml

Selection is based on academic standing in dental school (grade-point average, class standing and National Board scores) and experience (years in practice, teaching or research, advanced training or degrees, publications, activity in organized dentistry and participation in continuing education).

Stipend

Periodontic residents will receive a stipend of $20,000 per year during Program Year 1 and Year 2, and $10,000 for the last six months of the program.

Tuition and Fees

Estimated school tuition can be obtained at the Advanced Education Enrollment Fees section of this catalog. If selected for the program there is a $500 nonrefundable acceptance fee which must be paid within two days of the time of acceptance of the position. More information will be provided to the applicant once he/she is accepted into the program.

Instruments and Equipment

Residents are required to lease their dental instruments through the Infection Control Instrument Management System of the School, and will also be required to purchase some additional equipment including a clinical camera.

Financial Assistance

Up-to-date additional information on financial assistance can be obtained at http://www.sfa.umkc.edu/.

Interview

Competitive applicants will be invited to Kansas City for an interview with the program director and other selected faculty and staff. If invited, the interview is a required part of the application process and funding is the responsibility of the applicant.

Accreditation

The program in periodontics is fully accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-2500 or at 211 East Chicago Avenue, Chicago, IL 60611. Their website is: http://www.ada.org.

Study Areas

Residents have a dedicated office space with computer and printer support connected to a high-speed LAN. The program also has a dedicated seminar room for literature reviews, case presentation, lectures, etc.

Point of Contact

To request further information, contact the Office of Student Programs at (816) 235-**2080** or dds@umkc.edu; or the program director, Dr. Keerthana Satheesh, at (816) 235-2075 or satheeshk@umkc.edu.

Student Learning Outcomes

The following learning outcomes have been developed and adopted by the faculty. These goals, skills, and knowledge must be demonstrated by every graduate to qualify for graduation. The Department of Periodontics assess these outcomes in the classroom, the laboratory, and through treatment of clinical cases over the length of the program, using examinations, presentation of papers, and review of clinical treatment.

The competencies expected of a graduate are:

- Have an understanding of the biology and pathology of the periodontium.
- Be soundly based in the interpretation of the dental literature in periodontics.
- Be clinically competent to conceptualize, rationalize and defend periodontal therapy in advanced cases. In addition, he/she should be aware of and have performed current therapeutically accepted periodontal modalities.
- Be innovative and logically reason using prior biological information.
- Be worthy of the title "Specialist".
- Be able to communicate, motivate and educate patients and general dentists on their level.
- Believe in the necessity of continuing education and self-enrichment.
- Assume leadership in the advancement of periodontics in his/her community. He/she also should be active in the American Academy of Periodontology.
- Be able to demonstrate an organizational ability to collect and present data.
- Be able to interpret the collected data and subsequently to diagnose, prognosticate and develop a Comprehensive Treatment Plan.

- Be able to evaluate, critically, the results of therapy.
- Be able to demonstrate his/her ability to perform all the above activities in a professional manner.
- Design, conduct and present a research project. Each research project must be written in a format suitable for publication.

Program Requirements

Residents enrolled in the Periodontics Advanced Education Program must complete the following requirements:

1. Graduate students, regardless of classification, must maintain a 3.0 (B) grade point average for all course work taken for graduate credit at UMKC.
2. Graduate students must maintain a 3.0 (B) grade point average in their graduate level specialty course work.
3. Grades in specialty area course work must be B or better. Any specialty area course that is graded below B must be repeated.

Required Core Curriculum

PERIO 5701	Periodontal Residency I	1-6
PERIO 5702	Periodontal Residency II	1-6
PERIO 5703	Periodontal Residency III	1-6
PERIO 5704	Periodontal Residency IV	1-6
PERIO 5705	Periodontal Residency V	1-6
PERIO 5706	Periodontal Residency VI	1-6
PERIO 5707	Periodontal Residency VII	1-6
PERIO 5708	Periodontal Residency VIII	1-6
PERIO 5709	Periodontal Residency IX	1-6
PERIO 5719	Implantology	2
BMS 9701	Clinical Anatomy of Head and Neck	2
BIO-SCI 5740	Oral Pathology I	2
RES-ME 5700	Introduction To Research Methodology	2
BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology	2
RES-ME 5704	Introduction to Biostatistics	2
BIO-SCI 5805	Molecular Biology of Oral Microflora	2
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	2
BIO-SCI 5759	Special Problems in Pharmacology	2
BIO-SCI 5802	Immunopathology	2

Dental Hygiene Division

Dental School (http://www.umkc.edu/virtualtour/sod.asp), Room 415
(816) 235-**2050**

About the Undergraduate Dental Hygiene Program

Dental hygiene is a rapidly growing and increasingly dynamic allied health profession for qualified persons who wish to participate as active members of a health field. Service to mankind is the primary purpose of health professions. The dental hygienist with a baccalaureate degree accomplishes this objective through a variety of challenging and rewarding opportunities.

There is informal evidence that a nine-month dental hygiene program existed at UMKC (then the Kansas City Western Dental College) in 1922-23, as did a one-year program during the ’30s. However, concrete documentation indicates that the official program began in 1952.

The program in dental hygiene is accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and the U.S. Department of Education.

The student at UMKC can earn a bachelor of science degree in dental hygiene in two ways. The first alternative offers an opportunity for the student who has completed two academic years of liberal arts pre-requisites at any accredited community/junior college, college or university to matriculate into the entry level clinical dental hygiene program. The second alternative provides for the licensed dental hygienist with a certificate or associate degree an opportunity to earn a baccalaureate degree (degree completion).

Undergraduate

The Division of Dental Hygiene at the UMKC School of Dentistry offers two routes to a Bachelor of Science degree in Dental Hygiene: The B.S. Clinical Entry-Level program and the B.S. Degree Completion program. The following competencies have been adopted by the faculty in the Division of Dental

Hygiene as the skills, knowledge and values every graduate must be able to consistently and independently demonstrate to qualify for graduation. The School of Dentistry, Division of Dental Hygiene assessment plan calls for theses competencies to be assessed throughout the classroom, laboratory and patient care experiences during the student's tenure in the program in the form of papers, case study presentations, student portfolios, clinical competency examinations, community assessment and other appropriate assessment measures.

- Bachelor of Science in Dental Hygiene
- General Education Requirements
- Student Learning Outcomes
- Entry Level Program
  - Admission Requirements
  - Program Requirements
- Degree Completion Program
  - Admission Degree Completion Program (p. 387)
  - Program Requirements (p. 387)

Graduate/Professional

Director:
Tanya V. Mitchell, R.D.H., M.S.

About the Program

The Master of Science Degree program in Dental Hygiene Education at the University of Missouri - Kansas City (UMKC) prepares students for careers in dental hygiene education. The 36 credit hour graduate program and core curriculum is offered through a combination of distance and onsite teaching and learning modalities. Out of state students who complete coursework on a part-time basis are eligible for in-state tuition. To be eligible for this, the student must enroll in no more than 6 credit hours in the fall and spring semestersa and no more than 3 credit hours in the summer.

The curriculum provides academic experiences based on the career goals and interest of the graduate student. Although the curriculum is focused on preparing the student for a career in dental hygiene education, elective courses may be taken in research, gerontology, special patient care, health services administration, and community dental health, through a personalized approach – pursuing excellence together.

The graduate program has a thesis or non-thesis option. The completion of a thesis or non -thesis research project (manuscript ready for publication) is required as part of the graduate student's academic program. The core curriculum is completed online with the exception of two (3 credit hour) courses - Research Methodology and Biostatistics/ Statistics. These must be taken and transferred in from an accredited institution. However, these two courses are offered onsite at UMKC SOD. Full time students are required to attend a minimum of two academic years.

- Requirements for Admission
- Tuition and Fees Schedule
- Scholarships
- Program Goals (p. 393)
- Vision Statement (p. 393)
- Mission Statement (p. 393)
- Student Learning Outcomes
- Program and Graduation Requirements
- Other Requirement (p. 395)**s**

Faculty

Director, Division of Dental Hygiene:
Kimberly S. Bray, R.D.H., M.S.

Bachelor of Science in Dental Hygiene

Dental School (http://www.umkc.edu/virtualtour/sod.asp), Room 415
(816) 235-**2050**

About the Undergraduate Dental Hygiene Program

Dental hygiene is a rapidly growing and increasingly dynamic allied health profession for qualified persons who wish to participate as active members of a health field. Service to mankind is the primary purpose of health professions. The dental hygienist with a baccalaureate degree accomplishes this objective through a variety of challenging and rewarding opportunities.

There is informal evidence that a nine-month dental hygiene program existed at UMKC (then the Kansas City Western Dental College) in 1922-23, as did a one-year program during the ’30s. However, concrete documentation indicates that the official program began in 1952.

The program in dental hygiene is accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and the U.S. Department of Education.

The student at UMKC can earn a bachelor of science degree in dental hygiene in two ways. The first alternative offers an opportunity for the student who has completed two academic years of liberal arts pre-requisites at any accredited community/junior college, college or university to matriculate into the entry level clinical dental hygiene program. The second alternative provides for the licensed dental hygienist with a certificate or associate degree an opportunity to earn a baccalaureate degree (degree completion).

Academic Standards

Professional education in the health sciences manifests characteristics that are distinct from other advanced educational programs. Academic standards of the School of Dentistry are established to ensure that the public, whose health will be entrusted to graduates of the school’s programs, will receive care of professionally acceptable quality and that the care will be provided in an ethical and professional manner. The School’s Academic Requirements are described in the following two sets of standards, one for scholarly achievement and one for professional conduct, located in the Student Handbook.

Attendance

Regular attendance at all classes and clinical sessions is required during the professional program. The student is responsible for familiarization with all classroom and clinical requirements and assignments.

Scholastic Honesty

The Division of Dental Hygiene assumes all students are enrolled to learn. Any cheating is contradictory to the purposes of students and this institution. Any dishonesty detected in a course (including during examinations or in submitting plagiarized material) may result in an F grade in the course, and may be cause for dismissal or suspension from the Division of Dental Hygiene.

Repeated Courses

A dental hygiene student who wishes to repeat a course must submit a course repeat form to the UMKC Registration Office no later than the end of the fourth week of the term if that repeat is to be included in GPA calculations. Students who are repeating a course must have prior approval of the director of the Division of Dental Hygiene.

Advanced Placement

The general examination offered by the College Level Examination Program (CLEP) will not be accepted for degree credit. However, credit received through specific or subject examinations will apply toward a bachelor of science degree in dental hygiene. Although hours of credit may be received in natural sciences, it is preferred that an applicant to the dental hygiene program complete the specific science prerequisites.

For more information regarding admission to either the clinical entry level or degree completion program in dental hygiene, contact the Division of Dental Hygiene.

Admission Requirements

Students must complete the required writing intensive courses within the dental hygiene curriculum with a grade of "C" or higher thereby meeting the WEPT requirement for BSDH candidates.

This clinical entry level program is for the individual who wants to go into the field of dental hygiene. The primary goals of the basic preparation bachelor of science degree program in dental hygiene are to prepare dental hygienists to perform competently in clinical practice and to perform competently in clinical practice and/ or community oral health program planning, clinical teaching, special patient care, practice management and research.

Admission to the Clinical Entry Level Program

Admission is on a selective basis and requires more than simply meeting certain course or GPA requirements. Factors considered in the selection process are the candidates’ academic credentials, letters of evaluation, a personal interview, motivation and all other information submitted by the candidates. Formal applications for admission to the dental hygiene program must be submitted no later than Feb. 1 of the year that the student desires admission. Classes formally begin each year at the end of August. Minimum requirements and credentials for application are all of the following:

1. Graduation from an accredited high school or its equivalent.
2. Satisfactory completion of approximately two academic years or 60 semester hours of college. (The 60 semester hours must satisfy the general education requirements, which are specified later in this section. All general education requirements must be completed prior to entrance into the dental hygiene program.)
3. Application to UMKC.

4. Supplemental application for admission to the Division of Dental Hygiene.
5. College transcripts of all college coursework.
6. A cumulative college GPA of at least 2.5.
7. A college science GPA of at least 2.5.
8. Three evaluation and reference forms.
9. Personal interview with at least two members of the Dental Hygiene Admissions Committee (interviews will be scheduled after February).
10. For international applicants, a satisfactory TOEFL score (at least 550 on the paper test or 213 on the computer-based version).

Notification of Admission

Applications for admission are reviewed by the School of Dentistry Dental Hygiene Student Admissions Committee. After a decision is reached on an application, notification of acceptance is made by mail. The applicant has 30 days from the date of the acceptance letter to make a required non-refundable $100 deposit. This deposit is applied to enrollment fees.

Several applicants are placed on an alternates list. In the event that a position becomes available, an applicant from this list is chosen to fill the vacancy. Alternates may be accepted through the first week of the program.

Admission to the Degree Completion Program

This program is designed for students who have completed an accredited dental hygiene program at another educational institution and desire to continue their education toward a baccalaureate degree.

Formal applications for admission to this program must be submitted by Feb. 1 for the class beginning in August of each year. The program may be completed on a full- or part-time basis. Basic requirements and credentials for admission are all of the following:

1. Graduation from an accredited dental hygiene program.
2. Results and successful completion of the National Board Examination for dental hygiene.
3. High school transcripts.
4. Complete college transcripts.
5. Satisfactory grade point average.
6. Application for admission to UMKC.
7. Supplemental application for admission to the Division of Dental Hygiene.
8. Three reference forms (including one from the director of the accredited dental hygiene program attended).
9. An interview with the admissions committee
10. An admissions narrative

Degree Completion Program Requirements

Student Learning Outcomes

The following competencies have been adopted by the faculty to assure our RDH to BSDH graduates are adequately prepared to succeed in the dynamic job market of their chosen area of expertise. The assessment plan provides direct and indirect measures of these competencies through exit interview, portfolio, California critical thinking skills test, Information Competency exam, and publication rate.

The competencies expected of a graduate are:

1. Students will demonstrate effective communication and interpersonal skills allowing them to communicate with diverse individuals and groups.
2. Students will demonstrate effective management of information technology.
3. Students will utilize critical thinking and problem-solving skills to facilitate decision-making.
4. Students will demonstrate the ability to locate, evaluate, organize and use research materials from a broad range of sources to support the use of scholarly inquiry in the dental hygiene process of care.
5. Students will assume responsibility for professional actions and care based on ethical and professional behavior, accepted scientific theories and accepted standards of care.
6. Students will demonstrate the ability to manage themselves and others and work as a team member.

All students enrolled in the degree completion program must complete the general education requirements of the Division of Dental Hygiene prior to completion of the baccalaureate degree. Refer to the general education requirements stated under the description of the basic preparation program for a listing of those courses. Courses that the student has not completed will be included in the individual program of study for that student.

An individual program of study will be developed for each student depending on the number of college hours completed previously. The following courses are available through the Division of Dental Hygiene:

Core BSDHDC Curriculum

Required		
DENT-HYG 4130	Introduction to Instructional Technologies and Online Learning	1
DENT-HYG 4040	Foundations of Teaching	2
DENT-HYG 4110	Introduction to Research Methodologies	2
DENT-HYG 4500	Seminar on Issues in Higher Education for Health Professionals	3
DENT-HYG 4600	Evidence Based Decision Making in the Clinical Practice of Dental Hygiene	2
DENT-HYG 4620	Introduction to Educational Methodology	3
DENT-HYG 4150	Portfolio Capstone	1
Electives		
The following electives are also offered to fulfill the requirements of the degree completion program:		
DENT-HYG 4115	Practicing in the Dental Hygiene Public Health Safety Net	
DENT-HYG 4320	Special Patient Care Practicum	
DENT-HYG 4380	Research Practicum	
DENT-HYG 4630	Practicum in Dental Hygiene Administration	
DENT-HYG 4635	Practicum In Clinical Supervision	
DENT-HYG 4640	Student Teaching and Conference I	
DENT-HYG 4650	Student Teaching and Conference II	
DENT-HYG 4660	Independent Study in Dental Hygiene (Extended Care Permit)	
DENT-HYG 4680	Dental Hygiene Clinical Instruction I	
DENT-HYG 4685	Dental Hygiene Clinical Instruction II	
DENT-HYG 5595	Writing in Science	

The student must complete 30 credit hours in residence and have a minimum of 124 semester credit hours to earn a baccalaureate degree in dental hygiene. Electives may be taken in the School of Dentistry, College of Arts and Sciences, School of Education or Henry W. Bloch School of Business and Public Administration. The particular choice of study will be determined by each student in consultation with the director of the degree completion program.

“Candidates for all baccalaureate degrees must take the UMKC RooWriter writing assessment before they have completed 90 credit hours. Incoming transfer students with more than 90 credit hours must take the RooWriter by the end of their first semester of enrollment. Students may take the RooWriter at any time while enrolled at UMKC as a personal diagnostic, but it will only satisfy the undergraduate graduation requirement after a student has completed Discourse II (or equivalent).

Certain Colleges, Schools, Departments, Majors, Writing Intensive courses, etc. may also require the RooWriter to be taken multiple times, and some might further require a certain minimal level of achievement be attained for advancement. The RooWriter supports and is supported by the University-wide General Education requirements.

The RooWriter is offered any time online. Students should visit the RooWriter website for contact information, writing improvement resources, and other general information.”

Tools for Planning and Fulfilling Academic Requirements

UMKC’s Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student’s evaluation of progress and major “fit”. In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC’s Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student’s officially recorded (Office of Registration and Records) and “what if” plans of study. This evaluation is used to certify all graduation requirements.

Expenses and Financial Assistance

Expenses (Basic Preparation)

Approximate expenses for the basic preparation dental hygiene program are listed below. These do not include room and board, expenses for personal items or educational fees.

Instrument rental and supplies (entire program)	$4,075
Textbooks (entire program)	$2,663
Uniforms, lab coats, etc. (entire program)	$ 600
National, regional and state licensure fees	$1,500
Professional association fee	$90

Note: Fees are subject to change without notice. An advance deposit of $100 is required on admission to the program. This payment shall be credited to the student's educational fee upon enrollment. The fee is non-refundable except by special order of the dean of the School of Dentistry and as approved by the director of admissions.

Financial Assistance

In addition to the University's financial aid services, the UMKC Dental Hygienists' Alumni Association (UMKC DHAA) has several scholarship funds and grants for dental hygiene students who are in need of financial assistance and who qualify academically. For more information, see Scholarships and Awards.

General Education Requirements

Program Prerequisites

Students must complete the 30 hour General Education Core (www.umkc.edu/core (http://www.umkc.edu/core)). Alternatives to Anchor and Focus courses can be found at this site. In addition, program specific prerequisites must be met for a **minimum of 28 additional (58 total) semester hours** prior to entry. Student must meet the state requirement for study of U.S. and Missouri Constitutions. Credit will be granted for courses taken at other accredited institutions, which are substantially equivalent to those offered at the University of Missouri-Kansas City, **provided a grad of C or above was received.** Six credit hours of excess Focus coursework transferred from another institution satisfies each Anchor course.

Reasoning and Values		
DISC 100	Discourse I: Reasoning and Values (Speech and Writing)	3
Anchor I [GE]		3
Culture and Diversity		
DISC 200	Discourse II: Culture and Diversity (Writing and Speech)	3
Anchor II [GE]		3
Arts and Humanities (Focus A)		
One 3 credit hour course chosen from Focus A		3
Scientific Reasoning (Focus B)		
MATH 110	College Algebra	3
Human Values and Ethical Reasoning (Focus C)		
One 3 credit hour course satisfies Focus C & Constitution Requirement		3
Dental Hygiene Specific Prerequisites		
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
SOCIOL 101	Sociology: An Introduction	3
PSYCH 210	General Psychology	3
Biological and Physical Sciences		13-19
CHEM 211	General Chemistry I [GE]	4
CHEM 211L	Experimental General Chemistry I [GE]	1
LS-MCRB 112	Microbiology and Living	3
LS-ANATO 118	Introductory Anatomy	3
LS-PHYS 117	Human Physiology [GE]	3
(If taking a combined Anatomy & Physiology, it must be a sequence of two semesters.)		
Electives		15-21
One three credit hour course from Focus Elective		3
Remaining hours may come from Focus Areas A-D		12-18

GE UMKC General Education Core (http://www.umkc.edu/core/courses).

Job Opportunities

The major responsibilities of the dental hygienist are preventive in nature. In the private dental office, the dental hygienist may be responsible for providing patient education, exposing and processing dental radiographs, conducting head and neck examinations, as well as providing a thorough oral prophylaxis, non-surgical periodontal therapy, local anesthesia, diet analysis and other services as delegated by the licensed dentist. In some large offices the dental hygienist may serve as a manager of office procedures. Dental hygiene services vary from state to state according to the laws that govern the practice of dental hygiene.

In public health and community agencies, the dental hygienist is concerned with the oral health of the community being served. Major responsibilities may be assessing the oral health of a given population or developing and implementing a dental health program. In hospitals and nursing homes, the dental hygienist may function as a health educator, a clinician or a resource person. In other instances, hygienists are employed for clinical and descriptive research projects.

Although the majority of dental hygiene graduates are involved in private practice, the following practice settings may also be available:

- Federal, state and local health departments.
- Hospitals and nursing homes.
- School districts.
- Health maintenance organizations.
- Educational programs for dental, dental hygiene and dental assisting students.
- Private and public centers for pediatric, geriatric and other special needs groups.

Graduates can take advantage of the Dental School's job placement assistance service. The School of Dentistry's library maintains an extensive database of job opportunities in several states. Faculty members are available for job-placement counseling to assist graduates with placement decisions.

Licensure Examinations

To practice dental hygiene legally, the student must take and successfully pass a computer-based examination, the National Board Dental Hygiene Examination. This examination is administered to all dental hygiene students in the country. The student also must successfully complete a clinical examination and an examination on the dental laws of the desired state of licensure. After written and clinical examinations have been completed, the graduate may apply for licensure in any state. Additional information regarding these examinations and the licensure process is given during the dental hygiene program.

Professional Associations

The School of Dentistry encourages students to participate in professional association activities. Dental hygiene students are encouraged to join and participate actively in the Student American Dental Hygienists' Association, the UMKC Dental Hygienists' Alumni Association and the American Dental Education Association. Through participation in these associations, students can network with and become familiar with the professional opportunities and activities of area dental health professionals.

Program Requirements

Student Learning Outcomes

The Division of Dental Hygiene at the UMKC School of Dentistry offers two routes to a Bachelor of Science degree in Dental Hygiene: The B.S. Clinical Entry-Level program and the RDH to BSDH B.S. Degree Completion program. The following competencies have been adopted by the faculty in the Division of Dental Hygiene as the skills, knowledge and values every entry level graduate must be able to consistently and independently demonstrate to qualify for graduation. The School of Dentistry, Division of Dental Hygiene assessment plan calls for theses competencies to be assessed throughout the classroom, laboratory and patient care experiences during the student's tenure in the program in the form of papers, case study presentations, student portfolios, clinical competency examinations, community assessment and other appropriate assessment measures.

The UMKC dental hygiene graduate will be competent in:

- Core competence for ethical practice, adherence to regulations, evidence-based decision making, and self assessment.
- Assessing persons of all ages and stages of life in a diverse society.
- Treatment care planning and case presentation for persons of all ages/stages of life in a diverse society.
- Health education strategies for the prevention of disease and the promotion of health.
- Provision of preventive and therapeutic dental hygiene services for persons of all ages/stages of life.
- Health and safety provisions
- Management procedures (emergency management, communication, etc.)

- Community oral health strategies in a culturally diverse society.
- Utilization of information technology to assist in evidence-based decision making.

Program Requirements

The dental hygiene program begins in August of each year and continues for two academic years with a summer session between years. For more information, contact the program director.

Year I					
Fall	**Credits**	**Spring**	**Credits**	**Summer**	**Credits**
BMS 9701	2	DENT-HYG 3030	2	DENT-HYG 4020	3
DENT-HYG 3000	2	DENT-HYG 3200	2	DENT-HYG 4060C	2
DENT-HYG 3020	2	DENT-HYG 3210	2	DENT-HYG 4065	1
DENT-HYG 3080	4	DENT-HYG 3220	2		
DENT-HYG 3080L	2	DENT-HYG 3280C	3		
DENT-HYG 3320	3	DENT-HYG 3285	2		
LS-PHYS 3070	3	DENT-HYG 3260	3		
		DENT-HYG 3300	0.5		
		DENT-HYG 3340	2		
	18		**18.5**		**6**
Year II					
Fall	**Credits**	**Spring**	**Credits**		
DENT-HYG 4050	2	DENT-HYG 4210	3		
DENT-HYG 4080	2	DENT-HYG 4240	1		
DENT-HYG 4100	3	DENT-HYG 4260	2		
DENT-HYG 4120	2	DENT-HYG 4260C	4		
DENT-HYG 4120C	4	Elective[1]	2-3		
DENT-HYG 4220	2				
DENT-HYG 4400	3				
	18		**12-13**		

Total Credits: 72.5-73.5

[1] Electives (Select One): DENT-HYG 4320, DENT-HYG 4330, DENT-HYG 4340, DENT-HYG 4350, DENT-HYG 4380, DENT-HYG 4660.

A minimum of 124 semester hours is required for a bachelor's degree in dental hygiene.

"Candidates for all baccalaureate degrees must take the UMKC RooWriter writing assessment before they have completed 90 credit hours. Incoming transfer students with more than 90 credit hours must take the RooWriter by the end of their first semester of enrollment. Students may take the RooWriter at any time while enrolled at UMKC as a personal diagnostic, but it will only satisfy the undergraduate graduation requirement after a student has completed Discourse II (or equivalent).

Certain Colleges, Schools, Departments, Majors, Writing Intensive courses, etc. may also require the RooWriter to be taken multiple times, and some might further require a certain minimal level of achievement be attained for advancement. The RooWriter supports and is supported by the University-wide General Education requirements.

The RooWriter is offered any time online. Students should visit the RooWriter website for contact information, writing improvement resources, and other general information."

The Division of Dental Hygiene reserves the privilege of making changes and improvements in course sequence and content to assure the best dental hygiene education for its students.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Scholarships and Awards

In addition to the University and federal financial aid opportunities, the Division of Dental Hygiene has numerous scholarship sources available to dental hygiene students. Students must meet financial and academic qualifications. Contact the division for more information. The Free Application for Student Aid (FAFSA) is required for application for Division scholarships. The Division will provide scholarship information to admitted and enrolled students.

During the last semester of the program, dental hygiene students who have distinguished themselves are eligible to be selected from the graduating class to become members of Sigma Phi Alpha, a national dental hygiene honor society. Students who receive this honor exhibit outstanding character and leadership during the professional program.

The Greater Kansas City Dental Hygienists' Association sponsors a Community Service Award; the Missouri Dental Hygienists' Association sponsors the Outstanding Dental Hygiene Graduate Award; and the UMKC Dental Hygienists' Alumni Association sponsors the Outstanding Clinician Award. These awards are presented annually to graduating seniors.

Master of Science: Dental Hygiene Education

Director:
Tanya V. Mitchell, R.D.H., M.S.

About the Program

The Master of Science Degree program in Dental Hygiene Education at the University of Missouri - Kansas City (UMKC) prepares students for careers in dental hygiene education. The 36 credit hour graduate program and core curriculum is offered through a combination of distance and onsite teaching and learning modalities. Out of state students who complete coursework on a part-time basis are eligible for in-state tuition. To be eligible for this, the student must enroll in no more than 6 credit hours in the fall and spring semestersa and no more than 3 credit hours in the summer.

The curriculum provides academic experiences based on the career goals and interest of the graduate student. Although the curriculum is focused on preparing the student for a career in dental hygiene education, elective courses may be taken in research, gerontology, special patient care, health services administration, and community dental health, through a personalized approach – pursuing excellence together.

The graduate program has a thesis or non-thesis option. The completion of a thesis or non -thesis research project (manuscript ready for publication) is required as part of the graduate student's academic program. The core curriculum is completed online with the exception of two (3 credit hour) courses - Research Methodology and Biostatistics/ Statistics. These must be taken and transferred in from an accredited institution. However, these two courses are offered onsite at UMKC SOD. Full time students are required to attend a minimum of two academic years.

- Requirements for Admission
- Tuition and Fees Schedule
- Scholarships
- Program Goals (p. 393)
- Vision Statement (p. 393)
- Mission Statement (p. 393)
- Graduate Dental Hygiene Core Competencies (p. 393)
- Program and Graduation Requirements
- Other Requirement (p. 395)**s**

Requirements for Admission

Graduation from an accredited school or program of dental hygiene, a baccalaureate degree from an accredited college or university, and a satisfactory academic undergraduate record are required. The deadline for application is Feb. 1 for the class beginning the following Fall semester. An interview is a required component of the admissions process. Interviews are granted to candidates for this program by invitation only. Application forms and

information may be obtained from the Director, Graduate Dental Hygiene Education, Division of Dental Hygiene, at the address at the beginning of this section. (http://cat-edit.umkc.edu/~/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=99&topicgroupid=55941) Enrollment is limited.

Questions about this program may be answered by contacting the program director's office at (816) 235-2049 or villalpandot@umkc.edu.

Completed applications **must be submitted to the Director of Graduate Dental Hygiene Education at the above address** by Feb. 1 for the class beginning in the Fall semester of the same year. The required application materials must include:

1. UMKC application for admission.
2. Supplemental application for admission.
3. Narrative statement.
4. Official transcripts of all previous academic work.
5. Three completed recommendation forms (including one from the director of the dental hygiene program attended).

Tuition and Fees Schedule

Master of Science Degree Program in Dental Hygiene Education

Tuition and Fees (http://dentistry.umkc.edu/Future_Students/asset/pdfs/TuitionScheduleMasterdentalhygiene2013-2014.pdf)

Scholarships

Please see the UMKC Master of Science in Dental Hygiene Education website located at http://dentistry.umkc.edu/Future_Students/DHMasterScience.shtml for a full list of scholarships available.

Program Goals

Career Opportunities

The program will prepare the student to assume roles in a variety of employment opportunities including education, research, and administration

Research

The program will provide the foundational skills necessary to contribute to the body of knowledge in dental hygiene research

Lifelong Learning

The program will foster the skills of reflective thinking, problem-solving, scholarly inquiry, and evidence-based decision making in an effort to promote lifetime learning.

Vision Statement

The UMKC School of Dentistry Graduate Dental Hygiene Program will serve as a model dental hygiene graduate program that increases the education of the dental hygienist unrelated to geographic location.

Mission Statement

The UMKC School of Dentistry Graduate Dental Hygiene Program provides a comprehensive education of both theory and practical applications and prepares the dental hygienist to assume a variety of employment opportunities where advanced communication skills, critical thinking, problem-solving, evidence-based decision making, and lifelong learning are needed.

Graduate Dental Hygiene Core Competencies

Graduate DH Core Competencies

The Graduate Dental Hygiene Program at the University of Missouri – Kansas City School of Dentistry builds upon the foundation of the baccalaureate degree dental hygienist. The program provides a variety of coursework to ensure the framework necessary to obtain employment in education, research, or administration. Upon completion of the 36 credit hours necessary for graduation, the student will be able to do the following:

1. **Our graduates will be prepared to conduct original and scholarly research projects** (G:1,2,3).
   - Apply the research process to an identified problem using the National Dental Hygiene Research Agenda as a guide.
   - Synthesize information from evidence-based literature to apply a research problem.
   - Apply the (scientific) research process to an identified problem.
   - Develop a research proposal, obtain IRB approval, grant monies if needed, and report findings in a manuscript format ready for submission to a peer-reviewed journal.
   - Discuss research findings with peers, faculty, and other allied health professionals.
   - Demonstrate effective and professional written, oral, and electronic communication skills.
   - Design and disseminate to other professionals appropriate to your area of research a scholarly presentation at a regional, state, or national conference with other health professionals.
2. **Our graduates will utilize information technology to advance teaching and education** (G:1,2,3).
   - Discuss different technologies used in classroom and online delivery modalities in dental hygiene education.
   - Design courses that use technology to reach individuals regardless of geographic location.
   - Create teaching opportunities that employ technology to engage student learning in the clinical and classroom setting.
   - Develop an electronic program portfolio.
3. **Our graduates will have an understanding of the relationship between higher education and oral health care policy (issues) in dental hygiene** (G: 1, 2).
   - Identify issues related to higher education policy and procedures.
   - Examine methods used to facilitate access to care and development of new workforce models' impact on oral and overall health.
   - Recognize the impact of interacting with diverse communities and cultures to serve individuals of all backgrounds.
   - Evaluate the impact of legislation and policy on trends in oral health at the national, state, and local levels.
4. **Our graduates will have the knowledge to demonstrate through behavior, high standards of ethics, integrity, and responsibilities in professional situations** (G: 3).
   - Display the ability to self-assess in enhancing professional self-development.
   - Demonstrate a commitment to life-long learning in the profession of dental hygiene.
   - Recognize responsibility and accountability for actions in various roles of the dental hygienist.
   - Explain the obligation to be active in society to make changes in one's health and welfare.
   - Foster high standards of personal and organizational integrity, honesty, and respect for people of all communities.
   - Exhibit knowledge of legal, ethical, and social issues related to developing technology and communication/social networks.
5. **Our graduates will have the ability to plan and integrate new teaching and educational programs in dental hygiene** (G: 1, 2,3).
   - Demonstrate the process of program development including assessment, planning,
   - implementation, and evaluation to accomplish program goals.
   - Be knowledgeable in the process of seeking funds for the implementation of new programs.
   - Articulate a plan for the development of new programs.
   - Use basic organizational, administrative and human relations skills in a group environment.
6. **Our graduates will be leaders in their communities, organizations, institutions and work environments** (G: 1, 2, 3).
   - Analyze interactions of human, social, and dental hygiene theories and how they affect individuals and professions.
   - Apply leadership skills when working with groups to attain personal and professional goals.
   - Support change and improvements in the profession of dental hygiene through service and affiliations with professional associations.
   - Successfully communicate to others with effective written, oral and electronic correspondence skills.

Program and Graduation Requirements

Student Learning outcomes

1: Our graduates will be prepared to conduct original and scholarly research projects

2: Our graduates will utilize information technology to advance teaching and education

3: Our graduates will understand the relationship between higher education and oral health care policy (issues) in dental hygiene

4: Our graduates will have the knowledge to demonstrate high standards of ethics, integrity, and responsibilities

5: Our graduates will have the ability to plan and integrate new teaching and educational programs in dental hygiene

6: Our graduates will be leaders in their communities, organizations, institutions and work environments

Core curriculum courses are taken in conjunction with students enrolled in the UMKC degree-completion program. In addition to a UMKC campus program orientation (usually in August), online students are required to attend on average, one campus class session per semester, held on the UMKC campus during their first year in the program - typically constituting a long weekend. Additional on- site campus visits for the graduate student are determined between the research committee chair and the student. The student is encouraged to attend another on-campus visit as their research project deems necessary.

Required Courses

DENT-HYG 4130	Introduction to Instructional Technologies and Online Learning	1
DENT-HYG 4020	Local Anesthesia And Pain Control	3
DENT-HYG 5502	Foundations of Teaching	2
DENT-HYG 5500	Introduction to Educational Methodology	3
DENT-HYG 5510	Student Teaching and Conference I	2-4
DENT-HYG 5516	Special Issues in Higher Education for Health Professional	3
DENT-HYG 5530	Clinical Instruction and Conference I	2-4
DENT-HYG 5553	Evidence Based Decision Making in the Clinical Practice of Dental Hygiene	2-4
DENT-HYG 5595	Writing in Science	1-2
DENT-HYG 5599	Research And Thesis	1-6
RES-ME 5700	Introduction To Research Methodology	2-3
RES-ME 5703	Thesis Writing	1
RES-ME 5704	Introduction to Biostatistics	2-3
DENT-HYG 5585	Portfolio Capstone Course	1
Total Credit Hours		27-36

It is highly recommended that the student take the following:

DENT-HYG 5512	Student Teaching and Conference II	2-4
DENT-HYG 5532	Clinical Instruction and Conference II	2-4

For students who do not reside in the Kansas City area (online students) some courses (DHGR510 Student Teaching and Conference I and DHGR530 Clinical Instruction and Conference I) require teaching (didactic or clinically) at a college/university setting other than UMKC. In those cases, an affiliation agreement is required. It is the student's responsibility to get permission from the sponsoring institution to teach in their facility. Once the student has initiated contact, the UMKC program director will contact the program director of the sponsoring institution.

* For students not in the Kansas City area (online students) six of the 36 credit hours must be transferred in from another institution. The six transfer credits must include a 3 credit hour course in Research Methodology and a 3 credit hour course in Biostatistics/Statistics. However, these two courses are offered onsite at UMKC SOD .Both courses must be at the graduate level and need to be approved by the program director. Prospective applicants will need to contact the program director for advising.

The total number of credit hours required for completion of the Master of Science Degree Program in Dental Hygiene Education is 36 credit hours for either the thesis or the non-thesis option.

Graduation Requirements

1. A minimum of a 3.0 GPA.
2. Successful completion of 36 credit hours with a thesis or graduate research project option.
3. All other requirements for graduation as stated in the General Graduate Academic. Regulations and Information section of the UMKC General Catalog. For more information - please visit www.umkc.edu/sgs (http://www.umkc.edu/sgs)
4. Design and disseminate to other professionals appropriate to your area of research a scholarly presentation at a regional, state, or national conference with other health professionals.
5. Successful completion of a portfolio as presented in DENT-HYG 5585. The final portfolio must be turned into the program director 6 weeks prior to the student's anticipated graduation date.

Other Requirements

Students will be expected to comply with all rules, regulations and requirements in the General Graduate Academic Regulations and Information section of this catalog.

Graduate students, regardless of classification, must maintain a 3.0 (B) grade-point average in all coursework taken for graduate credit at UMKC and must meet any additional academic requirements imposed by the school, department or Interdisciplinary Ph.D. discipline. Students are responsible

for keeping apprised of their academic status by referring to term grades and their permanent academic record on file in the UMKC Registration and Records Office.

Whenever the cumulative GPA for UMKC courses taken for graduate credit by a graduate student of any classification falls below 3.0, the student's status for the next term becomes: "On Probation - See principal graduate advisor." (Interdisciplinary Ph.D. students will be directed to consult their interim advisor or research advisor.) The principal graduate advisor, interim advisor or research advisor will review the student's progress and provide counsel, and the following conditions apply:

- A graduate student on probation who is not restored to good academic standing by the end of two successive regular semesters following the term in which the cumulative GPA fell below 3.0 will be declared ineligible to re-enroll.
- While on probation, a graduate student must achieve a 3.0 term GPA in order to enroll for the following term.
- A graduate student on probation will not be restored to good standing until a cumulative graduate-credit GPA of at least 3.0 is achieved.

Department of Oral and Craniofacial Sciences

Chairman, Department of Oral and Craniofacial Sciences:
Mark L. Johnson, Ph.D.

Director of Graduate Research Programs, Department of Oral and Craniofacial Sciences:
Mary P. Walker, D.D.S., Ph.D.

Doctoral Faculty Participation:
Cynthia Amyot, Lynda Bonewald, Bonnie Branson, Charles M. Cobb (E), Sarah Dallas, J. David Eick, Jeffrey Gorski, Laura Iwasaki, Mark Johnson, Ying Liu, Carole McArthur, Jeffrey Nickel, Paulette Spencer (E), Yasuyoshi Ueki, Mary Walker, Yong Wang

- General Nature of the Program (p. 396)
- Admission Information (p. 396)
- Master of Science: Oral and Craniofacial Sciences (p. 397)
  - Student Learn Outcomes (p. 399)
  - Program Requirements (p. 397)
  - Thesis Research & Writing (p. 399)
  - Other Requirements (p. 397)
- Interdisciplinary Ph.D. (p. 399)

Faculty

Chairman, Department of Oral and Craniofacial Sciences:
Mark L. Johnson, Ph.D.

Director of Graduate Research Programs, Department of Oral and Craniofacial Sciences:
Mary P. Walker, D.D.S., Ph.D.

Doctoral Faculty Participation:
Cynthia Amyot, Lynda Bonewald, Bonnie Branson, Charles M. Cobb (E), Sarah Dallas, J. David Eick, Jeffrey Gorski, Laura Iwasaki, Mark Johnson, Ying Liu, Carole McArthur, Jeffrey Nickel, Paulette Spencer (E), Yasuyoshi Ueki, Mary Walker, Yong Wang

General Nature of the Program

The School of Dentistry offers a program leading to an MS in oral and craniofacial sciences. A separate application is required for the master of science program in oral and craniofacial sciences. The goal of the program is to introduce students to the scientific method and to assist them in developing academic careers. The program includes advanced work in basic, behavioral and clinical sciences relating to dentistry. The coursework and thesis present an opportunity for the student to cross traditional departmental lines and undertake an interdisciplinary approach to the study of problems related to oral biology. On successful completion of all necessary coursework and thesis requirements, the student is awarded a master of science degree in oral and craniofacial sciences.

Admission Information

Eligibility

All applicants for the master of science in oral biology program must first meet UMKC requirements for admission as a graduate student (see Graduate Academic Regulations and Information (http://cat-edit.umkc.edu/~/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=54137) earlier in this catalog.)

To be eligible for admission to the master of science in oral biology program, an applicant either must hold a baccalaureate degree or a D.D.S. or equivalent degree. In general, he or she should have a minimum cumulative GPA of 3.0 (based on a 4.0 scale) for all undergraduate work, including dental school (if applicable).

Applicants must also meet the minimum GRE requirements.

GRE	Old Score Scale	New Score Scale
Quantitative	533	145
Verbal	533	155
Writing	4.0	4.0

Admission Procedure

Requests for information, including application materials, should be directed to:

Department of Oral and Craniofacial Sciences: Graduate Programs
UMKC School of Dentistry
650 East 25th Street
Kansas City, MO 64108-2795

The Department of Oral and Craniofacial Sciences has a rolling deadline and accepts MS applications year round.

Evaluation Criteria for Admission:

Transcripts

Analysis of transcripts from all prior institutions is required.

Letters of Recommendation

Three letters of recommendation are required from current or former teachers who are familiar with the applicant's past achievements and research ability/potential.

Personal Statement

A personal statement describing why the candidate is interested in pursuing a master of science in oral and craniofacial sciences, how the experience of the program may be used by the candidate in the future, and a list of potential research interests must be submitted by the applicant.

Interviews

Interviews are not required. However, interviews will be arranged upon the candidate's request at the School of Dentistry. Successful interviews may enhance the candidate's chance of acceptance.

The chairman of the Advanced Education Committee will notify the applicant regarding acceptance status.

Master of Science in Oral and Craniofacial Sciences

- General Nature of the Program (p. 396)
- Admission Information (p. 396)
- Program Requirements (p. 397)
- Thesis Research & Writing (p. 399)
- Other Requirements (p. 397)

Other Requirements

Students will be expected to comply with all rules, regulations and requirements specified in the General Graduate Academic Regulations and Information (http://cat-edit.umkc.edu/~/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=54137) section of this catalog.

Program Requirements

Objectives

In addition to writing a research proposal, completing a research project, and writing a thesis, a minimum of 30 credit hours including the core curriculum is required for the MS Degree. The course curriculum will be developed in consultation with the Oral and Craniofacial Sciences Director of Graduate

Research Programs and faculty who serve on the supervisory committee. The developed program of study will meet the student's individual needs and research interests, satisfy discipline-specific requirements, and assure upon graduation that students are able to:

- Demonstrate appropriate depth and breadth of knowledge in their discipline
- Use scholarship and research skills to evaluate the literature and make evidence-based decisions
- Work effectively in a collaborative environment
- Effectively communicate results of their research to diverse audiences
- Apply ethical principles to all aspects of their professional life
- Think critically and creatively as clinicians and researchers
- Develop skills to become good mentors and communicators
- Successfully complete the CITI Research Ethics Tutorial at: http://www.umkc.edu/ors/irb/training.cfm. When finished, the Certificate of Successful Completion will be printed and turned in to the Oral and Craniofacial Sciences Administrative Office to be placed in the student's file.

The candidate enrolled in this program must complete a minimum of 30 semester hours of coursework. These courses must be listed on the Master's Degree Program of Study form (available from the Department of Oral and Craniofacial Sciences office) and must be signed by the thesis advisor, members of the thesis committee, and chair of the Department of Oral and Craniofacial Sciences.

Program Requirements

Required Core Curriculum		
BIO-SCI 5751	Elements of the Scientific Method	1-2
BIO-SCI 5752	Research Methods in Oral and Craniofacial Sciences	1-5
BIO-SCI 5799	Research And Thesis	1-9
RES-ME 5700	Introduction To Research Methodology	2-3
RES-ME 5703	Thesis Writing	1
RES-ME 5704	Introduction to Biostatistics	2-3
Additional Courses		
Some examples of additional courses applicable to the program: [1]		
BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology	
BIO-SCI 5739	Biomaterials for the Dental Specialist	
BIO-SCI 5740	Oral Pathology I	
BIO-SCI 5743	Advanced Seminar in Dental Biomaterials	
BIO-SCI 5747	Research Instrumentation Used in Dental Biomaterials	
BIO-SCI 5759	Special Problems in Pharmacology	
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	
BIO-SCI 5802	Immunopathology	
BIO-SCI 5805	Molecular Biology of Oral Microflora	
BIO-SCI 5830	Structural Characterization of Dental Biomaterials	

[1] The thesis committee may require additional courses. This catalog contains listings of appropriate graduate level courses.

Of the 30 semester hours, no more than 6 semester hours of graduate work taken at institutions other than UMKC may be transferred. The transfer of 6 graduate credit hours includes those courses deemed appropriate to the student's program of study by the thesis committee.

The student must conduct an original investigation in a basic, behavioral or clinical science area and write a thesis describing the research and reporting the results of the study. The student will be required to successfully defend the thesis in a final oral examination at a university-wide seminar.

Enrollment in BIO-SCI 5751 and in BIO-SCI 5752 is required. These courses are the foundation for writing a Research Proposal for the MS thesis project.

Within BIO-SCI 5751 the student will conduct a literature review associated with developing a research question for the thesis research proposal.

As part of BIO-SCI 5752 the student will write the thesis research proposal in consultation with the committee chair and members plus obtain appropriate IRB and/or IACUC approvals. The research proposal serves as the written portion of the Qualifying Exam. Once the written proposal has committee approval, the student will give a presentation about the proposal and answer related questions pertaining to the proposal. This serves as the Oral portion of the Qualifying Exam.

Enrollment in BIO-SCI 5799 is also required as a part of the student's program of study. To reflect the student's research involvement in activities that will ultimately lead to the completion of the thesis, multiple semesters of enrollment in this course are allowed. Cumulative credit for this course may not

exceed 6 hours. Until the thesis is successfully completed and defended, a grade of incomplete (I) is given for each term of enrollment in this course. Upon successful defense and completion of the thesis, incomplete grades will be changed to an appropriate letter grade.

While the MS program in oral and craniofacial sciences can be pursued simultaneously with dental specialty certificate programs, it is likely that such a student can expect to spend 6 months or longer beyond the period designated for the certificate program to obtain the master of science in oral and craniofacial sciences.

Thesis Research & Writing

The major criterion of the MS in oral biology is original research. This original research may be conducted in basic, behavioral or clinical sciences. Adherence to all standards established by the School of Graduate Studies is necessary for final acceptance and approval of the thesis.

Thesis Committee

Each student is responsible for selecting a thesis committee chair who must be an Oral and Craniofacial Sciences faculty member. The selection of a thesis chair must be completed within the students first semester of study and approved by the Department of Oral and Craniofacial Sciences Director of Graduate Research Programs. Once the chair is selected, the student and the chair will select two or more additional faculty members to serve on the thesis committee. One additional member of the thesis committee must be a member of the Department of Oral and Craniofacial Sciences and all of the faculty selected must be members of the graduate faculty. Committee members should be selected for their ability to provide additional advice and resources to augment the thesis research of the student.

Following committee selection, the Program of Study form must be completed. This document serves as the record of selected committee members and required courses for each student. The Program of Study form and example course lists (for concurrent specialty certificate program students) are available on the Oral and Craniofacial Sciences Web site at http://dentistry.umkc.edu/oralbio/MasterOralBiology.shtml. The completed Program of Study must be signed by all committee members; the Department of Oral and Craniofacial Sciences Director of Graduate Research Programs; the Department of Oral and Craniofacial Sciences Chair; and the Dean or Graduate Officer, School of Dentistry. The completed form must meet all Department of Oral and Craniofacial Sciences and School of Graduate Studies requirements.

All thesis committee members must approve a thesis research proposal before the research project is initiated. The thesis committee members also advise and guide the students in the successful completion of their research and determine when the MS thesis is complete.

Thesis

Original research will be used to construct a formal thesis conforming to the standards set by the School of Graduate Studies (see University of Missouri-Kansas City Guide to Formatting Graduate Theses, which can be obtained at the UMKC Dental Library). At least ten weeks prior to graduation, the completed thesis must be submitted to the thesis committee for its preliminary approval.

After all members of the thesis committee have read and given preliminary approval to the content of the thesis, and the instructor(s) of the course RES-ME 5703 has given preliminary approval to the format of the thesis, and at least six weeks prior to graduation, the original typewritten copy must be submitted to the School of Graduate Studies for certification by the dean of Graduate Faculties and Research. After the thesis has been certified for acceptance by the dean of Graduate Faculties and Research, the thesis committee will require the student to defend the thesis. School of Dentistry regulations require students to defend their theses by presenting university-wide seminars on their research. In addition to the required distribution of copies (see the UMKC Guide to Formatting Graduate Theses and the General Graduate Academic Regulations and Information section of this catalog), a copy of the thesis also must be received for retention by the Dental Library of the School of Dentistry.

RES-ME 5703 Thesis Writing

The methods of preparing, organizing, and presenting research findings using scientific writing format will be reviewed for completing a thesis. This course is required for the MS degrees in Oral and Craniofacial Sciences and Dental Hygiene Education.

Oral and Craniofacial Sciences Interdisciplinary Ph.D.

The Ph.D. program at UMKC is interdisciplinary. This program is described in more detail in the Oral and Craniofacial Sciences Interdisciplinary Ph.D. Program (p. 528) within the Graduate Studies section of this catalog.

Students interested in studies at the doctoral level in the discipline of oral and craniofacial sciences should apply to the Interdisciplinary Ph.D. program (http://cat-edit.umkc.edu/~/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=54636) in the School of Graduate Studies.

Detailed information on the general and discipline-specific admission requirements for the Ph.D. can be found in the School of Graduate Studies section of this catalog.

Graduate/Professional

Graduate/Professional

Faculty

Faculty

Doctor of Dental Surgery Program

The UMKC School of Dentistry educates competent and caring oral health care providers through a curriculum that combines the best of the classroom and clinic. Preclinical dental and biomedical courses give our students the solid conceptual foundation they will need to successfully practice dentistry. Beginning early in the first year and increasing throughout the four-year program, students work with peers and faculty to master the clinical skills required to deliver comprehensive oral health care. Students treat their assigned patients within a "team" system of clinic organization, which is a hallmark of this program.
If you are a college student with at least 90 hours of college credit or a college graduate, you may apply for admission to the D.D.S. program. Applicants are strongly encouraged to complete a baccalaureate degree prior to starting their dental education. As a public institution financially supported by the state of Missouri, our first obligation is to qualified residents of **Missouri**. Additionally for many years we have had formal or informal agreements with the states of **Kansas**, **Arkansas**, **New Mexico**, and **Hawaii** to accept qualified residents of those states to our program. Preferred consideration will be given to applicants who are residents of the states listed above. Applications from other states are welcome and are considered on an individual basis for highly qualified candidates.

To apply for the D.D.S. program, you must submit an application through the American Dental Education Association's application service (AADSAS (http://www.adea.org)). Although the UMKC deadline for submission is October 1, early applications are strongly recommended. A preference is given to applications received in the Office of Student Programs of the School of Dentistry prior to September 1. Keep in mind that AADSAS can take up to two months to process and deliver an application. Therefore, it is extremely important that you apply in June or July of the year prior to anticipated entry into dental school.

The admission process is a selective one. A number of variables will be considered: academic credentials, Dental Admission Test scores, letters of recommendation, investigation of dentistry, community service and your written responses to a series of questions. In addition, an "invitation only" interview is a part of the selection process. To be sure you fully understand the admissions process, applicants are encouraged to thoroughly review the additional admissions guidelines available here (http://dentistry.umkc.edu/Future_Students/DDSAdmissions.shtml).

This four-year program begins in August and culminates with a doctor of dental surgery degree. Click here to view the curriculum in detail. (p. 404)

A Suggested Pre-Dental Schedule of Activities can be downloaded here (http://dentistry.umkc.edu/Future_Students/asset/pdfs/SuggestedPredentalSchedule.pdf).

Admission Information

Any college student or graduate can apply for admission to the four-year doctor of dental surgery program. A student should be a U.S. citizen or permanent resident of the U.S. Priority is given to Missouri residents. The School also has contractual or other agreements with the states of Kansas, Arkansas, New Mexico and Hawaii to consider qualified residents for acceptance from those states. Preferred consideration will be given to applicants who are residents and high school graduates of the states listed. Applications from other states are welcome and are considered on an individual basis for highly qualified candidates.

Candidates may be considered for acceptance after successful completion of a minimum of 90 hours of college credit. After completion of a minimum of 120 hours of college credit, the accepted applicant will be eligible to enroll in the School of Dentistry. All candidates for this program are encouraged to complete a baccalaureate degree before entry. In fact, college degree-holders with a broad educational background are the preference of the Dental Student Admission Committee.

Admission is on a selective basis and requires more than meeting course or college-hour requirements. Factors considered in the selection process are the candidates' academic credentials, including Dental Admission Test (DAT) scores, letters of evaluation, personal interview, evidence of the subjective criteria identified in a later section, and all other information submitted by the candidates. Approximately 109 candidates are admitted to the D.D.S. program annually.

Those who want to apply for admission must apply online through the AADSAS Application Service administered by the American Dental Education Association at http://www.adea.org/. Candidates must submit applications no later than Oct. 1 of the year prior to desired enrollment. **Sept. 1 is the UMKC preference deadline date for UMKC to receive application materials.** Be aware that approximately 4-8 weeks are required by AADSAS to process applications and deliver them to the dental school.

Counseling by the School of Dentistry's admissions staff is available to those interested in applying for admission. It is advisable to seek this counseling early in the undergraduate program.

GPA/College Hour Minimums

The following are the Dental Student Admission Committee's guidelines for GPA/college semester credit hour/Dental Admission Test (DAT) minimums and preferences:

- Preference will be given to candidates with 90 or more semester hours of college credit at the time of application with a science GPA of 3.40 or higher and/or a DAT academic average of 17 or higher.
- A candidate with 90 or more semester hours of college credit at the time of application with a science GPA of 3.00 and a DAT academic average of 16 or higher can be considered for an interview.
- **The minimum science GPA which will be considered for an interview is 3.0.**
- It should be noted that no more than 60 hours of college credit can be earned at a community college and preference will be given to candidates who complete the science prerequisites at a four-year institution.

A broad liberal education culminating in a bachelor's degree is strongly encouraged of applicants seeking admission into this program. Recent history indicates that admission of a candidate who does not have a B.S./B.A. degree or who is not likely have one at the time of enrollment in the D.D.S. program is rather rare.

Pre-Dental Course Requirements

There is no required college major for admission to the School of Dentistry. However, certain courses are required prior to entering:

Biology

A minimum of four semesters of biology with labs. In particular, we require general biology I, anatomy, physiology and cell biology. Other courses that have counterparts in the dental curriculum (i.e., histology, neuroscience, microbiology) are strongly recommended.

Chemistry

A minimum of two semesters of general chemistry with labs (Chemistry I and Chemistry II).

A minimum of two semesters of organic chemistry with labs (Organic Chemistry I and Organic Chemistry II).

A minimum of one semester of biochemistry (lab is recommended but not required).

Physics

A minimum of two semester of physics with labs (Physics I and Physics II).

English

A minimum of 6 credit hours of English composition. (Courses in speech are not acceptable as substitutes for English composition.)

Other

It is advantageous to have course credit in mathematics, formal logic, histology, business, social/behavioral sciences (such as psychology), communication skills, computer science, the humanities and applied arts (such as sculpting, drawing, etc.).

Dental Admission Test

All dental school applicants must take the Dental Admission Test (DAT) administered by the American Dental Association. The DAT is given throughout the year by computer at designated testing centers, and a score must be submitted to be fully considered.

DAT scores are based on a range of 1 to 30, with 19.0 generally being the national average of accepted dental students. The Dental Student Admission Committee requires a minimum DAT score of 16, but prefers that a candidate's DAT scores be 17 or higher to be considered for admission.

For more information or to request a DAT application go to http://www.ada.org. Contact the School of Dentistry's Office of Student Programs at (816) 235-**2080** (local) or (800) 776-8652 (toll-free) to learn about our online **DAT Prep Course**.

Personal Interview

A personal interview at the School of Dentistry is required of applicants completing the necessary college hours, grade-point average and DAT requirements. The interview is by invitation only, an applicant for admission may not request it.

Candidate Subjective Criteria

When considering candidates for possible admission, the UMKC School of Dentistry's Dental Student Admission Committee (DSAC) reviews the entire scope of information that is available on each applicant. For each candidate the sources of this information include the academic record (i.e., overall GPA, science GPA and Dental Admission Test scores), AADSAS essay, responses to items on the UMKC School of Dentistry's Application Survey, letters of reference, interview assessment, and any other information provided by the candidate (e.g., personal statement). Specifically, the committee will expect evidence of the following factors in making the difficult choices among candidates:

1. Demonstrated investigation of the profession of dentistry. It is strongly suggested that candidates observe in a minimum of five different dental offices (the offices of general dentists and specialists) and acquire a minimum of 80-100 hours of dental office observation, preference is given to candidates who have worked in a dental office.
2. Evidence of social conscience and compassion (i.e., caring attitude, sensitivity to those in need, significant community activities). It is strongly suggested that this be active and ongoing participation in volunteer activities.
3. Indication of fundamental personal character (i.e., integrity, maturity, self-reliance, leadership skills).
4. Evidence of critical thinking and problem solving ability (e.g., performance in courses requiring this skill such as in laboratory segments, in formal logic or in research experiences).
5. Significant and sustained level of academic achievement based on full course loads with evidence of a broad science and liberal arts education (i.e., fine arts, business, mathematics, humanities, computer science, etc.).
6. Established effective interpersonal/communication skills (i.e., an ability to communicate orally and in writing, a capacity to listen, a personality conducive to forming personal and/or professional relationships, an involvement in a range of extracurricular activities, especially those in which significant leadership roles have been taken).
7. Demonstrated ability to balance full academic schedules with extracurricular involvement and/or employment (i.e., effective/efficient management of time).

Because the Dental School Admission Committee looks closely at information from all sources included in an applicant's file, it is in the candidate's best interest that this information is consistent among sources. This is especially true with information supplied directly by the candidate (i.e., AADSAS essay, UMKC School of Dentistry's Application Survey, interview and/or personal statement). You are strongly encouraged to review all written materials for consistency and accuracy before submission.

Finally, before developing these written materials, the candidate is strongly encouraged to honestly and critically assess himself/herself on all the qualities identified. Following this process, the candidate is urged to review drafts of these documents collectively (e.g., to check for completeness, accuracy and consistency) and to evaluate himself/herself comprehensively as if he/she were a member of the Dental Student Admission Committee. Where the candidate feels a question may arise from Committee review, the applicant is encouraged to address this in a personal statement/letter to the Committee.

Technical Standards

The dental degree signifies that the holder is a dentist who has received sufficient training in dental education to practice dentistry. It follows that graduates must have acquired and demonstrated the knowledge, skills and abilities to function in a broad variety of clinical situations and to render a wide spectrum of dental care.

While each application is reviewed individually, it is necessary that each candidate be able to observe and perform each task required by the curriculum of the school. Similarly, the school does not consider the waiver of required examinations a reasonable accommodation for individuals with learning disabilities. Learning disabled students, when appropriate, may be granted additional time on required examinations, be examined in separate testing facilities, or accommodated in other reasonable ways, but they will not be exempted from the requirement to take and pass such examinations. (Candidates with disabilities should contact the UMKC Office of Services for Students with Disabilities for information regarding definition and requirements for documentation of learning disabilities.)

Candidates for admission into the D.D.S. program must possess abilities and skills in the following areas to satisfactorily complete the curriculum:

Observation

Candidates must be able to accurately observe laboratory experiments, preclinical demonstrations, clinical laboratory procedures and patient-care activities.

Communication

Candidates must be able to communicate effectively and sensitively with patients and with all members of the health care team.

Motor

Candidates must have physical dexterity to master all aspects of patient care. They must be able to execute motor movements required to arrive at a diagnosis and treatment plan, and to provide patient care, including emergency treatment.

Intellectual-Conceptual, Integrative and Quantitative Abilities

A candidate must have intellectual-conceptual, integrative and quantitative abilities that include measurement, calculation, reasoning, analysis and synthesis. Problem solving, one of the critical skills demanded of dentists, requires all of these intellectual abilities. In addition, the candidate must be able to comprehend three-dimensional relationships and understand the spatial relationship of structures.

Emotional and Behavioral Attributes

In addition to these skills, candidates must possess the high moral and ethical standards demanded of dentists and must possess the capability required for full utilization of intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities attendant to the diagnosis, treatment planning and care of patients, and the development of mature, sensitive and effective professional relationships with patients. Candidates must be able to cope with taxing workloads and to function effectively under stress. A candidate must also be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties in the clinical problems of many patients. In addition, personal qualities such as compassion, integrity, concern for others, interpersonal skills, interest and motivation should be assessed during the admissions and education processes. Technological accommodation can be made for some inadequacies in certain areas, but a candidate must be able to perform in a reasonably independent manner.

Notification of Admission

Applications for admission are reviewed by the Dental Student Admission Committee. In accordance with the guidelines of the American Dental Education Association, no notification of the admission decision is made to a candidate before Dec. 1 of the academic year prior to that applicant's class graduation date.

Formal Notification

After a decision is reached on an applicant, notification of acceptance is made by mail. Accepted candidates have 30 days from the date of an acceptance letter to make a required nonrefundable $200 deposit. If notification of acceptance is made after Feb. 1, the candidate must submit the deposit within 15 days of the date of acceptance.

Several individuals are placed on a list of alternates. In the event that a position becomes available, an applicant from this list is chosen to fill the vacancy. Notification of alternate status will be sent by mail.

Notification of denial is also sent by mail. If applicants are interested in reapplying, they should make an appointment with a School of Dentistry director of admissions to discuss the reason for the denial. An explanation of the admission decision and advice will be offered to applicants to enhance their future applications.

Minority Recruitment Program

The School of Dentistry has an active recruitment program to encourage and assist qualified minority students, particularly those from under-represented groups in the dental profession, to pursue careers in dentistry. Native Americans, African Americans and Hispanics are strongly encouraged to seek admission to the school. Students desiring information should contact John Cottrell or cottrellj@umkc.edu, the Director of Minority Recruitment and Special Programs within the Office of Student Programs (816) 235-2080.

Reserved Admission Program

The Reserved Admission Program for the Doctor of Dental Surgery degree at the UMKC School of Dentistry enables highly motivated, ambitious, talented students to pursue their dream of becoming a dentist. Entry into the program is available to students from Missouri and Kansas who are in the early years of their undergraduate education.

This program is composed of three stages with the first two stages requiring formal application and review. The first stage is application and acceptance as a Provisional Reserved Admission Program Student. This step may be accomplished immediately following the completion of a minimum of but not more than four semesters of college credit with a cumulative 3.6 science and math GPA while being continuously enrolled in full-time course loads.
In the second stage, provisional reserved admission program students meet additional objective and subjective criteria to move to full acceptance at the end of their undergraduate junior year. Students with full admission into the Reserved Admission Program are assured a seat in the D.D.S. class matriculating in August following the completion of their undergraduate studies, provided they meet the criteria for maintaining their status. The third stage is matriculation at the School of Dentistry.

For more information about this program or to request an application, contact the School of Dentistry's Office of Student Programs. (816) 235-2080 or dds@umkc.edu.

Disability Services

Federal law prohibits UMKC and the School of Dentistry from making pre-admission inquiry about disabilities. Information regarding disabilities given voluntarily or received inadvertently will not adversely affect any admission decision. Any accepted applicant requiring special services because of disability should notify the Office of Services for Students with Disabilities for accommodation services (816-235-5696).

Dental Education Curriculum Mission

The mission of the Doctor of Dental Surgery program is to graduate a dentist who can deliver patient care with a scientific basis and a caring manner. Through the integration of the biomedical, behavioral, and clinical sciences, the graduate dentist will be able to function effectively as the leader of the oral health care team to provide comprehensive oral health care for diverse populations in a constantly changing society. Graduates must be able to use the skills of problem solving, decision-making and evaluation so that behaviors and practices are derived from intentional choices. They must become lifelong learners, directing their professional growth during and beyond the educational programs.

Graduation Requirements

Satisfactory completion of the program including:

1. Demonstration of competencies expected of a graduating student.
2. A passing grade on Part I and Part II of the National Board Dental Examinations.
3. A cumulative grade-point average of 2.5 or higher for the student's period as a dental student.
4. A demonstrated ability to meet the standards of professional conduct.

Program Requirements

Student Learning Outcomes

- Apply the fundamental principles of the biomedical and behavioral sciences as they relate to the promotion and provision of oral health care.
- Apply legal, ethical and regulatory principles to the provision of oral health care, including practice management.
- Apply interpersonal and communication skills to empathetically and effectively care for diverse patient populations and function in the health care environment.
- Apply critical thinking and problem solving skills to provide evidence-based patient-centered care.
- Evaluate various models of oral health management and care delivery.
- Participate in improving the oral health of individuals, families, and groups in the community through oral health promotion, education and interaction with other health professions.
- Manage medical emergencies and complications that may occur during dental treatment.
- Recognize and manage pain and anxiety, trauma, hemorrhage, and infection of the orofacial complex by selection, administration or prescription of pharmacological or non-pharmacologic agents in the treatment of dental patients.
- Demonstrate competence in providing oral health care within the scope of general dentistry for children, adolescents, adults, and special needs patients. This includes:
  - Perform a complete dental examination to arrive at a diagnosis of the patient's oral condition/s.
  - Develop, present and implement an integrated treatment plan to address a patient's oral health needs.
  - Prevent, identify and manage periodontal conditions.
  - Prevent, identify and manage pulpal and periradicular conditions.
  - Identify and manage patients with oral surgical needs.
  - Identify and manage malocclusions.
  - Manage restorative procedures for single defective teeth, or to restore function in patients with partial or complete edentulism.
  - Treat patients with soft tissue lesions and oral manifestations of systemic diseases.
- Demonstrate the ability to self-assess competency and the outcomes of care.

Program Requirements

The school offers a four-year, eight-semester, two-summer-term curriculum leading to the doctor of dental surgery (D.D.S.) degree. This curriculum is designed to prepare graduates in dentistry to deliver patient care with a scientific basis and a caring manner. As such, it provides a sound background in

the biomedical, behavioral and clinical sciences with an emphasis on comprehensive oral health care. Exposure to clinical dentistry in the first semester of the first year is a hallmark of this curriculum.

The first year of dental school focuses on instruction in the biomedical sciences that provide a foundation for clinical studies. The first-year student also studies introductory courses in oral diagnosis, preventive periodontics and dental restorative techniques in a pre-clinical setting. Early clinical exposure is further emphasized through clinic-based courses in both the first and the second semesters. Acquisition of basic diagnostic skills and background knowledge is a goal of the first year of the curriculum.

Biomedical science courses extend into the second year; however, the major thrust of the second year is devoted to pre-clinical technique coursework of increasing complexity. In the preclinical laboratory courses, students continue learning the fundamental procedures of dentistry: operative dentistry, prosthodontics (fixed and removable), and endodontics. Clinically, students are introduced to the basic essential skills needed in preventive periodontics. Classroom lecture sessions are also conducted in each of these areas of dentistry along with didactic courses in periodontics, oral diagnosis, oral radiology, and oral surgery.

The primary emphasis of the third year of the curriculum is the clinical practice of dentistry. The general clinic is organized into subunits called teams. Each team includes an established set of faculty and staff. Patients are assigned to students for comprehensive care, from diagnosis and treatment planning through procedures necessary for successful case completion. While the emphasis of the third and fourth years of the dental curriculum is gaining clinical experience, students also attend advanced classes in periodontics, prosthodontics, oral surgery, orthodontics, pediatric dentistry, operative dentistry and oral diagnosis/oral medicine.

The fourth year involves extensive clinical practice. There are a few seminar sessions and formal courses (e.g., practice management), but the student's major responsibility is to perfect diagnostic, patient-management and technical-treatment skills and demonstrate competence in all the skills required by the faculty of the School of Dentistry.

An outline of the four-year curriculum by semester is given below.

Year I

Fall	Credits	Spring	Credits
BMS 9300	5	BMS 9301	5
BMS 9308	2.5	DENT 6305	1
DENT 6306	1.5	DENT 6305L	2
DENT 6310C	3	DENT 6307	1
DENT 6313	4	DENT 6314C	3
DENT 6316	3	DENT 6317	3
DENT 6328	1	DENT 6350	2.5
		LS-PHYS 401	5
	20		**22.5**

Year II

Fall	Credits	Spring	Credits	Summer	Credits
DENT 6402	0.5	DENT 6403	0.5	DENT 6315C	3
DENT 6410	1	DENT 6415	2	DENT 6501C	8
DENT 6410L	2	DENT 6417	1	DENT 6537	0.5
DENT 6412	1	DENT 6417L	2	DENT 6558C	1
DENT 6414	4	DENT 6420	2	DENT 6566	2
DENT 6416	1	DENT 6423	1		
DENT 6416L	2	DENT 6423L	2		
DENT 6422	1	DENT 6431	1		
DENT 6422L	2	DENT 6439	1		
DENT 6426	2	DENT 6440	1		
DENT 6435	1	DENT 6442	1		
DENT 6436	1	DENT 6442L	2		
LS-MCRB 4180	4	DENT 6524	2		
		DENT 6526	1		

		DENT 6526L	2		
		DENT 6556	1		
		DENT 6564	2		
		DENT 6595	1		
	22.5		**25.5**		**14.5**

Year III

Fall	**Credits**	**Spring**	**Credits**	**Summer**	**Credits**
DENT 6312	1	DENT 6411	1	DENT 6650	0.5
DENT 6318	1	DENT 6504	1	DENT 6593C	1
DENT 6424	2	DENT 6520	0.5	DENT 6609C	8
DENT 6502	1	DENT 6522	1		
DENT 6515	1	DENT 6527	2		
DENT 6518	0.5	DENT 6534	1		
DENT 6521	1	DENT 6559	1		
DENT 6538	1	DENT 6602	1		
DENT 6460C	2	DENT 6633	1		
DENT 6509C	8	DENT 6634	1		
DENT 6531C	1	DENT 6636C	2		
DENT 6591C	1	DENT 6510C	4		
		DENT 6521C	1		
		DENT 6542C	1		
		DENT 6551CR	2		
		DENT 6592C	1		
		DENT 6606C	1		
	20.5		**22.5**		**9.5**

Year IV

Fall	**Credits**	**Spring**	**Credits**
DENT 6429	1	DENT 6600	1
DENT 6514	1	DENT 6604	1
DENT 6603	1	DENT 6605	1
DENT 6613	1	DENT 6618	1
DENT 6614	2	DENT 6631	1
DENT 6615	1	DENT 6562C	1
DENT 6617	0.5	DENT 6601C	2
DENT 6626	1	DENT 6608C	1
DENT 6635	1	DENT 6611C	1
DENT 6607C	1	DENT 6614C	10
DENT 6610C	5	DENT 6621C	1
DENT 6532C	1	DENT 6642C	1
DENT 6691C	1	DENT 6656C	1
		DENT 6692C	1
	17.5		**24**

Total Credits: 199

Cost Estimates

The estimated cost (exclusive of living costs) for the four-year D.D.S. curriculum at the School of Dentistry is $166,747. The amount is based on fees established and costs existing at the time of printing. This is itemized by type of expense and by year.
Note: Educational fees and books/equipment costs are subject to change without notice.

First Year (Fall and Spring Semesters)

Books, Equipment and Supplies	$11,525
Educational Fees (Resident)	$28,564
First-Year Total	$40,089

Second Year (Fall and Spring Semesters)

Books, Equipment and Supplies	$9,125
Educational Fees (Resident)	$28,645
Second-Year Total	$37,770

Third Year (one 13-week Summer term plus Fall and Spring Semesters)

Books, Equipment and Supplies	$7,895
Educational Fees (Resident)	$35,773
National Dental Board Exam-Part 1	$355
Third-Year Total	$44,023

Fourth Year (one 13-week Summer term plus Fall and Spring Semesters)

Books, Equipment and Supplies	$6,765
Educational Fees (Resident)	$35,700
National Dental Board Exam-Part 1I/Clinical Board Exam	$2,400
Fourth-Year Total	$44,865
Four-Year Total	$166,747

Non-resident students are assessed an additional $13,431 each fall and spring semester and $6,715 for each of the two summer terms.

Agreements are in place for residents of Kansas, Arkansas, New Mexico and Hawaii to receive waivers of the non-resident fees.

Tuition/Fee Policy for Elective Coursework Outside the School of Dentistry

The dental “flat-rate” tuition and fees only applies to required courses within the DDS program. Dental students who elect to enroll in courses other than those required as part of the DDS curriculum will pay tuition and fees for those courses.

A dental student’s primary academic responsibility is successfully meeting the curricular expectations of the DDS program. Any coursework taken outside the curriculum requires that a student is in good standing and must be pre-approved by the Associate Dean for Academic Affairs.

Elective enrollment in coursework outside the School of Dentistry is not suggested during fall & spring semesters in years 1 & 2. Additionally enrollment in courses other than dental courses during preparation for National Board Part 1 (Summer D3) and National Boards Part II (Fall D4) should be limited.

Dental students considering course work outside the dental curriculum should also consider the financial aid implications of the additional course work. Students should work closely with the Student Financial Aid Office. The student would only be eligible for DDS financial aid, although Grad Plus loans may be available to select students.

Student Organizations/Activities

Dental students qualify for membership in a variety of student organizations. Most are affiliated with national dental organizations. Students can also participate in other non-dentistry oriented organizations.

Active student organizations within the school include:

- American Academy of Pediatric Dentistry
- American Association of Women Dentists

- Student American Dental Hygienist's Association
- UMKC Student Council
- Student National Dental Association
- Hispanic Dental Association
- Students Take Action
- UMKC Chapter of the Academy of LDS Dentists
- Interfraternity Council
- Delta Sigma Delta Fraternity
- Psi Omega Fraternity
- Xi Psi Phi Fraternity
- Student Professionalism & Ethics Association
- Christian Medical-Dental Association
- American Association for Dental Research-Student Research Group

School of Education

Education Building (http://www.umkc.edu/virtualtour/education-building.asp), Room 347
615 E. 52nd Street
(816) 235-2260 Dean's Office
(816) 235-2234 Student Services
Fax: (816) 235-5270
education@umkc.edu
http://education.umkc.edu/

Mailing Address
University of Missouri-Kansas City
School of Education
5100 Rockhill Road
Kansas City, MO 64110-2499

Dean:
Wanda J. Blanchett Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=blanchett)

Associate Dean:
LaVerne Berkel Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=berkel)

Associate Dean for Teacher Education:
Vacant

Assistant Dean for Student Services:
Christine Timmerman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=timmerman)

Division of Counseling and Educational Psychology Chair:
Chris Brown Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%3D%3F7%5F%40%24%2CU%2DT%20%0A)

Division of Curriculum and Instructional Leadership Chair:
Rita Barger Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=barger)

Division of Educational Leadership, Policy and Foundations Chair:
Bonita Butner Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=butner)

- History and Mission
- Centers and Projects
- Curricula Objectives
- Accreditation
- Advising and Student Services
- Scholarships
- Student Organizations
- Special Services
- Division of Counseling and Educational Psychology

- Division of Curriculum and Instructional Leadership
- Division of Educational Leadership, Policy and Foundations

Faculty

Susan A. Adler[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=adler); professor emeritus of education; B.A. (State University of New York-Buffalo); M.A., Ph.D. (University of Wisconsin).

Edwin R. Bailey; professor emeritus of education; A.B., B.S., M.A. (Western Michigan University); Ph.D. (Michigan State University).

Carolyn Barber[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=barber); assistant professor of educational psychology; B.A. (Johns Hopkins University); M.A. and Ph.D. (University of Maryland-College Park).

Rita Barger[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=barger); associate professor of education; B.S., M.A., Ph.D. (University of Missouri-Columbia); M.S. (Drury College).

Clare Bell[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bell); assistant professor of education; B.M. (Cleveland Institute of Music); M.A., Ph.D. (The Ohio State University).

LaVerne A. Berkel[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=berkel); associate professor of education and associate dean; B.S. (Oakwood College); M.A. (New York University), Ph.D. (The Pennsylvania State University).

Dea Bermudez Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bermudez); field placement coordinator; B.A. (University of Missouri-Columbia); M.Ed. (Northern Arizona University).

Valerie Blackwell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=blackwell); teaching professor; B.A., M.A., Ph.D. (University of Missouri-Kansas City).

Wanda Blanchett Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=blanchett); dean, school of education, and professor of education and Ewing Marion Kauffman/Missour Endowed Chair in Teacher Education; B.S.E., M.S.E. (University of Central Arkansas); Ph.D. (The Pennsylvania State University).

S. Wheadon Bloch; professor emeritus of education; B.S., M.S. (Louisiana State University); M.S., Ph.D. (University of Wisconsin).

Chrisanthia Brown[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brown); professor of education; B.S. (University of California at Los Angeles); M.S. (California State University-Long Beach); Ph.D. (University of Missouri-Kansas City).

Bonita Butner[3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=butner); associate professor of education; B.S. (Central Missouri State University); M.A.,Ed.S. (University of Missouri-Kansas City); Ph.D. (University of Missouri-Columbia).

Loyce Caruthers[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=caruthers); associate professor of education; B.A., M.A., Ed.S., Ph.D. (University of Missouri-Kansas City).

Donna M. Davis[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=davis); associate professor of education; B.A. (San Jose State University); M.S., Ph.D. (University of Kansas).

Tricia DeGraff Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=degraff); assistant teaching professor; B.A. (Washington University); M.S. (University of Wisconsin-Madison).

J. Joseph Doerr; professor emeritus of education; B.S. (Northern Illinois University); M.Ed. (Kent State University); Ed.D. (University of Missouri-Columbia).

Richard S. Dunlop; professor emeritus of education; B.A., M.A. (San Diego State University); Ed.D. (Arizona State University).

Mary Phyl Dwight Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dwight); clinical assistant professor, B.S. (Southwest Missouri State University); M.S. (Kansas State University).

Linda Edwards Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=edwards); dean emeritus, school of education, and professor emeritus of education; B.A. (University of Missouri-Kansas City); M.S. Ed., Ed.D. (University of Kansas).

Phyllis Esposito Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=esposito); assistant teaching professor; B.A., M.A. (Rockhurst University); Ph.D. (Kansas University).

Jennifer Friend[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=friend); associate professor of education; B.A., M.A, I.Ph.D. (University of Missouri-Kansas City).

Cheryl Grossman associate professor emeritus of education; B.A. (Long island University); M.A. (New York University); Ph.D. (University of Iowa).

Gail Hackett Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hackett); provost and executive vice chancellor for academic affairs, and professor of education; B.A., M.Ed., Ph.D. (The Pennsylvania State University).

Erica Hernandez-Scott Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hernandez); assistant teaching professor; B.A. (Rockhurst University); M.A. (University of Missouri-Kansas City).

Shirley Hill; curators' professor emeritus of education and mathematics; B.A. (University of Missouri-Columbia); M.A. (University of Missouri-Kansas City); Ph.D. (Stanford University).

Etta Hollins[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hollins); professor of education and Kauffman Endowed Chair for Urban Teacher Education; B.S.Ed. (Pittsburg State University); M.S.Ed. (University of Washington); Ph.D. (University of Texas-Austin).

Helen Huus; professor emeritus of education; B.A. (University of Northern Iowa); M.A., Ph.D. (University of Chicago).

Arthur Gus Jacob Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jacob); clinical assistant professor of education; B.S., M.S. (Emporia State University); Ed.D. (University of Kansas).

Don A. Knight; professor emeritus of education; B.S. (Southern Utah University); M.A. (University of Utah); Ed.D. (Wayne State University).

Jack P. Krueger; professor emeritus of education; B.A., M.A. (University of Nebraska-Kearney); Ed.D. (University of Nebraska-Lincoln).

James R. Kuechler; assistant professor emeritus of physical education; B.S., M.Ed. (University of Missouri-Columbia).

Ellen Lavelle Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lavelle); associate research professor; B.A., M.S.Ed., Ph.D. (Southern Illinois University).

Robert Leachman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=leachman); program director; B.S.Ed. (Northwest Missouri State University); M.A. (University of Missouri-Kansas City); Ed.S. (Central Missouri State University); Ed.D. (University of Missouri-Columbia).

Robert E. Leibert; professor emeritus of education; B.S. (State University of New York-New Paltz); M.S. (University of Pennsylvania); Ed.D. (Syracuse University).

Daniel Urey Levine; professor emeritus of education; B.A., M.A., Ph.D. (University of Chicago).

William A. Lewis; professor emeritus of education; B.S., M.S., Ed.D. (University of Illinois).

Nathan Lindsay; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lindsay); assistant vice provost for assessment and assistant teaching professor; B.A. (Brigham Young University); M.S. (Indiana University); Ph.D. (University of Michigan).

Malcolm E. Linville[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=linville); professor emeritus of education; B.A., M.A., Ph.D. (University of Missouri-Kansas City).

Kathryn E. Loncar Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=loncar); associate professor emeritus of education; B.M.Ed. (Saint Mary College); M.A., Ph.D. (University of Missouri-Kansas City).

Anthony V. Manzo; professor emeritus of education; B.A. (St. John's University); M.S. (Hofstra University); Ph.D. (Syracuse University).

Jacob Marszalek[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=marszalek); associate professor of educational psychology; B.A. (Illinois State University); M.S. (Emporia State University); Ph.D. (University of Illinois at Urbana-Champaign).

Zachary McCall Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mccall); assistant professor of education; B.A. (Missouri State University); M.A. Humanities (University of Chicago); M.A. Special Education (University of Missouri-Kansas City); Ph.D. (University of Kansas).

S. Marie McCarther Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mccarther); assistant professor of education; B.A. (Wilkes University); M.A., Ed.S. (University of Missouri-Kansas City); Ed.D (University of Cincinnati).

Donald W. Mocker; dean emeritus, school of education, and professor emeritus of education; B.S. (Missouri Valley College); M.S. (University of Missouri-Columbia); Ed.D. (State University of New York-Albany).

Nancy L. Murdock[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=murdock); professor of education; B.S., M.S., Ph.D. (Virginia Commonwealth University).

Gary W. Nahrstedt; professor emeritus of education; B.A. (Florida State University); M.S., Ed.D. (Auburn University).

Frank W. Neff; associate professor emeritus of education; B.A., M.S. (Indiana University); Ed.D. (Columbia University).

Johanna E. Nilsson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=nilsson); associate professor of education; B.A. (Roger Williams University); M.A., Ed.S. (State University of West Georgia); Ph.D. (Western Michigan University).

Elizabeth Noble; assistant professor emeritus of education; B.A., M.A., Ph.D. (University of Missouri-Kansas City).

Louis Odom[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=odom); professor of education, B.S., B.A., M.Ed. (University of Arkansas); Ph.D. (University of Missouri-Columbia).

Ann Pace Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pace); associate professor emeritus of education; B.A., M.S.Ed. (University of Pennsylvania); Ph.D. (University of Delaware).

Joseph Parisi[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=parisi); assistant professor of music (music education, instrumental music); B.M. (State University College of New York at Potsdam); M.M. (Florida State University); Ph.D. (Florida State University).

Robert D. Paul; associate professor emeritus of education; B.S. (South Dakota State University); M.Ed., Ed.D. (University of Florida).

Uzziel Pecina Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pecina); assistant teaching professor; B.A., M.S.Ed. (Kansas State University); Ed.D. (University of Missouri-Columbia).

Cynthia Pemberton Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pemberton); vice provost for academic affairs, and professor of education; B.S. (Missouri State University); M.S. (Kansas State University); Ph.D. (University of Illinois).

Sheri Robb[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=robb); assistant professor of music (music therapy); B.M. (Florida State University); M.E. (Auburn University); Ph.D. (University of Kansas).

Charles R. Robinson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=robinson); assistant professor of music (music education, choral music); B.M.E. (Florida State University); M.A. (California State University, Long Beach); Ph.D. (Florida State University).

Dennis Schemmel; associate professor emeritus of education; B.A. (Loras College); M.Ed. (Marquette University); Ph.D. (Ohio University).

Candace Schlein; assistant professor of education; B.A., B.Ed. (McGill University); M.Ed., Ph.D. (University of Toronto).

Cynthia Schmidt[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schmidt); assistant professor of education; B.A. (St. Mary's College); M.S. (The Johns Hopkins University); Ph.D. (University of Wisconsin-Madison).

Monika Williams Shealey Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=shealey); associate professor and associate dean of teacher education; B.S., M.A. (University of South Florida); Ed.S. (University of Miami); Ph.D. (University of Central Florida).

John K. Sherk, Jr.; professor emeritus of education; B.S. (Pennsylvania State University); M.S. (Temple University); Ph.D. (Syracuse University).

Dianne Smith[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); professor of education; B.S., M.Ed. (Winthrop College); Ph.D. (Miami University).

William C. Smith; professor emeritus of education; A.B. (St. Benedict's College); M.S. (Kansas State University); Ph.D. (University of Missouri-Kansas City).

George D. Spear; associate professor emeritus of education; B.A. (Baker University); M.A. (University of Missouri-Kansas City); Ph.D. (University of Michigan).

Raol Taft Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=taft); assistant professor of education; B.A. (Metropolitan State College); M.A. (University of Illinois at Urbana-Champaign); Ph.D. (The Pennsylvania State University).

Carolyn Thompson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thompson); associate professor of education; B.A. (San Francisco State); M.A. (Mills College); M.A., Ph.D. (University of California-Los Angeles).

Mark Turner Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=turner); assistant teaching professor and student recruiter; B.A. (Park University); M.A. (Webster University).

Priscilla Tyler; professor emeritus of education and English; B.A. (Radcliffe College); M.A., Ph.D. (Case Western Reserve University).

Omiunota Ukpokodu[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ukpokodu); professor of education; B.S., M.A., M.S., PhD. (University of Kansas).

Edward Underwood Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=underwood); associate professor of education and Kauffman Endowed Chair; B.S., M.S. (Kansas State College); Ed.D. (University of Cincinnati).

Sue Vartuli[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vartuli); associate professor of education; B.S. (State University of New York-Oneonta); M.S., Ph.D. (Ohio State University).

Jennifer Waddell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=waddell); assistant professor of education; B.A. (University of Montana); M.A., Ph.D. (University of Missouri-Kansas City).

Kenneth Webster; retired assistant professor of physical education; B.E.Ed., M.S.Ed. (Central Missouri State University).

Youfu (Michael) Wei[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wei); associate professor of teaching English to speakers of other languages; B.A. (Yunnan University of the Nationalities in China); M.A. (Naresuan University in Thailand); M.A. and Ph.D. in TESOL (University of Maryland-College Park).

Gary E. Widmar Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=widmar); former vice chancellor for student affairs and professor emeritus of education; B.S. (Illinois State University); M.Ed. (University of Illinois); Ph.D. (Florida State University).

Denise Wiedemann Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wiedemann); project director; B.S., M.S. (University of Southern Connecticut); M.Ed. (Ashland University).

Lindsey Williams[2,3] Contact Information; (http://www.umkc.edu/lookup/search.cfm?LastName=williams) assistant professor of music education; B.M.E., M.M.E. (University of Kansas); Ph.D. (Florida State University).

Raymond G. Williamson; professor emeritus of education; B.S. (Northeast Missouri State University); M.S. (Central Missouri State University); Ph.D. (University of Missouri-Kansas City).

Joseph L. Wolff; professor emeritus of education; B.A. (University of Chicago); M.A., Ph.D. (Indiana University).

Debra Woodard Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=woodard); assistant teaching professor; B.A. (Ottawa University); M.A. (Emporia State University).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Undergraduate

- Bachelor of Arts: Early Childhood Education
- Bachelor of Arts: Elementary Education
- Bachelor of Arts in Middle School Education
- Bachelor of Arts in Secondary Education

Graduate

- Graduate Certificate Programs
  - Graduate Certificate in Educational Foundations (p. 450)
  - Graduate Certificate in Health Professions Education (p. 448)
  - Graduate Certificate in Community College Leadersh (p. 449)ip
  - Graduate Certificate in Reading Intervention (p. 451)
- Master of Arts: Counseling and Guidance
  - Couples and Family Counseling
  - Mental Health Counseling
  - School Counseling
- Master of Arts: Educational Administration
  - Emphasis Area: School (Grades PK-12) Administration
  - Emphasis Area: Higher Education

- Master of Arts: Curriculum and Instruction
  - Emphasis Area: General
  - Emphasis Area: Early Childhood
  - Emphasis Area: Elementary
  - Emphasis Area: Subject Matter
  - Emphasis Area: Multicultural Education
  - Emphasis Area: Teaching English as a Second Language
  - Emphasis Area: Learning Technologies
- Master of Arts: Language and Literacy
- Master of Arts: Special Education

- Educational Specialist: Educational Administration
- Educational Specialist: Counseling and Guidance
- Educational Specialist: Curriculum and Instruction
- Educational Specialist: Language and Literacy

- Educational Administration, Ed.D.
- Counseling Psychology, Ph.D.
- Interdisciplinary, Ph.D. (p. 484)

Accreditation

The teacher education programs of the School of Education are accredited at the bachelor's, master's, educational specialist and doctoral levels by the National Council for Accreditation of Teacher Education for the preparation of elementary teachers, secondary teachers and other school personnel. Continuing accreditation was granted in Spring 2012.

The School of Education is a member of the American Association of Colleges of Teacher Education.

The Ph.D. program in Counseling Psychology is accredited by the American Psychological Association.

Programs for the preparation of teachers and other school personnel are approved by the Missouri Department of Elementary and Secondary Education.

Admission to the Teacher Education Program

In order to meet state and national accredittion standards, the implementation of an electronic assessment system is required to measure the knowledge, skills, and dispositions of teacher candidates. The UMKC School of Education has implemented LiveText in order to meet this requirement. LiveText allows for the tracking of students' progress throughout their careers in the School of Education as well as how that progress relates to the relevant educational standards met by individual programs.

Students receive other benefits from LiveText, including:

- An online document storage area available anywhere with an internet connection, and the ability to share stored documents with fellow students
- A system for creating and sharing professional portfolios that can be disseminated to potential employers

LiveText is used to assist students in the collection, preservation, organization, evaluation, and dissemination of activities, assignments, pieces of evidence, and reflections that are associated with competencies and standards. Information about the School of Education assessment system can be found at this link (http://education.umkc.edu/LiveText).

As part of its assessment system, the School of Education has adopted the Social Equity Essay as a written assessment to measure candidates' dispositions on issues such as social justice and equity. The written prompt will be administered at program entry and program exit. All responses are confidential and will not be used in making grading decisions.

Students new to UMKC should send transcripts and applications for admission to:

UMKC Office of Admissions
5100 Rockhill Road
Kansas City, MO 64110-2499

Current UMKC students or transfers interested in applying to the professional Teacher Education program should following the instructions below:

Students seeking entry into the professional teacher preparation program should apply for admission to the School of Education when they anticipate completion of the majority of their prerequisite coursework with a cumulative 2.75 GPA. Applications for all Teacher Education programs are due

by the end of the fall semester for admission the subsequent summer or fall semester. Specifics on the application process may be found at http://education.umkc.edu/students/admissions/.

1. Initial admission at the freshman or sophomore level will be as a pre-education major to the School of Education in accordance with regular UMKC admissions standards. For students interested in music education, admission will be to the Conservatory of Music and Dance, which is discussed further in that section of the catalog.
2. Admission to Teacher Education:
   - Completion of a majority of specific prerequisite and subject area coursework with a 2.75 cumulative GPA, a 3.0 content and 3.0 professional GPA
   - Score results from the ACT or SAT (if graduated from high school in past 5 years)
   - A score of 235 or greater on each segment of the College Basic Academic Subjects Examination (C-BASE) (**NOTE: CBASE will be replaced with a new standardized test beginning in August of 2014**)
   - Completion of an oral communications class, English Composition I & II and a required math class or its equivalent with grades of C or better (students who have less than a C grade in mathematics may take the subject area CLEP)
   - Clearance of an FBI background check as required by the Missouri Department of Elementary and Secondary Education
   - Interview
   - Acceptance by the Teacher Education Admissions Committee based on one essay selected from prompts on the application form and two letters of recommendation indicating an appropriate disposition to educating children
   - **Passing scores on the appropriate PRAXIS II content knowledge exam are required for admission to the middle school, secondary and K-12 programs. (PRAXIS requirements will be changing after August 2014)**
3. Admission to student teaching requires:
   - Recommendations from teachers.
   - A cumulative 2.75 GPA.
   - A content (subject) area 3.0 GPA (if relevant)
   - Completion of all education courses with grades of C or better.
   - Students must pass an FBI background check as required by the Missouri Department of Elementary and Secondary Education.

Post-Baccalaureate Programs

Students who have earned a degree in another field and wish to become certified teachers should apply to the Teacher Education program by the process outlined above. Academic work completed prior to admission will be reviewed on a course-by-course basis. Coursework in the subject area and the professional education sequence is required of all students as are general education courses specifically required for certification.

Advising and Student Services

The School of Education Student Services Office mission is to facilitate student success by providing quality services and support in the spirit of building a community of learners. The office is a resource for all School of Education students, providing program information as well as referrals to other campus resources and services. Primary responsibilities are to provide quality advising for undergraduates and to coordinate the processing of certification. The staff also assists with recruitment events, contact with prospective students, freshmen and transfer orientation, admissions to teacher education, School of Education scholarship materials, commencement and other student-centered activities.

Academic advisors are available to meet with undergraduate education majors and those seeking teacher certification. Academic advisors can be reached by contacting Student Services in person in room 129 Education, by phone at (816) 235-2234 or by e-mail at education@umkc.edu.

Graduate students are encouraged to contact their department within the first semester to connect with their faculty advisor.

Bachelor of Arts: Early Childhood Education

Student Learning Outcomes

The School of Education subscribes to the Missouri Standards for the Preparation of Educators found at the Missouri Department of Elementary and Secondary Education website - www.dese.mo.gov (http://www.dese.mo.gov).

Missouri Standards for the Preparation of Educators (MoSPE)

Program Standards

- *Standard 1* – Academics: Candidates demonstrate knowledge and application of general education, content knowledge, and pedagogy.
- *Standard 2* – Design and Assessment: The data from fair, valid, and reliable assessments will be used to measure the performance of candidates and educator preparation programs by program and certification areas.

- Standard *3* – Field & Clinical Experiences: Field and clinical experiences, offered in collaboration with PK-12 schools, support the development of educators.
- *Standard 4* – Candidates: A diverse pool of candidates, who demonstrate potential for effectiveness as educators are recruited, admitted, developed and retained by educator preparation programs.
- *Standard 5* – Faculty: Educator preparation faculty are qualified for their assignments, recruited from diverse populations, and model effective professional practices in teaching, learning, scholarship, and service.
- *Standard 6* – Operations and resources: Operations and resources are necessary to govern, develop, support, and maintain the educator preparation program.

Program Requirements

Students who complete this program will earn the bachelor of arts in early childhood education (birth to grade 3). Successful completion of this program includes a professional teacher work sample. This results in eligibility for UMKC's recommendation for teacher certification in a self-contained early childhood/elementary classroom setting with children birth through grade three in Missouri, contingent on meeting state testing requirements. Completing four additional classes (10 credit hours) will allow certification for grades 1-6.

A 2.75 cumulative GPA, 3.0 content GPA and 3.0 professional GPA is required at completion of the program. Grades of C or better are required in all professional education classes. Consult with an academic advisor to determine specific course requirements.

Requirements for the B.A. Early Childhood Education (http://education.umkc.edu/documents/fetch/40)

Graduation Requirements Early Childhood Education

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam completed
- Passing score on Praxis II or designated assessment: Education of Young Children examination
- Teacher Work Sample
- Exit Interview
- Q-Sort Belief Measure
- Social Equity Prompt

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Elementary Education

Student Learning Outcomes

The School of Education subscribes to the Missouri Standards for the Preparataion of Educators (MoSPE) which can be found on the website of the Missouri Department of Elementary and Secondary Education - www.dese.mo.gov (http://www.dese.mo.gov).

Program Standards

- *Standard 1* – Academics: Candidates demonstrate knowledge and application of general education, content knowledge, and pedagogy.
- *Standard 2* – Design and Assessment: The data from fair, valid, and reliable assessments will be used to measure the performance of candidates and educator preparation programs by program and certification areas.
- Standard *3* – Field & Clinical Experiences: Field and clinical experiences, offered in collaboration with PK-12 schools, support the development of educators.
- *Standard 4* – Candidates: A diverse pool of candidates, who demonstrate potential for effectiveness as educators are recruited, admitted, developed and retained by educator preparation programs.
- *Standard 5* – Faculty: Educator preparation faculty are qualified for their assignments, recruited from diverse populations, and model effective professional practices in teaching, learning, scholarship, and service.

- *Standard 6* – Operations and resources: Operations and resources are necessary to govern, develop, support, and maintain the educator preparation program.

Program Requirements

Students who complete this program will earn the bachelor of arts in elementary education. Successful completion of this program includes a teacher work sample and meeting Missouri state certification testing requirements. This results in eligibility for UMKC's recommendation for elementary certification (grades first-sixth) in Missouri.

A 2.75 cumulative GPA, a 3.0 professional GPA and a 3.0 content GPA is required at completion of program. Grades of C or better are required in all subject matter and professional education classes. Consult with an academic advisor to determine specific course requirements.

Bachelor of Arts Elementary Education Course Requirements (http://education.umkc.edu/documents/fetch/41)

Graduation Requirements Elementary Education

- Completion of at least 120 credit hours including all course work listed (although program may require more than 120 credits)
- Written English Proficiency Test passed
- Passing score on Praxis II: Elementary Education: Curriculum, Instruction and Assessment examination
- Teacher Work Sample
- Social Equity Prompt

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Middle School Education

Student Learning Outcomes

The School of Education subscribes to the Missouri Standards for the Preparataion of Educators (MoSPE) which can be found on the website of the Missouri Department of Elementary and Secondary Education - www.dese.mo.gov (http://www.dese.mo.gov).

Program Standards

- *Standard 1* – Academics: Candidates demonstrate knowledge and application of general education, content knowledge, and pedagogy.
- *Standard 2* – Design and Assessment: The data from fair, valid, and reliable assessments will be used to measure the performance of candidates and educator preparation programs by program and certification areas.
- Standard *3* – Field & Clinical Experiences: Field and clinical experiences, offered in collaboration with PK-12 schools, support the development of educators.
- *Standard 4* – Candidates: A diverse pool of candidates, who demonstrate potential for effectiveness as educators are recruited, admitted, developed and retained by educator preparation programs.
- *Standard 5* – Faculty: Educator preparation faculty are qualified for their assignments, recruited from diverse populations, and model effective professional practices in teaching, learning, scholarship, and service.
- *Standard 6* – Operations and resources: Operations and resources are necessary to govern, develop, support, and maintain the educator preparation program.

Program Requirements

The Bachelor of Arts in Middle School Education is taken with an emphasis in the subject area to be taught. Successful completion of this program includes a teacher work sample and meeting Missouri state certification testing requirements. This results in eligibility for UMKC's recommendation for middle school education certification (grades 5-9) in Missouri. The subjects available include:

- English
- Mathematics
- Science

- Social Studies

General education and subject matter requirements will vary with the field to be taught. Students must consult with an advisor to determine specific requirements. Students who already have a bachelor's degree may be required to complete subject area requirements that were not part of their prior degree program in addition to the professional education requirements. Students must consult with an advisor concerning specific requirements. Students may complete 30 hours in a single discipline, or 21 hours in each of two separate disciplines for certification.

A 2.75 cumulative GPA, 3.0 content GPA and 3.0 professional GPA is required at completion of the program. Grades of C or better are required in all subject matter and professional education classes.

Bachelor of Arts Middle School Education Course Requirements (http://education.umkc.edu/documents/fetch/46)

In addition to the courses listed above, at least one Content Field must be selected from the following:

Content Requirements for Middle School English Language Arts

Required Courses		
TCH-ED 432	Special Methods of Teaching English to Middle School and High School Students	3
TCH-ED 461	Student Teaching In Middle School	6-12
EDUC 440	Literature For Adolescents	3
ENGLISH 311	American Literature I	3
ENGLISH 321	American Literature II	3
TCH-ED 494	Language Arts Capstone	2
English Electives		
Select five of the following:		15
EDUC 414	English Language Study In Elementary And Secondary Schools	
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 317	British Literature I	
ENGLISH 320	Structure Of English	
ENGLISH 323	Shakespeare	
ENGLISH 327	British Literature II	
ENGLISH 330	History Of The English Language	
Electives		
Additional course work in any field to assure 120 hours have been attained		6

Graduation Requirements Middle School English

- Completion of at least 120 credit hours including all course work listed
- RooWriter
- Missouri Department of Elementary and Secondary Education (DESE) approved content assessment
- Completion of requirements by DESE

Content Requirements for Middle School Mathematics

Required Courses		
TCH-ED 433	Special Methods of Teaching Middle and Secondary Mathematics	3
TCH-ED 493	Mathematics Capstone	2
TCH-ED 461	Student Teaching In Middle School	6-12
MATH 110 & MATH 120	College Algebra and Precalculus	8
MATH 210 or MATH 244	Calculus I Mathematics for Teachers: Calculus	4
Math Electives		
Math course work		12
Electives		
An additional course to assure 120 hours have been attained		3

Graduation Requirements for Middle School Mathematics

- Completion of at least 120 credit hours including all course work listed
- Roo Writer
- Missouri Department of Elementary and Secondary Education (DESE) approved content assessment
- Completion of requirements by DESE

Content Requirements for Middle School Science

Required Courses		
TCH-ED 435	Special Methods of Teaching Middle and Secondary Science	3
TCH-ED 461	Student Teaching In Middle School	6-12
TCH-ED 495	Science Capstone	2
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
ENV-SCI 110L	Understanding the Earth Laboratory	2
TCH-ED 470	Philosophy and History of Science and Technology	3
GEOG 319	Descriptive and Synoptic Meteorology	4
Science Electives		
Science elective course work		14
Electives		
Additional course work to assure 120 hours have been attained		6

Graduation Requirements for Middle School Science

- Completion of at least 120 credit hours including all course work listed
- RooWriter
- Missouri Department of Elementary and Secondary Education (DESE) approved content assessment
- Completion of requirements by DESE

Content Requirements for Middle School Social Studies

TCH-ED 436	Special Methods of Teaching Social Studies to Middle/Secondary School Students	3
TCH-ED 461	Student Teaching In Middle School	6-12
TCH-ED 496	Social Studies Capstone	2
HISTORY 101	U.S. History to 1877	3
HISTORY 102	U.S. History Since 1877	3
HISTORY 206	World History To 1450	3
HISTORY 208	World History since 1450	3
HISTORY ____	Non-Western History Elective	
GEOG 105	Introduction to the Elements of Geography	3
or GEOG 200	World Geography I	
ECON 201	Introduction To Economics I	3
Electives		
Additional course work to assure 120 hours have been attained		9

Graduation Requirements for Middle School Social Studies

- Completion of at least 120 credit hours including all course work listed (although actual program may require more than 120 credits)
- RooWriter
- Missouri Department of Elementary and Secondary Education (DESE) approved content assessment
- Completion of requirements by DESE
- Social Equity Prompt

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts: Secondary Education

Student Learning Outcomes

The School of Education subscribes to the Missouri Standards for the Preparataion of Educators (MoSPE) which can be found on the website of the Missouri Department of Elementary and Secondary Education - www.dese.mo.gov (http://www.dese.mo.gov).

Program Standards

- *Standard 1* – Academics: Candidates demonstrate knowledge and application of general education, content knowledge, and pedagogy.
- *Standard 2* – Design and Assessment: The data from fair, valid, and reliable assessments will be used to measure the performance of candidates and educator preparation programs by program and certification areas.
- *Standard 3* – Field & Clinical Experiences: Field and clinical experiences, offered in collaboration with PK-12 schools, support the development of educators.
- *Standard 4* – Candidates: A diverse pool of candidates, who demonstrate potential for effectiveness as educators are recruited, admitted, developed and retained by educator preparation programs.
- *Standard 5* – Faculty: Educator preparation faculty are qualified for their assignments, recruited from diverse populations, and model effective professional practices in teaching, learning, scholarship, and service.
- *Standard 6* – Operations and resources: Operations and resources are necessary to govern, develop, support, and maintain the educator preparation program.

Program Requirements

The Bachelor of Arts in Secondary Education is to be taken with an emphasis in the subject to be taught. Dual degrees in secondary education and subject area are possible with additional coursework. Check with an advisor for specific information. Successful completion of this program includes a teacher work sample and meeting Missouri state certification testing requirements. This results in eligibility for UMKC's recommendation for secondary education certification (grades 9-12) in Missouri. The subjects available include:

- Art (K-12)
- Biology
- Chemistry
- Earth Science
- English
- Foreign Language (K-12; French, German, Spanish)
- Mathematics
- Physics
- Social Sciences

Note: Music Education majors should check degree requirements with the Conservatory of Music and Dance.

General education and subject matter requirements vary with the field to be taught. Students must consult with an advisor to determine specific requirements. Students who already have a bachelor's degree may be required to complete subject area requirements that were not part of their prior degree program in addition to the professional education requirements.

Subject Matter Areas

Students must consult with their academic advisor concerning specific requirements. Typically between 30 and 50 hours of subject matter specific coursework is required to attain the subject major.

A 2.75 cumulative GPA, 3.0 content GPA and 3.0 professional GPA is required at completion of the program. Grades of C or better are required in all subject matter and professional education classes. Consult with an academic advisor to determine specific course requirements.

Secondary Education Course Requirements (http://education.umkc.edu/programs/view/22)

In addition to the courses listed above, each student must select a content area and complete specific content area course work and testing.

Course Requirements for Secondary Education Art

Students will receive certification to teach K-12 art upon completion of this program.

ART 112	Foundation Drawing	3
ART 114	Foundation Digital Design	3
ART 121	Foundation 2D Design	3
ART 131	Foundation 3D Design	3
ART 212	Intermediate Drawing	3
ART 221	Painting I	3
Select one of the following:		3
ART 204	Digital Video and Motion Design I	
ART 206	Photography I	
ART 224	Print Media I	
ART 235	Digital Imaging I	
ART 230	Fibers I	
Elective course work in studio art at the junior level or above (ART 300+)		6
Select two of the following:		6
ART-HIST 302	Survey Of Western Art II	
Select one of the two courses below:		
ART-HIST 315	The Arts Of African and New World Cultures (OR)	
ART-HIST 319	Asian Art	
At least one class at the ART 400+ level		3
ART 405	Art In Secondary School	3
TCH-ED 402	Integrated Arts	3
EDUC 489AR	Special Topics	1-6
TCH-ED 419	Student Teaching in Elementary School	3-12

At present the following two classes are not offered at UMKC but must be completed to meet degree and certification requirements for art:

- Ceramics
- Sculpture

Graduation Requirements for Secondary Education Art

- Completion of at least 120 credit hours including all course work listed (although program may require more than 120 credits)
- RooWriter Exam completed
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education Biology

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
BIOLOGY 202	Cell Biology	3
BIOLOGY 206	Genetics	3
BIOLOGY 303	Invertebrate Zoology	3
or BIOLOGY 308	Vertebrate Zoology	
BIOLOGY 346	Plant Biology	3
or BIOLOGY 427	Plant Physiology	
BIOLOGY 405	Introduction to Evolution	3
BIOLOGY 200+ level or above biology course work		6
TCH-ED 470	Philosophy and History of Science and Technology	3
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
PHYSICS 210	General Physics I	4

GEOLOGY 220	General Geology	3
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
ENV-SCI 110L	Understanding the Earth Laboratory	2
TCH-ED 435	Special Methods of Teaching Middle and Secondary Science	3
TCH-ED 495	Science Capstone	2

Graduation Requirements for Secondary Education Biology

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education Chemistry

CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
CHEM 330	Elementary Physical Chemistry	3
CHEM 341	Analytical Chemistry I: Quantitative Analysis	4
CHEM 367	Bioorganic Chemistry	3
CHEM 387	Environmental Chemistry I	3
TCH-ED 470	Philosophy and History of Science and Technology	3
BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
PHYSICS 210	General Physics I	4
GEOLOGY 220	General Geology	3
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
ENV-SCI 110L	Understanding the Earth Laboratory	2
TCH-ED 435	Special Methods of Teaching Middle and Secondary Science	3
TCH-ED 437	Student Teaching in Secondary School	3-12
TCH-ED 495	Science Capstone	2

Graduation Requirements for Secondary Education Chemistry

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education Earth Science

PHYSICS 150	Introduction To Astronomy: Gravity and Motion in the Universe	3
GEOLOGY 220	General Geology	3
GEOLOGY 220L	General Geology Laboratory	2
GEOLOGY 302	Environmental Geology	3
GEOG 319	Descriptive and Synoptic Meteorology	4
Earth Science Electives		15
PHYSICS 210	General Physics I	4
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1

TCH-ED 470	Philosophy and History of Science and Technology	3
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
ENV-SCI 110L	Understanding the Earth Laboratory	2

Graduation Requirements for Secondary Education Earth Science

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education English

Select one of the following English Writing Intensive (WI) electives:		3
ENGLISH 301WI	Writing And The Academy	
ENGLISH 304WI	Workplace Writing	
ENGLISH 305WI	Theory And Practice Of Composition	
ENGLISH 307WI	Language, Literacy, Power	
ENGLISH 308	Rhetorics of New Media	
ENGLISH 309WI	Rhetorics of Public Memory	
ENGLISH 365WI	Contemporary Novel	
ENGLISH 498	Senior Seminar On Writing In The Secondary Classroom	3
Select two of the following:		6
ENGLISH 320	Structure Of English	
ENGLISH 330	History Of The English Language	
EDUC 414	English Language Study In Elementary And Secondary Schools	
ENGLISH 311	American Literature I	3
ENGLISH 321	American Literature II	3
Select one of the following:		3
ENGLISH 300CD	Cluster Course: American Social Film:Silver Screen&American Dream	
ENGLISH 300CQ	Cluster Course: Race in American Film	
ENGLISH 331	African American Literature I	
ENGLISH 332WI	African American Novel	
ENGLISH 333	African American Literature II	
ENGLISH 336	Contemporary American Literature	
ENGLISH 342WI	Women And Rhetoric	
ENGLISH 344WI	Women & Literary Culture: Genre Focus	
ENGLISH 345WI	Women And Literary Culture: Historical Focus	
ENGLISH 378	Asian American Literature	
ENGLISH 408	Harlem Renaissance	
ENGLISH 410	Black Women Writers	
ENGLISH 418	19th-Century American Literature	
ENGLISH 428	20th-Century American Literature	
ENGLISH 440	American Culture	
ENGLISH 441	Girls And Print Culture	
ENGLISH 317	British Literature I	
ENGLISH 327	British Literature II	
Select one of the following:		3
ENGLISH 323	Shakespeare	
ENGLISH 451	Shakespeare Comedies And Histories	
ENGLISH 461	Shakespeare Tragedies And Romances	
EDUC 440	Literature For Adolescents	3
TCH-ED 432	Special Methods of Teaching English to Middle School and High School Students	3

TCH-ED 437	Student Teaching in Secondary School	3-12
TCH-ED 494	Language Arts Capstone	2
Additional hours of course work in any field to assure at least 120 hours have been completed		11

Graduation Requirements for Secondary Education English

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education French

FRENCH 110	Elementary French I	3
FRENCH 120	Elementary French II	3
FRENCH 211	Second Year French I	3
FRENCH 221	Second Year French II	3
FRENCH 315	Intermediate Conversation and Composition I	3
FRENCH 325	Intermediate Conversation and Composition II	3
FRENCH 415	Advanced Conversation and Composition I	3
FRENCH 425	Advanced Conversation and Composition II	3
Select four of the following French electives:		12
FRENCH 301	Introduction to French Literature	
FRENCH 303	Masterpieces of French Literature I	
FRENCH 304	Masterpieces Of French Literature II	
FRENCH 350	French Civilization I	
FRENCH 351	Introduction to French Phonetics	
FRENCH 352	French Civilization II: Contemporary French Civilization	
FRENCH 354	French Civilization III: Lyon, Crossroads of France and Europe	
FRENCH 380	Special Topics	
FRENCH 412	17th Century French Literature	
FRENCH 413	18th-Century French Literature	
FRENCH 414	Medieval Literature	
FRENCH 417	16th-Century French Literature	
FRENCH 426	20th-Century French Literature	
FRENCH 435	Directed Discussions In Advanced French	
FRENCH 440	Medieval Romance	
FRENCH 443	Early French Theater	
FRENCH 444	Renaissance Poetry	
FRENCH 446	17th-Century French Drama	
FRENCH 452	Medieval Poetry	
FRENCH 455	Fin-De-Siecle and Belle Epoque	
FRENCH 456	20th Century French Poetry	
FRENCH 457	20th Century French Narrative	
FRENCH 463	19th-Century French Fiction	
FRENCH 471	Autobiography	
FRENCH 472	Francophone Studies	
FRENCH 480	Special Topics	
FRENCH 499	Senior Seminar (Capstone)	
FRN-LNG 494	Methods of Teaching Foreign Languages	3
TCH-ED 419	Student Teaching in Elementary School	3-12
FRN-LNG 480	Special Topics (Special Methods II (Capstone))	1-3
Additional hours of course work in any field to assure at least 120 hours have been completed		4

Graduation Requirements for Secondary Education French

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education German

GERMAN 110	Elementary German I	3
GERMAN 120	Elementary German II	3
GERMAN 211	Second-Year German I	3
GERMAN 221	Second-Year German II	3
GERMAN 315	Intermediate Conversation and Composition I	3
GERMAN 325	Intermediate Conversation and Composition II	3
GERMAN 415	Advanced Conversation and Composition I	3
GERMAN 425	Advanced Conversation and Composition II	3
Select four of the following German electives:		12
GERMAN 301	Introduction to Literary Studies	
GERMAN 305	Current Events in Germany	
GERMAN 306	Aspects Of Contemporary German Culture (Conducted In German)	
GERMAN 307	From the Middle Ages to the Baroque	
GERMAN 308	From the Enlightenment Through the 19th Century	
GERMAN 310	Classical Period Of German Literature	
GERMAN 313	CC: Intro to German Studies	
GERMAN 314CC	Weimar Culture: Gender and Modernity in Central Europe	
GERMAN 340	Society and Literature in 20th-Century Germany	
GERMAN 341	German Film	
GERMAN 342	Contemporary German Film 1980	
GERMAN 345	The Antifascist Tradition In Germany	
GERMAN 400	Rainer Maria Rilke	
GERMAN 410	Music in German Culture	
GERMAN 411	Romanticism	
GERMAN 412	The German Novelle	
GERMAN 414	German Lyric Poetry	
GERMAN 421	19Th-Century Drama	
GERMAN 426	20th-Century German Literature	
GERMAN 453	Women’s Voices in Germany and Austria	
GERMAN 480	Special Topics	
GERMAN 499	Senior Seminar (Capstone)	
FRN-LNG 494	Methods of Teaching Foreign Languages	3
TCH-ED 419	Student Teaching in Elementary School	3-12
TCH-ED 437	Student Teaching in Secondary School	3-12
FRN-LNG 480	Special Topics (Special Methods II (Capstone))	2
Additional hours of course work in any field to assure at least 120 hours have been completed		4

Graduation Requirements for Secondary Education German

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education Mathematics

MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 250	Calculus III	4
MATH 300	Linear Algebra I	3
MATH 301	On Solid Ground: Sets and Proofs	3
MATH 224	Mathematics for Teachers: Geometry	3
or MATH 424	Mathematics for Secondary Teachers: Geometry	
COMP-SCI	Computer programming language course	
Mathematics at 200+ level (minimum 17 hours)		17
TCH-ED 433	Special Methods of Teaching Middle and Secondary Mathematics	3
TCH-ED 437	Student Teaching in Secondary School	3-12
TCH-ED 493	Mathematics Capstone	2

Graduation Requirements for Secondary Education Mathematics

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education Physics

PHYSICS 240	Physics For Scientists and Engineers I	5
PHYSICS 250	Physics For Scientists and Engineers II	5
PHYSICS 310	Mechanics I	3
PHYSICS 350	Modern Physics With Engineering Applications	3
PHYSICS 460	Electricity And Magnetism I	3
PHYSICS 475LWI	Nuclear Physics Laboratories	3
BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
GEOLOGY 220	General Geology	3
ENV-SCI 110R	Understanding the Earth: Introduction to Environmental Science and Laboratory	3
ENV-SCI 110L	Understanding the Earth Laboratory	2
TCH-ED 435	Special Methods of Teaching Middle and Secondary Science	3
TCH-ED 470	Philosophy and History of Science and Technology	3
TCH-ED 437	Student Teaching in Secondary School	3-12
TCH-ED 495	Science Capstone	2

Graduation Requirements for Secondary Education Physics

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam completed
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education Social Studies

HISTORY 101	U.S. History to 1877	3
HISTORY 102	U.S. History Since 1877	3
HISTORY 206	World History To 1450	3
HISTORY 208	World History since 1450	3
HISTORY - Electives in U.S. history numbered 300+		6
Elective in Non-U.S. history numbered 300+		3

Elective in Non-Western history		3
Electives in history		9
POL-SCI 210	American Government	3
Elective in political science		3
ECON 201	Introduction To Economics I	3
GEOG 200	World Geography I	3
VARIOUS - behavioral coursework from psychology, sociology or anthropology		6
TCH-ED 436	Special Methods of Teaching Social Studies to Middle/Secondary School Students	3
TCH-ED 437	Student Teaching in Secondary School	3-12
TCH-ED 496	Social Studies Capstone	2

Graduation Requirements for Secondary Education Social Studies

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Course Requirements for Secondary Education Spanish

SPANISH 110	Elementary Spanish I	3
SPANISH 120	Elementary Spanish II	3
SPANISH 211	Second Year Spanish I	3
SPANISH 221	Second Year Spanish II	3
SPANISH 315	Intermediate Conversation And Composition I	3
SPANISH 325	Intermediate Conversation And Composition II	3
SPANISH 415	Advanced Conversation And Composition I	3
SPANISH 425	Advanced Conversation And Composition II	3
Select four of the following SPANISH electives:		12
SPANISH 301	Introduction To Literary Studies	
SPANISH 350	Continental Spanish Civilization	
SPANISH 351	Latin American Civilization	
SPANISH 365	The Search For Mexican Identity	
SPANISH 373	History Of Spanish Literature I	
SPANISH 374	History Of Spanish Literature II	
SPANISH 380	Special Topics	
SPANISH 383	Introduction To Spanish American Literature I	
SPANISH 384	Introduction To Spanish American Literature II	
SPANISH 414	Early 20th Century Penisular Literature: From the Generation of 1898 to Surrealism	
SPANISH 416	Medieval Spanish Literature	
SPANISH 417	Spanish-American Lyric Poetry	
SPANISH 418	Romantic Movement In Spain	
SPANISH 420	Cervantes' Don Quixote, Part I	
SPANISH 426	Golden Age Drama	
SPANISH 427	Pre-Columbian And Spanish Colonial Literature	
SPANISH 428	Contemporary Spanish Poetry	
SPANISH 429	The Novel Of The Mexican Revolution	
SPANISH 430	Spanish Mysticism	
SPANISH 431	The Golden Age Novel	
SPANISH 432	Pastoral Literature	
SPANISH 434	The Picaresque Novel	
SPANISH 435	Peninsular Poetry	
SPANISH 436	Spain's Transition to Democracy: Literature and Film	
SPANISH 450	Modern Classics Of Latin American Literature	

SPANISH 453	Spanish-American Short Story	
SPANISH 460	U.S.-Latino Literature	
SPANISH 480	Special Topics	
SPANISH 490	Special Readings	
SPANISH 499	Senior Seminar (Capstone)	
FRN-LNG 494	Methods of Teaching Foreign Languages	3
FRN-LNG 480	Special Topics (Special Methods II (Capstone))	2
TCH-ED 419	Student Teaching in Elementary School	3-12
TCH-ED 437	Student Teaching in Secondary School	3-12
Additional hours of course work in any field to assure at least 120 hours have been completed		4

Graduation Requirements for Secondary Education Spanish

- Completion of at least 120 credit hours including all course work listed (although your program may require more than 120 credits)
- RooWriter Exam complete
- DESE approved content exam
- Social Equity Prompt

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Centers and Projects

Berkley Child and Family Development Center

The Berkley Child and Family Development Center provides quality care and education for young children and serves as a research training site for UMKC students. The center is administered through the School of Education and is part of the academic unit. It is accredited through the National Association for the Education of Young Children and licensed by the state of Missouri. Enrollment is open to the University population and the community for children ages 3 months to 6 years old. During the summer, programming is also provided for children ages 6 to 11 years old. Tuition assistance scholarships are available and are awarded based upon financial need. The center is accessible to children with special needs. To inquire about enrollment or a tour of the facility call (816) 235-2600.

Center for Economic Education

The UMKC Center for Economic Education is one of a network of centers across the state and nation that promotes economic and financial education in schools. The Center is affiliated with the Missouri Council on Economic Education, which in turn is a part of the National Council for Economic Education. The UMKC Center for Economic Education's mission is to serve the economic education needs of teachers and their students. The Center achieves its mission through development and delivery of undergraduate/pre-service teacher training, in-service teacher training, student and community programs, and web-based resources and programs.

Charter School Center

As part of UMKC's vision of active engagement with its city and its mission to collaborate in urban issues and education, the UMKC Charter School Center was created to:

- Establish and assist in the development of high quality urban schools that will retain and attract families with school-age children within the Kansas City Missouri School District.
- Sponsor charter schools which address safe and orderly climates, high attendance,m increased parent involvement, high academic achievement, and effective governance practices to ensure this is the norm for all students regardless of economic standing, race, culture, or gender.
- In exchange for greater autonomy, the charter schools sponsored by UMKC are more accountable for student achievement, fiscal responsibility, and legal compliance.
- Provide schools of choice for parents and students which could encourage more effective practices and collaboration throughout the Kansas City Missouri School District.

Kansas City Regional Professional Development Center (KCRPDC)

The Kansas City Regional Professional Development Center (KCPDC) is one of nine regional professional development centers in Missouri, partially funded by the Department of Elementary and Secondary Education and serving schools, districts and educators in the Kansas City region. The mission of the KCPDC is to build the capacity of educators to maximize student performance through high quality professional development. The Center oversees several state and federally funded projects:

Migrant Education and English Language Learning(MELL)

The Missouri Migrant Education and English Language Learning program (MELL) is designed to use existing resources to better serve all English Language Learning (ELL) and migrant students in the state of Missouri. The MELL program works to prevent duplicate services and allows most funds to swiftly reach any and all Missouri school districts with children of need.

Missouri School-Wide Positive Behavior Support

Missouri School-wide Positive Behavior Support is a partnership among the Missouri Department of Elementary and Secondary Education (DESE), The University of Missouri-Columbia (MU) Center for School-wide Positive Behavior Support and the Office of Special Education Programs (OSEP) Center on Positive Behavioral Interventions and Supports, University of Oregon and Connecticut. The program facilitates teachers and administrators in implementing a behavior culture and climate to increase learning.

NASA Education Resource

Missouri's NASA Resource Center is located at Southeast Missouri State University in Cape Girardeau. UMKC hosts a Regional Resource consultant who provides resources and instructional lessons and support in Science.

Special Education Consultants

The KCPDC provides technical assistance and instructional support to special education teachers and administrators. Services include supporting effective practices, compliance, post-secondary transition planning, and MAP-A.

Professional Learning Communities

This Missouri Professional Learning Communities Project (PLC) evolved from the Missouri Accelerated Schools Project which had served as a school reform initiative for many years. PLC consultants work with building leadership teams during a multi-year process to implement school-wide reform.

Curriculum, Instructional and Assessment Support

Consultants at the KCPDC are available to assist teachers and administrators in reviewing, designing and implementing effective curriculum, instructional strategies and assessments.

Curricula Objectives

The UMKC School of Education has been committed to professional education in the Kansas City metropolitan area for 60 years. Throughout the School's history, faculty have an established record of involvement in educational reform - exemplified through innovative teaching methods, action-based research, and community-focused programs preparing teachers, administrators, and mental health professionals for the challenges in urban communities today and for the future.

The primary objectives of the School of Education, which stem from our conceptual framework, mission, and values, are:

- To provide sound theoretical foundations and practical skills at the undergraduate and graduate levels required for competent performance by teachers, administrators and special-services personnel in schools, colleges and universities in a culturally pluralistic society.
- To provide graduate education and research skills which are supportive of and lead to advanced levels of scholarly achievement.
- To provide a diversity of specialized education and training programs for persons engaged in educational roles in non-school settings such as governmental agencies, social service agencies, mental and physical health care institutions, business and industrial organizations and private practice.
- To provide leadership, consultation and other support services for quality improvement in planning and conducting educational programs in schools, higher education institutions, and community agencies and organizations.
- To provide professional development opportunities for educators at all levels through specially designed programs in research, continuing education instruction, in-service programs and workshops.
- To impact the student learning in classrooms and communities throughout Missouri and the Kansas City metropolitan region in positive and meaningful ways.
- To make original contributions to the broad field of professional education through basic and applied research by both faculty and students with specific emphasis on issues of urban education.

Division of Counseling and Educational Psychology

Chair:
Chris Brown, Ph.D. Contact Information (http://www.umkc.edu/lookup/details.cfm?id=%28%26%3D%3F7%5F%40%24%2CU%2DT%20%0A)
(816) 235-**2491**

Areas of Study and Degrees

- M.A. Counseling and Guidance; Emphasis Areas: School Counseling, Mental Health Counseling, and Couples and Family Counseling (p. 453)
- Ed.S. Counseling and Guidance; Emphasis Areas: School Counseling, General Mental Health (p. 437)
- Ph.D. Counseling Psychology (p. 472)

Faculty Scholastic Activity and Research Interests

The faculty in Counseling and Educational Psychology embodies a diverse gathering of expertise and interest. Faculty members conduct research in a wide variety of counseling and education-related areas, direct grant programs, and counsel clients in therapy. Individual and cultural diversity is paramount to the division, and faculty members attend to diversity issues in both coursework and research. Faculty members are invested in advising students in research, evaluation and counseling endeavors in order to help them achieve their educational goals.

Division of Curriculum and Instructional Leadership

Chair:
Rita Barger, Ph.D. Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vartuli)
(816) 235-**5655**

Areas of Study and Degrees

- B.A. Early Childhood Education (p. 414)
- B.A. Elementary Education (p. 415)
- B.A. Middle School Education (p. 416) (English, Mathematics, Natural Science, Social Studies)
- B.A. Secondary Education; Certification areas: Art, English, Foreign Language (French, German, Spanish), Mathematics, Natural Sciences (Biology, Chemistry, Earth Science, Physics) and Social Studies (p. 419)

Undergraduate students may also elect to pursue a dual degree between Education and Arts and Sciences. Secondary education majors may earn a B.A. or B.S. degree in a major in the College of Arts and Sciences. Elementary and early childhood education majors may earn a bachelor of liberal arts degree in the College of Arts and Sciences. Contact the advising office of the College of Arts and Sciences for more details.

- M.A. Curriculum and Instruction; Emphasis Areas: Early Childhood, Elementary, General, Multicultural Education, Subject Matter Specialty and Teaching English to Speakers of Other Languages (p. 456)
- M.A. Language and Literacy (p. 470)
- M.A. Special Education (Mild/Moderate Cross-Categorical Disabilities) (p. 471)
- Ed.S. Curriculum and Instruction (p. 440)
- Ed.S. Language and Literacy (p. 444)
- Ph.D. Interdisciplinary (Curriculum and Instruction and other disciplines) (p. 505)

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking.
   - Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.

3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Student Academic Assessment Policy

The National Council for Accreditation of Teacher Education, the accreditation body for the School of Education, has standards which require that candidates demonstrate the knowledge, skills and professional dispositions necessary for educators and educational leaders. The academic assessment of a student in the School of Education is a significant event for both the student and the faculty. It represents an evaluation by the faculty of student competency in academic skills and/or in other critical areas of professional conduct.

At any point during the student's matriculation through the program, the faculty retains the right to review any student behavior that may affect the welfare of the student or others. Such a review may result in the student being encouraged to receive additional support and assistance or possibly not being permitted to continue in the program. The following are offered as examples of behaviors that are the basis for evaluation of student progress:

1. Failure to maintain academic standards (e.g., 3.0 GPA).
2. Academic dishonesty (e.g., cheating, plagiarism).
3. Unethical or unprofessional behavior which could include but is not limited to, dishonesty; lack of collegiality, cooperation, or responsibility; inability to handle stress; abrasiveness; lack of timeliness; to name a few.
4. Behaviors that obstruct the leadership process and/or threaten the welfare of the student or others (e.g., verbal abuse, physical abuse, active substance abuse).
5. Failure to comply with established University or Program timetables, requirements, and policies (e.g., failure to meet time limits for completion of degree program).
6. Violation of federal, state, or local laws on UMKC premises or at UMKC sponsored or supervised activities.
7. Consideration may be given to other circumstances as they arise.

Procedures for Student Evaluation

To protect student interests as well as the rights of faculty to uphold the academic and professional standards of the academic program, the following steps may be taken as part of the academic review process.

1. If a concern about student behavior develops within the context of a course or at a field experience, the course instructor and/or field supervisor documents concerns and notifies the student's faculty advisor. The instructor meets with the student (and the faculty advisor if needed) to outline deficiencies and establish a remedial course of action (if appropriate). Chronological time frames may be established to evaluate performance. Others (i.e., program faculty or professionals and agents outside the university) who have university- related concerns about a student outside of the context of a course may communicate their concerns directly to the appropriate division chair or the Dean's Office. (Such discussions are governed by the Family Educational Rights and Privacy Act.)
2. If the instructor(s) has made a reasonable determination with adequate documentation that a pattern of severe problems exists, he or she warrants additional action beyond that already taken. Then the instructor will communicate the concerns, actions taken and their outcomes to the faculty advisor and Division Chair and request a hearing panel be assembled to review the student's status.
3. The student will be informed in writing by the Division Chair of the concerns and a hearing will be set by the Dean's Office with the program faculty (at least three faculty, in addition to the faculty member filing the complaint, must be present) and the student. An Associate Dean will present the scenario(s) and the student will have a right to respond to the allegations. The hearing panel may ask questions of both parties. The student may bring another person of support to the hearing but this individual may not speak on behalf of the student. The student will receive copies of all written documentation related to the allegations in advance of the hearing. This hearing will determine the student's status in the program.
4. The program faculty will notify the student in writing of the outcome of the hearing and make a recommendation to the Dean.

5. The student has a right to appeal the decision of the program faculty and must notify the Dean in writing within ten business days of the faculty decision. Another hearing will take place between the student and the Dean or his/her designee. The Dean reviews the recommendation and conveys a decision to the respective faculty group and the student.
6. Students who have been declared ineligible due to unsatisfactory progress or performance may appeal such decisions to the Dean of the School of Graduate Studies, as designee of the Chancellor. This appeal must be made in writing within 14 consecutive days after receipt of the registrar's notification to the student of the decision. The Dean of the School of Graduate Studies will review the full record of the case and the appeal document.
7. The decision of the Graduate Dean, as the Chancellor's designated representative in such cases, is final and will be communicated in writing to:
    a. The student
    b. The graduate faculty review group(s)
    c. The academic dean
    d. The registrar

Faculty Scholastic Activity and Research Interests

Faculty in Curriculum and Instruction have a wide variety of experiences and interests. Several faculty members conduct research on achievement and pedogogy for at-risk students, direct grant programs and work intensely and collaboratively in school settings. Faculty emphasize the importance of technology in the classroom and incorporate this content into their work. They are active in national and regional professional associations, in which many hold offices. Faculty in Curriculum and Instruction strive to facilitate high levels of professional development and leadership skills and help their students achieve their educational goals.

Division of Educational Leadership, Policy and Foundations

Chair:
Bonita Butner, Ph.D. Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=butner)
(816) 235-**2716**

Areas of Study and Degrees

- M.A. Educational Administration; Emphasis Areas: PK-12 Administration (Building-Level), Higher Education Administration (http://education.umkc.edu/academics/masters-degrees)
- Ed.S. Educational Administration; Emphasis Areas: PK-12 Administration (Building-Level, Advanced Principal, District-Level) (http://education.umkc.edu/academics/masters-degrees)
- Ed.D. Educational Administration; Emphasis Areas: PK-12 Administration; Higher Education Administration (http://education.umkc.edu/academics/masters-degrees)
- Ph.D. Interdisciplinary (Educational Leadership, Policy and Foundations with other disciplines) (See School of Graduate Studies)
- Graduate Certificate in Community College Leadership (p. 449)
- Graduate Certificate in Educational Foundations

Student Academic Assessment Policy

The National Council for Accreditation of Teacher Education, the accreditation body for the School of Education, has standards which require that candidates demonstrate the knowledge, skills and professional dispositions necessary for educators and educational leaders. The academic assessment of a student in the School of Education is a significant event for both the student and the faculty. It represents an evaluation by the faculty of student competency in academic skills and/or in other critical areas of professional conduct.

At any point during the student's matriculation through the program, the faculty retains the right to review any student behavior that may affect the welfare of the student or others. Such a review may result in the student being encouraged to receive additional support and assistance or possibly not being permitted to continue in the program. The following are offered as examples of behaviors that are the basis for evaluation of student progress:

1. Failure to maintain academic standards (e.g., 3.0 GPA).
2. Academic dishonesty (e.g., cheating, plagiarism).
3. Unethical or unprofessional behavior which could include but is not limited to, dishonesty; lack of collegiality, cooperation, or responsibility; inability to handle stress; abrasiveness; lack of timeliness; to name a few.
4. Behaviors that obstruct the leadership process and/or threaten the welfare of the student or others (e.g., verbal abuse, physical abuse, active substance abuse).
5. Failure to comply with established University or Program timetables, requirements, and policies (e.g., failure to meet time limits for completion of degree program).
6. Violation of federal, state, or local laws on UMKC premises or at UMKC sponsored or supervised activities.
7. Consideration may be given to other circumstances as they arise.

Procedures for Student Evaluation

To protect student interests as well as the rights of faculty to uphold the academic and professional standards of the academic program, the following steps may be taken as part of the academic review process.

1. If a concern about student behavior develops within the context of a course or at a field experience, the course instructor and/or field supervisor documents concerns and notifies the student's faculty advisor. The instructor meets with the student (and the faculty advisor if needed) to outline deficiencies and establish a remedial course of action (if appropriate). Chronological time frames may be established to evaluate performance. Others (i.e., program faculty or professionals and agents outside the university) who have university- related concerns about a student outside of the context of a course may communicate their concerns directly to the appropriate division chair or the Dean's Office. (Such discussions are governed by the Family Educational Rights and Privacy Act.)
2. If the instructor(s) has made a reasonable determination with adequate documentation that a pattern of severe problems exists, he or she warrants additional action beyond that already taken. Then the instructor will communicate the concerns, actions taken and their outcomes to the faculty advisor and Division Chair and request a hearing panel be assembled to review the student's status.
3. The student will be informed in writing by the Division Chair of the concerns and a hearing will be set by the Dean's Office with the program faculty (at least three faculty, in addition to the faculty member filing the complaint, must be present) and the student. An Associate Dean will present the scenario(s) and the student will have a right to respond to the allegations. The hearing panel may ask questions of both parties. The student may bring another person of support to the hearing but this individual may not speak on behalf of the student. The student will receive copies of all written documentation related to the allegations in advance of the hearing. This hearing will determine the student's status in the program.
4. The program faculty will notify the student in writing of the outcome of the hearing and make a recommendation to the Dean.
5. The student has a right to appeal the decision of the program faculty and must notify the Dean in writing within ten business days of the faculty decision. Another hearing will take place between the student and the Dean or his/her designee. The Dean reviews the recommendation and conveys a decision to the respective faculty group and the student.
6. Students who have been declared ineligible due to unsatisfactory progress or performance may appeal such decisions to the Dean of the School of Graduate Studies, as designee of the Chancellor. This appeal must be made in writing within 14 consecutive days after receipt of the registrar's notification to the student of the decision. The Dean of the School of Graduate Studies will review the full record of the case and the appeal document.
7. The decision of the Graduate Dean, as the Chancellor's designated representative in such cases, is final and will be communicated in writing to:
    a. The student
    b. The graduate faculty review group(s)
    c. The academic dean
    d. The registrar

Faculty Scholastic Activity and Research Interests

Faculty in Educational Leadership, Policy and Foundations have a wide variety of experiences and interests. Faculty members engage in research and consult on education-related issues in both public and higher education. The faculty are committed to multiculturalism and the importance of diversity in education settings. They advise students in research and administrative endeavors, and help them achieve their professional career goals.

ELPF Student Learning Outcomes

Student Learning Outcomes (K-12)

The mission of the UMKC division of Educational Leadership, Policy and Foundations is to prepare and professionally advance educational leaders who are in the fields of Prek-12 and higher education. Faculty members are committed to students to ensure that they become knowledgeable, skilled, and highly effective transformational educational leaders in their schools/educational institutions communities.

Program Goals for Prek-12 Educational Leadership

1. *Program Goal 1 - VISION:* Educational leaders have the knowledge, skills, and dispositions required to promost the success of all students by facilitating the development, articulation, implementation, and stewardship of a shared vision of learning, strong organizational mission, and high expectations for every student.
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam: MoSTEP=State Accreditation)
   - MoSTEP Standard 1.3.1
     - A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.
   - ELPS Performance Expectation 1, Elements A, B, C
     - Education leaders ensure the achievement of all students by guiding the development and implementation of a shared vision of learning, strong organizational mission, and high expectations for every student.
   - ELCC Standard 1, Elements 1.1, 1.2, 1.3, 1.4, 1.5

- Candidates who complete the program are educational leadersh who have the knowledge and ability to promote the success of all students by facilitating the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community.

2. *Program Goal 2 - SCHOOL CULTURE & INSTRUCTIONAL LEADERSHIP:* Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by supporting a positive and collaborative school culture committed to applying high-quality research and data-based practices to continuously improve student learning and adult professional development programs, providing a rigorous curriculum aligned with content standards, and guiding a comprehensive evaluation and assessment program that includes the role of technology in promoting student learning and professional growth.
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam: MoSTEP=State Accreditation)
   - MoSTEP Standard 1.3.2
     - A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.
   - ELPS Performance Expectation 2, Elements A, B, C
     - Education leaders ensure achievement and success of all students by monitoring and continuously improving teaching and learning.
   - ELCC Standard 2, Elements 2.1, 2.2, 2.3, 2.4
     - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff.

3. *Program Goal 3 - ORGANIZATION & MANAGEMENT: Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by managing the organizational and operational systems, and facilitating the equitable allocation of fiscal, human, and other resources in a way that promotes a safe, efficient, and effective learning environment.*
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam: MoSTEP=State Accreditation)
   - MoSTEP Sandard 1.3.3
     - A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.
   - ELPS Performance Expectation 3, Elements A, B, C
     - Education leaders ensure the success of all students by managing organizational systems and resources for a safe, high-performing learning environment.
   - ELCC Standard 3, Elements 3.1, 3.2, 3.3
     - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment.

4. *Program Goal 4 - PARENTAL & COMMUNITY INVOLVEMENT*: Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by communicating and collaborating with families and other community members, demonstrating cultural competence in sharing responsibilities with diverse members of the school community, and developing mutually beneficial relationships with community organizations to expand available resources to improve teaching and learning.
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam: MoSTEP=State Accreditation)
   - MoSTEP Standard 1.3.4
     - A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.
   - ELPS Performance Expectation 4, Elements A, B, C
     - Education leaders ensure the success of all students by collaborating with families and stakeholders who represent diverse community interests and needs and mobilizing community resources that improve teaching and learning.
   - ELCC Standard 4, Elements 4.1, 4.2, 4.3
     - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources.

5. *Program Goal 5 - INTEGRITY & ETHICAL LEADERSHIP: Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by modeling high expectations and examining assumptions and beliefs that affect student learning, protecting confidentiality of students, staff, and families, continuously improving knowledge and skills, and acting with integrity, fairly, and in an ethical manner.*
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam: MoSTEP=State Accreditation)
   - MoSTEP Standard 1.3.5
     - A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner.
   - ELPS Performance Expectation 5, Elements A, B, C
     - Education leaders ensure the success of all students by being ethical and acting with integrity.
   - ELCC Standard 5, Elements 5.1, 5.2, 5.3

    - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by acting with integrity, fairly, and in an ethical manner.

6. *Program Goal 6 - EDUCATIONAL CONTEXT: Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural contexts affecting education to advocate for students' and teachers' needs.*
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam: MoSTEP=State Accreditation)
   - MoSTEP STandard 1.3.6
     - A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.
   - ELPS Performance Expectation 6, Elements A, B, C
     - Education leaders ensure the success of all students by influencing interrelated systems of political, social, economic, legal, and cultural contexts affecting education to advocate for their teachers' and students' needs.
   - ELCC Standard 6, Elements 6.1, 6.2, 6.3
     - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.
7. *Program Goal 7 - INTERNSHIP:* The internship provides significant opportunities for candidates to synthesize and apply their knowledge and understanding, to practice and develop the skills, and to refine and clarify the dispositions identified in Program Goals 1-6 through substantial, sustained, standards-based work in real settings, planned and guided cooperatively by the institution and school district personnel for graduate credit.
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam: MoSTEP=State Accreditation)
   - ELCC STandard 7, Elements 7.1, 7.2, 7.3, 7.4, 7.5, 7.6
     - Internship. The internship provides significant opportunities for candidates to synthesize and apply the knowledge and practice and develop the skills identified in Standards 1-6 through substantial, sustained, standards-based work in real settings, planned and guided cooperatively by the institution and school district personnel for graduate credit.

Student Learning Outcomes for Higher Education Administration

Upon completion of the Higher Education Administration program, the student will:

- Have a thorough grounding of higher education/student affairs as a field of study
- Understand organizational, management, leadership and supervision theories and issues
- Understand developmental theories as they relate to college students
- Understand professional requirements and ethics of the field
- Develop self-awareness
- Develop multicultural competencies
- Improve communication skill
- Develop skills to use technology to enhance the educational experience
- Develop the ability to analyze and interpret current research in the field
- Increase skills to apply research
- Improve ability to integrate and synthesize information

Ed.D. - Educational Administration

The Doctorate of Education Degree (Ed.D.) in Educational Administration has been designed to meet the needs of aspiring administrators in urban and metropolitan school districts and colleges/universities. There are two focus areas within the Ed.D. program: PK-12 school administration and higher education administration.

Coordinators:
Loyce Caruthers Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=caruthers), (816) 235-**1044**, caruthersl@umkc.edu **(PK-12)**
Bonita Butner Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=butner) (816) 235-**2325**, butnerb@umkc.edu **(Higher Education)**

Doctor of Education: Focus in PK-12 Administration

Criteria for Admission to PK-12 Focus

1. Completed UMKC application.
2. Official transcripts from each college attended.

3. Master's degree or Educational Specialist degree or equivalent from an accredited institution with G.P.A. of at least 3.65 in Education Administration. (Master's in other fields may be provisionally accepted.)
4. Graduate Record Examination within the last five years: verbal, quantitative, and analytical writing.
5. Four professional or academic letters of reference.
6. An autobiographical statement (500 words or less) that includes your professional goals and how the doctoral degree will help you in achieving these goals, and a description of some of your leadership accomplishments.
7. A writing sample, which gives evidence of your writing ability. The sample may be a previous course paper, a chapter from thesis, a published article, etc. Send copies for documents will not be returned.
8. Successful completion of three hours or equivalent of EDUC-R&P 5505 **-and-** three hours or equivalent of EDUC-R&P 5508 with a grade of B or higher.

Student Learning Outcomes

The mission of the UMKC division of Educational Leadership, Policy and Foundations is to prepare and professionally advance educational leaders who are in the fields of Prek-12 and higher education. Faculty members are committed to students to ensure that they become knowledgeable, skilled, and highly effective transformational educational leaders in their schools/educational institutions communities.

Program Goals for Prek-12 Educational Leadership

1. *Program Goal 1 - VISION:* Educational leaders have the knowledge, skills, and dispositions required to promost the success of all students by facilitating the development, articulation, implementation, and stewardship of a shared vision of learning, strong organizational mission, and high expectations for every student.
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam)
   - ELPS Performance Expectation 1, Elements A, B, C
     - Education leaders ensure the achievement of all students by guiding the development and implementation of a shared vision of learning, strong organizational mission, and high expectations for every student.
   - ELCC Standard 1, Elements 1.1, 1.2, 1.3, 1.4, 1.5
     - Candidates who complete the program are educational leadersh who have the knowledge and ability to promote the success of all students by facilitating the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community.
2. *Program Goal 2 - SCHOOL CULTURE & INSTRUCTIONAL LEADERSHIP:* Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by supporting a positive and collaborative school culture committed to applying high-quality research and data-based practices to continuously improve student learning and adult professional development programs, providing a rigorous curriculum aligned with content standards, and guiding a comprehensive evaluation and assessment program that includes the role of technology in promoting student learning and professional growth.
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam)
   - ELPS Performance Expectation 2, Elements A, B, C
     - Education leaders ensure achievement and success of all students by monitoring and continuously improving teaching and learning.
   - ELCC Standard 2, Elements 2.1, 2.2, 2.3, 2.4
     - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff.
3. *Program Goal 3 - ORGANIZATION & MANAGEMENT: Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by managing the organizational and operational systems, and facilitating the equitable allocation of fiscal, human, and other resources in a way that promotes a safe, efficient, and effective learning environment.*
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam)
   - ELPS Performance Expectation 3, Elements A, B, C
     - Education leaders ensure the success of all students by managing organizational systems and resources for a safe, high-performing learning environment.
   - ELCC Standard 3, Elements 3.1, 3.2, 3.3
     - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment.
4. *Program Goal 4 - PARENTAL & COMMUNITY INVOLVEMENT*: Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by communicating and collaborating with families and other community members, demonstrating cultural competence in sharing responsibilities with diverse members of the school community, and developing mutually beneficial relationships with community organizations to expand available resources to improve teaching and learning.
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam)

- ELPS Performance Expectation 4, Elements A, B, C
  - Education leaders ensure the success of all students by collaborating with families and stakeholders who represent diverse community interests and needs and mobilizing community resources that improve teaching and learning.
- ELCC Standard 4, Elements 4.1, 4.2, 4.3
  - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources.

5. *Program Goal 5 - INTEGRITY & ETHICAL LEADERSHIP: Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by modeling high expectations and examining assumptions and beliefs that affect student learning, protecting confidentiality of students, staff, and families, continuously improving knowledge and skills, and acting with integrity, fairly, and in an ethical manner.*
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam)
   - ELPS Performance Expectation 5, Elements A, B, C
     - Education leaders ensure the success of all students by being ethical and acting with integrity.
   - ELCC Standard 5, Elements 5.1, 5.2, 5.3
     - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by acting with integrity, fairly, and in an ethical manner.
6. *Program Goal 6 - EDUCATIONAL CONTEXT: Educational leaders have the knowledge, skills, and dispositions required to promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural contexts affecting education to advocate for students' and teachers' needs.*
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam)
   - ELPS Performance Expectation 6, Elements A, B, C
     - Education leaders ensure the success of all students by influencing interrelated systems of political, social, economic, legal, and cultural contexts affecting education to advocate for their teachers' and students' needs.
   - ELCC Standard 6, Elements 6.1, 6.2, 6.3
     - Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.
7. *Program Goal 7 - INTERNSHIP:* The internship provides significant opportunities for candidates to synthesize and apply their knowledge and understanding, to practice and develop the skills, and to refine and clarify the dispositions identified in Program Goals 1-6 through substantial, sustained, standards-based work in real settings, planned and guided cooperatively by the institution and school district personnel for graduate credit.
   Applicable Standards (ELCC=NCATE Accreditation; ELPS=SLLA Exam)
   - ELCC STandard 7, Elements 7.1, 7.2, 7.3, 7.4, 7.5, 7.6
     - Internship. The internship provides significant opportunities for candidates to synthesize and apply the knowledge and practice and develop the skills identified in Standards 1-6 through substantial, sustained, standards-based work in real settings, planned and guided cooperatively by the institution and school district personnel for graduate credit.

The Doctorate of Education in PK-12 Educational Administration program is designed to expand the content competencies and applied leadership skills of candidates in educational leadership careers in elementary, middle, and secondary school settings, as well as in central office administration. Curriculum focuses on current and future educational challenges to enhance the knowledge and skill development of public school leaders in their positions, incorporating strategic planning, collaborative problem solving, interpersonal and inter-group functioning, technological proficiency, and effective communication.

Curriculum

The Doctorate of Education program will consist of 33 hours of inter-disciplinary course work and a 9 hour Applied Research Dissertation Project. The Doctoral Applied Research Study will include the identification of a study to be conducted that is grounded in educational policy in the public arena. A theoretical construct for the study will be developed including a research design, a review of the literature, and a presentation of the findings of the study in a public setting as well as to the doctoral committee. It is expected that students will complete this program during a four year period of time.

Doctor of Education: Focus in Higher Education Administration

Student Learning Outcomes for Higher Education Administration

Upon completion of the Higher Education Administration program, the student will:

- Have a thorough grounding of higher education/student affairs as a field of study
- Understand organizational, management, leadership and supervision theories and issues
- Understand developmental theories as they relate to college students
- Understand professional requirements and ethics of the field
- Develop self-awareness

- Develop multicultural competencies
- Improve communication skill
- Develop skills to use technology to enhance the educational experience
- Develop the ability to analyze and interpret current research in the field
- Increase skills to apply research
- Improve ability to integrate and synthesize information

The doctoral program with a focus in Higher Education Administration is designed to prepare administrative leaders for positions in community colleges and four-year colleges and universities. The program may also be appropriate for individuals working in government agencies and business and industry. Therefore, students may come to the program from a variety of fields, backgrounds, and types of higher education institutions.

Criteria for Admission to Higher Education Focus

Admission to the Higher Education doctoral program is a separate procedure from admission to the Graduate School and is based on successful acceptance into the University of Missouri-Kansas City graduate School and the Higher Education program. This requires submission of the following:

1. Completed UMKC application.
2. Official transcripts from each college attended.
3. Graduate Record Exam: quantitative, verbal and writing portion
4. A letter of intent including a brief statement of the reason for pursuing a doctoral degree in Higher Education and a brief discussion about the match between the applicant's needs and the program offering.
5. A vita or resume providing a summary of leadership activities, work experiences, and scholarly activity.
6. Three letters of recommendation (on forms provided in application packet) are required. One letter may be from a personal reference; two letters must be professional references.
7. An interview will be scheduled with at least two faculty members as the final step in the admission process. Interview topics will be wide-ranging, including personal goals and objectives, current issues in education, and successful college experiences. The interview is designed to acquire information concerning the applicant's oral skills and critical thinking skills. The applicant will also have the opportunity to garner additional information about the program.

Curriculum

The program consists of 90 semester hours beyond the baccalaureate degree inclusive of the dissertation. The Ed.D. is an applied degree designed for the advanced student who wishes to achieve a superior level of competency in his/her professional field with emphasis on practice and leadership in an urban setting. The degree requires students to demonstrate proficiency in independent research in higher education and make original contributions to the body of knowledge related to higher education. The program is structured on a cohort model with admission every three years. Admitted students must agree to take courses as prescribed in order to complete all courses in a three year timeframe.

Educational Specialist: Counseling and Guidance

The mission of the counseling and guidance program at UMKC's School of Education is to prepare students to meet the psychological, social, and educational needs of indviduals, couples and families in diverse urban communities. The Educational Specialist degree in Counseling and Guidance is a post-masters program designed for experienced counselors who desire to add another area to their professional expertise. The program is designed with flexibility to support the preparation of licensed professional counselors and certified school counselors. Emphasis areas include General Mental Health Counseling and School Counseling.

All students pursuing the Educational Specialist degree in Counseling and Guidance complete a minimum of 26 hours of required coursework (because of certification and licensure requirements, students may be required to complete additional courses). In addition to the core courses, students will complete 12 or more hours depending on the chosen emphasis area and certification and/or licensure requirements. The curriculum is individually designed with an adviser so each candidate meets his/her specific needs and professional objectives. Those electing the School Counseling emphasis will, upon successful completion of the coursework and passing of the state exam for counseling, become eligible for school counselor certification in Missouri. The General Mental Health Counseling emphasis area is designed for students who wish to work in a variety of settings other than the public schools. Those earning degrees in counseling become employed in community colleges, four-year colleges, specialized areas in large universities (e.g., career planning and placement, drug and alcohol counseling), the court system and community-based mental health services.

Requirements for Admission

Applicants must:

1. Hold a master's degree in counseling from an accredited institution.
2. A grade of "B-" or better is required for courses in theories and methods of counseling.
3. A grade of "pass" or "credit" is required for counseling practicum courses.

4. Overall master's in counseling degree GPA of at least 3.25 on a 4.0 scale.

Admission Procedures

Applications are accepted and reviewed on an ongoing basis. Applicants are encouraged to apply early to allow for processing and review time, which could take up to 8 weeks. Application materials must be submitted to two separate offices on campus.

Send the following materials:

1. UMKC Application for Admission.
2. Application Fee : $35 (domestic online) or $50 (international) non-refundable application fee.
3. Official transcripts from all post-secondary institutions.
4. Official GRE scores.

to the following address:

Mailing Address

University of Missouri-Kansas City
UMKC Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

Send the following materials:

1. Cover sheet for the Education Specialist Degree in Counseling and Guidance Program (included in the program application packet).
2. Three applicant evaluation forms (included in the program application packet) with attached letters of recommendation.
   - Raters should address your suitability for professional studies in counseling.
   - Raters should have knowledge of your interpersonal and intellectual functioning and skills in research, counseling and written and oral communication.
   - Raters should enclose their letters of recommendation along with the provided rating sheet in an envelope, sign their names across the sealed flap, and either return to the applicant for later submission or mail directly to the Division at the address below.
   - Raters should be professional references. This excludes friends and family members.
3. Personal statement.
   - Submit a concise two to three page statement concerning your professional goals.
   - Include your professional and applied interests/experiences.
4. Additional requirements may apply for international students.

to the following address:

Mailing Address

University of Missouri-Kansas City
ATTN: ED.S. Counseling and Guidance Admissions Committee

215 Education Building
5100 Rockhill Road
Kansas City, MO 64110-2499

Student Learning Outcomes

Graduates demonstrate skills and knowledge in the following areas:

- Theories and methods of counseling supervision
- Advanced theories of counseling
- Counseling-related topics, such as couples and family counseling
- Effective counseling skills in a community or school setting
- Working with diverse clients and students
- Mental health consultation processes

Curriculum

Program of study includes a minimum of 26 credit hours of coursework, including core courses and 12 or more credit hours for emphasis area, certification, and/or licensure requirements. Additional coursework may be necessary for students who did not complete all of the program pre-requisite courses during their master's degree in counseling. Individual coursework is dependent on the emphasis option chosen and coursework completed during the master's degree in counseling and will be determined with the help of the student's faculty adviser. Students must maintain a B average in all coursework associated with the Ed.S. program.

- No grade below B in professional counseling courses will be acceptable.
- Students are required to confer with advisers prior to enrolling in any course leading to the educational specialist degree.
- Courses at the 5600 level cannot be taken until students are admitted to the Ed.S. program. Please note that 5600 level coursework is likely to be offered during daytime hours.

Mental Health Common Core Courses - Required 14-17 Semester Credit Hours)

CPCE 5620	Advanced Theories And Methods Of Counseling	3
CPCE 5640	Theories And Methods Of Counseling Supervision	2
CPCE 5590	Seminar (Prevention, Consultation, and Program Evaluation in Community Settings)	3
CPCE 5503	Psychopathology: Diagnoses And Classification	3
Six credits of practicum and/or internship from the following course options:		6
CPCE 5532	Counseling Practicum II	
CPCE 5533	Couples And Family Therapy Practicum	
CPCE 5539	Continuing Counseling Practicum	
CPCE 5633	Advanced Couples & Family Practicum	

Mental Health Additional Courses (Minimum of 12 semester credit hours required)

CPCE 5521	Special Counseling Methods - Substance Abuse	3
CPCE 5541	Couples And Family Therapy	3
CPCE 5542	Theories and Techniques of Family Systems Therapy	3
EDUC-R&P 5513	Life Span Human Development	3
CPCE 5527	Theory And Methods Of Sexual Counseling	3
CPCE 5528	Introduction to Play Therapy	3
CPCE 5589	Special Topics ((5589A - Multicultural Play Therapy))	1-6
CPCE 5598	Individual Studies	1-6

School Counseling Common Core Courses (Required 11 semester credit hours)

CPCE 5605	Career Development II	3
CPCE 5640	Theories And Methods Of Counseling Supervision	2
CPCE 5532	Counseling Practicum II	3
CPCE 5575C	Internship In Counseling III	3-16

School Counseling Additional Courses (Required 15 semester credit hours)

CPCE 5502	Fndtns Of Elementary & Secondary School Counseling & Guidance	3
CPCE 5504	School Guidance Programs	3
TCH-ED 404	Education of the Exceptional Child and Youth ((TCH-ED 5404))	3
EDUC-C&I 5512	Strategies For Effective Classroom Management *	3
EDUC-C&I 5517	Teaching Methods And Practices *	3
CPCE 5550	Organization And Administration Of Counseling Programs	3
Select one of the following:		3
EDUC-R&P 5510	Child Behavior And Development	
EDUC-R&P 5512	Adolescent Development And The School	
EDUC-R&P 5513	Life Span Human Development	

NOTE: TCH-ED 5404 (TCH-ED 404) , EDUC-C&I 5512, EDUC-C&I 5517, CPCE 5550, EDUC-R&P 5510, EDUC-R&P 5512 and EDUC-C&I 5513. Required for those who do not hold a current teaching certificate. Many people with a teaching certificate would already have taken these courses.

Requirements for Graduation

Students must complete all courses in the Ed.S. program with at least a 3.0 final GPA.

Students must apply for graduation by the posted deadline during their final term of enrollment. All students must be enrolled during the term they intend to graduate.

Students must pass the state exam for school counseling.

More information about the program can be found at http://education.umkc.edu/programs/view/17

Educational Specialist: Curriculum and Instruction

Program Goal

The goal of the educational specialist degree in Curriculum and Instruction **emphasis in Curriculum Theory and Leadership** is to build on the master's degree in curriculum and instruction on the theme of Transformative Leadership. The degree is designed for educators who want to assume positions in instructional leadership. The program requires course work in four major areas:

- Curriculum Theory
- Diverse Learners
- Becoming a Learning Leader
- Transforming Practice

It is assumed that most candidates will have a degree in an area related to the field of education. Their faculty advisor, however, may require additional course work in a specialty area such as math education. This would depend upon the applicant's background, previous coursework and anticipated school role.

Students are not currently being admitted for the Early Childhood Education, Elementary or Middle School Specialty, Multicultural Education, or Subject Matter Specialty emphases in the Ed.S. program in Curriculum and Instruction.

Program Goals

The Educational Specialist Degree in Curriculum & Instruction is designed to further enhance the skills and knowledge necessary to collaborate with other educators and lead in the development of learning opportunities which:

- promote the learning, growth and development of all students, valuing the differences which diverse learners bring to the school experience;
- demonstrate understanding of how knowledge is created, organized and linked to other disciplines;
- convey subjects to diverse learners through multiple pathways;
- equitably manage and monitor student learning;
- promote reflective teaching and decision-making;
- encourage the development of learning communities which include education professionals, parents and communities.

Admission Requirements

Applications are accepted on a rolling basis and may be obtained from and submitted to the Office of Admissions.

Students are eligible for full admission to the Ed.S. program in curriculum and instruction if they have met two of the three following requirements:

- Master's degree in an educational area with a minimum grade point average of 3.25
- Two years of teaching experience
- Graduate Record Exam (GRE) with score of 155 or better on Verbal component

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).

- Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
- Teachers expose their students to different modes of critical thinking.
- Teachers teach students to think analytically about content.
- Teachers command specialized knowledge of how to convey a subject to students.
- Teachers generate multiple paths to knowledge.
- Teachers have knowledge of available curricular resources including technological innovations.

3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Program Requirements

A minimum of 36 hours of approved graduate work beyond the master's degree is required for the educational specialist degree, with at least 60 percent of the courses numbered 5500 and above. Any courses on the 300 and 400 level included in the Ed.S. program of study must be accepted by the advisor and taken for graduate credit.

As soon as possible after admission to graduate study, students should seek to meet with a faculty member in the major to plan a program of study. This program must be filed in the Education Student Services Office and approved by the dean's representative when students still have at least 18 hours beyond the master's degree to complete. A majority (80%) of new coursework applied to any graduate degree to be completed at UMKC must be taken at UMKC. Transfer credit not included in a master's degree *must not be more than 7 years old at the time of degree completion or graduation.*

Transfer credit may be allowed for correspondence courses, provided the credits meet the criteria for graduate coursework. A maximum of 6 credit hours of continuing education credit (workshops, special topics) taken for graduate credit may be included on an Ed.S. program.

UMKC credit more than seven years old at the time of degree completion that has not been included on a master's degree is not applicable to an Ed.S. degree unless validated to the satisfaction of the School of Education and the School of Graduate Studies. A maximum of 30 percent of coursework on the student's program of study may be validated under this procedure. All validation must be completed by the end of the final semester of enrollment.

Curriculum Summary

The coursework is divided into the following study areas:

Becoming a Learning Leader	12
Diverse Learners	9
Curriculum Theory	6
Transforming Practice	9
Total Credits	36

Becoming a Learning Leader		
EDUC-UL 5523	Administrative Roles For Instructional Leadership	3
EDUC-C&I 5513	Effective Communication In The Classroom	3
EDUC-C&I 5570	Curriculum And Instruction In Technology	3
Working with Diverse Learners		
EDUC-C&I 5563	Multicultural Perspectives In Education	3
or EDUC-C&I 5562	Teaching For Equity And Social Justice	
EDUC-C&I 5510	Differentiating Instruction Through Teaching/Learning Styles	3

Curriculum Theory		
EDUC-C&I 5505	Introduction To Curriculum Theory	3
or EDUC-C&I 5506	Curriculum Design	
EDUC-C&I 5618	Survey Of Research In Curriculum	3
or EDUC-C&I 5620	Seminars In Theories Related To Curriculum	
Assessment		
EDUC-R&P 5522	Principles Of Testing	3
or EDUC-C&I 5620	Seminars In Theories Related To Curriculum	
Transforming Practice		
EDUC-R&P 5505	Statistical Methods I	3
or EDUC-R&P 5508	Principles And Methods Of Research	
EDUC 5621	Practicum In Curriculum And Instruction	6
-OR-		
EDUC 5621	Practicum In Curriculum And Instruction	3
AND		
EDUC-C&I 5595	Action Research For Practitioners	3

[1] The culminating project is an experience designed by the student with the assistance and approval of the advisor. The culminating project includes the selection of a topic relevant to the student's course of study, a review of current research and trends, and the design of a plan of action, the implementation of that action and reflective analysis of the experience.
The Culminating experience is to be taken toward the end of the program just prior to sitting for comprehensive examination.

Residency

One full-time summer session or one full-time semester is required.

Program Committee

Final program planning is the joint responsibility of the candidate, the advisor and the candidate's committee. The committee shall consist of three faculty members, all from curriculum and instruction or two faculty members from curriculum and instruction and a faculty member from another division of the School of Education or University.

This committee and the candidate shall work cooperatively in reviewing progress in the program, planning the culminating experience and making arrangements for the comprehensive examination.

Comprehensive Examination

Students are required to pass a comprehensive examination in curriculum upon the completion of the culminating experience. This four-hour examination may be either written or oral, at the discretion of the committee.

Educational Specialist: Educational Administration

Program Description

The educational specialist degree with **emphasis in PK-12 school administration** (accredited by the National Council for Accreditation of Teacher Education and the Missouri Department of Elementary and Secondary Education) prepares teachers for specialization in school leadership and administration. The program also provides an opportunity for practicing administrators to enhance their professional skills and to connect with other practitioners from the metropolitan area and region. To this end, the program's emphasis is the development of broad understanding and experiences across the whole professional field, the acquisition of in-depth knowledge in at least one specialized field in educational administration, and integrative experiences demonstrating the application of theory to practice.

The program of study will be planned in accord with the candidates' professional goals. Emphasis areas include:

- General administration (school superintendents and other central office administrators)
- Secondary principals or assistant principals
- Elementary principals or assistant principals

Although not essential to completion of the educational specialist degree, the master of arts may be earned by the candidate at approximately the halfway point.

EdS Beginning Principal

The Ed.S. degree with emphasis in educational administration prepares teachers for specialization in school leadership and administration. The program also provides an opportunity for practicing administrators to enhance their professional skills and to connect with other practitioners from the metropolitan area and region. Students in the program gain a broad understanding across the professional field, the acquisition of in-depth knowledge in at least one specialized field in educational administration, and integrative experiences demonstrating the application of theory to practice.

EdS Advanced Principal

The Ed.S. degree with emphasis in educational administration prepares teachers for specialization in school leadership and administration. The program also provides an opportunity for practicing administrators to enhance their professional skills and to connect with other practitioners from the metropolitan area and region. Students in the program gain a broad understanding across the professional field, the acquisition of in-depth knowledge in at least one specialized field in education administration, and integrate experiences demonstrating the application of theory to practice.

District Level Administration (100% Online)

The online Ed.S. degree with emphasis in district-level educational administration prepares experienced principals or building administrators for specialization in central office positions, including superintendent or associate superintendent roles. The program provides an opportunity for practicing administrators to enhance their professional skills and gain a deeper understanding across the professional field including facilities planning, school finance, governmental and legal aspects of special education, and other integrate experiences that bring together the application of theory to practice. Upon completion of the program of study and passing the School Superintendent's Assessment, graduates will be recommended for District Administration/Superintendent certification.

This program is designed to prepare current building administrators and curriculum leaders for professional educator roles in a district-level setting. The degree leads to superintendent certification eligibility in Missouri and Kansas.

Requirements for Admission

Candidates must:

- Provide a copy of a valid teaching certificate
- Provide a copy of a current permanent or professional school administrator/principal license/certificate to teach.
- Have at least two years of full-time certified teaching, supervisory, or administrative experience, or any combination thereof, in elementary, middle or secondary schools under a fully licensed teaching certificate (temporary or provisional certification does not meet this requirement).
- Provide a transcript demonstrating completion of a course in psychology or education of the exceptional child.
- Possess a master's degree with a GPA of at least 3.25

Student Learning Outcomes for Ed.S. PK-12 Administration

Upon completion of the Ed.S. Educational Administration program, the student will:

- Have a thorough grounding of higher education/student affairs as a field of study
- Understand organizational, management, leadership and supervision theories and issues
- Understand developmental theories as they relate to college students
- Understand professional requirements and ethics of the field
- Develop self-awareness
- Develop multicultural competencies
- Improve communication skill
- Develop skills to use technology to enhance the educational experience
- Develop the ability to analyze and interpret current research in the field
- Increase skills to apply research
- Improve ability to integrate and synthesize information

Curriculum

A minimum of 36 credit hours is required in the major area. Individual programs will be designed with the assistance of the faculty advisor to develop competencies in the theoretical, technical and functional aspects of educational administration.
The basic prerequisite course for the PK-12 program is:

- EDUC-UL 5501

Completion of one of the following is required in all programs:

- EDUC-UL 5574
- EDUC-UL 5575

Candidates are required to complete 15-18 credit hours of work in the supporting areas in education and humanistic and behavioral studies. Courses in the field of educational psychology, history of education, philosophy of education, sociology of education, curriculum, or from the behavioral sciences or humanities are considered appropriate.

Also required are 6 credit hours of research coursework to include EDUC-R&P 5508.

Note: Students should identify a faculty advisor in Educational Leadership, Policy and Foundations at the time of admission to the School of Education. Final program planning is a joint responsibility of the candidate and, the faculty advisor.

Requirements for Graduation

In addition to the general School of Education graduate degree requirements, the Ed.S. degree in educational administration also requires:

1. EDUC-UL 5574
   -or-
   EDUC-UL 5575
2. A planned field experience
3. An action research project
4. The educational specialist degrees designed to meet state certification requirements for school superintendency and have specific course requirements in addition to the above.

Educational Specialist: Language and Literacy

Program Requirements

Requirements for the Educational Specialist (Ed.S.) Degree in Language and Literacy support the professional development of all reading or literacy specialists; including classroom teachers, reading/literacy specialists, and literacy coaches. The Ed.S. degree is intended for those who wish to develop high levels of expertise in the Standards for Reading Professionals developed by the International Reading Association's Committee on Standards and Ethics. The objectives of the Ed.S. in Language and Literacy are:

1. To ensure that the competencies in the discipline (reading education) have been attained and meet professional agency standards.
2. To develop competencies in:
   - Organizing, supervising and evaluating reading programs and classroom literacy instruction.
   - Translating literacy research findings into practices.
   - Reading/literacy assessment and diagnostic procedures.
   - Teaching reading at the secondary, junior college, college and adult levels.
   - Conducting teacher training workshops at the teacher in-service level.
   - Performing the duties of reading specialist and literacy coach.

Requirements for Admission

Candidate must:

- Be admitted to the UMKC School of Graduate Studies.
- Possess a bachelor's degree and a teaching certificate.
- Have at least two years of teaching experience (or its equivalent).
- Have completed a minimum of six credit hours of graduate-level (5500) courses in reading education taken at UMKC. It is not necessary to have a master's degree to enter the program.

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking.
   - Teachers teach students to think analytically about content.

- Teachers command specialized knowledge of how to convey a subject to students.
- Teachers generate multiple paths to knowledge.
- Teachers have knowledge of available curricular resources including technological innovations.

3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Curriculum

A minimum of 60 post-B.A. hours are required including a minimum of 21 credit hours beyond the master's degree.

Curriculum Summary

Reading Concentration	21-42
Supporting Area(s)	9-12
Practicum	6-12
Humanistic and Behavioral Studies	6-12
Total (minimum)	60

Curriculum Detail

Reading Concentration and Practicum		
Select courses in Reading Concentration (21-42 hours) and Practicum (6-12 hours) from the following:		27-54
EDRD 5502	Early Literacy and Language Development	
EDRD 439	Content Area Reading And Language Development	
EDRD 5501	Teaching Of Reading	
EDRD 5510	Classroom-Based Literacy Assessment and Intervention	
EDRD 5511	Reading Assessment And Evaluation	
EDRD 5520	Practicum in Reading	
EDRD 5515	Seminar In Reading	
EDRD 5530	Reading Instruction for English Language Learners, K-12	
EDRD 5541	Teaching Reading Improvement: Secondary, College, and Adult Levels	
EDRD 5601	Organizing And Guiding The Reading Program	
EDUC 5640	Apprenticeship And Conference In College Training	
EDRD 5650	Seminar In Dyslexia And Related Learning Disabilities	
EDUC 5690	Special Problems	
Supporting Area(s)		
Select courses from Urban Leadership and/or Curriculum and Instruction		9-12
Humanistic and Behavioral Studies		
Select two to four of the following:		6-12
EDUC-R&P 5502	Advanced Educational Psychology	
EDUC-R&P 5510	Child Behavior And Development	
EDUC-R&P 5512	Adolescent Development And The School	

EDUC-UL 5525	Cultural Foundations Of Education
EDUC-UL 5526	Philosophical Foundations Of Education
EDUC-UL 5527	Historical Foundations Of Education
EDUC-UL 5528	Sociological Foundations Of Education

Requirements for Graduation

Candidates must pass an examination in the major field and complete a reading/literacy field project.

General Information on Doctoral Degrees

The School of Education offers a Ph.D. degree program in Counseling Psychology that is accredited by the American Psychological Association since 1985. The School also participates, through the School of Graduate Studies, in the Interdisciplinary Ph.D. program. Two disciplines, curriculum & instruction and educational leadership, policy and foundations are offered through the School of Education. Students may select one or both of those disciplines in addition to disciplines offered through other academic units across campus.

All but a select few Ph.D. programs at UMKC are interdisciplinary. Students desiring to study at the doctoral level in curriculum & instruction and/or educational leadership, policy and foundations in education (which includes the foundation areas of educational theory and educational administration) must apply to the School of Graduate Studies. Detailed information on the general and discipline-specific admission requirements may be found in the School of Graduate Studies (p. 480) section of the catalog.

General Information on Educational Specialist Degrees

The goal of the educational specialist degree is to develop personnel who are highly competent practitioners/specialists in specific fields of education. The program of study will place emphasis on the extension of the students' abilities to apply theory, methodology and techniques to practical problems related to the individual's field. The breadth of studies will be consistent with the guidelines suggested by the appropriate professional organization. Graduates are expected to be competent translators of practices and research.

The educational specialist degree can be earned in counseling and guidance, educational administration, reading education, or curriculum and instruction.

Requirements for Admission

Students are eligible for consideration for admission to the Ed.S. degree program in the School of Education when they have met at least one of the following requirements:

- Students must be eligible for regular admission to the School of Education at the graduate level (undergraduate GPA must be at least 3.0 on a 4.0 scale); if applicants have earned graduate credit, their graduate GPA must be at least 3.0.
- The completion of a master's degree from an accredited institution of higher education and a cumulative graduate GPA of at least 3.0.

Applicants who have met one of the above requirements for admission to the School of Education at the Ed.S. level must also meet the divisional admission requirements for the specific degree program (educational administration, counseling and guidance, curriculum and instruction, or reading education). Consult the section of the catalog outlining the requirements of the divisions.

All educational specialist degree-seeking students are governed both by School of Education requirements and those of the School of Graduate Studies.

Program Requirements

A minimum of 60 hours of approved graduate work beyond the bachelor's degree is required for the educational specialist degree, with at least 60 percent of the courses numbered 5500 and above. Any courses on the 300 and 400 level included in the Ed.S. program of study must be accepted by the advisor and taken for graduate credit.

As soon as possible after admission to graduate study, students should seek to meet with a faculty member in the major to plan a program of study. This program must be filed in the Education Student Services Office and approved by the dean's representative when students still have at least 18 hours of coursework beyond the master's degree to complete. A majority of new coursework applied to any graduate degree to be completed at UMKC must be taken at UMKC. Transfer credit not included in a master's degree must not be more than 7 years old *at the time of degree completion or graduation*.

Transfer credit may be allowed for correspondence courses, provided the credits meet the criteria for graduate coursework. A maximum of 6 credit hours of continuing education credit (workshops, special topics) taken for graduate credit may be included on an Ed.S. program.

UMKC credit more than seven years old at the time of degree completion that has not been included on a master's degree is not applicable to an Ed.S. degree unless validated to the satisfaction of the School of Education and the School of Graduate Studies. A maximum of 30 percent of coursework on the student's program of study may be validated under this procedure. All validation must be completed by the end of the final semester of enrollment.

The coursework is divided into the following study areas:

Specialization (21-42 hours)

The specialization is defined as a body of coursework associated with the area of concentration or major. Such courses might deal with the theory, research and methodology of the field.

Supporting Area(s) (9-15 hours each)

In addition to specific courses in a field of study, there are those courses which expand the competence of the specialist. These supporting areas might include study in one or two related areas, or study might be an intensive development of specific skills within the field.

Culminating Experience (3-12 hours)

All students should be able to demonstrate an ability to perform satisfactorily in situations approximating the intended role or specialization. While such experience may be included in regular coursework, at least 3 hours of supervised practicum, internship or field experience should be accomplished where the practice is the focus of the course.

Humanistic and Behavioral Studies (6-12 hours)

The success of a specialist may also depend on a broader understanding and interpretation of the concepts related to the problems and practices of the field, as revealed by study in humanistic and behavioral sciences. Courses or seminars in educational history, philosophy, psychology or sociology, or other appropriate courses, might be included in this area.

Residency

Enrollment as a full-time graduate student during one semester (5 credit hours during summer sessions, 9 credit hours during fall and spring semesters) is required for the educational specialist degree.

Final Examination

Students are required to pass a final examination in the major field or an oral examination upon the completion of the practicum or internship for the educational specialist degree.

Requirements for Retention

Students should assume responsibility for the following steps:

1. Complete all admission requirements.
2. With the faculty advisor, establish a program of study and have it approved by the dean's representative.
3. Complete all courses listed on the program of study.
4. Maintain an acceptable GPA (Grades below B- in 300- or 400-level courses taken for graduate credit will not be accepted on the program of study. No grade lower than a C in any 5500-level course is acceptable. A minimum of 80 percent of the program must be completed with grades of A or B. Additionally, students must maintain a 3.0 (B) average in all graduate coursework, regardless of whether the courses are on the actual program of study.
5. Apply for the degree (graduation) by the posted deadline during their final term of enrollment. Students are required to be enrolled in at least one credit hour during the term the degree requirements are to be completed.

General Information on Master of Arts Degrees

Requirements for the Master of Arts

Requirements for a master's degree include a minimum of 30 credit hours but vary according to the major and emphasis area. Regardless of program length, at least 60 percent of the coursework on the degree program must be numbered 5500 or above. At least 3.0 GPA must be maintained, with no grade lower than a C earned in any 5500-level course. A maximum of 20 percent of coursework numbered 5500 or above on the master's program may have grades of C. Any courses on the 300 and 400 level to be included in a master of arts program must be taken for graduate credit and only by arrangement with the advisor. No grade lower than B- may be earned in any 300- or 400-level course to be used toward a graduate degree.

As soon as possible after regular admission to graduate study, the student should meet with a faculty advisor to develop a program of study. This program must be filed with the Education Student Services Office before the end of the second semester enrolled in the program. Program revisions may be requested later but also must be approved by the student's advisor and the dean's representative.

Twenty percent of resident graduate coursework may be transferred from other accredited universities' graduate programs. A maximum of 49 percent of acceptable graduate work (no grade below B) may be transferred from other campuses of the University of Missouri. Credits are transferred only with the

recommendation of the advisor and the consent of the dean's representative in the School of Education. Transfer credit must not be more than seven years old at the time of program completion.

Transfer credit may be allowed for correspondence courses, provided the credits meet the above criteria. A maximum of six semester hours of continuing education courses that have been taken for graduate credit (workshops, special topics) may be included on a master's program. Students must provide a letter from the transfer institution clarifying the grade equivalent for transfer work posted as "credit" or "pass."

For regular courses taken through continuing education at UMKC to apply on degree programs, the student must be admitted to graduate study and have an approved program on file, including the continuing education courses.

Credit more than seven years old at the time of degree completion must be validated. To validate a course, the student must meet with the instructor of the current equivalent course to devise a plan in which the student's current knowledge of the coursework can be assessed. Faculty may ask the student to write a paper, review current literature, or take examinations to determine whether the student's knowledge of the subject is acceptable. A maximum of 30 percent of the student's program of study may be validated under this procedure. All validation must be completed prior to the completion of the final semester of enrollment for the degree.

A thesis is not required for the master of arts degree, although the option for a thesis is available. A final integrating experience or independent or group research study may be required of those not selecting the thesis option.

Requirements for Retention

Students must:

1. Meet all admission requirements.
2. File a planned program of study in consultation with a faculty advisor and have it approved by the dean's representative in the Education Student Services Office.
3. Complete all coursework listed on the approved program of study.
4. Maintain an acceptable graduate GPA with no grades below B- (3.0) in 300- or 400-level courses, no grades below C (2.0) in any 5500-level course, at least 80 percent of the degree program completed with grades of A or B, and a 3.0 average maintained in all graduate coursework, regardless of whether the courses are on the actual degree program.
5. Apply for the degree (graduation) by the posted deadline during the final term of enrollment.
6. Enroll in at least one credit hour during the term they intend to graduate.

Graduate Certificate - Health Professions Education

Admission Requirements

- Applicants must hold a professional degree in a health profession (e.g. MD, DDS, DO, RN, PharmD) and/or a bachelor's degree. Limited enrollment.
- Applicants must complete the graduate application found at http://www.umkc.edu/admissions/graduate.asp
- Submit all university transcripts as well as a one page goal statement, resume or CV, and two letters of recommendation to:

UMKC School of Medicine
Office of Admissions, M1-103
ATTN: Health Professions Education
2411 Holmes Street
Kansas City, MO 64108

Student Learning Outcomes

The program seeks to:

- Deliver effective, theory-based instruction in large group, small group, and clinical settings
- Develop skill in educational research as it relates to the quality of instructional practice
- Design evidence-based educational programs and materials with appropriate scope, sequence, and focus for learners
- Understand assessment and to effectively use assessment tools to track student progress and to promote student learning
- Develop skill in program and curriculum development and evaluation in health professions education
- Identify current issues in health professions education and develop skill in monitoring changes in the field

Program Requirements

The Graduate Certificate in Health Professions Education provides an educational research foundation for teaching and assessment in health professions education. The certificate, which includes six courses (18 credit hours), is based on a mix of both classroom and internet instruction. The

Graduate Certificate in Health Professions Education reflects a unique collaboration between the School of Education and the School of Medicine at UMKC, both nationally recognized for their innovation in teaching and learning.

Course Requirements

HPRE 5530	Current Issues in Health Professions Education	3
EDUC-R&P 5639	Educational Psychology: Focus on Teaching in Higher Education	2-3
HPRE 5550	Assessment in Health Professions Education	3
EDUC-R&P 5564	Instructional Design	3
EDUC-R&P 5508	Principles And Methods Of Research	3
EDUC-R&P	Program Development and Evaluation	

Courses include a mix of classroom and online work. The program may be completed in one year.

For more information, please visit the website: http://www.med.umkc.edu/hpce/

Graduate Certificate in Community College Leadership

Program Requirements

Institutions in the state of Missouri, and across the nation, have come to recognize the growing demand for community college leadership and administrator preparation in the coming decades. This 18 credit hour graduate certificate program will provide opportunities for candidates to gain knowledge, skills, and competencies essential to their career and professional development as leaders in higher education settings, specifically in community colleges, in a convenient yet rigorous online environment.

This online certificate program is designed to incorporate skills and competencies put forth by the American Association for Community Colleges (AACC), including a focus on: organizational strategy, resource management, communication, collaboration, community college advocacy, and professionalism. The certificate can be completed either in conjunction with a graduate degree program or as a free-standing credential. This program is a collaborative effort between the University of Missouri – Kansas City (UMKC) School of Education and the University of Missouri – St. Louis (UMSL) College of Education.

Requirements for Admission

Applicants for this certificate program must have:

- A completed application for admission
- An undergraduate degree from an accredited institution
- Two letters of recommendation

Student Learning Outcomes

Upon completion of the Graduate Certificate in Community College Leadership program, the student will:

- Have a thorough grounding of higher education/student affairs as a field of study
- Understand organizational, management, leadership and supervision theories and issues
- Understand developmental theories as they relate to college students
- Understand professional requirements and ethics of the field
- Develop self-awareness
- Develop multicultural competencies
- Improve communication skill
- Develop skills to use technology to enhance the educational experience
- Develop the ability to analyze and interpret current research in the field
- Increase skills to apply research
- Improve ability to integrate and synthesize information

Curriculum Requirements

The curriculum reflects consideration of the current issues and needs of society, of higher education, and of the student populations served by community colleges and other 2 year institutions.

Required Core Courses	
HigherEd 6430: The Community College [1]	3

HigherEd 6431: Community College Leadership [1]		3
EDUC-UL 5559	Current Issues In Community Colleges [2]	3
EDUC-UL 5553	Supervision and Management of People [2]	3
Internship Requirement		
Select one of the following:		1-10
EDUC-UL 5571	Internship In Higher Education [2]	
Elective		
HigherEd 6900: Inernschip [1]		1-10
EDUC-UL XXXX	Elective [3]	3

1 Taught online by UMSL Faculty.

2 Taught by UMSL.

3 Can be taken from either institution or an approved elective from the student's home institution.

Requirements for Retention

Program candidates must maintain a minimum grade of "B" in all classes or a GPA of 3.0 on a 4.0 Scale.

Time Limit for Completion

The program can be completed in four semesters; however, students must complete the program in three years or less.

Graduate Certificate in Educational Foundations

Program Overview

The Educational Leadership, Policy, and Foundations Division in the School of Education is committed to preparing individuals to serve in a variety of educational settings and in a myriad of capacities. The online Graduate Certificate in Educational Foundations provides candidates with opportunities to explore the philosophical, sociological, historical, and cultural foundations of education through analysis of important issues that have under-girded educational systems in our society. It is designed to be comprehensive in nature, with students completing a total of five online courses for a total of 15 credit hours.

Who Does This Program Benefit?

Because this graduate certificate program is offered totally online, students in the Kansas City region and indeed across the globe can expand their knowledge and further their professional development in any number of areas. Teachers and administrators in PK-12 settings, school counselors, students in Higher Education Administration programs, individuals serving in youth programs, or individuals interested in pursuing the Interdisciplinary Ph.D. in Educational Leadership, Policy, and Foundations at UMKC should apply. Applicants are required to have a completed Bachelor's degree upon start of the program.

What Does The Program Look Like?

This certificate program is offered 100% online, and is designed to allow students to complete in as little as four semesters.

Application Procedures

Applicants for this certificate program must complete the following:

- Complete the online UMKC Graduate Application
- Submit official transcripts from an accredited institution showing the awarding of an undergraduate degree. Transcripts are considered official if they are received in a sealed envelope from the institution or sent electronically to the Office of Admissions (admit@umkc.edu)
- Provide two letters of recommendation to the Division of Educational Leadership, Policy & Foundations (ELPF) at the UMKC School of Education: 615 E. 52nd St., Kansas City, Missouri 64110

Required Curriculum

EDUC-UL 5525	Cultural Foundations Of Education	3
EDUC-UL 5526	Philosophical Foundations Of Education	3
EDUC-UL 5527	Historical Foundations Of Education	3
EDUC-UL 5528	Sociological Foundations Of Education	3

In addition to these required courses, students must also select ONE of the following elective courses to complete the certificate program:

EDUC-UL 5524	Philosophical Inquiry And Education	3
EDUC-UL 5602	Seminar In The History Of American Urban Education	3
EDUC-UL 5655	Studies In Philosophy Of Education	3

Graduate Certificate in Reading Intervention

Reading Intervention Graduate Certificate Overview

Who benefits from this certificate?

The Reading Intervention Graduate Certificate program is for certified teachers who are currently, or will be, working with struggling readers on a regular basis, providing an avenue for in-service teachers to gain additional expertise in a focused manner. Classes focus on improving the quality and effectiveness of instruction in Tier 2 and 3 reading.

What will the program look like?

Consisting of four courses, the certificate can be completed in just one year.

Special Reading Certificate

Who benefits from this certificate?

The Language and Literacy division regularly offers all courses needed for non-degree seeking students who are only seeking DESE Special Reading certification (not a Master's or Education Specialist in Reading/Language & Literacy).

What will the program look like?

The program will be individually tailored to meet the needs of the student.

Graduation and Certification Requirements

All undergraduate students must abide by the School of Education Policies and Procedures and by the Undergraduate Admission Policies and Procedures in this catalog.

All students completing an undergraduate teacher education degree must meet the following conditions in order to graduate and be recommended for teacher certification:

- 2.75 cumulative GPA/3.0 content GPA/3.0 Professional GPA.
- Completion of at least 120 credit hours if earning first bachelor's degree (although many programs will require more than 120 credits).
- "C" or higher in all Education courses.
- "C" or higher in all subject-area courses required for Middle School and Secondary degrees.
- Successful completion of the Teacher Work Sample.
- Passing score on the certification exam(s) required by the State of Missouri (Praxis II) **(Note this exam will be replaced with a new standardized assessment after fall 2013).**
- Passing score on the CBASE exam **(Note this exam will be replaced with a new standardized assessment after fall 2013).**

All students completing a baccalaureate degree program in the School of Education must apply to graduate by the posted deadline during their final semester of enrollment. The deadline for making application to graduate is posted on each term's academic calendar and on each student's registration materials. See your academic advisor for questions about these requirements.

History and Mission

History

The School of Education, organized officially as a separate academic division in 1954, was the result of the University of Kansas City's involvement in professional education since 1940. At that early date the University was offering an M.A. in education, heavily liberal-arts laden, with most classes conducted in the summer and evenings. An undergraduate major in elementary education was established in 1952, and the first University of Kansas City doctoral program, the Ph.D. in education, was inaugurated with the organizing of the school in 1954. Since 1954, the school has grown to include three disciplinary divisions with 21 programs, offering bachelor of arts, master of arts, educational specialist, doctor of philosophy, doctor of education and interdisciplinary degree programs. Several degree and certification programs are offered in cooperation with the the School of Biological Sciences, the Conservatory of Music and Dance, and the College of Arts and Sciences.

Mission & Values

The mission of the School of Education is to recruit, prepare, and support outstanding teachers, mental health professionals, and administrators who will create lifelong opportunities through education for America's diverse urban communities. This mission is centered on six key values which embody the knowledge, skills and dispositions expected of our candidates across the School of Education. The goals defined by individual programs are more specific subsets of these broader values:

1. Academic excellence
2. Strategic innovation
3. Inquiry leading to reflective decision-making and problem-solving
4. Skilled and knowledgeable professionals working collaboratively
5. Democracy, diversity, and social justice
6. Creating caring and safe environments

Vision

To be a leading urban-serving school of education in the nation.

Priority Goals

1. Foster and model a collaborative environment
2. Ensure academic excellence
3. Increase research focused on urban education
4. Provide leadership for urban schools and healthy communities
5. Ensure infrastructure for achieving strategic plan
6. Optimize and increase resources

The mission of the School of Education is to recruit, prepare and support outstanding teachers, mental health professionals and administrators who will create lifelong opportunities through education for America's diverse urban communities. This mission is centered on six key values which embody the knowledge, skills and dispositions expected of our candidates across the School of Education. The goals defined by individual programs are more specific subsets of these broader goals:

1. Academic excellence.
2. Strategic innovation.
3. Inquiry leading to reflective decision making and problem solving.
4. Skilled and knowledgeable professionals working collaboratively.
5. Democracy, diversity and social justice.
6. Caring and safe environments.

Institute for Urban Education (IUE): Description

The Institute for Urban Education (IUE) Scholarship is an undergraduate scholarship program in the School of Education for students who are interested in teaching elementary or middle school education with a focus in the teaching of math, science, and literacy. The scholarship is specifically targeted at students who have a strong interest in becoming teachers for urban schools.

Students receiving IUE scholarships will make a commitment to teach in an urban district following graduation in exchange for financial support. Questions regarding the IUE's programs and offerings should be directed to Student Services at (816) 235-**2234** .

Interdisciplinary, Ph.D.

Refer to the School of Graduate Studies (http://sgs.umkc.edu) for more information.

Master in Health Professions Education

Program Overview

The Masters Degree in Health Professions Education (MHPE) provides an educational research foundation for teaching, assessment and leadership in health professions education. The MHPE curriculum is comprised of twelve courses which focus on the application of learning principles to educational practice. All courses emphasize an applied project based on students' professional experiences. The educational portfolio serves as an integrative tool

across courses and as a showcase for student accomplishments. The MHPE reflects a unique collaboration between the School of Education and the School of Medicine at UMKC, both nationally recognized for their innovation in teaching and learning.

- Inter-professional–For all health education professionals
- Educational research foundation–Evidence-based decision making
- Application–Based on solving real instructional problems in health professions education
- Professional Portfolio–Documents learning goals and accomplishments
- Summer Health Professions Education Mini-Conference–Student-facilitated health professions education conference
- Online and Blended–Most coursework is online with occasional in-class meetings

Student Learning Outcomes

- Understand and apply educational research in health professions education.
- Design evidence-based educational programs and materials.
- Deliver effective, theory-based instruction in large, small and clinical group settings.
- Effectively use assessment tools to reflect student progress in learning.
- Evaluate the effectiveness of programs, curricula and instructional events.
- Develop cultural awareness and commitment to diversity.
- Provide reflective and evidence-based leadership.

Program Requirements

HPRE 5530	Current Issues in Health Professions Education	3
EDUC-R&P 5508	Principles And Methods Of Research	3
HPRE 5560	Teaching in Health Professions Education	3
HPRE 5550	Assessment in Health Professions Education	3
HPRE 5522	Curriculum Design in Health Professions Education	3
HPRE 5580	Program Evaluation in Health Professions Education	3
HPRE 5590	Advanced Research in Health Professions Education	3
HPRE 5500	Leadership and Administration in Health Professions Education	3
EDUC-R&P 5555	Statistical Methods II	3
or EDUC-R&P 5505	Statistical Methods I	
EDUC-R&P 5589	Special Topics In Education *	1-6

1 The following required courses may be offered as special topics courses:
1. Teaching about Culture and Health (3 credit hours)
2. Portfolio in Health Professions Education (1-3 credit hours)
3. Summer Conference in Health Professions Education (3 credit hours)

Master of Arts: Counseling and Guidance

The Counseling and Guidance Program is accredited by the Master's in Psychology and Counseling Accreditation Council and has as its primary purpose the preparation of professional counselors. The master's degree is the first professional degree in counseling. Graduates holding this degree will gain the basic understanding and skills necessary for professional practice as a counselor. The program currently offers three emphasis areas leading to the M.A. degree: Elementary and Secondary School Counseling, Couples and Family Counseling and Mental Health Counseling.

Those electing the school counseling emphasis will, upon successful completion of the coursework and passing of the Praxis Exam for counseling, be eligible for school counselor certification in Missouri. The other counseling emphases are designed for students who wish to work in a variety of settings other than the public schools. Those earning degrees in counseling become employed in community colleges, four-year colleges, specialized areas in large universities (e.g. career planning and placement), the court system and community-based mental health services. Many students go on for advanced degrees. Students in this program will take all of the coursework needed to be eligible for licensure as a professional counselor in the state of Missouri. Students may also arrange their internship setting placements similar to those in which they plan to work.

Admissions

Courses for the master's program in Counseling and Guidance are primarily offered at the Volker campus. Select school counseling courses are offered at the UMKC Northland campus; however, not all courses will be made available at that site. Applications for the program are accepted twice a year: by Sept. 1 to be admitted for the spring semester or by March 1 to be admitted for the fall semester. Application materials must be sent to both the UMKC Office of Admissions and the Division of Counseling and Educational Psychology. It is suggested that students apply to the University as soon as

possible to allow for processing time. Materials sent to the UMKC Admissions Office should be ***received*** by the application deadlines; materials sent to the Division of Counseling and Educational Psychology can be ***postmarked*** by the application deadlines.

Admission Criteria:

- Overall undergraduate 2.75 GPA or better, or 3.0 or better (4.0 scale) in the last 60 semester hours.
- Official GRE scores obtained within the last five years. The GRE requirement can be waived if the applicant is a graduate of a post-bachelor degree program with a cumulative GPA of 3.5 or higher.

Applying to the Program

Students who wish to apply to the program will have to submit two separate applications, one to the University (see A. below) and one to the Division of Counseling and Educational Psychology (see B. below).

A. Send to the UMKC Admission office:

1. Application for Admissions (available on-line at www.umkc.edu/admissions).
2. $35 (domestic online) or $50 (international) non-refundable application fee.
3. Official transcripts from all colleges/universities previously attended (in sealed envelope or sent directly from universities).
4. Graduate Record Exam (GRE) (official copy).

Mailing Address

University of Missouri-Kansas City
Office of Admissions
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

B. Send to the Counseling and Guidance office:

1. M.A. Counseling and Guidance Application at http://education.umkc.edu/academics/masters-degrees/master-of-arts-in-counseling-and-guidance/ (detailed instructions available on the application).
2. Three letters of reference (use rating forms in the application packet).
3. Statement defining personal and professional goals.
4. Additional requirements may apply for international students.

Mailing Address

University of Missouri-Kansas City
ATTN: Division of Counseling and Educational Psychology
215 Education Building
5100 Rockhill Road
Kansas City, MO 64110-2499

For more specific information about the master's in Counseling and Guidance see http://education.umkc.edu/programs/view/16

Student Learning Outcomes

Graduates demonstrate skills and knowledge in the following areas:

- Theories and skills of counseling
- The counseling relationship
- Social and cultural foundations of counseling
- Career development
- Assessment
- Research methods
- Professional identity
- Group theory and skills
- Ethical standards and issues
- Diagnostic systems
- School counseling

- Comprehensive program development, implementation and management

Additional School Counseling Student Learning Outcomes*

- Student development
- Program implementation
- Professional relationships
- Leadership and advocacy
- Ethical and professional conduct
- Cultural competence

*The UMKC Counseling Program Goals are based on the Missouri Standards for the Preparation of Educators (MoSPE). The MoSPE Standards for School Counselors are the foundation for certification in Missouri.

Degree Requirements

* Note: Only courses with an asterisk may be taken prior to being admitted to the program.
# Note: Course can be taken if officially admitted to a graduate degree program.

Required Core Courses (All Emphases)		
CPCE 5500	Introduction To Professional Counseling *	3
CPCE 5505	Career Development I #	3
EDUC-R&P 5508	Principles And Methods Of Research *	3
CPCE 5515	Assessment Methods In Professional Counseling	3
CPCE 5520	Theories of Counseling	3
CPCE 5530	Methods Of Counseling	3
CPCE 5531	Counseling Practicum I	3
CPCE 5532	Counseling Practicum II	3
or CPCE 5533	Couples And Family Therapy Practicum	
CPCE 5540	Theories And Methods In Group Counseling	3
CPCE 5551	Counseling in a Pluralistic Society	3
CPCE 5553	Ethics And Professional Issues In Counseling	3
CPCE 5575A	Internship In Counseling I	3
CPCE 5575B	Internship In Counseling II	3
Couples and Family Emphasis Area		
CPCE 5503	Psychopathology: Diagnoses And Classification	3
CPCE 5527	Theory And Methods Of Sexual Counseling	3
CPCE 5541	Couples And Family Therapy	3
CPCE 5542	Theories and Techniques of Family Systems Therapy	3
CPCE 5590CF	Seminar in Couples and Family Counseling	3
EDUC-R&P 5513	Life Span Human Development *	3
Mental Health Emphasis		
CPCE 5503	Psychopathology: Diagnoses And Classification	3
CPCE 5527	Theory And Methods Of Sexual Counseling	3
CPCE 5521	Special Counseling Methods - Substance Abuse	3
EDUC-R&P 5513	Life Span Human Development	3
School Counseling Emphasis		
CPCE 5502	Fndtns Of Elementary & Secondary School Counseling & Guidance	3
TCH-ED 404	Education of the Exceptional Child and Youth (5404 section)	3
CPCE 5504	School Guidance Programs	3
CPCE 5550	Organization And Administration Of Counseling Programs	3
Select one of the following:		3
EDUC-R&P 5510	Child Behavior And Development (Elementary and K-12 counselors only)	
EDUC-R&P 5512	Adolescent Development And The School (Secondary and K-12 counselors only)	
EDUC-R&P 5513	Life Span Human Development (Elementary, Secondary, and K-12 counselors)	3

EDUC-C&I 5512	Strategies For Effective Classroom Management (Required for those who do not hold a current teaching certificate.) *	3
EDUC-C&I 5517	Teaching Methods And Practices (Required for those who do not hold a current teaching certificate.) *	3

Master of Arts: Curriculum and Instruction

Requirements for Admission

Students admitted to School of Education graduate programs are governed by School of Education requirements and those of the School of Graduate Studies. Students seeking advanced degrees also should consult the School of Graduate Studies section for regulations applicable to all graduate students.

Students with a baccalaureate degree and teacher's certification from a school of education may apply for all graduate programs or may enter with a baccalaureate degree (including a departmental major in a liberal arts program). Work toward a master of arts degree can begin during any semester.

Criteria for admission include an appropriate GPA and an overall record of achievement. A baccalaureate degree with a 3.0 GPA or above (on a 4.00 scale), or a master's degree or other post-baccalaureate degree from an institution accredited by a regional accrediting agency is required for regular admission to the School of Education at the graduate level. Applicants who do not possess a post-baccalaureate degree and whose undergraduate GPA is between 2.50 and 2.99 are eligible for conditional admission and are required to complete the requirements described below. Applicants who do not meet the necessary admissions requirements may appeal to the Division Chair.

Conditional applicants must meet with a faculty advisor and are required to take four courses prescribed by the division for the degree in which the student intends to pursue. Applicants must achieve a grade of B or better in each of the courses (a course may be repeated only once). Two of these courses must be at the 5500 level.

Students who successfully complete the conditional period are eligible for regular admission to the School of Education at the master's level. Only when conditional students are reclassified as degree-seeking may they file a program of study.

Students who do not successfully complete the conditional period will be permanently reclassified to post-bachelor status and will be allowed enrollment for undergraduate credit only. Post-bachelor students may not enroll in classes numbered 5500 or above.

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking.
   - Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.
3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)

- Teachers contribute to school effectiveness by collaborating with other professionals.
- Teachers work collaboratively with parents.
- Teachers take advantage of community resources.

Degree Requirements

The master of arts in Curriculum and Instruction is a degree sought by teachers and others who wish to enhance their knowledge base for application in the classroom and to increase Prek-12 student learning. There are seven emphasis areas from which to choose:

- General
- Early Childhood
- Elementary
- Subject Matter (Art, English, Math, Science, Social Studies)
- Multicultural Education
- Teaching English to Speakers of Other Languages

There is an 18-credit-hour core to all programs. This core includes coursework in the humanistic, behavioral, research, assessment and multicultural and urban focus foundation areas. In addition to these core courses, students complete 18 additional hours in their emphasis area.

Core Courses (meet with advisor before enrolling)

Curriculum Theory/Design		
Select one of the following:		3
EDUC-C&I 5505	Introduction To Curriculum Theory	
EDUC-C&I 5506	Curriculum Design	
EDUC-C&I 5591	Curriculum & Instruction For The 21St Century	
Humanistic Studies		
Select one of the following:		3
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5526	Philosophical Foundations Of Education	
EDUC-UL 5527	Historical Foundations Of Education	
Behavioral Studies		
Select one of the following:		3
EDUC-R&P 5502	Advanced Educational Psychology	
EDUC-R&P 5510	Child Behavior And Development	
EDUC-R&P 5512	Adolescent Development And The School	
EDUC-R&P 5513	Life Span Human Development	
Research		
Select one of the following:		3
EDUC-R&P 5505	Statistical Methods I	
EDUC-R&P 5508	Principles And Methods Of Research	
EDUC-C&I 5544	Theory and Research in Second Language Teaching and Learning	
Assessment		
Select one of the following:		3
EDUC-C&I 5554	Assessment In Science Education	
EDUC-C&I 5596	Classroom Assessment	
EDUC-SP 5508	Assessment for Special Educators	
TCH-ED 442	Observation, Assessment & Screening in Early Childhood Classrooms	
EDUC-R&P 5522	Principles Of Testing	
Multicultural and Urban Focus		
Select one of the following:		3
EDUC-C&I 5560	Teaching And Learning In The Urban Classroom	
EDUC-C&I 5561	Teaching Diverse Populations In Today’s Classrooms	
Culminating Experience - Select one of the following:		
EDUC-C&I 5575	Internship - Early Childhood	

EDUC-C&I 5595	Action Research For Practitioners	
Total Credits		18

General Emphasis

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking. Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.
3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Program Requirements

The general option is the most flexible and allows students to create a program to meet their desire to become an accomplished teacher. This degree may be pursued concurrently with teacher certification. Additional coursework is required for certification. In addition to the core courses, students take coursework related to their educational role and supporting coursework in curriculum and instruction.

Core Courses	
Core Courses (meet with adviser before enrolling)	18
Courses Related to the Student's Educational Role	
Approved coursework may be taken in any college or school of the University [1]	12
Supporting Courses	
Coursework offered by the Division of Curriculum and Instructional Leadership	6
Total Credits	36

[1] They should form a coherent body of work related to the student's educational goals.

Early Childhood Emphasis

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking. Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.
3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Program Requirements

The following courses are required in addition to the core courses listed.

The early childhood emphasis is for those who hold elementary or early childhood teacher certification, or for those who are interested in the field of early care and education. The master's degree alone does not lead to certification in early childhood. Additional courses are required to obtain certification to teach early childhood education. For current program plan, go to http://education.umkc.edu/programs/view/10 and check on Early Childhood.

Early Childhood Courses		
Select five of the following:		15
TCH-ED 440	Introduction To Early Childhood Education	
TCH-ED 442	Observation, Assessment & Screening in Early Childhood Classrooms	
TCH-ED 450	Integrating The Curriculum In Early Childhood Education	
TCH-ED 451	Child Guidance Within The Classroom	
TCH-ED 452	Family and Program Relationships in Early Childhood Education	
TCH-ED 453	Learning from Parents	
TCH-ED 454	Human Relations In The Early Childhood Classroom	
EDUC-C&I 5576	Administration Of Early Childhood Programs	
EDUC-C&I 5577	Early Childhood Special Education Methods	
EDUC-C&I 5578	Play In Early Childhood Education	
EDUC-C&I 5579	History, Theories, And Issues In Early Childhood Education	
EDUC-C&I 5580	Curriculum In Early Childhood Education	
Culminating Experience - Select one of the following: [1]		3

EDUC-C&I 5575	Internship - Early Childhood	
EDUC-C&I 5584	Early Childhood Culminating Project	
Total Credits		18

[1] An approved special project, internship or thesis is required to integrate academic work.

Elementary Emphasis

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking. Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.
3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Program Requirements

The following courses are required in addition to the core courses listed.

This emphasis is for elementary teachers or those teachers who are interested in gaining perspective on elementary strategies. It does not lead to elementary certification.

Curriculum in Basic Content		
Select four of the following:		12
EDUC-C&I 5504	Social Studies In the Schools	
EDUC-C&I 5506	Curriculum Design	
EDUC-C&I 5522	Language Arts Curriculum In The Elementary And Middle School	
or EDUC-C&I 5523	Advanced Literature For Children	
EDUC-C&I 5531	Diagnosis And Remediation Of Mathematics Learning Problems	
EDUC-C&I 5553	Curriculum And Instruction In Science	
Assessment		
Select one of the following:		3
TCH-ED 442	Observation, Assessment & Screening in Early Childhood Classrooms	

EDUC-R&P 5522	Principles Of Testing	
EDUC-C&I 5596	Classroom Assessment	
EDUC-R&P 5510	Child Behavior And Development	
Curriculum		
Select one of the following:		3
EDUC-C&I 5505	Introduction To Curriculum Theory	
EDUC-C&I 5506	Curriculum Design	
EDUC-C&I 5591	Curriculum & Instruction For The 21St Century	
Multicultural and Urban Focus		
Select one of the following:		3
EDUC-C&I 5560	Teaching And Learning In The Urban Classroom	
EDUC-C&I 5561	Teaching Diverse Populations In Today's Classrooms	
EDUC-C&I 5562	Teaching For Equity And Social Justice	
EDUC-C&I 5563	Multicultural Perspectives In Education	
Research		
Select one of the following:		3-6
EDUC-R&P 5505	Statistical Methods I	
EDUC-R&P 5508	Principles And Methods Of Research	
Culminating Experiences		
EDUC-SP 5516	Collaborating with Families and Other Professionals	
EDUC-C&I 5595	Action Research For Practitioners	
Total Credits		24-27

Subject Matter Emphasis

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking. Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.
3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)

- Teachers contribute to school effectiveness by collaborating with other professionals.
- Teachers work collaboratively with parents.
- Teachers take advantage of community resources.

Program Requirements

The following courses are required in addition to the core courses listed.

Curriculum in the Designated Subject Matter Area		
Select one of the following:		3
EDUC-C&I 5504	Social Studies In the Schools	
EDUC-C&I 5520	English Curriculum In The Middle And High School	
EDUC-C&I 5522	Language Arts Curriculum In The Elementary And Middle School	
EDUC-C&I 5539	Mathematics Curriculum Development	
EDUC-C&I 5551	Science Curriculum In The Middle And High School	
EDUC-C&I 5566	Social Studies Curriculum In The Middle And High School	
Total Credits		3

Subject Matter Concentration

Nine hours of coursework related to the student's teaching area are required. The courses would typically be taken in a department of the College of Arts and Sciences, the School of Biological Sciences or be subject-related courses in the School of Education.

Secondary Art

EDUC-C&I 5513	Effective Communication In The Classroom	3
EDUC-C&I 5515	Integrated Arts As A Model For Classroom Instruction	3
EDUC-C&I 5523	Advanced Literature For Children	3
EDUC-SP 5516	Collaborating with Families and Other Professionals	3
Coursework in graduate art history		3
Coursework in graduate studio art		3
Total Credits		18

Secondary English

EDUC 414	English Language Study In Elementary And Secondary Schools	3
EDUC 440	Literature For Adolescents	3
EDUC-C&I 5520	English Curriculum In The Middle And High School	3
Coursework related to your area of specialization, typically English courses		6
Elective coursework in Curriculum and Instructional Leadership (EDCI)		3
Total Credits		18

Secondary Mathematics

EDUC-C&I 5511	Developing Multidisciplinary Problem Solving Skills	3
EDUC-C&I 5536	Specialized Secondary School Curriculum Mathematics	3
EDUC-C&I 5539	Mathematics Curriculum Development	3
Coursework related to your area of specialization, typically math courses		6
Elective coursework in Curriculum and Instructional Leadership (EDCI)		3
Total Credits		18

Secondary Natural Science

EDUC-C&I 5551	Science Curriculum In The Middle And High School	3
EDUC-C&I 5553	Curriculum And Instruction In Science	3
Coursework related to your area of specialization, typically science courses		9
Elective coursework in Curriculum and Instructional Leadership (EDCI)		3
Total Credits		18

Secondary Social Studies

EDUC-C&I 5504	Social Studies In the Schools	3
EDUC-C&I 5506	Curriculum Design	3
or EDUC-C&I 5591	Curriculum & Instruction For The 21St Century	
Coursework related to your area of specialization, typically history courses		9
Coursework with Multicultural & Urban Focus		3
Total Credits		18

Multicultural Education Emphasis

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking. Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.
3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Program Requirements

This emphasis is for teachers or practitioners who are interested in developing competency for multicultural teaching. Students will have the option of selecting a focus area in Cultural Diversity, Urban Teaching and Working with Limited English Proficient Learners. The program does not lead to teacher certification.

The following courses are required in addition to the core courses listed:

Curriculum in Multicultural Education	Hours
EDUC-C&I 5548 English As A Second Language In Content Areas	3
EDUC-C&I 5560 Teaching And Learning In The Urban Classroom	3
EDUC-C&I 5561 Teaching Diverse Populations In Today's Classrooms	3
EDUC-C&I 5562 Teaching For Equity And Social Justice	3
EDUC-C&I 5563 Multicultural Perspectives In Education	3
Total Credits	15

Courses must be approved by a faculty advisor.

Emphasis in Teaching English as a Second Language

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking. Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.
3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)
   - Teachers call on multiple methods to meet their goals.
   - Teachers orchestrate learning in small and large group settings.
   - Teachers place a premium on student engagement.
   - Teachers regularly assess student progress.
   - Teachers are mindful of their principle objectives.
4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Program Requirements

This program leads to a master's degree in teaching English to speakers of other languages. Students may take the degree program for personal enrichment and for use outside of public education.

The following courses are required in addition to the core courses listed:

Teaching English as a Second Language		
EDUC-C&I 5545	Linguistics for ESOL Teachers	3
EDUC-C&I 5546	Intercultural communication	3
EDUC-C&I 5547	Second Language Acquisition	3
EDUC-C&I 5548	English As A Second Language In Content Areas	3
EDUC-C&I 5549	Practicum In English As A Second Language	3
FRN-LNG 494	Methods of Teaching Foreign Languages	3
Total Credits		18

Courses must be approved by a faculty advisor.

Master of Arts: Educational Administration

Student Learning Outcomes

Upon completion of the MA in Educational Administration program, the student will:

- have a thorough grounding of higher education/student affairs as a field of study
- understand organizational, management, leadership and supervision theories and issues
- understand developmental theories as they relate to college students
- understand professional requirements and ethics of the field
- develop self-awareness
- develop multicultural competencies
- improve communication skill
- develop skills to use technology to enhance the educational experience
- develop the ability to analyze and interpret current research in the field
- increase skills to apply research
- improve ability to integrate and synthesize information

General Nature of the Program

The master of arts degree in educational administration, accredited by the National Council for Certification of Teacher Education and the Missouri Department of Elementary and Secondary Education, is designed to provide entry-level preparation for students planning careers in school administration.

The course of study includes a sequence of basic and advanced studies and other applied learning experiences. Students have the opportunity to develop understanding and skills through seminar courses, individual study, and the practice of inquiry in addition to study in required courses. The program is designed to support a focus on professional effectiveness and to foster research, evaluation and assessment activities for students. Instruction and mentored practical experiences will make frequent use of and reference to evaluation and assessment of student performance.

Emphasis Area: Higher Education

Master of Arts in Educational Administration: Higher Education Emphasis

Admissions

The Higher Education faculty review all admissions applications and make admission decisions. Admission for the M.A. in educational administration, with an emphasis in Higher Education, requires that the following steps be successfully completed:

Admission Requirements

1. ***Full admission*** to the Higher Education Program requires:
   - Completion of the UMKC graduate admission application.
   - An undergraduate 3.0 GPA or higher.
   - Cover sheet.
   - Two letters of reference with recommendation form.
   - A written statement of purpose (500 words maximum) that outlines the student’s rationale for application to the program and learning goals.
2. Students who do not meet the undergraduate grade-point average can receive conditional admission to the program. Sstudents must complete a minimum of six hours of core requirements with a grade of "B" or better within the first two semesters of enrollment.
3. Priority application deadlines are as follows:
   - April 1 for summer term
   - July 1 for fall term
   - November 1 for spring term

Student Learning Outcomes

Upon completion of the Higher Education Administration program, the student will:

- Have a thorough grounding of higher education/student affairs as a field of study
- Understand organizational, management, leadership and supervision theories and issues
- Understand developmental theories as they relate to college students
- Understand professional requirements and ethics of the field
- Develop self-awareness
- Develop multicultural competencies
- Improve communication skill
- Develop skills to use technology to enhance the educational experience

- Develop the ability to analyze and interpret current research in the field
- Increase skills to apply research
- Improve ability to integrate and synthesize information

Program Requirements

The graduate program in Educational Administration with an emphasis in Higher Education prepares administrators and educators for the demands of leadership in colleges or universities and other institutional settings. Through a comprehensive master's program for individuals wanting a graduate degree or through coursework taken for professional development, the program supports administrative leaders and educators who seek to enhance their professional competencies and effectiveness in today's increasingly diverse work place.

Student programs of study at the master's level are developed to reflect required core courses that provide all master's level students with fundamental understandings of higher education, student development, organizational leadership and diversity. In addition, the program offers a range of cognate courses that are tailored to meet specific student interests or learning goals in administrative leadership or student affairs administration. Advising materials and meetings with faculty enable students to create academic programs that meet their unique learning needs. Unless indicated, all courses are available to non-degree seeking students for professional development.

All master's level students will design a full-term internship in collaboration with an on-site supervisor and the instructor of the fieldwork course. The purpose of the internship is to provide students with guided opportunities to enhance skills, expand their professional experience base, and apply course learning in new settings.

Required Core Courses		
EDUC-UL 5526	Philosophical Foundations Of Education	3
EDUC-UL 5550	Organization And Administration Of Higher Education	3
EDUC-UL 5556	The College Student	3
EDUC-UL 5560	Leadership In Higher Education	3
EDUC-UL 5564	History Of Higher Education	3
EDUC-UL 5566	Racial And Ethnic Diversity, And Cultural Understanding	3
EDUC-UL 5567	Higher Education Capstone	3
Internship		
EDUC-UL 5571	Internship In Higher Education	3
Research and Statistics		
EDUC-R&P 5508	Principles And Methods Of Research	3
Focus Area		
Select one of the following areas:		9
Focus Area: Student Affairs Administration		
EDUC-UL 5551	Student Affairs Administration In Higher Education	
EDUC-UL 5558	Advanced Student Development Theory	
EDUC-UL 5557	Legal Aspects Of Higher Education	
Focus Area: Foundations of Education		
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5527	Historical Foundations Of Education	
EDUC-UL 5528	Sociological Foundations Of Education	
Focus Area: Sports Administration & Exercise Science		
PHYS-ED 5561	Social-Cultural Aspects of Sport and Physical Activity	
PHYS-ED 5570	Sport Psychology	
PHYS-ED 5530	Organization And Administration Of Athletics	
Students with no focus area must select three of the following electives: [1]		
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5526	Philosophical Foundations Of Education	
EDUC-UL 5528	Sociological Foundations Of Education	
EDUC-UL 5551	Student Affairs Administration In Higher Education	
EDUC-UL 5557	Legal Aspects Of Higher Education	
EDUC-UL 5637	Community College	3
EDUC-UL 5652	Financial Aspects Of Higher Education	3
EDUC-UL 5558	Advanced Student Development Theory	

EDUC-UL 5559	Current Issues In Community Colleges
CPCE 5505	Career Development I
EDUC-R&P 5505	Statistical Methods I
PHYS-ED 5561	Social-Cultural Aspects of Sport and Physical Activity
PHYS-ED 5570	Sport Psychology
PHYS-ED 5530	Organization And Administration Of Athletics
Total Credits	42

[1] **Note:** The student may select courses from other disciplines to meet elective hours. All coursework must be approved by the advisor.

Emphasis Area: School (Grades K-12) Administration

Coordinator:
Uzziel Pecina, (816) 235-**2716**, pecinau@umkc.edu

Admissions

Admission and retention for the M.A. in educational administration, with an emphasis in school (PK-12) administration, requires that the following steps be successfully completed:

Admission into Program

- Completion of a course in education of the exceptional child.
- Attain an undergraduate GPA of at least 2.75.
- Provide copy of a current permanent or professional teaching license/certificate.
- Provide resume showing at least one year of certified teaching experience in elementary, middle or secondary schools under a fully licensed teaching certificate (temporary or provisional certification does not meet this requirement).
- Essay statement regarding past, present and future career goals (500 words or less).
- A minimum of three letters of reference on official letterhead from a direct supervisor of professional teaching experience.

Students who do not meet all of the above admission requirements may receive conditional admission to the program. Full admission is contingent upon completion of a minimum of six hours of core requirements during the first semester of enrollment with a grade of ’B’ or better.

Acceptance into Practicum

- Successful completion of all coursework (1) with a B grade or better.

Program Completion and Recommendation for Administrative Certificate

- Successful completion of the practicum.
- Recommendation of the faculty based on coursework completion, development of an administrative platform, and action research presentation.
- Completion of the student exit survey.

Post-Program Completion

- Student completion of ELPF graduate survey relative to preparation program and ELCC standards.
- Employer survey completion (supervisor).

1. No more than 6 post-undergraduate/graduate credit hours may transfer into the M.A. program.
2. Students must file a **Program Plan of Study** while enrolled in the course EDUC-UL 5501.
3. EDUC-UL 5501 is the prerequisite to EDUC-UL 5502 ; and EDUC-UL 5502 is the prerequisite to EDUC-UL 5503. These courses are mandatory and *cannot* be waived. Students must enroll in these courses in sequence.

Master of Arts in Educational Administration: Elementary School Emphasis

Student Learning Outcomes

The master’s program with emphasis in school administration is designed to prepare leaders for 21st century schools. These leaders must begin now to envision the nature of a global technical-information-based society and the schooling such a society will require. Assumptions based on available knowledge concerning these schools will be made in designing the M.A. program for students. Students will be expected to develop "Learning Organizational Culture" schools and demonstrate competency to develop:

1. Into a facilitator of relationships and outcomes that enhance the effective operation of the school.
2. Collaborative and participative planning and decision-making structures (teams).
3. Support networks from the community and in the school.
4. School organizations as cultures of renewal, risk, problem-solving, trust and caring.
5. School culture of reflective and critical thought concerning learning theory and practice.

On completion of the program, students will be equipped to envision and embrace an information-based, developmental society. Students begin their program of study with a cohort group of other potential school leaders and will take a series of 3-credit-hour block courses. Each cohort will work collaboratively throughout its studies and be led by University faculty.

Students will complete both individual and group projects, over the course of their degree program, and participate in field experiences each semester. While the three-block sequence is intended for school leaders at every level, it is expected that students will tailor their elective coursework and their culminating experience (practicum or internship) to the building level at which they hold their teaching credentials.

Students who complete the master of arts in educational administration may be recommended for initial certification as a building administrator (Kansas) or principal (Missouri). Students must complete the Educational Specialist to earn advanced principal certification in Missouri. Advanced certification is required to be a principal in an AAA-rated school district. Administrative assessment (the School Leaders Licensure Assessment) is required in Missouri and Kansas.

Degree Requirements

Theoretical and Functional Aspects of Educational Administration [1]		
EDUC-UL 5501	Foundations Of School Leadership & Organization (Block I) [2]	3
EDUC-UL 5502	Building Administration And Management (Block II) [2]	3
EDUC-UL 5503	Student, Staff And Organization Development (Block III) [2]	3
EDUC-UL 5507	Instructional Supervision	3
EDUC-UL 5515	Governmental And Legal Aspects Of Education	3
EDUC-UL 5518	Leadership for School Improvement	3
EDUC-UL 5520	Data Driven Leadership for Reculturing Schools	3
EDUC-UL 5574	Administrative Practicum	3
Related and Supporting Areas		
Curriculum - Select one of the following:		3
EDUC-C&I 5505	Introduction To Curriculum Theory	
EDUC-C&I 5506	Curriculum Design	
EDUC-C&I 5591	Curriculum & Instruction For The 21St Century	
Humanistic - Select one of the following:		3
EDUC-UL 5526	Philosophical Foundations Of Education	
EDUC-UL 5527	Historical Foundations Of Education	
Behavioral - Select one of the following:		3
EDUC-R&P 5502	Advanced Educational Psychology	
EDUC-R&P 5510	Child Behavior And Development	
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5528	Sociological Foundations Of Education	
EDUC-R&P 5512	Adolescent Development And The School (Meets Middle School cert. requirements)	
Research - Select one of the following:		3
EDUC-R&P 5508	Principles And Methods Of Research	
EDUC-R&P 5522	Principles Of Testing	
Total Credits		36

1 Required core for all level principals.

2 EDUC-UL 5501, EDUC-UL 5502 and EDUC-UL 5503 must be taken sequentially. EDUC-UL 5501 is offered in the fall and spring semesters only.

Master of Arts in Educational Administration: Secondary School Emphasis

Student Learning Outcomes

The master's program with emphasis in school administration is designed to prepare leaders for 21st century schools. These leaders must begin now to envision the nature of a global technical-information-based society and the schooling such a society will require. Assumptions based on available knowledge concerning these schools will be made in designing the M.A. program for students. Students will be expected to develop "Learning Organizational Culture" schools and demonstrate competency to develop:

1. Into a facilitator of relationships and outcomes that enhance the effective operation of the school.
2. Collaborative and participative planning and decision-making structures (teams).
3. Support networks from the community and in the school.
4. School organizations as cultures of renewal, risk, problem-solving, trust and caring.
5. School culture of reflective and critical thought concerning learning theory and practice.

On completion of the program, students will be equipped to envision and embrace an information-based, developmental society. Students begin their program of study with a cohort group of other potential school leaders and will take a series of 3-credit-hour block courses. Each cohort will work collaboratively throughout its studies and be led by University faculty.

Students will complete both individual and group projects, over the course of their degree program, and participate in field experiences each semester. While the three-block sequence is intended for school leaders at every level, it is expected that students will tailor their elective coursework and their culminating experience (practicum or internship) to the building level at which they hold their teaching credentials.

Students who complete the master of arts in educational administration may be recommended for initial certification as a building administrator (Kansas) or principal (Missouri). Students must complete the Educational Specialist to earn advanced principal certification in Missouri. Advanced certification is required to be a principal in an AAA-rated school district. Administrative assessment (the School Leaders Licensure Assessment) is required in Missouri and Kansas.

Degree Requirements

Theoretical and Functional Aspects of Educational Administration [1]		
EDUC-UL 5501	Foundations Of School Leadership & Organization (Block I) [2]	3
EDUC-UL 5502	Building Administration And Management (Block II) [2]	3
EDUC-UL 5503	Student, Staff And Organization Development (Block III) [2]	3
EDUC-UL 5507	Instructional Supervision	3
EDUC-UL 5515	Governmental And Legal Aspects Of Education	3
EDUC-UL 5518	Leadership for School Improvement	3
EDUC-UL 5520	Data Driven Leadership for Reculturing Schools	3
EDUC-UL 5574	Administrative Practicum	3
Related and Supporting Areas		
Curriculum - Select one of the following:		3
EDUC-C&I 5505	Introduction To Curriculum Theory	
EDUC-C&I 5506	Curriculum Design	
EDUC-C&I 5591	Curriculum & Instruction For The 21St Century	
Humanistic - Select one of the following:		3
EDUC-UL 5526	Philosophical Foundations Of Education	
EDUC-UL 5527	Historical Foundations Of Education	
Behavioral - Select one of the following:		3
EDUC-R&P 5502	Advanced Educational Psychology	
EDUC-R&P 5510	Child Behavior And Development	
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5528	Sociological Foundations Of Education	
EDUC-R&P 5512	Adolescent Development And The School (meets Middle School cert. requirements)	
Research - Select one of the following:		3
EDUC-R&P 5508	Principles And Methods Of Research (required for Kansas Certification)	

EDUC-R&P 5522	Principles Of Testing	
Total Credits		36

1 Required core for all level principals.

2 EDUC-UL 5501, EDUC-UL 5502 and EDUC-UL 5503 must be taken sequentially. EDUC-UL 5501 is offered in the fall and spring semesters only.

Principal Certification

Students seeking administrative certification must first offer proof of holding valid teaching certification at the same level (i.e., elementary or secondary), and have a minimum of two years teaching experience. The M.A. is offered with certification concentrations in elementary school administration or secondary school administration. Additional coursework is required for certification as a middle school administrator.

Those who complete the master of arts in educational administration may be recommended for initial certification as a building administrator (Kansas) or principal (Missouri). Students are encouraged to complete the educational specialist degree to further their careers. In addition to completion of the academic program, Missouri and Kansas require all prospective administrators to successfully complete the School Leaders Licensure Assessment.

Master of Arts: Language and Literacy

Student Learning Outcomes

Objectives for the master of arts vary according to candidates' career objectives. In general, candidates should expect:

1. To develop competencies in:
   - Reading instruction for elementary and/or secondary, college and adult students.
   - Individual assessment and instructional intervention strategies for diverse learners and struggling readers.
   - Knowledge of the strategies and techniques used in reading research, and experience in reading and reporting such research.
   - Performing the duties of reading specialist and literacy coach.
2. To meet requirements for certification as a Special Reading Teacher grades K-12. (Initial teaching certification at the elementary, middle or secondary level required.)
3. To meet all professional standards specified by the Professional Standards and Ethics Committee of the International Reading Association.

Program Requirements

The Division of Curriculum and Instructional Leadership offers a program of study leading to the Master of Arts Degree in Language and Literacy. A reading teacher certification program is also available to those who hold a prior teaching certificate for public schools and have a minimum of two years teaching experience.

The 36-credit-hour program of study consists of the reading requirements, humanistic and behavioral studies requirements, and electives.

Reading Requirements [1]		
EDRD 5502	Early Literacy and Language Development	3
EDRD 439	Content Area Reading And Language Development	3
EDRD 5501	Teaching Of Reading	3
EDRD 5511	Reading Assessment And Evaluation	3
EDRD 5510	Classroom-Based Literacy Assessment and Intervention	3
EDRD 5520	Practicum in Reading	3
EDRD 5515	Seminar In Reading	3
Humanistic Studies Requirement		
Select one of the following:		3
EDUC-UL 5525	Cultural Foundations Of Education	
EDUC-UL 5526	Philosophical Foundations Of Education	
EDUC-UL 5527	Historical Foundations Of Education	
Behavioral Studies Requirement		
Select one of the following:		3
EDUC-R&P 5502	Advanced Educational Psychology	
EDUC-R&P 5510	Child Behavior And Development	
EDUC-R&P 5512	Adolescent Development And The School	

EDUC-R&P 5513	Life Span Human Development	
Multicultural and Urban Focus		
Select one of the following:		3
EDUC-C&I 5560	Teaching And Learning In The Urban Classroom	
EDUC-C&I 5561	Teaching Diverse Populations In Today's Classrooms	
EDUC-C&I 5562	Teaching For Equity And Social Justice	
EDUC-C&I 5563	Multicultural Perspectives In Education	
EDUC-SP 5516	Collaborating with Families and Other Professionals	
Electives		
Select two of the following: [2]		6
EDRD 5530	Reading Instruction for English Language Learners, K-12	
EDRD 5541	Teaching Reading Improvement: Secondary, College, and Adult Levels	
EDRD 5601	Organizing And Guiding The Reading Program	
EDRD 5650	Seminar In Dyslexia And Related Learning Disabilities	
Total Credits		36

1 Note: Reading courses are being revised and renumbered. The new designation EDRD will be in place beginning Spring 2010.

2 Coursework related to the major area of reading/literacy is needed to satisfy this requirement. This coursework must be approved by the student's faculty advisor.

Final Examination

Students must pass a written examination covering their reading coursework.

Master of Arts: Special Education

Admission Requirements

Candidates entering the master's program with emphasis in MM/CC disabilities must hold a baccalaureate degree and have an overall 3.0 GPA or higher on a 4.0 scale and successfully complete an interview with program faculty. Official admission to the University of Missouri-Kansas City graduate school is required. Admission deadlines are February 1st for summer and fall admission and October 1st for spring admission.

Candidates who do not hold initial teaching certification in elementary or secondary education must pass the College Basic Academic Subjects Examination (CBASE), with a score of 235 or greater at admission. Informational packets for the CBASE can be obtained from Student Services in the School of Education.

The master of arts in special education is a degree sought by teachers and others who wish to enhance their knowledge and skills in working with children and adolescents with exceptional learning needs. The Division of Curriculum and Instructional Leadership offers a program of study leading to the degree of master of arts in special education. The focus of the master's degree is in **Mild-Moderate/Cross-Categorical (MM/CC) Disabilities**. The program prepares educators to teach students, to serve as advocates for children and their families, and to work collaboratively with colleagues in K-12 educational settings, including public and charter schools, and private schools.

Student Learning Outcomes

1. Teachers are committed to students and their learning. (Diversity, Core Concepts)
   - Teachers recognize individual differences in their students and adjust their practice accordingly.
   - Teachers have an understanding of how students develop and learn.
   - Teachers treat students equitably.
   - Teachers' mission extends beyond understanding the cognitive capacity of their students.
2. Teachers know the subjects they teach (Curriculum Design, Content Knowledge) and how to teach those subjects to students (Pedagogy, Technology in Instruction).
   - Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
   - Teachers expose their students to different modes of critical thinking.
   - Teachers teach students to think analytically about content.
   - Teachers command specialized knowledge of how to convey a subject to students.
   - Teachers generate multiple paths to knowledge.
   - Teachers have knowledge of available curricular resources including technological innovations.
3. Teachers are responsible for managing and monitoring student learning. (Assessment, Pedagogy)

- Teachers call on multiple methods to meet their goals.
- Teachers orchestrate learning in small and large group settings.
- Teachers place a premium on student engagement.
- Teachers regularly assess student progress.
- Teachers are mindful of their principle objectives.

4. Teachers think systematically about their practice and learn from experiences. (Research, Reflection)
   - Teachers are continually making difficult choices that test their judgment.
   - Teachers seek the advice of others and draw on education research and scholarship to improve their practice.
   - Teachers understand the importance of educational research, its relevance to daily classroom practice and justify practice based on sound research outcomes.
5. Teachers are members of learning communities. (Professional Activism)
   - Teachers contribute to school effectiveness by collaborating with other professionals.
   - Teachers work collaboratively with parents.
   - Teachers take advantage of community resources.

Program Requirements

Program requirements vary depending on the combination of degree and certification desired. Three program options provide opportunities for candidates to earn a master's degree with or without special education teaching certification.

- Program Option 1: Initial Certification plus Master's Degree
- Program Option 2: Master's Degree with Special Education Endorsement for Those with Previous Certification
- Program Option 3: Master's Degree Only

For specific degree requirements, contact the Division of Curriculum and Instructional Leadership at (816) 235-**2245** or e-mail education@umkc.edu.

Certification

Courses required for certification in Missouri and Kansas are typically completed as part of the MM/CC program. Arrangements can be made for obtaining temporary certification in MM/CC in Missouri only; however, employment in the field is required. Because the requirements for certification vary from state to state, it is important to plan a course of study carefully with a special education faculty advisor during the first semester of coursework at UMKC.

Ph.D. - Counseling Psychology

Overview

The Ph.D. degree in counseling psychology has been fully accredited by the American Psychological Association since 1985. The counseling psychology program emphasizes multicultural and individual diversity within a scientist-practitioner model. Consistent with the University's urban/metropolitan mission, the diverse Counseling Psychology faculty is committed to educating future counseling psychologists to improve the welfare of individuals and communities through scholarship and applied interventions.

Student Learning Outcomes

Our program emphasizes a scientist-practitioner model in which students are informed about and contribute to scientific knowledge and are committed to life-long learning. Student practice activities are informed by research and a scientific attitude, and all professional activities are approached and critically evaluated with an ethical, multicultural, and professional mind-set. Students are also trained to work effectively and ethically with diverse clients, using interventions based on theory and informed by science. Our developmental model provides early and progressive training in both research and practice activity, culminating in professionals who can design, conduct, and evaluate research relevant to the field of psychology.

More information about the program can be found at http://education.umkc.edu/programs/view/18

Graduates demonstrate skills and knowledge in the following areas:

- Professional identity as counseling psychologists.
- Understand the importance and complexity of cultural and individual diversity. They acquire the competence to apply knowledge of diversity in all areas of science and practice.
- Understand counseling psychology as a scientific discipline. They are able to create, evaluate, and ethically contribute to the empirical knowledge base of psychological practice and theory.

- Trained to meet the varied needs of their diverse clients using ethical interventions based on counseling theory and informed by science. Graduates are able to effectively use and provide supervision and consultation.

Admission Criteria

The program accepts bachelor's-level and master's-level applicants. Approximately six to ten students are admitted to the Counseling Psychology program each year.

Recommended minimum for bachelor's level applicants:

- The completion of a bachelor's degree with a major in psychology.
- Official GRE scores obtained within the last five years.
- An overall undergraduate 3.0 GPA covering all college work taken prior to the bachelor's degree, or 3.25 for the major courses or the last 60 credits of the bachelor's degree.
- Additional requirements may apply for international students.

Recommended minimum for master's level applicants:

- The completion of a master's degree in counseling or a closely related area.
- Official GRE scores obtained within the last five years.
- Graduate GPA of 3.5 or above.
- Additional requirements may apply for international students.

Applicants will be evaluated using the following dimensions: academic potential, research potential, research interest, interpersonal characteristics, contribution to program diversity, commitment to multiculturalism, professional goals and interest, understanding of the profession of counseling psychology.

Alternative Criteria: students who do not meet the regular recommended criteria may be admitted under alternative criteria provided there is good reason to believe that the regular criteria do not adequately manifest the student's potential to do quality work in the program. The Counseling Psychology faculty reserves the right to require those who are admitted under the alternative criteria to take some background core courses in psychology before or during the first year of their doctoral training in the areas of general psychology, theories of personality, tests and measurement, abnormal psychology, experimental psychology, and introductory statistics. This decision will be made by the admission committee and the student's assigned advisor, and communicated to the student before he/she starts the program.

The admission committee will consist of three or more faculty members and one or more student members. The student member must be in his or her final year of the academic program (i.e., doing the pre-doctoral internship in the subsequent academic year). Using the above criteria, the admission committee will select approximately thirty applicants to be offered interviews. Campus interview will be recommended, but not required. Phone interviews are offered for those who cannot make the campus interview on our Interview Day. Admission will be offered to a small number of the applicants interviewed. In addition, the committee selects a list of those who were interviewed to serve as alternates. Candidates will be notified of the admissions decisions no later than April 1st. Candidates are required to act on the notifications by April 15th. If a first-round candidate does not accept, an alternate for the position will be selected from the list of the remaining candidates. Alternates will have 7 days to act on the notification, but if the offer is made on or after April 15, they will have 3 days to give a definite response. In making decisions, the Counseling Psychology Program at UMKC does not discriminate against anyone on the basis of race, gender, ethnicity, sexual orientation, age, religion, nationality, or physical disability and appearance.

Admission Requirements

Application packets for the Counseling Psychology Program can be obtained from the program's Web site: http://education.umkc.edu/academics/doctoral-degrees/doctorate-of-philosophy-ph-d-in-counseling-psychology/.

If needed, you may contact the UMKC Office of Admissions either by phone (816) 235-**1111**, or by e-mail admit@umkc.edu. You may also contact the Counseling Psychology Program at (816) 235-**2722**.

Applications are accepted only for the fall semester and must be completed and received by January 1. Application materials must be submitted to two separate offices on campus: 1. The UMKC Admissions Office, **-and-** 2. The Counseling Psychology Admissions Committee.

1. **Materials to be sent to the UMKC Admissions Office:**
   a. UMKC application for admission (May be completed electronically at http://www.umkc.edu/admissions).
   b. Application fee (May be completed electronically at http://www.umkc.edu/admissions).
   c. Official transcripts from all post-secondary institutions.
   d. Official Graduate Record Examination (GRE) scores, sent directly from ETS.
   - **Please submit the UMKC Admissions Office materials to:**
     UMKC Office of Admissions
     University of Missouri-Kansas City

120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

2. **Materials to be sent to Counseling Psychology:**
   a. Cover sheet for the Ph.D. in Counseling Psychology (from the Counseling Psychology application packet).
   b. Personal statement. Submit a concise (two to three pages) statement concerning some or all of the following:
      - Your self reflection/perception
      - Your professional goals and interests
      - Your research knowledge, experience, and interest
      - Your views on multiculturalism and diversity
   c. Curriculum vitae including the following information:
      - Contact information
      - Educational background
      - Relevant clinical, research, and volunteer experiences
      - Honors or awards
      - Membership/leadership in professional organizations
      - Presentations and publications
   d. Three applicant evaluations forms (from the Counseling Psychology application packet) with attached letters of recommendation.
      - Raters should address your suitability for professional studies in a mental health service profession.
      - Raters should have knowledge of your interpersonal and intellectual functioning and skills in research, counseling and written and oral communication.
      - Raters should enclose their letters of recommendation along with the provided rating sheet in an envelope, sign their names across the sealed flap of the evelope, and either return to the student or mail directly to the address below.
      - References must be from professional or academic settings.

- **Mailing Address**
  University of Missouri-Kansas City
  ATTN: Counseling Psychology Admissions Committee
  215 Education Building
  5100 Rockhill Road
  Kansas City, MO 64110-2499

Note: Admission to UMKC or the school of Graduate Studies does not guarantee admission to the Doctor of Philosophy degree program in Counseling Psychology.

Recommendation for Teacher Certification

Although the School of Education may recommend persons for certification to teach in Missouri, the requirements for certification are determined by the state. The State of Missouri requires that any individual seeking to be a teacher complete an accredited college or university's teacher education program. Individuals seeking certification must meet the program requirements established by UMKC as approved and accredited by the Missouri Department of Elementary and Secondary Education regardless of previously completed college coursework. Post-baccalaureate students are encouraged to consider entering the field of education but should be prepared to complete the specific content area and professional education courses required for certification.

In cooperation with the Missouri Department of Elementary and Secondary Education and the National Council for Accreditation of Teacher Education, UMKC is responsible for recommending students and alumni for teacher certification. Requests for certification are initiated by students. The School of Education will also make recommendations to other state's departments of education.

The certification and data manager in the School of Education Student Services Office serves as a certification officer for teachers, counselors and administrators at UMKC.

Information for Missouri certification can be accessed on-line at http://dese.mo.gov/divteachqual/teachcert/. Certification application materials and information for Kansas can be obtained directly from the state at http://ksde.org/Default.aspx?tabid=1648. Students should apply for certification early in their final semester to prevent delay in receiving the certificate. Institutional recommendations for certification are made only for students who have completed a UMKC School of Education degree or the equivalent in the appropriate certification area. To establish a basis for the institutional recommendation, all students who do not earn a degree at UMKC, who are seeking an additional endorsement to teach, administer, or counsel, must take at least 12 hours of coursework planned with an advisor in the School of Education.

Most states, including Missouri and Kansas, have additional testing requirements for certification. It is the student's responsibility to obtain this information and satisfy those testing requirements prior to applying for certification. In addition, the states of Missouri and Kansas require that all candidates for certification submit fingerprints to be used for state and national background checks before any certificate is issued.

On completion of the appropriate degree, recommendation for Missouri[1] certification can be achieved in the following areas:

- Early Childhood Teacher (birth-3rd grade), B.A. early childhood education
- Elementary Teacher (1-6), B.A. elementary education
- Middle School Teacher (5-9), B.A. middle school education/subject area specialty (language arts, mathematics, science and social studies)
- Secondary Teacher (9-12), B.A. secondary education/subject matter specialty: English, mathematics, science (requires an emphasis in biology, chemistry, earth science, or physics), unified science (requires an emphasis in biology, chemistry, earth science, or physics), and social studies.
- Teacher (K-12), B.M.E. (Bachelor of Music Education) music education/choral/instrumental; B.A. secondary education: foreign language (French, German, Spanish), Art
- School Counselor (1-8), M.A. counseling and guidance/elementary
- School Counselor (7-12), M.A. counseling and guidance/secondary
- Teaching English to Speakers of Other Languages (K-12), M.A. curriculum and instruction/TESOL
- Principal (K-8) M.A. educational administration/elementary (initial); Ed.S. educational administration/elementary (advanced)
- Principal (7-12) M.A. educational administration/secondary (initial); Ed.S. educational administration/secondary (advanced)
- Middle Level Principal (5-9), M.A. educational administration
- Special Reading Teacher (K-12), M.A., Ed.S. reading education
- Mild/Moderate Cross-Categorical disabilities(K-12), M.A. special education
- Superintendency, Ed.S. educational administration

1 Kansas and other state's certification subjects and levels are similar. Contact the School of Education Student Services Office for information.

Provisional Certification

The State of Missouri allows individuals who hold a bachelor's degree to be provisionally certified to teach provided the individual is within 12 credit hours of completing a teacher certification program. The Missouri school district that wishes to employ such an individual for a teaching position must complete its segment of the on-line application before an academic contract is written and endorsed by the School of Education.

Criminal Record Check

Missouri State law requires all persons working in the public schools to have passed a criminal background check as done by the FBI and Missouri Highway Patrol. Students applying for teacher certification will have to request an FBI background check from DESE. Forms and instructions are available directly from DESE (http://dese.mo.gov/divteachqual/teachcert/bcindex.html) or in the Student Services Office.

State of Missouri Grade-Point Average Requirement

All persons certified to teach in public elementary middle, and secondary schools in Missouri, except for non-academic vocational and 45- and 90-day substitute teachers, must have an overall 2.5 GPA or higher (on a 4.0 scale).

Missouri Certification Testing

Missouri has established a requirement that all prospective teachers must take a competency examination prior to certification. All students must pass the Praxis II Specialty Area Test appropriate to their field of study prior to graduation for certification in Missouri. All test results must be sent directly to the UMKC School of Education. Passing scores have been established by the Missouri Department of Elementary and Secondary Education. Contact the School of Education Student Services Office for more information.

Retention

Education majors are expected to maintain a quality of achievement significantly above minimum UMKC standards for degree work. Individual student progress will be monitored throughout the program. Satisfactory progress is required of all students for retention in the teacher preparation program. Students are expected to maintain academic standards, perform satisfactorily in clinical courses, refrain from academic dishonesty, comply with the established University and teacher education timetables and requirements, and refrain from unethical or unprofessional behavior or behaviors that obstruct the training process or threaten the welfare of the student or others. Other circumstances involving student behavior will be addressed by the faculty on an individual basis.

Specific policies relating to academic progress and dispositions that relate to retention in the teacher preparation program can be found at http://education.umkc.edu/academics/undergraduate-programs/ where there is a link to the current Student Handbook.

Title II Notice

Title II of the Higher Education Act requires that every institution of higher education provide public information regarding the pass rate of the institution's graduates on the teacher certification or licensure assessment of the state in which the institution is located. Additionally, Title II requires that a comparison of each program's pass rate be made with the average pass rate in the state.

Graduates of the teacher education program at UMKC have achieved a 99 percent pass rate on the Praxis II, a nationally normed examination required by the State of Missouri for certification purposes. The average pass rate in Missouri is 97 percent.

Scholarships

School of Education Scholarship Information

Three types of scholarships are available to students: Automatic (considered when applying to UMKC); Additional scholarships to apply for through the UMKC Financial Aid and Scholarships Office, and School of Education scholarships. The SOE scholarships are available to undergraduate and graduate students in our programs. Apply to be considered for these opportunities!

Applicants

- Must be admitted to the School of Education
- Submit application by February 1st
- Must complete a new application each year
- Previous recipients may reapply
- Number and dollar amount of awards vary from year to year
- Awards are not automatically renewable
- Undergraduate students must be enrolled in at least 12 credit hours each semester during the new academic year to receive a scholarship
- Graduate students must be enrolled in at least 6 credit hours each semester during the new academic year to receive a scholarship

Procedures

- School of Education students complete a single application which is then used to determine eligibility for all scholarships.
- Application should include:

1. **750 word essay addressing the following:**

- *Discuss your past accomplishments and future goals in the field of education or counseling. Finally, please describe how you will integrate and exemplify the SOE Mission and Values in your future work.*

Student names are removed from the essay and resume before they are reviewed. Applicants are asked to avoid using their name in these materials. **Responses longer then 750 words will not be considered beyond the first 750 words**. *NOTE: If you choose to apply for the Mazuma Credit Union Scholarship you will need to submit an ADDITIONAL essay addressing how you would incorporate personal financial management in the classroom. This essay should be submitted as part of the same attachment as your general scholarship essay, but please write it on a separate page in your document.

Resume (please remove student name and email address before submitting)

If you need assistance, contact Career Serivces Center here on campus. Contact information along with helpful resources can be found at http://career.umkc.edu.

Two current recommendations

A recommendation from an educator or UMKC faculty member is recommended but not required. Recommendation forms should be returned to the School of Education no later than February 11th. A copy of the recommendation form can be found here. (http://education.umkc.edu/Documents/fetch/502)

Return forms to:

University of Missouri - Kansas City
School of Education
Room 345 - Dean's Office
5100 Rockhill Road
Kansas City, MO 64110-2499
attn: Renique Kersh

OR Fax forms to: (816) 235-6511

To complete the online application to go http://education.umkc.edu/CurrentStudents/SOEScholarships.html

Selection Process/Timeline

December: Scholarship application opens

February 1st: Applications are due and committee begins review

April: All applicants are notified if selected

August-September: All scholarship recipients will be honored at the SOE scholarship event scheduled in the beginning of the next academic year.

For more information about the SOE Scholarships go to http://education.umkc.edu/CurrentStudents/SOEScholarships.html.

Special Services

Public School Placements

The Field Placement Office in the School of Education assists in making placements to enable teachers and other school personnel to complete their various practicum experiences. All field placements require students to have a current background clearance check.

Students admitted to the Teacher Education program are required to complete practicums within one of the School of Education's nine partner districts (Center School District, KCMO, KCKS, Grandview, Hickman Mills, Independence, North Kansas City, Raytown, Turner and UMKC-sponsored charter schools). All Teacher Education programs require students to complete at least a semester-long student teaching experience. During student teaching, students are under the guidance of cooperating mentor teachers and members of the University's education staff. Weekly seminars are a required part of the program.

Career Services at UMKC

The Career Services Office offers a variety of career and job-related services to students and alumni. Through Career Services, students can receive resume, interview and job search assistance. Teacher Education and School Counseling students in their last year of coursework can interview with representatives of area school districts through a Career Day sponsored by Career Services.

Students or graduates seeking a teaching or administrative position are urged to register and keep their records current in the Career Services Office, 4825 Troost, phone (816) 235-**1636** or check their Web site: http://www.career.umkc.edu/.

The Career Services Office will be located in the new Student Success Center.

Technology Learning Laboratory

The Technology Learning Lab is located in the STAR Center in room 129 in the Education Building. The TLL is operated by the School of Education specifically for Education students. It offers specialized equipment for scanning, digital video and digital video edition. In addition, one-on-one assistance with software applications, electronic portfolio construction and technology integration techniques for the classroom is available. Customized training is available by appointment and on a first-come, first-served basis. Computers with the PC and Mac platforms are available. For more information, visit http://education.umkc.edu/tll.

Office of Continuing Education

Through Continuing Education, hundreds of courses are offered to teachers and other community members throughout the Greater Kansas City area and beyond. Credit and non-credit courses are offered throughout the year at various locations and at various times. Continuing Education also has numerous online offerings to fit any schedule. For course topics and additional information, visit our Web site at http://education.umkc.edu/CE/ or call (816) 235-**1188**.

Student Organizations

The *School of Education Student Government* strives to expand the students' academic concerns and abilities, promote students' involvement in the School of Education and the University, act on all matters concerning students' welfare, aid faculty and students in cooperative work and promote a professional attitude and feeling of responsibility. Community service is also a regular part of the activity of the SOESG. The organization meets on a regular basis and welcomes all students' attendance and participation.

The *American Psychological Association -- Student Affiliate Group* encourages professional development within the field of counseling psychology. It also serves as a meeting time for the members to discuss issues and concerns of the counseling psychology doctoral program. It encourages students to organize educational, social and fund raising events, and to act as a liaison with the counseling psychology faculty and the UMKC community.

The *Master's of Counseling Student Organization* (MCSA) is the organization for students pursuing their Master's in Counseling and Guidance. It serves as a source of support and advocacy for students enrolled in the program. In addition to seminars and social events, MCSA has a student mentorship program. For more information, contact your MCSA officers or the division Administrative Assistant at (816) 235-2722.

The *Higher Education Student Association* (HESA) is a student-run organization founded to further the understanding of the purpose and practices of higher education. HESA's purpose is to serve the specific and current needs of students enrolled in or interested in the Higher Education Administration program at UMKC. The goals of the organization are to:

- Create a community among higher education administration students, faculty, and alumni
- Provide a forum for the exchange of ideas on current issues in higher education
- Offer professional experiences in conference participation, planning and organization
- Network with other Higher Education Student associations
- Assist in the professional advancement of members

Teacher Education Student Learning Outcomes

The School of Education subscribes to the Missouri Standards for Teacher Education Programs (MoSTEP).

Missouri Standards for Teacher Education Programs (MoSTEP)

Performance Standards for Education Professionals

The School of Education ensures that candidates possess the knowledge, skills and competencies defined as appropriate to their area(s) of responsibility.

General Education for Initial Teacher Preparation

The School of Education ensures that candidates have completed general studies courses and experiences in the liberal arts and sciences.
Quality Indicators:

- The general studies include the arts, comunications, history, literature, mathematics, philosophy, sciences and the social sciences.
- The general studies incorporate multi-cultural and global perspecitves.

Content, Professional, Pedagogical and Integrative Studies for Initial Teacher Preparation

The School of Education ensures that candidates have completed a program of content, professional, pedagogical and integrative studies.

MoSTEP Standards/Program Goals

1. *Goal No. 1: The preservice teacher understands the central concepts, tools of inquiry and structures of the discipline(s) within the context of a global society and creates learning experiences that make these aspects of subject matter meaningful for students.*
   Performance Indicators: The preservice teacher:
   a. Knows the discipline applicable to the certification area(s) (as defined by Missouri State Subject Area Competencies).
   b. Presents the subject matter in multiple ways.
   c. Uses students' prior knowledge.
   d. Engages students in the methods of inquiry used in the discipline.
   e. Creates interdisciplinary learning.
2. *Goal No. 2: The preservice teacher understands how students learn and develop, and provides learning opportunities that support the intellectual, social and personal development of all students.*
   Performance Indicators: The preservice teacher:
   a. Knows and identifies child/adolescent development.
   b. Strengthens prior knowledge with new ideas.
   c. Encourages student responsibility.
   d. Knows theories of learning.
3. *Goal No. 3: The preservice teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.*
   Performance Indicators: The preservice teacher:
   a. Identifies prior experience, learning styles, strengths and needs.
   b. Designs and implements individualized instruction based on prior experience, learning styles, strengths and needs.
   c. Knows when and how to access specialized services to meet students' needs.
   d. Connects instruction to students' prior experiences and family, culture and community.

4. *Goal No. 4: The preservice teacher recognizes the importance of long-range planning and curriculum development and develops, implements and evaluates curriculum based upon student, district and state performance standards.*
   Performance Indicators: The preservice teacher:
   a. Selects and creates learning experiences that are appropriate for curriculum goals, relevant to learners and based upon principles of effective instruction (e.g., encourages exploration and problem solving, building new skills from those previously acquired).
   b. Creates lessons and activities that recognize individual needs of diverse learners and variations in learning styles and performance.
   c. Evaluates plans relative to long and short-term goals and adjusts them to meet student needs and to enhance learning.
5. *Goal No. 5: The preservice teacher uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving and performance skills.*
   Performance Indicators: The preservice teacher:
   a. Selects alternative teaching strategies, materials and technology to achieve multiple instructional purposes and to meet student needs.
   b. Engages students in active learning that promotes the development of critical thinking, problem solving and performance capabilities.
6. *Goal No. 6: The preservice teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning and self-motivation.*
   Performance Indicators: The preservice teacher:
   a. Knows motivation theories and behavior management strategies and techniques.
   b. Manages time, space, transitions and activities effectively.
   c. Engages students in decision making.
7. *Goal No. 7: The beginning teacher models effective verbal, nonverbal and media communication techniques to foster active inquiry, collaboration and supportive interaction in the classroom.*
   Performance Indicators: The preservice teacher:
   a. Models effective verbal/non-verbal communication skills.
   b. Demonstrates sensitivity to cultural, gender, intellectual and physical ability differences in classroom communication and in responses to students' communications.
   c. Supports and expands learner expression in speaking, writing, listening and other media.
   d. Uses a variety of media communication tools.
8. *Goal No. 8: The preservice teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.*
   Performance Indicators: The preservice teacher:
   a. Employs a variety of formal and informal assessment techniques (e.g., observation, portfolios of student work, teacher-made tests, performance tasks, projects, student self-assessments, authentic assessments and standardized tests) to enhance and monitor her or his knowledge of learning, to evaluate student progress and performances and to modify instructional approaches and learning strategies.
   b. Uses assessment strategies to involve learners in self-assessment activities, to help them become aware of their learning behaviors, strengths, needs and progress and to encourage them to set personal goals for learning.
   c. Evaluates the effect of class activities on both the individual and the class as a whole, collecting information through observation of classroom interactions, questioning and analysis of student work.
   d. Maintains useful records of student work and performances and can communicate student progress knowledgeably and responsibly, based on appropriate indicators, to student, parents and other colleagues.
9. *Goal No. 9: The preservice teacher is a reflective practitioner who applies the ethical practices of the profession and continually assesses the effects of choices and actions on others. This reflective practitioner actively seeks out opportunities to grow professionally and utilizes the assessment and professional growth to generate more learning for more students.*
   Performance Indicators: The preservice teacher:
   a. Applies a variety of self-assessment and problem-solving strategies for reflecting on practice, their influences on students' growth and learning, and the complex interactions between them.
   b. Uses resources available for professional development.
   c. Practices professional ethics.
10. *Goal No. 10: The preservice teacher fosters relationships with school colleagues, parents and educational partners in the larger community to support student learning and well-being.*
    Performance Indicators: The preservice teacher:
    a. Participates in collegial activities designed to make the entire school a productive learning environment.
    b. Talks with and listens to students, is sensitive and responsive to signs of distress and seeks appropriate help as needed to solve students' problems.
    c. Seeks opportunities to develop relationships with the parents and guardians of students, and seeks to develop cooperative partnerships in support of student learning and well-being.
    d. Identifies and uses the appropriate school personnel and community resources to help students reach their full potential.

11. *Goal No. 11: The preservice teacher understands theories and applications of technology in educational settings and has adequate technological skills to create meaningful learning opportunities for all students.*
    Performance Indicators: The preservice teacher:
    a. Demonstrates an understanding of instructional technology concepts and operations.
    b. Plans and designs effective learning environments and experiences supported by informational and instructional technology.
    c. Implements curriculum plans that include methods and strategies for applying informational and instructional technology to maximize student learning.
    d. Uses technological applications to facilitate a variety of effective assessment and evaluation strategies.
    e. Uses technology to enhance personal productivity and professional practice.
    f. Demonstrates an understanding of the social, ethical, legal and human issues surrounding the use of technology in Pre-k-12 schools and applies that understanding in practice.

Undergraduate Programs

The School of Education offers the following undergraduate degree programs:

- B.A., Early Childhood Education (http://education.umkc.edu/UndergraduateDegrees/Home.html)
- B.A., Elementary Education (http://education.umkc.edu/UndergraduateDegrees/Home.html)
- B.A., Middle School Education (http://education.umkc.edu/UndergraduateDegrees/Home.html)
- B.A., Secondary Education (http://education.umkc.edu/UndergraduateDegrees/Home.html)

Students may contact the School of Education Student Services Office for specific program information.

Students may also elect to pursue a dual degree between Education and Arts and Sciences. Secondary education majors may earn a B.A. or B.S. degree in a major in the College of Arts and Sciences. Elementary and early childhood education majors may earn a bachelor of liberal arts degree in the College of Arts and Sciences. Contact the advising office of the College of Arts and Sciences for more details.

School of Graduate Studies

Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 300F
5115 Oak Street
(816) 235-1301
graduate@umkc.edu
http://sgs.umkc.edu

Mailing Address
University of Missouri-Kansas City
School of Graduate Studies
AC 300F
5100 Rockhill Road
Kansas City, MO 64110-2499

Dean:
Denis M. Medeiros Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=medeiros)

General Information

The School of Graduate Studies is responsible for monitoring compliance to the campuswide minimum graduate academic regulations, which are explained in detail in the General Graduate Academic Regulations and Information section of this catalog. Working with and through the Graduate Council and Graduate Officers Committee, the School also provides leadership and coordination of all graduate programs, offers programs to prepare graduate students for faculty positions in a variety of educational settings, and administers a number of competitive graduate fellowships.

The School also serves as the academic and administrative home for students admitted to the Interdisciplinary Ph.D. program. All other graduate students are admitted to the school or college in which their degree programs are housed.

- Mission and Administrative Organization of Graduate Education
- Institute for Human Development
  - Interdisciplinary Leadership Certificate in Disability Studies
- Graduate Certificate in College Teaching and Career Preparation
- Interdisciplinary Ph.D. Program

- Program Administration
- Program Description
- Doctoral Faculty Participation in the Interdisciplinary Ph.D. Program
- Interdisciplinary Doctoral Student Council
- Application Procedure and Minimum Criteria for Admission
- Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements
  - Change of Disciplines by Admitted Students
  - Interim Advisor
  - Qualifying Requirements for Full Admission
  - Research Advisor and Supervisory Committee
  - Interdisciplinary Ph.D. Plan of Study
  - Interdisciplinary Ph.D. Residency Requirement
  - Transfer Credit
  - Comprehensive Examination
  - Program Time Constraints
  - Dissertation Research Proposal Development and Approval
  - Dissertation and Completion of Degree
  - Interdisciplinary Ph.D. Student Appeal Process
- Student Learning Outcomes
- Interdisciplinary Ph.D. Discipline-Specific Requirements
  - Art History
  - Biomedical and Health Informatics
  - Cell Biology and Biophysics
  - Chemistry
  - Computer Science
  - Curriculum and Instruction
  - Economics
  - Educational Leadership, Policy and Foundations
  - Electrical and Computer Engineering
  - Engineering
  - English
  - Entrepreneurship
  - Geosciences
  - History
  - Humanities Consortium
  - Mathematics
  - Molecular Biology and Biochemistry
  - Music Education
  - Oral and Craniofacial Sciences
  - Pharmaceutical Sciences
  - Pharmacology
  - Physics
  - Political Science
  - Public Affairs and Administration
  - Social Science Consortium: Economics, Political Science and Sociology
  - Telecommunication and Computer Networking

Mission and Administrative Organization of Graduate Education

UMKC currently offers more than 50 graduate degrees at the master’s, educational specialist and doctoral levels, plus a number of graduate certificates. Graduate students represent about 35 percent of the total campus enrollment. The graduate student population is diverse in ethnicity, gender and racial

background. As an urban university, our programs strive to accommodate adult working students. Nearly two-thirds of all graduate students are enrolled part time and the average age is 35.

The Graduate Council, representing a cross section of campus graduate faculty, sets policy, establishes minimum graduate education standards and monitors the quality of graduate education at UMKC. The graduate faculty in the various graduate degree programs may set standards more stringent than the minimums outlined in this catalog section, and in such cases, the program standards take precedence over the campuswide minimum regulations. The School of Graduate Studies is responsible for monitoring compliance to the campuswide minimum graduate academic regulations; providing leadership and coordination of all graduate programs; and serves as the academic home for students admitted to the Interdisciplinary Ph.D. program. Information on the Interdisciplinary Ph.D. program (p. 480) may be found in the School of Graduate Studies section of this catalog.

Interdisciplinary Leadership Certificate in Disability Studies

Minimum Requirements for Admission

Possession of a baccalaureate degree from a regionally accredited institution is required. Application for admission to the Leadership Certificate in Disability Studies program must be made to the School of Graduate Studies.

Student Learning Outcomes

The course requirements for the program are not predetermined, but rather formulated by the student in consultation with the UMKC doctoral faculty who will serve on their supervisory committee, to meet the student's individual needs and research interests, satisfy discipline-specific requirements and assure upon graduation students are able to:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines.
- Use skills of interdisciplinary scholarship and research to integrate multiple perspectives.
- Work effectively in a collaborative environment.
- Effectively communicate results of their research to diverse audiences.
- Understand and value diverse approaches to problems.
- Use self-reflection for personal and professional improvement.

Program Requirements

The Interdisciplinary Leadership in Disability Studies certificate program is offered through the School of Graduate Studies and the Institute for Human Development. Disability Studies is a relatively new, interdisciplinary field that studies disability from a social and cultural context. The certificate can be completed either in conjunction with a graduate degree program or as a free-standing credential. Students in such diverse fields as sociology, psychology, nursing, pharmacy, law, social work, public administration, urban planning and design and education are well suited for this certificate. Students who receive the certificate will be prepared to influence public policy, professional practice, societal arrangements and cultural values that shape the meaning of disability.

Required Courses

LAW 8815R	Disabilities And The Law	2-3
SOC-WK 5563	Life Span Issues in Developmental Disabilities	3
SGS 5501	Disability and Community Support	3

Curriculum Requirements

At least 60 percent of the certificate course work must be at or above the 500 level.

Credit Hours

A minimum of 12 credit hours is required for the certificate.

Requirements for Retention

Students must maintain a 3.0 grade point average while enrolled. The minimum acceptable grade for 400 level courses is B, and for 500 level and above courses, B-.

Time Limit for Completion of Certificate Program

All work toward the Leadership Certificate in Disability Studies must be completed in 4 years.

Contact Information

For additional information contact:

UMKC Institute for Human Development
215 W. Pershing Road, 6th Floor
Kansas City, MO 64108
(816) 235-1770

Graduate Certificate in College Teaching & Career Preparation

Minimum Requirements for Admission

Students apply for admission to this Graduate Certificate Program through the School of Graduate Studies. Interdisciplinary Ph.D. students must be recommended by the discipline coordinator in their coordinating discipline. Non-Interdisciplinary doctoral students (Ph.D., DMA, and Ed.D) must be recommended by the primary graduate advisor or program director in their degree programs. Although space in the program is limited and doctoral students will be given first preference, individuals who possess a master's degree, and who are recommended by a UMKC faculty member in their discipline area, may also be considered for admission to the program.

Student Learning Outcomes

The course requirements for the program are not predetermined, but rather formulated by the student in consultation with the UMKC doctoral faculty who will serve on their supervisory committee, to meet the student's individual needs and research interests, satisfy discipline-specific requirements and assure upon graduation students are able to:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines.
- Use skills of interdisciplinary scholarship and research to integrate multiple perspectives.
- Work effectively in a collaborative environment.
- Effectively communicate results of their research to diverse audiences.
- Understand and value diverse approaches to problems.
- Use self-reflection for personal and professional improvement.

Program Requirements

In today's competitive academic job market, academic institutions increasingly desire faculty members who not only possess the appropriate academic credentials, but can demonstrate that they are prepared to be excellent teachers and well-rounded colleagues. The 12 credit hour graduate certificate in College Teaching and Career Preparation is intended primarily for doctoral students who are preparing for college-level teaching careers, regardless of the discipline(s) in which they plan to teach; however, individuals who possess a master's degree and who are recommended by a UMKC faculty member in their discipline area may also be considered for admission. The structure of this graduate certificate program balances the emphases on both career exploration and teaching excellence.

The certificate complements the discipline knowledge of existing doctoral and masters programs at UMKC by (1) focusing on strategies for successful teaching, including incorporating technology into the college classroom, and (2) familiarizing students with the demands of college teaching and the nature of the academic environment in a variety of institutions of higher education. Courses that satisfy program requirements are taken for graduate credit; and, upon completion, the certificate is officially noted on the student's transcript. All courses in the certificate program are taken in addition to those required for the student's program of study. A nine-member faculty steering committee, with representation from multiple schools and chaired by the Associate Dean in the School of Graduate Studies, administers the program.

Curriculum Requirements

The Graduate Certificate in College Teaching and Career Preparation requires a minimum of 12 credit hours. A six-course series of Preparing Future Faculty (PFF) seminars is the core of this 12 credit hour graduate certificate curriculum. The seminars are graded on a credit/no credit basis and are offered year-round for five terms. The first four are worth one credit hour each and the final two capstone courses are taken simultaneously in the second spring term for two credits. Students in the PFF Seminar courses not only refine their teaching skills, but also explore the opportunities at, and differences among, a variety of institutions of higher education -- public, private, 2-year and 4-year. For the remaining six credits of the certificate program, students may select a 3-hour teaching practicum course in their field approved by the program director, plus one of the following 3 credit hour on-line courses: EDUC-R&P 5639 **OR** EDUC-C&I 5570.

Required Core Courses		
Take at least 4 hours of the following:		4
EDUC-R&P 5639	Educational Psychology: Focus on Teaching in Higher Education	
or EDUC-C&I 5570	Curriculum And Instruction In Technology	
Seminars		
SGS 5651A & SGS 5651B	Preparing Future Faculty I and Preparing Future Faculty II	2

SGS 5652A & SGS 5652B	Preparing Future Faculty III and Preparing Future Faculty IV	2
SGS 5653A & SGS 5653B	Preparing Future Faculty V and Preparing Future Faculty VI	2
Total Credits		10

Requirements for Retention

Students must maintain 3.0 graduate GPA while enrolled and receive no grade below a B- in courses applied to the certificate program.

Time Limit for Completion of Certificate Program

3 years maximum.

Interdisciplinary Ph.D. Program

Mission, Philosophy and History

The world of the future will require scholars with a global approach to problem solving. It will no longer be enough to know one area, one discipline, one field. Inquiry and discovery are crossing disciplines. For example, the insights of the science of chaos are the products of mathematics, computer science, meteorology, astronomy and biology. Study of aging draws on sociology, psychology, pharmacy, the life sciences and education. For this reason, in 1990, UMKC developed and introduced an interdisciplinary doctoral degree program that spans traditional boundaries among disciplines.

The goal for Interdisciplinary Ph.D. studies at UMKC is to help students develop knowledge and skills for independent research on the fundamental questions of the present and the future. The program is designed to provide self-directed students with academic training at the highest level, while allowing their participation as colleagues in research of fundamental importance. UMKC is dedicated, within the framework of its interdisciplinary program leading to the Ph.D., to provide education of the highest quality.

Scholars in the program fully participate in their own learning, guided by our philosophy that facts must be tempered by values and that true excellence in scholarship demands a far-reaching context of knowledge. The program has grown rapidly. In the fall 2006 term, more than 360 students were enrolled in the Interdisciplinary Ph.D. program. Nearly 350 students have graduated during the program's existence.

The following five core values underscore UMKC's Interdisciplinary Ph.D. program:

Education First: Learning is enhanced by a search for knowledge across discipline boundaries.
Therefore, the program:

- Is student-centered.
- Enables students to acquire the skills of interdisciplinary scholarship and research.
- Broadens students' exposure to multiple academic fields.

Discovery and Innovation: Interdisciplinary research draws on discipline-based knowledge, generating integrated solutions to problems that cross discipline boundaries.
Therefore, the program:

- Is problem-oriented.
- Integrates the attributes of a broad-based interdisciplinary approach with the grounding of a traditional academic focus.
- Provides a solid grounding in theories, concepts and methodologies of two or more disciplines.

Integrity and Accountability: Self-reflection and individual responsibility.
Therefore, the program:

- Incorporates a model of continuous quality improvement.

Diversity, Inclusiveness and Respect: Learning thrives in an environment open to a diversity of ideas, cultural backgrounds, discipline perspectives and approaches to problems.
Therefore, the program:

- Instills an appreciation of different disciplines.
- Integrates the disciplinary perspectives to give students the methodological and theoretical tools to thrive in a wide range of scholarly and professional environments.

Energized, Collaborative Communities: Society derives great benefit from collaborative efforts that transcend discipline boundaries to solve problems.
Therefore, the program:

- Prepares individuals to be multi-functional; to combine disparate skills to solve problems.

Program Description

Applicants must meet both the general and the discipline-specific criteria for admission and be recommended for admission by the doctoral faculty review groups in at least two disciplines. Upon approval by the graduate dean, students are admitted to the School of Graduate Studies. The School of Graduate Studies monitors student progress in the program, enforces program regulations and facilitates communication among the disciplines. A discipline coordinator, usually a doctoral faculty member, coordinates admission reviews and tracking of students within each discipline.

Doctoral students in this program take coursework and conduct their research in at least two disciplines. The content of their program of study is not predetermined, but formulated by them, in consultation with UMKC doctoral faculty, to meet their individual needs and research interests and satisfy discipline-specific requirements. The program structure and these requirements follow from the five core values of UMKC:

1. Education first
2. Discovery and innovation
3. Integrity and accountability
4. Diversity, inclusiveness and respect
5. Energized, collaborative communities

These core values guide the expectations for our students, who upon graduation will be able to:

1. Demonstrate appropriate depth and breadth of knowledge in their disciplines.
2. Use skills of interdisciplinary scholarship and research to integrate multiple discipline perspectives; and effectively communicate the results of their research to diverse audiences.
3. Use self-reflection for personal and professional improvement.
4. Understand and value diverse approaches to problems.
5. Work effectively in a collaborative environment.

Disciplines participating for the fall 2014 admissions cycle:

Administrative and Information Sciences

- Entrepreneurship and Innovation (Henry W. Bloch School of Management)
- Public Affairs and Administration (Henry W. Bloch School of Management)
  (only available as a co-discipline option)
- Educational Leadership, Policy and Foundations (School of Education)

Biological and Chemical Sciences

- Biomedical and Health Informatics (p. 494) (School of Medicine)
- Cell Biology and Biophysics (School of Biological Sciences)
- Molecular Biology and Biochemistry (School of Biological Sciences)
- Chemistry (College of Arts and Sciences)
- Oral and Craniofacial Sciences (School of Dentistry)
- Pharmaceutical Sciences (School of Pharmacy)
- Pharmacology (School of Pharmacy)

Humanities and Arts

- Art History (College of Arts and Sciences)
- English (College of Arts and Sciences)
- Humanities Consortium (p. 521) (College of Arts and Sciences)
- Music Education (Conservatory of Music and Dance)

Physical, Mathematical, Engineering and Computer Sciences

- Engineering (School of Computing and Engineering (SCE))
- Geosciences (College of Arts and Sciences)
- Mathematics (College of Arts and Sciences)
- Physics (College of Arts and Sciences)
- Telecommunication and Computer Networking (SCE)

- Computer Science (SCE)
- Electrical and Computer Engineering (SCE)

Social and Behavioral Sciences

- Economics (College of Arts and Sciences)
- Curriculum and Instruction (School of Education)
- History (College of Arts and Sciences)
- Political Science (p. 538) (College of Arts and Sciences)
- Social Sciences Consortium: Economics, Political Science and Sociology (p. 542) *(only available as a co-discipline option)*

The above list of participating disciplines constitutes a dynamic list that can change annually as members are added to or dropped from the doctoral faculty, or as the resources in various academic units change. Applicants should contact the School of Graduate Studies Office for information about modifications to the above list that might have occurred since this catalog was prepared.

Admission to UMKC's School of Graduate Studies' Interdisciplinary Ph.D. program is highly competitive. Enrollment in the program is limited, and admission is granted only to students who have a mature commitment to advanced study and scholarship. Admission is also subject to availability of adequate faculty and other resources within an applicant's chosen disciplines.

After being admitted to the Interdisciplinary Ph.D. program, and no later than the end of the semester in which the student completes his or her comprehensive examinations, each student must satisfy the interdisciplinary doctoral residency requirement by completing at least 21 credits, exclusive of dissertation research (5696-5699), in no more than 18 months. Students may be admitted either provisionally or fully to the program; however, within 24 months of being fully admitted, each student must develop a Plan of Study proposal in consultation with the doctoral faculty members who have agreed to serve on the student's supervisory committee. Although no fixed set of courses is required, students are expected to prepare a rigorous plan of study that includes at least 30 didactic course hours beyond the baccalaureate degree, exclusive of thesis and dissertation research credits. More credit hours may be required by either the student's supervisory committee, the student's disciplines, the Interdisciplinary Ph.D. Executive Committee, or the dean of the School of Graduate Studies. The number of credits included on the plan of study shall be predicated upon the extent of the student's previous academic preparation, the discipline-specific requirements of the student's disciplines, and the nature of the student's field of study.

Students must take and pass a comprehensive examination containing components of each discipline to which they have been admitted to determine if they are ready to advance to candidacy and the final phases of their Ph.D. program. Typically the comprehensive examination will be conducted as the student nears completion of the didactic coursework listed on his or her plan of study. The final phases of the program shall comprise:

- Completion of significant research.
- A written dissertation acceptable to the doctoral faculty.
- Successful oral defense of the research work and dissertation.

Program Administration

Quality control of the Interdisciplinary Ph.D. program rests with those faculty members certified by the University of Missouri to chair and serve on doctoral supervisory committees. These doctoral faculty members are responsible for the design and implementation of a student's doctoral plan of study and for the assessment of the qualifications of a student they recommend to the curators for the Ph.D. degree. To help students formulate an appropriate plan of study, the doctoral faculty are divided into five broad groups corresponding to research interests and expertise. The groupings do not preclude an interdisciplinary plan of study and research involving more than one of these five groups, but are intended only to provide a structure that will assist students and doctoral faculty in developing a plan of study for each Interdisciplinary Ph.D. student. A 15-member executive committee of the doctoral faculty, chaired by the dean of the School of Graduate Studies, formulates the policies that govern Interdisciplinary Ph.D. studies. Ten members of the committee are elected by the doctoral faculty. The chancellor, in view of the election results and in consultation with the dean of the School of Graduate Studies, appoints five members. There are three members from each of the five broad research areas. This process ensures representation from across the primary areas of responsibility assigned to the campus by the curators. The Interdisciplinary Ph.D. Executive Committee is also charged with formulating, monitoring and reviewing goals of the Interdisciplinary Ph.D. program and recommending changes in goals, procedures and policies to the faculty. Any proposed major change must be ratified by the doctoral faculty of the campus.

Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission

When preparing an application for admission, applicants must choose two or more disciplines of primary interest. The applicant also must designate which one of the disciplines is to become the applicant's primary unit for initial advising, record-keeping and receiving/sending mail in the event that admission is granted. A student's research advisor must be affiliated with the student's primary unit discipline.

Application for admission to Interdisciplinary Ph.D. study is made to the dean of the School of Graduate Studies through the UMKC Admissions Office or, in the case of international applicants, through the UMKC International Student Affairs Office (ISAO). For additional program information, applicants

should contact the School of Graduate Studies. E-mail requests may be sent to graduate@umkc.edu; the phone number is (816) 235-**1161**. Application information and an online application system are also available from the Web site: http://www.umkc.edu/iphd/

Mailing Address
University of Missouri-Kansas City
School of Graduate Studies
AC 300F
5115 Oak Street
Kansas City, MO 64110-2499

The general criteria for admission for Interdisciplinary Ph.D. program study are as follows:

- Graduate Record Examination (GRE) scores will be evaluated by the disciplines *[If an applicant's GRE scores are more than seven years old, and other predictors of ability to do doctoral-level work in the applicant's file are marginal, the applicant may be asked to retake the GRE general test before an admission decision is made]*.
- A grade-point average of at least 2.75 (on a 4.0 scale) covering all college work taken prior to the bachelor's degree, or a grade-point average of at least 3.0 covering all post-baccalaureate work completed to date.
- Recommendation for provisional or full admission by the doctoral faculty review group in **at least two** participating disciplines.

Graduates of schools outside the United States may be considered for admission to this doctoral program at UMKC, subject to the following criteria.

1. They must have completed a course of study at least the equivalent of a U.S. baccalaureate degree.
2. They must have above-average grades in previous college study.
3. They are required to establish proof of adequate English proficiency as part of the UMKC admissions process. Applicants from countries in which English might be one of the official languages, but is not necessarily the first language of the majority of the population, must attain a minimum composite score of either 79 on the iBT Test of English as a Foreign Language (TOEFL), or a score of 6.0 on the IELTS to be considered for admission.[1] The results of the examination must be received in the UMKC International Student Affairs Office before the application deadline. Exceptions to this policy:
   - Non-native speakers who hold degrees or diplomas from post-secondary institutions in English-speaking countries (such as the United States, Antigua, Australia, Bahamas, Barbuda, Belize, Canada, Dominica, Fiji, Gambia, Ghana, Guyana, Ireland, Jamaica, Liberia, Mauritius, New Zealand, Sierra Leone, Solomon Islands, South Africa, St. Christopher (St. Kitts), St. Lucia, St. Vincent, Tobago, Trinidad, Uganda, United Kingdom [England, Scotland, Wales and Northern Ireland], Zambia and Zimbabwe), provided they have spent a minimum of two years in successful full-time study there and English was the medium of instruction.
   - International transfer students from other institutions in the United States or Canada who have spent a minimum of two years in successful full-time study.
4. In addition to 1 through 3 above, international graduate students must satisfy any program-specific admission criteria. For instance, the Graduate Management Admission Test (GMAT) is required for applicants for graduate study toward the M.B.A. degree. Several programs require TOEFL scores that are well above the minimum stated previously. The Graduate Record Examination (GRE), including the appropriate Advanced Test, is either required or strongly recommended for all other international graduate applicants. International students planning to apply are directed to consult the appropriate degree program listing for additional criteria and medical requirements.

[1] In the United States, the Educational Testing Service, Princeton, NJ 08541, U.S.A., can be contacted for application forms to take this test. Contact http://www.ilts.org/ for information on the International English Testing System. Detailed information can be obtained from U.S. embassies, consulates general, bi-national centers and other offices throughout the world.

Participating disciplines may establish whatever additional criteria or higher standards they consider to be appropriate and such discipline-specific criteria will take precedence over the general criteria. Applicants should note that several discipline areas have set more rigorous admission requirements, and a number of discipline areas have established qualifying requirements for students who intend to include that discipline in their doctoral programs. These discipline-specific requirements range from specific prerequisite coursework, to successful completion of a qualifying examination, to having the equivalent of a master's degree in the area, to having higher scores on specific segments of the GRE and are listed in greater detail later in this section.

Students may apply for admission with or without meeting the general criteria of the School of Graduate Studies and any additional criteria established by the discipline areas. Meeting these criteria does not automatically make any student eligible for admission. In exceptional circumstances, students who do not meet the general criteria of the School of Graduate Studies and the disciplines may be admitted.

The School of Graduate Studies' minimum requirements for admission to the Interdisciplinary Ph.D. program are determined by the doctoral faculty in the academic units in which the student will be doing work, and by the UMKC doctoral faculty through representation on the Interdisciplinary Ph.D. Executive Committee. Admission to the program is subject to availability of adequate faculty and other resources within an applicant's chosen disciplines and the approvals of the dean of the School of Graduate Studies and the Interdisciplinary Ph.D. Executive Committee.

Application Procedure

The deadlines for applications varies by discipline.

Although new students in most disciplines may be accepted in all terms, some disciplines will only consider applications for the fall term. Applicants are responsible for:

1. Submitting a completed **Application for Admission or Readmission to Interdisciplinary Ph.D. Studies** form to the UMKC Admissions Office, or in the case of international applicants, to the UMKC International Student Affairs Office (ISAO). All applications must be accompanied by the appropriate non-refundable application fee ($35 for domestic applicants or $50 for international applicants).
2. Submitting a *one-page narrative statement* outlining professional background and educational plans with the completed application form.
3. Having the following supplementary documentation sent to the UMKC Admissions Office:
   - *Official test scores (GRE, TOEFL, etc.).* The applicant must request the testing agency to send official GRE test scores to the School of Graduate Studies. The Educational Testing Service does not report GRE scores more than 20 years old or scores more than five years old but earned since Sept. 30, 1985.
   - *Official transcripts from all colleges attended.* All applicants must submit an official transcript from the school where their bachelor's degrees were obtained. This transcript must show all courses, grades and credits attempted or completed at the undergraduate level. Unless the transcript of the degree-granting institution shows the complete record of undergraduate work taken at all other schools, an official transcript from each of the other institutions must be supplied. In addition, applicants must submit an official transcript from each school where other coursework has been taken or degrees have been obtained after the bachelor's degree.
   - *Three letters of recommendation.*
   - *Any supplemental material requested by the discipline(s).* Note that several disciplines require professional writing samples, tentative outlines of plans of study, or other supplemental materials to complete the application packet. Applicants should consult the discipline-specific information to determine whether supplemental materials are required by the disciplines they select.
   - *Resumes / vita*

International applicants must submit the following additional forms:

1. Summary of Education Experiences by Years form.
2. Official Statement of Finances form.
3. If transferring from another U.S. institution, a Supplemental Information form.

All credentials submitted in support of the application for admission to the Interdisciplinary Ph.D. program become UMKC property. They will not be returned to the applicants and UMKC cannot copy them for release to a third party.

Once the UMKC Admissions Office or the ISAO has received the application, application fee (if applicable), and transcripts of previous work, the application file is transmitted to the School of Graduate Studies. The School of Graduate Studies notifies each applicant by mail when the application packet has been forwarded to them. If required test scores, recommendation forms or supplementary documentation appropriate to the applicant's discipline selections are missing at that time, the applicant will be advised of the date by which all materials must be received in order to have the application reviewed by the faculty review groups in the specified disciplines for admission in the terms requested. The School of Graduate Studies transmits completed application files to the doctoral faculty review groups in each discipline the applicant has indicated on the application form.

Faculty review groups usually will not take action on an application unless all supporting documentation is on file. Applicants with files that are incomplete at the time the discipline(s) review applications will be so notified and asked whether they wish to have their applications updated for consideration for admission in a subsequent term.

An applicant can expect the review and recommendation process to take approximately 30 days from the time all supporting documentation has been received. The faculty review groups in some disciplines review all applications as a group, while in other disciplines, applications are reviewed and acted upon on a revolving basis, as received. The review and recommendation process within the disciplines varies in length depending upon the disciplines' review policies.

For questions about the contents of their admission files, or to determine whether their applications have been transmitted to the School of Graduate Studies for review, applicants may call the Admissions Office (816) 235-**1111**. International applicants may check on the status of their applications by contacting the ISAO at http://www.umkc.edu/isao/. Once the application has been transmitted to the School of Graduate Studies, applicants may call (816) 235-**1161** for information on the status of their applications.

Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements

The following requirements pertain specifically to students pursuing Interdisciplinary Ph.D. programs. However, Interdisciplinary Ph.D. students are subject to, and also should refer to, those regulations common to all graduate students and the dissertation requirements common to all doctoral students included in the General Graduate Academic Regulations and Information section of this catalog. Students should also consult the specific

requirements for the disciplines to which they have been admitted. Where discipline requirements are more stringent than the general requirements, the discipline requirements take precedence.

Change of Disciplines by Admitted Students (p. 489)
Interim Advisor (p. 489)
Qualifying Requirements for Full Admission (p. 489)
Research Advisor and Supervisory Committee (p. 489)
Interdisciplinary Ph.D. Plan of Study (p. 490)
Interdisciplinary Ph.D. Residency Requirement (p. 491)
Transfer Credit (p. 491)
Comprehensive Examination (p. 491)
Program Time Constraints (p. 491)
Dissertation Research Proposal Development and Approval (p. 491)
Dissertation and Completion of Degree (p. 492)
Interdisciplinary Ph.D. Student Appeal Process (p. 492)

Change of Discipline by Admitted Students

Once a student is admitted to Interdisciplinary Ph.D. study, any change of disciplines requires a full review process by the disciplines, similar to the initial admission review. Forms to initiate this review may be obtained from the School of Graduate Studies or downloaded from their Web site: http://www.umkc.edu/iphd.

Interim Advisor

Once an Interdisciplinary Ph.D. student is admitted to the School of Graduate Studies, the dean, upon recommendation from the student's disciplines, identifies a doctoral-faculty member from each discipline to serve as the student's interim advisor in that discipline. Students who have had minimal prior graduate study will be encouraged to explore research opportunities before choosing fields of endeavor.

As the student progresses and develops focused research interests, the interim advisors are expected to assist in identifying potential research advisors among doctoral-faculty members in appropriate research areas with whom the student can discuss research plans. The interim advisors also provide academic guidance until the student selects a research advisor, has satisfied all qualifying requirements and is classified as fully admitted. The interim advisor in the student's primary-unit discipline reports on the student's progress to the dean of the School of Graduate Studies. If another faculty member has not been identified as the research advisor by the time the student is fully admitted and ready to formulate the plan of study, the interim advisor in the primary-unit discipline will automatically become the student's research advisor.

Qualifying Requirements for Full Admission

Admission to the Interdisciplinary Ph.D. program is granted on a provisional or fully admitted basis as determined by the doctoral faculty review group of the student's chosen discipline(s). Upon their acceptance as provisional Ph.D. students, applicants are notified of the specific qualifying requirements they must satisfy before they can be classified as fully admitted Ph.D. students. Provisional admission does not guarantee advancement to full admission, and full admission does not guarantee advancement to Ph.D. candidacy.

At the end of each academic year, the interim adviser reports the provisional Ph.D. student's progress toward satisfying the qualifying requirements to the dean of the School of Graduate Studies. When all qualifying requirements have been completed, the interim adviser requests that the student's classification be changed to fully admitted.

Research Advisor and Supervisory Committee

The chair and a majority of the members of a student's supervisory committee must be from disciplines certified as eligible to participate in the Ph.D. program. The student's committee chair must be a regular doctoral faculty member from the student's primary discipline, and has the final authority over the student's program. A graduate or adjunct graduate faculty member may be the dissertation director if approved by the primary discipline.

The adviser assists the student in identifying other members of the doctoral faculty to form a supervisory committee appropriate to the student's research goals. A request for appointment of supervisory committee is included as part of the written proposal for the student's Ph.D. plan of study.

The supervisory committee shall consist of at least five members composed of one doctoral faculty from each of the primary and co-disciplines with a maximum of three from any one discipline. Up to two of the remaining members of each committee can hold either graduate or adjunct graduate faculty status. Final approval of the composition of each supervisory committee shall be obtained in writing by the advisor (or committee chair) from the Dean of the Graduate school. Where graduate or adjunct graduate faculty are included, the advisor shall provide a strong justification for their inclusion.

An outside reader may also be included on the supervisory committee as a non-voting member.

Annual Evaluation of Progress

During the spring semester, Interdisciplinary Ph.D. students, using forms provided by the School of Graduate Studies, must submit a summary of their accomplishments over the previous year and a projection of the progress they intend to make during the next academic year. Forms are submitted

to their interim advisers or, if their supervisory committees have been formed, to the chairs of their supervisory committee. The faculty adviser or supervisory committee chair will review the student's report and meet with the student to discuss the student's progress and plans for the coming year. They will provide the student and the School of Graduate Studies with a copy of the completed evaluation form. Failure to meet this requirement may result in a hold being placed on the student's enrollment.

Plan of Study

Within 24 months of admission, a student chooses a research adviser and forms a supervisory committee. In consultation with the research advisor and other members of the proposed supervisory committee, the student prepares a proposed Ph.D. plan of study, obtains all required signatures and submits the proposed plan to the School of Graduate Studies for review and final approval by the Interdisciplinary Ph.D. Executive Committee. This submission *must occur within 24 months* of being admitted to the program.

In addition to any coursework completed prior to admission that is being credited toward discipline-specific requirements, the written Interdisciplinary Ph.D. plan of study includes courses and other activities at UMKC that should normally be completed approximately two years from the time the Ph.D. student is fully admitted, a statement about overall plans for study and research, and a list of the proposed members of the supervisory committee.

The Interdisciplinary Ph.D. Plan of Study Guidelines

- The plan of study must include coursework from all the student's disciplines and must satisfy all of the applicable discipline-specific core requirements.
- The plan of study must include at least 30 didactic hours beyond the baccalaureate degree, exclusive of thesis or dissertation research hours, in courses taken at UMKC or courses taken at another institution and approved for transfer by the student's supervisory committee.
- Didactic coursework on the plan of study will include a minimum of nine credit hours in a co-discipline area.
- No more than 60 percent of the total coursework taken at UMKC and listed on the plan of study, exclusive of thesis or dissertation research hours, will be in any one discipline.
- All plans of study must include a minimum of 12 hours of dissertation research (5696-5699) credit.
- At least two-thirds of the total courses included on the plan of study must be numbered 5500 or above if taken at UMKC, or, if taken from an institution with a course-numbering system that differs from UMKC's, they must be courses intended primarily for graduate students.
- UMKC courses at the 100 and 200 levels, and courses with equivalent lower-division numbers taken at another institution, are not available for graduate credit and may not be applied toward the hours required for the degree nor included in the discipline percentages.
- At least 75 percent of the coursework on the plan, exclusive of dissertation credits, must be in disciplines certified as eligible to participate in the Interdisciplinary Ph.D. program.
- Students' needs will be examined on a case-by-case basis by their supervisory committees, and appropriate language or related research skill requirements will be incorporated into each student's plan of study.
- The plan of study will include a brief description of the course focus and the name of the supervising professor for any independent study courses listed.
- The plan of study will specify which courses are being used to satisfy the residency requirement.
- The plan of study will outline the comprehensive examination expectations.
- The plan of study will include a preliminary research proposal for the dissertation research, including key bibliographic references.

If modifications to discipline-specific requirements are made after the student is admitted, the student has the option of proceeding under either the requirements in place at the time he or she entered the Ph.D. program or the current requirements.

Plan of Study Approval Process

Once the supervisory committee members and student have agreed on and signed the plan of study, appropriate academic officers corresponding to the student's choice of disciplines [dean(s) or program director(s), department chair(s), division head(s), etc.], must then review and certify by signature that the courses and all other resources are currently available at UMKC and in the respective units for the student to initiate the plan of study. The student then submits the certified plan of study to the dean of the School of Graduate Studies for review and approval by the appropriate subcommittees of the Interdisciplinary Ph.D. Executive Committee.

The subcommittees of the Interdisciplinary Ph.D. Executive Committee will accept Ph.D. plan of study proposals for review only if:

- The Ph.D. coursework falls within the guidelines outlined above.
- The student will enroll at UMKC for dissertation credit under the supervision of a UMKC member of the UM doctoral faculty.
- The plan includes written assurance from the appropriate academic officers that:
    a. adequate faculty, laboratories, library support and all other necessary resources are presently available at UMKC to support the proposed Ph.D. plan of study, and
    b. the courses included in the plan are either presently available at UMKC or can be taken by the student as a visiting student in a time period less than that required to satisfy the residency requirements on the other campus.

The appropriate Interdisciplinary Ph.D. executive committee subcommittees will review the certified plan of study within 60 calendar days and will either recommend to the dean of the School of Graduate Studies approval of the plan as presented or will return the plan to the student with recommendations for modification. Once the proposed plan of study and supervisory committee are approved by the Interdisciplinary Ph.D. executive committee, the dean of the School of Graduate Studies will confirm the appointment of those doctoral-faculty members who will serve as the student's supervisory committee and file the plan with the registrar. Any further modifications of the plan of study must be made in consultation with the student's supervisory committee and major modifications must be approved by the Interdisciplinary Ph.D. Executive Committee.

Residency Requirement

Interdisciplinary Ph.D. students must satisfy the doctoral residency requirement by satisfactory completion of at least 21 credits, exclusive of dissertation research, in no more than 18 months. When satisfying the residency requirement, all Interdisciplinary Ph.D. students are subject to the following restrictions:

1. The doctoral residency requirement must be satisfied no later than the end of the semester in which the student completes his or her comprehensive examinations.
2. Students must achieve a cumulative graduate grade-point average of at least 3.0 in all courses counted toward satisfying the residency requirement.
3. Dissertation research credits (5696-5699) may not be counted toward satisfying the doctoral residency requirement.

Transfer Credit

Ph.D. plans of study are tailored to the needs of individual students based on their prior academic work as evidenced by transcripts and other credentials. An approved plan of study may recognize class work from other institutions as determined by the student's supervising committee, either as qualifying courses or as relevant to a program of study.

Comprehensive Examination

To advance to degree candidacy, Interdisciplinary Ph.D. students are required to pass a comprehensive examination that integrates components of each discipline to which they have been admitted. Either the written or oral or both component(s) of the comprehensive examination must include an evaluation of the student's ability to integrate content, theory and/or methods from each specified discipline. The doctoral comprehensive examinations must be completed at least seven months before the date of graduation.

The following requirements must have been met before students can take the comprehensive examination(s):

1. Successful completion of all qualifying requirements and full admission to the School of Graduate studies.
2. Appointment of a research advisor and supervisory committee.
3. Filing and approval of the Ph.D. plan of study and completion of essentially all coursework or other study required for the degree.

The student must be enrolled when taking the comprehensive examination. Comprehensive examinations are not administered when UMKC is not officially in session. The comprehensive examination may be written, oral or both. A student, through his or her advisor, applies to the dean of the School of Graduate Studies for an examining committee. This committee consists of members of the student's supervisory committee and others approved by the dean of the School of Graduate Studies. The examination is arranged and conducted by the examining committee. Upon completion of the examination, the student's research advisor sends a report of the results, carrying the signatures of all members of the examining committee, to the dean of the School of Graduate Studies, who then informs the student and the registrar. A student is considered to have passed the comprehensive examination if no more than 20 percent of the committee members vote for failure of the student. If failure is reported, the examining committee will either recommend termination as a Ph.D. student or suggest additional work or other remedial measures. Furthermore, a student who has failed may not take a second examination for at least 12 weeks. Failure of the second comprehensive examination shall automatically preclude candidacy at this institution.

Program Time Constraints

The doctoral student must take and pass the doctoral comprehensive examination and advance to candidacy within five years from the beginning of doctoral coursework (within four years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of five years will be allowed for completion of degree requirements. Failure to complete the work within the periods specified will necessitate re-evaluation of the entire program and may result in a notice of termination. In compelling circumstances and on the written recommendation of a majority of the student's supervisory committee members, the dean of the School of Graduate Studies may grant a one-year extension. Some academic units may impose more stringent time requirements.

Dissertation Research Proposal Development and Approval

The student's supervisory committee must approve the research activities associated with a dissertation. These activities must be performed under the direct and continuing supervision of the supervisory committee chair. If the proposed research involves the use of human subjects, animals or radioactive materials, the student and the research advisor must obtain prior written approval of the proposed research by the appropriate Institutional Review Board, the Animal Care and Use Committee or the Radiation Safety Committee.

For the approval process, the Ph.D. candidate must submit a brief dissertation research proposal. The dissertation proposal shall include the following:

- An abstract.
- A statement regarding the general purpose of the research.
- Background information, including a review of the relevant literature, the rationale for the research and a concise statement of the hypotheses to be investigated and/or the research questions to be answered.
- Methods.
- Appropriate protocol or application if human subjects, animals or radioactive materials are to be used in the research.

This proposal must be approved in writing by all members of the student's supervisory committee and filed with the School of Graduate Studies. It is in the best interest of the Ph.D. student to complete the approval process of the dissertation research proposal before significant progress is made on the completion of the dissertation. Any important changes in the research outlined in the proposal must be approved by the supervisory committee.

Dissertation and Completion of Degree

Doctoral Dissertation Requirement

All UMKC Ph.D. degrees require a dissertation as the final component of the program. The doctoral faculty view the dissertation as one of the most important aspects of the student's experience because:

- It is a work of original research or scholarship that makes a contribution to existing knowledge.
- It is an educational experience that demonstrates the candidate's mastery of research methods and tools of the specialized fields.
- It demonstrates the candidate's ability to address a major intellectual problem.

For regulations pertaining to formatting the dissertation and the process for approval, the reader is directed to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this catalog section.

Final Dissertation Examination

Final examinations in defense of the dissertation are open to all members of the doctoral faculty, who may attend as interested observers. The format and procedures of the defense are determined by the supervisory committee and its chair. The date, time and location must be announced and published at least two weeks before each final examination takes place. This examination may be conducted only after the dissertation has been approved by the dean of the School of Graduate Studies, and may not be administered when UMKC is not officially in session.

The defense of the dissertation is approved when a majority of the supervisory committee recommend approval and sign the Report of the Result of Final Doctoral Examination form. Within 48 hours of the defense, the supervisory committee chair will report the results of the final dissertation examination in writing to the candidate.

Deposit of Approved Dissertation with Libraries

For regulations pertaining to deposit of the approved dissertation with the libraries, please refer to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this catalog section.

Interdisciplinary Ph.D. Student Appeal Process

Students should process any petitions for waiver of policy or other academic appeals to their interim advisors or research advisors. The advisors should attach their recommendation and forward the request to the doctoral faculty review groups within the disciplines.

If the appeal does not require a policy decision, action on the appeal may be handled at the discipline level. If a policy decision is required or if, after action by the discipline, the student wishes a higher level of review of the case, the appeal or petition, complete with documentation of all reviews up to that point, may be forwarded to the dean of the School of Graduate Studies for action or referral to the appropriate subcommittees of the Interdisciplinary Ph.D. Executive Committee.

Interdisciplinary Ph.D. Discipline-Specific Requirements

All Interdisciplinary Ph.D. applicants and students must first meet the general requirements of the School of Graduate Studies for admission and retention in the Interdisciplinary Ph.D. program. (General Graduate Academic Regulations and Information, Application Procedure and Minimum Criteria for Admission, Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.) In addition to these general academic regulations that have been outlined in previous sections of the general catalog, disciplines may set more stringent discipline-specific requirements that take priority over the general requirements. Discipline-specific requirements for disciplines eligible to participate in the Interdisciplinary Ph.D. program are listed in alphabetical order by name of discipline. These guidelines are subject to ongoing review and revision, and the doctoral faculty reserves the right to make judicious changes in discipline-specific requirements. The student is referred to coordinators in the disciplines for the most current information.

Student Learning Outcomes

The course requirements for the program are not predetermined, but rather formulated by the student in consultation with the UMKC doctoral faculty who will serve on their supervisory committee, to meet the student's individual needs and research interests, satisfy discipline-specific requirements and assure upon graduation students are able to:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines.
- Use skills of interdisciplinary scholarship and research to integrate multiple perspectives.
- Work effectively in a collaborative environment.
- Effectively communicate results of their research to diverse audiences.
- Understand and value diverse approaches to problems.
- Use self-reflection for personal and professional improvement.

Student Learning Outcomes

The course requirements for the program are not predetermined, but rather formulated by the student in consultation with the UMKC doctoral faculty who will serve on their supervisory committee, to meet the student's individual needs and research interests, satisfy discipline-specific requirements and assure upon graduation students are able to:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines.
- Use skills of interdisciplinary scholarship and research to integrate multiple perspectives.
- Work effectively in a collaborative environment.
- Effectively communicate results of their research to diverse audiences.
- Understand and value diverse approaches to problems.
- Use self-reflection for personal and professional improvement.

Doctoral Faculty Participation in the Interdisciplinary Ph.D. Program

On Oct. 7, 1974, the University of Missouri Doctoral Council approved the creation of a UM doctoral faculty to identify, on all four UM campuses, qualified faculty members to direct doctoral dissertations in their disciplines. Uniform minimum standard criteria for doctoral faculty membership apply to all four campuses. In UMKC's Interdisciplinary Ph.D. program, three members of a student's supervisory committee must be regular, adjunct or emeritus members of the UM doctoral faculty, and the research advisor must be from the UMKC campus.

The supervisory committee shall be composed of one doctoral faculty from each of the primary and co-disciplines with a maximum of three from any one discipline. Up to two of the remaining members of each committee can hold either graduate or adjunct graduate faculty status. Final approval of the composition of each supervisory committee shall be obtained in writing by the advisor (or committee chair) from the Dean of the Graduate school. Where graduate or adjunct graduate faculty are included, the advisor shall provide a strong justification for their inclusion.

For purposes of the Interdisciplinary Ph.D. program, a discipline is defined as an academic unit, such as a department or division (with a chair/head) within a school, college or academic program. To be able to participate as a discipline in the Interdisciplinary Ph.D. program, a discipline, meeting the above definition, must have at least four regular doctoral-faculty members.

Doctoral Faculty Discipline Affiliation

Continuing doctoral faculty are reviewed for five-year reappointment and nominations for new appointments are considered throughout each academic year. Consequently, the list of doctoral faculty is dynamic and subject to change. Current lists are available from the School of Graduate Studies.

Interdisciplinary Doctoral Student Council

The UMKC Interdisciplinary Doctoral Student Council (originally called the Doctoral Student Association) was formed in 1991 to provide an opportunity for doctoral students to interact with each other and to support the students in their academic and research endeavors. The council sponsors a variety of social and academic programs throughout the year. Membership in the UMKC Interdisciplinary Doctoral Student Council is open to all dualy enrolled Interdisciplinary Ph.D. students. Doctoral students in other UMKC programs are eligible to be associate members and are welcome to participate in all Interdisciplinary Doctoral Student Council activities but are not eligible to vote or serve on the executive committee. The council is governed by an executive committee consisting of three representatives with coordinating disciplines in each of the following five areas: physical, mathematical, computer and engineering sciences; biological and chemical sciences; social and behavioral sciences; humanities and the arts; and administrative and information sciences.

Art History

Discipline Coordinator

Burton Dunbar, (816) 235-**2531**, dunbarb@umkc.edu

Art and Art History faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplineARTARTHISTORY)**.**

Art History is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

In addition to the general criteria for admission, applicants will be expected to have an undergraduate degree in art history, anthropology or history and an undergraduate minimum GPA of at least 3.0 on a 4.0 scale. An M.A. in art history is desired. Prerequisite coursework: Survey of World Arts. New students will be considered for admission for fall and spring semesters. Submit applications by Jan. 31 for fall admission or Sept. 1 for spring. In addition to the required application form, test scores, recommendations and transcripts, applicants must provide a written research plan and a research writing example. Presently only students with an interest in non-Western arts are encouraged to apply.

Suggested Compatible Co-disciplines

Curriculum and instruction, economics, English, and history

Core Requirements

Art History as a Primary Discipline

Required Courses		
ART-HIST 5501	Scope And Methods Of Art History [1]	3
ART-HIST 5573	Visual Arts Administration [1]	3
Seminars in African, African-American, MesoAmerican and Native American Arts		

[1] Research methodology courses.

Remaining credits depend upon what courses the student has taken before coming into the program. Students will generally design a total plan of study (primary discipline and co-discipline coursework) that includes 60 hours beyond the baccalaureate degree or 30 hours beyond the master's degree if in Art History.

Art History as a Co-discipline

Required Courses		
ART-HIST 5501	Scope And Methods Of Art History	3
Seminars in African, African-American, MesoAmerican or Native American Arts		

Remaining credits depend upon what courses the student has taken before coming into the program.

Requirements for Comprehensive Exams

Oral and written comprehensive exams are required, with questions based on courses taken.

Other Discipline-Specific Special Requirements

Two foreign language requirements as determined by the Faculty Advisory Committee for each student. Students will master a reading knowledge of two foreign languages for art history as a primary discipline or as a co-discipline. The foreign language requirement should be satisfied by the time 18 hours of graduate credit have been taken toward the Interdisciplinary Ph.D. The Faculty Advisory Commitee must include two art historians. Students must meet with their Faculty Advisory Committee at least once each semester. Students must complete Annual Evaluation forms each spring.

Biomedical and Health Informatics

Discipline Coordinator
Mary M. Gerkovich, Ph.D. (816) 235-1322, gerkovichm@umkc.edu

Biomedical and Health Informatics faculty who are members of the doctoral faculty.

Biomedical and Health Informatics is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Note: The Biomedical and Health Informatics discipline is accepting applications for the co-discipline only.

Discipline Overview

Biomedical and Health Informatics is the "scientific field that deals with biomedical information, data, and knowledge – their storage, retrieval, and optimal use for problem solving and decision making. It accordingly touches on all basic and applied fields in biomedical science and is closely tied to modern information technologies, notably in the areas of computing and communication, i.e. medical computer science." (Definition from Stanford University, Medical Informatics.) The National Center for Biotechnology Information defines Bioinformatics as the "field of science in which medicine, biology, computer science, and information technology merge to form a single discipline. The ultimate goal of the field is to enable the discovery of new biological insights as well as to create a global perspective from which unifying principles in biology and health can be discerned."

Recommended Curriculum

While the following courses are suggested core components for the Biomedical and Health Informatics co-discipline, students may work with the Discipline Coordinator to create an individualized plan of study.

- Clinical Research Methodology or Clinical Trials
- Clinical Epidemiology or General Epidemiology or Human Genome Epidemiology
- Introduction to Health Services Research
- Biostatistics I[1]

1 All students are expected to have Biostatistics as a core competency for this co-discipline; however, if students have a primary discipline in Mathematics, they may substitute Medical Informatics or Clinical Research Informatics.

For the department's policy on academic progression, please contact the discipline coordinator.

Suggested Primary Discipline Areas

Mathematics (p. 523)
Cell Biology and Biophysics (p. 496)
Molecular Biology and Biochemistry (p. 524)
Oral and Craniofacial Sciences (p. 528)
Pharmaceutical Science (p. 532)
Pharmacology (p. 534)
Computer Science (p. 501)

Admissions

Applicants must meet both the general and the discipline specific criteria for admission and be recommended for admission by the doctoral faculty review groups in at least two disciplines. Upon approval by the graduate dean, students are admitted to the School of Graduate Studies.

General Admissions Requirements

Please visit the Interdisciplinary Ph.D. Admissions page (p. 486) to learn about the general application requirements.

GPA

- Minimum undergraduate grade-point average of 3.0 on a 4.0 scale
- Minimum graduate grade-point average of 3.5 on a 4.0 scale

Letters of Reference

- Three letters of recommendation that speak to the applicant's ability to complete doctoral-level work.
- Instructions for Letters of Reference are found here: http://sgs.umkc.edu/irletter/index.asp

Curriculum Vita or Resume

Official college/university transcripts

Recommendation by the "Doctoral Faculty Review Group" in at least two participating disciplines

Discipline Specific Admissions Requirements

Degree Requirements

- A Bachelor of Science or Bachelor of Arts degree from an accredited institution is required.
- A Master of Science or Master of Arts degree is preferred, but not required.

Prerequisite Coursework[1]

- Calculus (2 semesters)
- Introductory Biology (2 semesters)
- Introductory Computer Science (2 semesters)
- Statistics or Probability (1 semester)

1 If students have successfully completed a professional doctoral degree (e.g. MD, DDS, DO, PharmD), these prerequisites may be waived.

Written consent from primary academic advisor

Personal Interview

Application Deadlines

The Biomedical and Health Informatics co-discipline admits students to the spring, summer, and fall semesters yearly.

U.S. citizens and permanent resident applicants must submit all applications and application materials by April 1 (summer semester admission), June 1 (fall semester admission) and December 1 (spring semester admission).

International applicants must submit all applications and application materials by March 1 (summer semester admission), May 1 (fall semester admission) and November 1 (spring semester admission).

Cell Biology and Biophysics

Discipline Coordinator

Karen Bame, (816) 235-2243, bamek@umkc.edu

Cell Biology and Biophysics faculty who are members of the Doctoral Faculty (http://sgs.umkc.edu/faculty/bioscience.asp#DeptandorPrimaryDisciplineCellBiolBiophysics)

Cell Biology and Biophysics is a discipline in the Interdisciplinary Ph.D. Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

No additional requirements. Due to the sequencing of coursework, new students selecting cell biology and biophysics as their primary discipline will normally only be admitted in the fall term.

Qualifying Requirements for Full Admission

Minimum of 16 hours of approved graduate coursework at UMKC toward the Ph.D. program with a grade-point average of at least 3.0 on a 4.0 scale. International students must establish English proficiency.

Suggested Compatible Co-disciplines

Chemistry, molecular biology and biochemistry, pharmaceutical science, pharmacology, oral and craniofacial sciences, and physics.

Core Program Requirements

Cell Biology and Biophysics as a Primary Discipline

Minimum Core

33 credit hours of courses and 15 credit hours of dissertation research for a total of 48 credit hours of post-baccalaureate credits, distributed as indicated below. The core courses should be completed by the end of the second academic year after admission to the graduate program on a full-time basis (individual arrangements will be made for part-time students).

LS-CBB 5530	Cell and Molecular Biology I	3
LS-CBB 5520	Cell and Molecular Biology II	3
LS-CBB 5596	Advanced Experimental Cell Biology I	2
or LS-CBB 5597	Advanced Experimental Cell Biology II	
LS-CBB 5612	Seminar in Cell Biology and Biophysics (2 x 1 cr. hr.)	2
LS-CBB 5690	Analytical Methods in Cell Biology and Biophysics	1-4
or LS-MBB 5690	Analytical Methods in Molecular Biology and Biochemistry	
BIOLOGY 5501	Proposal Writing	1
7 cr. hr. in discipline or related discipline courses (LS-CBB, LS-MBB, BIOL, PHARM, etc.) 15 cr. hr. LS-CBB 5699, Dissertation Research		

Seminar courses are part of this component of required courses, up to a maximum of three for the program, as are additional credits of Advanced Experimental Molecular or Cell Biology (a total of four credits in experimental laboratory courses, independent of thesis research, is required). 5700-level courses may not be used to satisfy cell biology and biophysics discipline-specific course requirements.

Any of the above courses, whether part of the primary or related discipline requirements, will be credited toward the 33-credit Ph.D. course requirement if taken as part of any graduate program at UMKC and if a grade of "B" or better is received.

In addition to the basic 33-credit course core, each student's Faculty Advisory Committee may require up to nine credit hours in additional elective courses in any University-approved doctoral discipline as preparation for specific areas of research. No more than seven credit hours of 5500-level courses, or their equivalents, can be taken at institutions outside UMKC.

For Students with Cell Biology and Biophysics as a Co-discipline

LS-CBB 5530	Cell and Molecular Biology I	3
LS-CBB 5520	Cell and Molecular Biology II	3
LS-CBB 5612	Seminar in Cell Biology and Biophysics	1
Additional SBS graduate courses (LS-CBB, LS-MBB or BIOL) for a minimum of 10 cr. hr.		

A sufficient amount of other core courses to constitute the required percentage of their overall program of study. 5700-level courses may not be used to satisfy cell biology discipline-specific course requirements.

Requirements for Comprehensive Exams

Full-time students with cell biology as their primary discipline must take their comprehensive examination before the beginning of the third academic year after admission to Ph.D. study. Part-time Ph.D. students in this discipline must complete their comprehensive examination immediately after completion of the 25-hour course requirement on their Ph.D. plan of study.

Format

For students with this discipline as their primary discipline, written and oral examinations are required.

Written Portion

The written examination, for students who have cell biology and biophysics as their primary discipline consists of an NIH-style grant proposal that the student will prepare. The topic of the research proposal will be determined by the student in consultation with the student's supervisory committee.

Oral Portion

The oral examination has two aspects: (1) questions covering the grant proposal prepared by the student for the written examination and (2) other related material in the student's area of specialization, including fundamental knowledge of the student's chosen disciplines.

Other Discipline-Specific Special Requirements

Students with this discipline as a primary discipline must participate in the teaching program of the School of Biological Sciences.

Students with this discipline as a primary discipline or co-discipline must participate in seminars.

Retention in Program

No more than one C grade will be permitted in basic core coursework. If a student with this discipline as the primary discipline receives more than one C grade in a basic course, he or she will be dropped from the doctoral program. Students with this discipline as a co-discipline who receive more than one C grade will be dropped from the discipline.

The doctoral faculty in cell biology and biophysics meets formally at the end of each academic year to discuss and evaluate all graduate students' progress. Each student's committee also meets with the student at least once a year. After the annual doctoral-faculty meeting, each student receives a written evaluation of his or her status and a report is placed in the student's file.

Chemistry

Discipline Coordinator

Kathleen Kilway, (816) 235-2289, kilwayk@umkc.edu

Chemistry faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplineCHEMISTRY)**.**

Chemistry is a discipline in the Interdisciplinary Ph.D. Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-specific Admission Requirements

Chemistry as a primary discipline

Normally, only applications to full-time academic status will be considered. To qualify for full admission (Note: full admission is unrelated to full-time academic status), applicants are expected to have the equivalent of an American Chemical Society-approved bachelor's degree in chemistry, which includes coursework in general chemistry, analytical chemistry, one year of organic chemistry, inorganic chemistry and one year of physical chemistry requiring calculus and physics as prerequisites. (For example, see UMKC's B.S. program in the Chemistry section in this catalog.) Applicants will be admitted as provisional students with a limited number of undergraduate deficiencies. They will be notified, at the time admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Applications are only accepted through the online system, and include:

1. Official, confidentially transmitted transcripts.
2. Statement of purpose.
3. Two confidentially transmitted letters of recommendation (academic and/or professional).
4. Official Graduate Record Exam (General Test) score, less than six (6) years old.
5. English language proficiency requirement.

An official Graduate Record Exam score (general test) is required as part of the application to the program. The GRE score will be evaluated as part of the entire application.

Suggested Compatible Co-disciplines

Curriculum and instruction, engineering, geosciences, mathematics, pharmaceutical sciences, physics, and pharmacology.

Chemistry as a Co-discipline

Applicants are expected to have undergraduate coursework in general chemistry and organic chemistry. Applicants accepted as provisional students will be notified, at the time admission is offered, of any requirements to be met for reclassification as fully admitted. Undergraduate courses included in these requirements must be completed with grades of "C" or higher.

Core Program Requirements

Chemistry as a Primary Discipline

Coursework Requirements

Students are to see the principal graduate advisor, or their research advisor, for advising and signature prior to registering each semester.

Students must successfully complete a minimum of one course from Group A; one course from Group B; one additional course from Group A or B; one elective course (three credit hours) from any course numbered 5500 or above, except for those excluded below; and one credit hour of chemistry seminar (CHEM 5611). A grade of C+ (2.3) or less in more than two chemistry courses applicable to the Ph.D. program will result in termination from Ph.D. candidacy.

Group A		
CHEM 5531	Classical Thermodynamics	3
CHEM 5532	Chemical Kinetics	3

CHEM 5533	Quantum Chemistry	3
CHEM 5534	Molecular Spectroscopy	3
CHEM 5535	Statistical Thermodynamics	3
CHEM 5541R	Advanced Analytical Chemistry	3
Group B		
CHEM 5521R	Mechanisms Of Organic Reactions	3
CHEM 5522	Synthetic Organic Chemistry	3
CHEM 5551R	Advanced Inorganic Chemistry I	3
CHEM 5571R	Introduction To Polymer Chemistry	3

Excluded as electives:

CHEM 5511	Laboratory Safety And Health I	1
CHEM 5520R	Survey Of Organic Chemistry	3
CHEM 5530	Systematic Physical Chemistry	3
CHEM 5590	Directed Studies	1-3
CHEM 5598	Research Methodology Conference	3
CHEM 5599	Research And Thesis	1-9
CHEM 5611	Chemistry Seminar	1
CHEM 5699	Research And Dissertation	1-16
CHEM 5899	Required Graduate Enrollment	1

In addition, students must successfully complete nine credit hours of 400-level or above coursework in their co-discipline(s). (A minimum of three of these credit hours must be at the 5500+ level.) Students may be required to take additional courses as outlined by their plan of study.

Any of the above chemistry courses will be credited toward the Ph.D. coursework requirement if taken as part of any previous graduate program at UMKC and a grade of B- (2.7) or better is received. Also, students who have received a grade of B- (2.7) or better in graduate chemistry coursework taken as part of a degree program at another institution may have up to six credit hours of equivalent required coursework waived upon approval of a majority of the supervisory committee. A written request for this waiver is to be submitted and approved before submission of the student's plan of study.

Courses/Experiences Providing Instruction in Research Methodology

Expertise in research methodology will be acquired under the mentorship of the research advisor and supervisory committee. The student's progress will be assessed annually by his/her supervisory committee and the results will be forwarded to the School of Graduate Studies.

Number of Credit Hours Required beyond Bachelor's Degree

A minimum of 13 credit hours of chemistry courses (including chemistry seminar) and 24 credit hours of dissertation research, plus a minimum of nine credit hours of co-discipline courses are required. However, up to six credit hours of chemistry may be waived, as described above under Coursework Requirements.

Chemistry as a Co-discipline

Coursework Requirements

Students are required to complete a minimum of three courses (nine credit hours) at the 400-level or above from classes offered by the Department of Chemistry or in conjunction with other units as approved in the student's plan of study. At least three of these credit hours must be at the 5500+ level and taken from courses offered by the Department of Chemistry. The systematic courses CHEM 5520R and CHEM 5530 may be used to satisfy the "400-level or above" requirement, but not the "5500+ level" requirement. CHEM 5590, CHEM 5599 and CHEM 5699 may not be used to satisfy these requirements. Students who receive a grade of C+ (2.3) or less in two or more courses used to satisfy these requirements will be disqualified from using Chemistry as their co-discipline.

Any of the above chemistry courses will be credited toward the Ph.D. coursework requirement if taken as part of any previous graduate program at UMKC and if a grade of B- (2.7) or better is received. Transfer credit from another institution cannot be applied to Chemistry's co-discipline requirement.

Special Requirements

Chemistry as a Primary Discipline

Placement Examinations

Incoming students take placement examinations in analytical, inorganic, organic and physical chemistry. Placement examinations are typically administered the week preceding the first week of classes of the fall and spring semesters. Students scoring below the 50th percentile in the organic and/or physical chemistry exams are required to enroll in CHEM 5520R and/or CHEM 5530, respectively. Enrollment in other graduate organic or

physical chemistry courses is not permitted until CHEM 5520R and/or CHEM 5530, respectively, is(are) successfully completed. Two grades of C+ (2.3) or lower, or one grade of less than C- (1.7) in CHEM 5520R / CHEM 5530 will result in termination from the degree program. These courses may not be counted toward the coursework requirements above. Students must complete all additional coursework required as a result of the placement exam scores by the end of their first three regular semesters.

Research Advisor

Full-time students are to select a research advisor from the doctoral faculty of the Department of Chemistry and a supervisory committee by the end of their first regular (e.g. fall or spring) semester on campus.

Seminar

Students are required to attend and participate in all regularly scheduled and special Chemistry Department seminars and colloquia. Students are required to present a one-hour chemistry seminar (CHEM 5611) during their second year following full admission to the Ph.D. program, based on their dissertation research project. This seminar will include a thorough review of the literature pertinent to their project and a description of the objectives, the proposed methodology and the significance of this research. An abstract is to be posted and distributed one week prior to the presentation date.

Time Constraints and Financial Support

Students must complete all requirements for their degree within seven years from the date of full admission to the Ph.D. program. Under compelling circumstances and on the written recommendation of a majority of the supervisory committee, a single extension for up to one year may be requested for approval by the dean of the School of Graduate Studies. Full-time (as defined in the current UMKC catalog) Ph.D. students may receive financial support (in the form of fellowships or teaching assistantships) from the Department of Chemistry for a maximum of five years. Students from countries not having English as their first language, and who are to be supported as graduate teaching assistants, are to take the SPEAK test before the end of the first week of their first semester on campus. They are to enroll in English 100E their first semester on campus if necessary.

Dissertation

Students must complete a minimum of 24 credit hours of dissertation research (CHEM 5699). All supervisory committee members are to receive a final draft of the dissertation for approval of form and content at least two weeks before submission to the dean of the School of Graduate Studies for certification. Candidates should submit preliminary drafts well in advance of this deadline. After the dissertation is certified for acceptance, the student must present an oral defense of his/her research in the form of a dissertation seminar. The supervisory committee will make a final determination of the acceptability of the dissertation immediately following this presentation. Only minor changes may be made to the dissertation at this point.

Expectations for Interdisciplinary Work

Chemistry as a Primary Discipline

Students develop and pursue a plan of study that includes coursework from the primary discipline and co-discipline(s). The interdisciplinary nature of the student's program is emphasized in the comprehensive examination, which includes material from all disciplines in the plan of study.

Chemistry as a Co-discipline

The Department of Chemistry will cooperate with the student's primary discipline in assessing the interdisciplinary nature of the student's progress.

Comprehensive Examination Guidelines

Chemistry as Primary Discipline

A written comprehensive examination will be prepared and administered by the examination committee (consisting of the student's supervisory committee and others selected by the dean of the School of Graduate Studies) before completion of the student's third year following full admission to the Ph.D. program. This examination will be based on the student's coursework and on general knowledge in all areas of his/her specialization. All efforts will be made to emphasize the multidisciplinary nature of the student's program in this examination. If the student fails the written portion of the comprehensive examination, he/she may petition the examination committee to allow for a single opportunity to retake it. This second examination must be completed no earlier than 12 weeks and no later than six months from the date of completion of the first examination.

After successful completion of the written portion of the comprehensive examination, an independent research proposal will be prepared describing a research project not related to the student's current research. The topic is to be approved by the examination committee. An abstract is to be posted and distributed, and a written copy of this proposal (in standard NSF or NIH format) given to all members of the examination committee at least one week prior to presentation in a proposal seminar. This seminar must be presented to all members of the examination committee within seven weeks of the completion date of the written portion of the comprehensive examination. The research proposal and proposal seminar are part of the comprehensive examination.

Chemistry as a Co-discipline

The comprehensive examination will be determined by the student's primary discipline in cooperation with the co-discipline(s).

Computer Science

Discipline Coordinator
Yugyung Lee, (816) 235-5932, leeyu@umkc.edu

Computer Science faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/sce.asp#DeptandorPrimaryDisciplineComputerSci)**.**

Computer Science is a discipline in the Interdisciplinary Ph.D. Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular full admission to the Ph.D. program. A student who meets the requirements partially but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, availability of advisor, the quality of previous work, etc. A student not qualifying for admission to the Ph.D. program may be automatically considered for admission to the M.S. computer science program.

Academic Preparation

The applicant must have a bachelor's degree and/or a master's degree in computer science, computer engineering, electronics, communications engineering or any other field requiring substantial training in at least one of the above fields and in mathematics with a GPA of 3.5 or better on a 4.0 scale, cumulative as well as in the major field; and a GPA of 3.5 or better on a 4.0 scale, in all post-baccalaureate or post-master's degree work.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national/international standardized examinations such as the GRE. The expected performance level is the 80th percentile in the quantitative portion of the GRE examination. The student must also show an excellent performance in all of his or her coursework.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national/international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. The expected proficiency level is the 50th percentile in the verbal portion of the GRE or a TOEFL score of 263 or above (230 CBT). UMKC students may also satisfy this requirement by obtaining an English Proficiency Certification from the English Department. [**Note:** As per University policy, all international students go through the English proficiency test upon arrival to the campus, regardless of their scores in TOEFL or verbal portion of GRE or any other test. A student's advisor may also require the student to take the above test, irrespective of the student's native language. As a result of this test, the student may be required to improve his or her oral and written communication in English before enrollment in the courses of the chosen disciplines.]

Recommendations

The student must provide at least **three** recommendation letters, identifying clearly his or her academic achievements and exceptional quality, from the professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. However, even in this situation, a recommendation letter from his or her last academic institution is highly recommended. A recommendation from a faculty member in the Computer Science Electrical Engineering (CSEE) Department at UMKC must be provided if the student has taken courses from or worked with the CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250- to 500-word essay on his or her goals and objectives of pursuing the Ph.D. in the chosen fields. This is an important document for reviewing the application. Applicants, therefore, are advised to provide a clear account of their academic achievements and plans for higher study.

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of post-master's work or 30 or more hours of post-bachelor's work) toward a Ph.D. at another institution must provide reasons for changing institutions. The applicant must also provide a letter of endorsement from a computer science doctoral faculty member indicating willingness to be the student's research advisor.

Alternate Admission Criteria

The applicant may have received a bachelor's degree or a master's degree in computer science, computer engineering, electrical engineering or electronics, or any other related field with substantial training in mathematics. An applicant not meeting the minimum admission requirements, or not having sufficient academic preparation (stated below under prerequisite knowledge) for advanced work in the chosen primary discipline(s), may be

considered for provisional admission by the CSEE Department Ph.D. committee if the committee sees high potential and preparation for advanced work from the rest of the applicant's credentials. Evidence of high potential might be pertinent work experience, published papers or extremely high achievement in related areas. In any case, the required GPA (or GPAs) must be at least 3.0 on a 4.0 scale, and the coursework deficiencies for doctoral study in computer science must not be more than 18 semester hours. Applicants with an established research or publication record in a quantitative science are encouraged to apply.

Qualifying Requirements for Full Admission

Prerequisite Knowledge

It is expected that a Ph.D. applicant selecting Computer Science as the primary discipline have the level of preparation represented by the following courses. An applicant with only a B.S. degree in computer science must have at least a GPA of 3.25/4.0 and an applicant with at least a year of graduate work must have at least a GPA of 3.5/4.0 before attempting advanced study.

Computer Science		
COMP-SCI 281R	Introduction to Computer Architecture and Organization	3
COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 394R	Applied Probability	3
COMP-SCI 404	Introduction to Algorithms and Complexity	3
COMP-SCI 431	Introduction to Operating Systems	3
COMP-SCI 449	Foundations of Software Engineering	3
COMP-SCI 451R	Software Engineering Capstone	3
COMP-SCI 470	Introduction to Database Management Systems	3
Mathematics		
MATH 300	Linear Algebra I	3

Length of Time to Complete Qualifying Requirements

When a student is admitted provisionally, the CSEE Ph.D. Committee will specify, and the UMKC Interdisciplinary Executive Committee will confirm, the conditions and length of time available to satisfy them to achieve full admission status.

Suggested Compatible Co-disciplines

Telecommunications and computer networking, electrical and computer engineering, mathematics, physics, chemistry (p. 498) (computational focus), engineering (p. 512) (civil and mechanical focus), cell biology and biophysics, molecular biology and biochemistry, oral and craniofacial sciences, pharmaceutical sciences, pharmacology, geosciences, and economics. A co-discipline outside of this list may be considered in exceptional cases.

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after earning a bachelor's degree may expect to do significantly more work compared to the student who enters after earning a master's degree.

Computer Science as a Co-Discipline

A Ph.D. student selecting Computer Science as co-discipline is expected to have the level of preparation represented by the following courses before attempting advanced study:

Computer Science		
COMP-SCI 303	Data Structures	3
COMP-SCI 394R	Applied Probability	3
COMP-SCI 404	Introduction to Algorithms and Complexity	3
COMP-SCI 449	Foundations of Software Engineering	3
COMP-SCI 451R	Software Engineering Capstone	3
COMP-SCI 470	Introduction to Database Management Systems	3
Mathematics		
MATH 210	Calculus I	4
MATH 220	Calculus II	4
MATH 300	Linear Algebra I	3

A Ph.D. student must clear the qualifying test and comprehensive test before defending his or her dissertation. The discipline's course requirements and qualifying test procedure is described below.

Discipline Course Requirements and Qualifying Test

The total Interdisciplinary Ph.D course credit (didactic) requirement is 30 hours which is divided into (a) primary discipline (12 credits), (b) co-discipline (9 credits), and (c) the remaining 9 credits can be completed either by doing graduate level courses at UMKC in any participating discipline or credits can be transferred from students' previous institutions. This credit transfer must be approved by the CSEE Department Ph.D. committee.

Ph.D. Qualifying Test for Computer Science Discipline

The qualifying test is conducted to confirm that the student has a sound understanding of the fundamentals of computer science and has developed good problem-solving skills and research potential. This document includes the syllabus and describes the procedure for taking the qualifying test in the Computer Science discipline.

Eligibility

The student must be fully admitted to the Ph. D program at UMKC. Students admitted provisionally will have to satisfy all requirements stipulated in the letter of admission before being fully admitted.

Duration for Clearing Qualifying Test

A student, irrespective of being full-time or part-time, must take the qualifying test by the third semester from the date he or she is fully admitted. For example, if a student is fully admitted in fall 2014, then he or she must take the qualifying test in fall 2015. Failure to do so will disqualify the student from continuing in the Ph.D. program. Upon consultation with his/her interim adviser, a student may opt to clear the qualifying test earlier than the third semester. If a student fails the qualifying test in the first attempt then he or she MUST retake it in the subsequent semester. Failure to clear the test in the second attempt disqualifies the student from remaining in the Ph.D. program with CS as the primary discipline.

Qualifying Test Dates

Qualifying tests are administered twice a year, on the second Friday of April and November.

Qualifying Test Procedure

1. **Registration:** Eligible Ph.D. students must register to take the test. The registration deadline is March 31 for the April test and October 31 for the November test. Eligible students should send an e-mail with the following information to the Student Services Coordinator (Coretta Carter-Muhammad) and the Discipline Coordinator.
    a. Name
    b. Student ID
    c. E-mail
    d. Primary discipline and Co-discipline
    e. Interim advisor's name
    f. Preferred semester for taking the test.
2. **Registration Notification:** Students will be notified by e-mail.
3. **Taking the Test:** Students take the test on the prescribed date.
   Test Duration: Four hours.

Test Result

The Discipline Coordinator will make the result of the test available within two weeks from the date of the test. The minimum passing grade is 70%. The result could be one of the following.

1. **Pass:** The student proceeds to the next level of the Ph.D. curriculum. He or She prepares the plan of study and finalizes the composition of his or her supervisory committee. The plan is submitted to the graduate office for approval.
2. **Fail:** If a student fails then he/she must retake and clear the test in the subsequent semester. Failure to clear the test in the second attempt disqualifies the student from remaining in the Ph.D. program with CS as the primary discipline.

Test Format

The test will cover the following topics: Discrete Structures, Data Structures and Algorithms, Basic Probability and Modeling, Operating Systems, Bioinformatics, Cryptography, Databases, Design and Analysis of Algorithms, Performance Modeling, and Software Engineering. A student will answer a set of questions from each topic as indicated on the test.

The qualifying test will contain questions from the topics listed below. The questions will be based on the material typically taught in the specified undergraduate and graduate courses. The students must have a sound understanding of these topics and are expected to demonstrate this in their answers.

1. Discrete Structures (Based on COMP-SCI 191 and COMP-SCI 291)
2. Data Structures (Based on COMP-SCI 303) and Algorithms (Based on COMP-SCI 404)
3. Basic Probability and Modeling (Based on COMP-SCI 394R)
4. Operating Systems (Based on COMP-SCI 431)
5. Bioinformatics (Based on COMP-SCI 5566)
6. Cryptography (Based on COMP-SCI 5596A).
7. Databases (Based on COMP-SCI 470 and COMP-SCI 5570).
8. Design and Analysis of Algorithms (Based on COMP-SCI 5592)
9. Performance Modeling (Based on COMP-SCI 494R and COMP-SCI 5594)
10. Software Engineering (Based on COMP-SCI 451Rand COMP-SCI 5551)

Computer Science as Co-discipline

There is no qualifying test for student selecting Computer Science as co-discipline.

Ph.D. Qualifying Test Syllabus

The syllabus lists the main topics in each area. Students are strongly advised to consult the listed textbooks to prepare for the test.

1. **Discrete Structures**
   Mathematical induction, Relations, Counting methods (Permutation, Combination, Pigeon-hole principle), Recurrent relations, Graph theory.
   Reference book
   - Discrete Mathematics by Richard Johnsonbaugh.
2. **Data Structures and Algorithms**
   Basic knowledge of algorithm complexity (Big-Oh, Big-Omega, Big Theta, best, worst, and average case analysis, etc.), Binary trees, Binary search trees, AVL trees, Heaps, B-trees, B+ trees, Graphs, Hashing (Static, Dynamic, and Extendible), Huffman codes, Divide-and-conquer, Searching, Sorting, In-order, Pre-order, and Post-order traversals, Breadth first, Depth first graph traversal), Spanning trees and Shortest path.
   Reference books
   - Data Structures and Algorithm Analysis in C++ by Mark Allen Weiss, Addison Wesley.
   - A Practical Introduction to Data Structures and Algorithm Analysis by Clifford A. Shaffer, Prentice Hall.
3. **Basic Probability and Modeling**
   Sample spaces and events; Conditional probabilities; Discrete random variables (Binomial, Geometric, Poisson), Continuous random variables (Uniform, Exponential, Normal, Gamma), Moment generating functions, Moments and expectation, and Conditional expectation.
   Reference books
   - Introduction to Probability Models by Ross, Academic Press.
   - **Probability and Statistics with Reliability**, Queuing and Computer Science Applications (Chapters 1-5), 2nd Edition, K. S. Trivedi, John Wiley & Sons.
4. **Operating Systems**
   Process Management (synchronization, concurrency, deadlock), Memory management, Process and Job scheduling, Performance models (expected behavior), and File Systems.
   Reference books
   - Operating System Concepts by Silberschatz and Galvin, John Wiley.
   - Operating Systems: Design and Implementations by Tannenbaum, Prentice Hall.
5. **Bioinformatics**
   Algorithms for Sequence and Structural analysis of Biopolymers (Pairwise Sequence analysis, Multiple Sequence Analysis, Structural alignment, Structure prediction, Phylogenetics), Bionformatic Databases & Ontologies, Bioinformatic Approaches to System-wide studies.
   Reference books
   - Bioinformatics: Sequence and Genome Analysis by David Mount. Cold Spring Harbor (2nd edition).
6. **Cryptography**
   Conventional and Public-key crypto-algorithms, including DES, RSA, Discrete-Logarithm based algorithms, Diffie-Hellman public-key distribution algorithm, mental poker, secret sharing, secure email, SSL, X.509, and Wireless security.
   Reference books
   - Cryptography and Network Security: Principles and Practice, 4th Edition by William Stallings. Prentice-Hall.
7. **Database Systems**

Database Design (Functional Dependencies and Modification anomalies), Relational Algebra, Transaction structure, transaction processing, serial and concurrent execution, and concurrency control mechanisms, Database Recovery.

Reference books

- Fundamentals of Database Systems, Elmasri/Navathe, Addison-Wesley.
- Database Management Systems, Ramakrishnan and Gehrke, McGraw-Hill.
- Concurrency Control and Recovery in Database Systems, Bernstein, Hadzilacos, and Goodman. AW. This book is out of print but freely available on the internet http://www1.sce.umkc.edu/~kumarv/cs570/text_book/complete-CCM-book.pdf

8. **Design and Analysis of Algorithms**
   Divide and Conquer method, Dynamic programming, Greedy algorithms, Depth-first and Breadth-first search, Shortest path algorithms, Minimum spanning trees, NP-completeness.
   Reference books
   - Introduction to Algorithms. 2nd Edition, by T.H. Corman, C.E. Leiserson, R. L. Rivest, C. Stein. McGraw Hill.
   - The Design and Analysis of Computer Algorithms, by A.V. Aho, J.E. Hopcroft, J.D. Ullman. Addison-Wesley.
9. **Performance Modeling**
   Construction of probabilistic models for performance prediction of computer systems or components, The Poisson Process, Properties of the exponential distribution, State classification (Periodic, Irreducible, Homogeneous, and Ergodic Markov chains), and M/M/1 type models.
   Reference books
   - Queuing Systems I, (Chapters 1-4), by L. Kleinrock, John Wiley
   - Probability Models, (Chapters 4, 5, and 8.1-8.3) by S. Ross, Academic Press
   - Probability, Statistics & Queuing Theory, (Chapters 4-5.2) by A. Allen, Academic Press
   - Probability & Statistics with Reliability, Queuing (Chapters 6-8.4) by K. Trivedi, Wiley.
10. **Software Engineering**
    Software process models, Software measurement, Metrics for software quality, Software project estimation techniques and models, Requirement analysis and analysis modeling, Software architecture, Software design methods, and Software design patterns, Real-time Software design, Software testing methods, Object-Oriented concepts and principles (UML analysis/design/testing), Formal methods for software engineering, Software reuse, CASE tools.
    Reference books
    - Software Engineering: A Practitioner's Approach by Roger Pressman McGraw-Hill.
    - Object-Oriented methods: Principles & Practice by Ian Graham, Addison-Wesley

Requirements for Comprehensive Exams

The comprehensive exam is administered by the student's supervisory committee. A student can either take a written test or opt for an oral presentation covering both primary and co-discipline areas. Discussion with and agreement from the student's supervisory committee is required before choosing the desired option.

The candidates should contact the CSEE Division office and the chair of their doctoral committee for additional information.

Financial Aid

All admitted international and non-resident Ph.D. students automatically receive financial aid in the form of significantly reduced fees. In addition, they can apply to various forms of financial aid (such as graduate research assistantships, graduate teaching assistantships, graduate fellowships) through the CSEE Department and the School of Graduate Studies. Note that a GTA can only be awarded to a student after the student has successfully demonstrated his or her teaching potential to a committee and has successfully passed the English language test. Contact the discipline coordinator for more information.

Curriculum and Instruction

Discipline Coordinator

Omiunota Ukpokodu, (816) 235-2469, ukpokodun@umkc.edu

Curriculum and Instruction faculty who are members of the doctoral faculty. (http://sgs.umkc.edu/faculty/education.asp#DeptandorPrimaryDisciplineEducation)

Curriculum and Instruction is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Applicants who designate curriculum and instruction as their primary discipline will be expected to have a Master's degree; and a GPA of at least 3.5 on a 4.0 scale, covering all post-baccalaureate work completed to date.

If the discipline is selected as the primary discipline and the dissertation research will have a primary orientation in curriculum and instruction, the student must obtain the agreement of a member of the doctoral faculty in curriculum and instruction to serve as research advisor before the student can be admitted.

The applicant must provide the following supplementary documentation:

1. Written recommendations from appropriate professors and practitioners in the field (selected by student).
2. Brief narrative stating research interest
3. GRE score requirement of a combined minimum score of 295 on the verbal and quantitative section and 4.00 on the analytic writing section
4. Sample research or scholarly writing

Suggested Compatible Co-disciplines

Educational Leadership, Policy and Foundations (p. 509), music education, chemistry, history, mathematics, physics, and public affairs and administration.

Core Program Requirements

All students with curriculum and instruction as primary discipline are required to complete:

Core Courses		
EDUC-C&I 5618	Survey Of Research In Curriculum	3
or EDUC-C&I 5620	Seminars In Theories Related To Curriculum	
EDUC-C&I 5626	Seminar in Multicultural Perspectives In Education	3
EDUC-C&I 5571	Cognition & Technology	3
or EDUC-C&I 5570	Curriculum And Instruction In Technology	
Electives		
A minimum of 15 credit hours of electives		15
Total Credits		24

All students with curriculum and instruction as a co-discipline are required to complete:

Core Courses		
Select one of the following:		3
EDUC-C&I 5505	Introduction To Curriculum Theory	
EDUC-C&I 5506	Curriculum Design	
EDUC-C&I 5591	Curriculum & Instruction For The 21St Century	
EDUC-C&I 5618	Survey Of Research In Curriculum	3
or EDUC-C&I 5620	Seminars In Theories Related To Curriculum	
EDUC-C&I 5626	Seminar in Multicultural Perspectives In Education	3
EDUC-C&I 5571	Cognition & Technology	3
or EDUC-C&I 5570	Curriculum And Instruction In Technology	
Electives		
A minimum of 3 credit hours of elective		3
Total Credits		15

All students with curriculum and instruction as primary discipline are required to complete:

A minimum of 12 hours of research that includes: [1]		12
EDUC-R&P 5608	Introduction To Graduate Research	
EDUC-R&P 5615	Qualitative Research Theory & Design Educational Setting. Part 1	
EDUC-R&P 5555	Statistical Methods II	
EDUC-R&P 5616	Qual Data Collection And Analysis In Educational Settings. Part 2	

or EDUC-R&P 5612	Applied Quantitative Research in Education	
A minimum of 12 hours of dissertation		12
Total Credits		24

1 Students interested in taking advanced coursework in statistics may substitute EDUC-R&P 5605 and EDUC-R&P 5606(Quantitative Methods I and II) forEDUC-R&P 5555. EDUC-R&P 5605 and EDUC-R&P 5606 must be taken as a sequence (6 credits total).
Students who have not had a previous statistics course at the undergraduate or graduate level must take EDUC-R&P 5505 before beginning research methods coursework. This will not count toward the 12-hour minimum.

Ph.D. study in curriculum and instruction prepares students with diverse academic and professional backgrounds to meet equally diverse career and scholarly goals. Moreover, rather than being a homogeneous field with a relatively uniform approach to Ph.D. study, curriculum and instruction encompasses several separate specialized areas, each with its own requirements and expectations regarding doctoral work. Hence, students accepted for the Interdisciplinary Ph.D. program with curriculum and instruction as their co-discipline may have backgrounds in one of the educational fields represented in the School of Education, in one of the disciplines represented in the College of Arts and Sciences, or in a professional field such as criminology, computer science or law. Students accepted with curriculum and instruction as their coordinating-unit discipline would typically have prior academic training and experience in curriculum and instruction. Advisors would tend to be specialists in reading education, physical education, special education, educational psychology, mathematics education, science education or curriculum and instruction. The doctoral student in curriculum and instruction may be preparing for teaching and research in higher education, for a curricular or supervisory position in a public school district or for work in a government agency, private foundation or an educational training role in business and industry. Consequently, a single set of minimum standards cannot possibly fit all Ph.D. programs for which curriculum and instruction is the primary discipline or co-discipline. Instead, sensitivity to individual student needs and goals, as well as regard for the different approaches to doctoral study represented in the several fields within curriculum and instruction, require flexibility and diversity in program planning.

Within the context described, a minimum of 24 hours in curriculum and instruction is required of students with curriculum and instruction as their coordinating-unit discipline and a minimum of 15 hours in curriculum and instruction is expected of students selecting curriculum and instruction as their co-discipline. In no case will a program be drawn up or approved that contains only coursework previously completed. Additional requirements may be set by the student's doctoral supervisory committee on the basis of the individual's program goals, previous academic preparation and relevant prior experiences.

Requirements for Comprehensive Examinations

The student may obtain discipline-specific information on comprehensive examination guidelines from his or her research advisor.

Economics

Discipline Coordinator

Peter Eaton, (816) 235-2832, eatonp@umkc.edu

Economics faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplineECONOMICS)**.**

Economics is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

In addition to the general criteria for admission, the criteria for admission to the Interdisciplinary Ph.D. program in economics are:

1. A score of at least 154 in verbal reasoning, a score of at least 154 in quantitative reasoning and at least a 4.0 on the analytical portions of the general Graduate Record Examination.
2. A grade-point average of at least 3.0 (on a 4.0 scale) covering all college work taken prior to the bachelor's degree, or a grade-point average of at least 3.0 (on a 4.0 scale) covering all post-baccalaureate work completed to date.
3. Recommendations for provisional or full admission by the doctoral faculty review group in at least two participating disciplines.
4. Applicants for whom English is not the native language and have studied less than two years (full time) in a U.S. academic program or a comparable program in an English-speaking country are required to obtain a TOEFL score of at least 550 on the paper-based test or 213 on the computer-based test. In addition, to qualify for **full admission** status, international students must achieve a score of at least 4.0 on the Test of Written English (TWE) portion of the TOEFL examination. Students admitted provisionally because of the TWE requirement may take a TWE equivalency test through UMKC's Applied Language Institute once they arrive on campus.
5. Applicants must have at least 18 undergraduate semester credit hours in economics, including intermediate microeconomics and macroeconomics and a course in elementary statistics. In addition, it is strongly recommended that applicants have some of the following courses: econometrics,

mathematical economics, history of economic thought, heterodox economics, economic history, calculus and linear algebra. Students with fewer than 18 credit hours will be admitted only on a provisional status.

6. Applicants matriculated into the M.A. economics program at UMKC may apply for admission to the Interdisciplinary Ph.D. program in economics as soon as they have completed 15 credit hours and have earned a grade-point average of 3.25 or better.
7. Applicants who wish to transfer to the UMKC Interdisciplinary Ph.D. program in economics from other institutions must have obtained a grade-point average of at least 3.0 covering all their graduate work. Transfer students must apply for transfer credits toward the Interdisciplinary Ph.D. as soon as possible after completion of a minimum of 12 credits at UMKC with a grade-point average of 3.0 or better. Up to 30 transfer credit hours may be granted. No transfer credit will be granted for any courses not relevant to the Interdisciplinary Ph.D. in Economics or for any course with a GPA of less than 3.0.

The deadline for receipt of completed applications and supporting documentation is Feb. 1 for the fall semester and Sept. 1 for the spring semester.

Alternate Admission Criteria

Applicants who do not fit the above criteria may petition the economics doctoral committee with evidence of scholarly publication, research and recommendations, but the decision rests with the committee.

Qualifying Requirements for Full Admission

At the time admission is offered, provisional students will be notified of any course deficiencies or qualifying requirements to be met for full admission. The faculty will make a decision with regard to full admission based upon the student's performance in meeting the qualifying requirements.

Suggested Compatible Co-disciplines

Curriculum and instruction, history, public affairs and administration, educational leadership, policy and foundations, and the Social Science Consortium.

Core Program Requirements

For Students with this Discipline as their Coordinating Unit

The Interdisciplinary Ph.D. in economics consists of a minimum of 18 required coursework credit hours in economics--including:

ECON 5506	Advanced History Of Economic Thought	3
ECON 5551	Advanced Institutional Theory	3
ECON 5601	Colloquium In Advanced Macroeconomics	3
ECON 5602	Colloquium In Advanced Microeconomics	3
ECON 5625	Colloquium In Econometrics	3
ECON 5688	Colloquium On Political Economy	3
Total Credits		18

If the student has not taken the prerequisites to ECON 5601, ECON 5602 and ECON 5625, he/she will be required to take ECON 5501, ECON 5502, ECON 5521, and ECON 5525 --and additional 12 coursework credit hours (or, a total of 30 hours). All students are strongly urged to take two fields in economics, each consisting of two three-credit hour courses for a total of 12 additional coursework credit hours. These courses will be taken in economics and at least one additional field such as sociology, history, public administration, education, mathematics, political science, geosciences, computer science or others, provided that such fields participate in the doctoral program.

Required Courses		
ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3
ECON 5506	Advanced History Of Economic Thought	3
ECON 5521	Mathematical Economics (Calculus I strongly recommended)	3
ECON 5525	Econometric Methods	3
ECON 5551	Advanced Institutional Theory	3
ECON 5601	Colloquium In Advanced Macroeconomics	3
ECON 5602	Colloquium In Advanced Microeconomics	3
ECON 5625	Colloquium In Econometrics	3
ECON 5688	Colloquium On Political Economy	3
Additional Requirements		
Coursework in an outside field or fields, depending upon the requirements of co-discipline regulations		

Dissertation and oral examination	12
Total Credits	42

For Students with this Discipline as a Co-discipline

Those students taking economics as a co-discipline will take a minimum of 12 hours in economics, at the graduate level, including:

ECON 5501	Advanced Macroeconomic Analysis	3
ECON 5502	Advanced Microeconomic Analysis	3

Comprehensive Examination Guidelines

Coordinating-discipline students are required to pass a qualifying examination in economics theory--micro, macro and political economy, and in quantitative methods. Students taking field concentrations must pass a comprehensive examination in those fields, or meet the requirement by an alternative means that is accepted by the department.

Co-discipline students must receive grades of "B" or better in ECON 5501 and ECON 5502. In addition, the oral portion of the comprehensive examination will require students to integrate knowledge between topics in economics and the student's coordinating unit.

Educational Leadership, Policy and Foundations

Discipline Contact
Janelle Laudick, (816) 235-2716, laudickj@umkc.edu

Educational Leadership, Policy and Foundations faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/education.asp#DeptandorPrimaryDisciplineULAPSIE)**.**

Educational Leadership, Policy and Foundations is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Applicants who designate educational leadership, policy and foundations as their primary discipline will be expected to have a grade-point average of at least 3.0 on a 4.0 scale, covering all college work taken prior to the bachelor's degree, or a GPA of at least 3.5 on a 4.0 scale, covering all post-baccalaureate work completed to date.

Applications are only reviewed once a year, for admission beginning the next fall term. To be considered, applications must be submitted to the Admissions Office by February 15.

The applicant must provide the following supplementary documentation:

1. Written recommendations from appropriate professors and practitioners in the field (selected by the applicant).
2. An autobiographical sketch. (This should be a brief resume of academic and professional goals and the applicant's personal, academic and career history as it relates to those goals. It should also include reasons for choosing educational leadership, policy and foundations as a field of study.)
3. Evidence of graduate-level writing ability provided by writing samples, prior scholarly writing or the successful completion of an essay examination.

Applicants are required to provide official GRE test scores. GRE scores will be used by doctoral faculty in the discipline as one of several criteria used to evaluate the strength of the application. No other assessment results will be substituted for the GRE. When evaluating applications, faculty members will take into account evidence in the applications of such factors as demonstrated leadership skills, commitment to education, communication and academic skills, a clear and important research agenda, cultural background, etc. There is no minimum aggregate GRE score required for applications to be considered for educational leadership, policy and foundations. Applicants must meet the GRE requirements for their other discipline(s).

In addition, an applicant, the applicant's advisor or any member of the division may request that the applicant meet with and be interviewed by the division faculty.

Alternate Admission Criteria

International applicants will be considered for admission to the Ph.D. program on the basis of background, experience and educational attainments in their home countries. Exceptions to the general criteria for admission to Interdisciplinary Ph.D. study may be made for students whose potential for success in the doctoral program may not be reflected in the general criteria.

Qualifying Requirements for Full Admission

In some cases, the division may ask that 12 hours of work at UMKC, including an education foundations course, be taken prior to full admission.

Students admitted under alternate criteria will be notified upon acceptance of any coursework deficiencies they must satisfy or other preparation they must undertake prior to full admission.

Suggested Compatible Co-disciplines

Curriculum and instruction, public affairs and administration, history, economics, political science, and the social science consortium.

Core Program Requirements

Students with educational leadership, policy and foundations as a co-discipline will be required to take a minimum of 15 credit hours of core courses. The core curricula will vary, depending on whether students' research is primarily in educational leadership or the social-philosophical foundations of education and on the types of educational setting upon which they wish to focus. Specific courses will be selected with the advice and consent of the student's faculty advisor and supervisory committee. The supervisory committee may elect to accept coursework in an educational-specialist program or other post-master's degree program as counting toward the 15-credit-hour requirement.

Students seeking administrative certification for public school positions should check with their advisors to be sure they include all courses currently required in the states in which they wish to become certified.

The amount of required coursework, beyond the minimum 15-credit-hour core requirement, taken by students with educational leadership, policy and foundations as their primary discipline, will depend upon their previous preparation in the discipline, their previous research competencies, their personal career goals and their research interests.

All students with urban leadership and policy studies in education as either the primary discipline or the co-discipline are required to take and complete EDUC-UL 5685, the seminar on problems and issues in education and urban leadership.

Other Discipline-Specific Special Requirements

The student, at a minimum, will be required to take and complete 12 hours of coursework that provides extensive preparation in research methodologies relevant to her or his professional goals and intended dissertation project. The student will select specific courses with the advice and consent of her or his faculty advisor and supervisory committee. Typical courses which would satisfy this requirement include (but are not limited to):

EDUC-R&P 5505	Statistical Methods I	3
EDUC-R&P 5508	Principles And Methods Of Research	3
EDUC-R&P 5605	Quantitative Analysis I: Regression And Analysis Of Variance	3
EDUC-R&P 5608	Introduction To Graduate Research	3
EDUC-R&P 5610	Research Design & Methodology	3
HISTORY 5591	Archival Methods	3
HISTORY 5687	Doctoral Research Seminar	3
SOCIOL 5510	Sociological Methods I	3
SOCIOL 5511	Sociological Methods II	3
EDUC-UL 5601	Research In Education Administration: Qualitative Theory & Design	3
EDUC-UL 5603	Research In Education Administration: Qualitative Data & Analysis	3

Requirements for Comprehensive Examinations

Students with educational leadership, policy and foundations as the primary discipline must pass a comprehensive examination including both the primary discipline and the co-discipline areas.

Electrical and Computer Engineering

Discipline Coordinator

Ghulam M. Chaudhry, (816) 235-5214, chaudhryg@umkc.edu

Electrical and Computer Engineering faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/sce.asp#DeptandorPrimaryDisciplineElec)**.**

Electrical and Computer Engineering is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, the quality of previous work, etc. A student not qualifying for admission to the Ph.D. program may be considered for admission to the M.S. computer science or electrical engineering program. Requirements for admission are similar whether the applicant is requesting electrical and computer engineering as the primary discipline or co-discipline.

Academic Preparation

The applicant must have a bachelor's degree and/or a master's degree in electrical and/or computer engineering, electronics, communications engineering or any other field requiring substantial training in at least one of the above fields and in mathematics with a GPA of 3.5 or better on a 4.0 scale, cumulative as well as in the major field; and a GPA of 3.5 or better on a 4.0 scale in all post-baccalaureate or post-master's degree work.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national/international standardized examinations such as the GRE. The expected performance level is the 85th percentile in the quantitative portion of the GRE examination.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national/international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. The expected proficiency level is the 50th percentile in the verbal portion of the GRE or a TOEFL score of 213 or above. UMKC students may also satisfy this requirement by obtaining an English Proficiency Certification from the English Department. (**Note:** As per University policy, all international students are tested for proficiency in English upon arrival on campus, irrespective of their scores in TOEFL or verbal portion of GRE, or any other test. A student's advisor may also require the student to take the above test, irrespective of the student's native language. As a result of this test, the student may be required to improve his or her oral and written communication in English before enrollment in the courses of the chosen disciplines.)

Recommendations

The student must provide at least three recommendation letters from the professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. However, even in this situation, a recommendation letter from his or her last academic institution is highly recommended. A recommendation from a faculty member in the Computer Science Electrical Engineering (CSEE) Department at UMKC must be provided if the student has taken courses from or worked with the CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250- to 500-word essay on his or her goals and objectives of pursuing the Ph.D. in the chosen fields.

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of the post-master's work or 30 or more hours of the post-bachelor's work) toward a Ph.D. at another institution must provide reasons for changing institutions. The applicant must also provide a letter of endorsement from a doctoral faculty member in electrical and computer engineering indicating willingness to be the student's research advisor.

Alternate Admission Criteria

The applicant may have received a bachelor's degree or a master's degree in computer science, computer engineering, electrical engineering or electronics, or any other related field with substantial training in mathematics. An applicant not meeting the minimum admission requirements, or not having sufficient academic preparation (stated below under prerequisite knowledge) for advanced work in the chosen discipline(s), may be considered for provisional admission by the CSEE Department's Ph.D. committee if the committee sees high potential for advanced work from the rest of the applicant's credentials. Evidence of high potential might be pertinent work experience, published papers or extremely high achievement in related areas.

Qualifying Requirements for Full Admission

Prerequisite Knowledge

A Ph.D. student selecting electrical and computer engineering as the primary discipline is expected to have the level of preparation represented by a four-year undergraduate degree in electrical/computer engineering.

A student not having an undergraduate degree in electrical/computer engineering may be admitted provisionally if the admission committee determines that the student has a strong aptitude for research and is willing to take prerequisite courses as determined by the admission committee based on the student's academic record.

Suggested Compatible Co-disciplines

Computer science, telecommunication and computer networking, mathematics, physics and engineering (p. 512) (civil and mechanical focus). A co-discipline outside of this list may be considered only in exceptional cases.

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after earning a bachelor's degree may expect to do significantly more work compared to a student who enters after earning a master's degree.

Requirements for Qualifying and Comprehensive Examinations

The Qualifying Exam is a written test administered by the CSEE Department's Ph.D. committee. The test questions are from a set of fundamental courses in electrical and computer engineering.

The Comprehensive Exam is administered by the doctoral committee of the candidate. A student can either take a written test or opt for an oral presentation covering both primary and co-discipline areas. Discussion with and agreement from the student's doctoral committee is required before choosing the best option. Candidates should contact the CSEE Department's office and the chair of their doctoral committee for more information.

Electrical and Computer Engineering as a Co-Discipline

The student who chooses electrical and computer engineering as a co-discipline may obtain information on qualifying exam and comprehensive exam requirements from the discipline coordinator.

Financial Aid

Various forms of financial aids (such as graduate research assistantships, graduate teaching assistantships, graduate fellowships) are available through the CSEE Department and the School of Graduate Studies. Contact the discipline coordinator for more information.

Engineering

Discipline Coordinator

Ganesh Thiagarajan, (816) 235-1288, ganesht@umkc.edu

Engineering faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/sce.asp#DeptandorPrimaryDisciplineEngineering)**.**

Engineering is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

A student who satisfies the general requirements for admission and also meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program with engineering as a discipline. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of the student's interest, the quality of previous work, etc. Requirements for admission are the same whether the applicant is requesting engineering as the primary discipline or the co-discipline.

1. The applicant must have a bachelor's degree or a master's degree in civil or mechanical engineering or related disciplines with a grade-point average of at least 3.0 on a 4.0 scale in the last 60 hours of undergraduate engineering coursework. In addition, a GPA of 3.5 or better in all post-baccalaureate coursework is required. Pre-program requirements may be specified in case the bachelor's degree is in a discipline different than that to which the candidate is applying.
2. The student must demonstrate an aptitude for advanced-level work by obtaining a cumulative GRE score of at least 302 (verbal + quantitative) and a minimum of 158 on the quantitative portion of the examination. GRE requirements may be waived for applicants with a baccalaureate from an ABET accredited program who have passed the fundamentals of Engineering (FE) exam.
3. TOEFL scores are required for international students without prior U.S. degrees. The minimum required score is 80. TOEFL requirements may be waived for applicants with a baccalaureate from an ABET accredited program.
4. The student must provide at least three recommendation letters from professors at previous institutions or mentors at work.
5. The applicant must provide a 500- to 750-word essay on his or her goals and objectives in pursuing the Ph.D. in the chosen fields.
6. Provisional admission may be granted if the minimum GPA and GRE requirements are not met, but other indicators promise the student's success in the program. To be fully admitted to the Interdisciplinary Ph.D. program, the provisionally admitted student must obtain a grade of B or better in the first nine hours of coursework and submit a satisfactory GRE score within their first year of the program.

Suggested Compatible Co-disciplines

Chemistry, computer science, electrical and computer engineering, geosciences, mathematics, molecular biology and biochemistry, oral biology, physics, and telecommunication and computer networking.

Core Program Requirements

Engineering as Primary Discipline

A minimum of 60 credit hours of approved graduate coursework (300-level or higher) beyond the baccalaureate, including dissertation research hours (CIV-ENGR 5699, E&C-ENGR 5699 or MEC-ENGR 5699), are required. Of these, at least two-thirds must be at ythe 5500/5600-level. The graduate coursework may include courses taken at UMKC or other institutions and approved for transfer by the student's supervisory committee. A minimum of 12 credit hours of dissertation research (CIV-ENGR 5699, E&C-ENGR 5699 or MEC-ENGR 5699) is required.

Example Minimum Requirements Beyond Master of Science Degree

Primary discipline (Engineering)	12
Co-discipline (e.g. Mathematics or Physics)	9
Dissertation research	12
Total beyond M.S. degree (minimum of 30 hours)	33

Engineering as Co-discipline

A student electing engineering as co-discipline will be required to complete a minimum of 9 credit hours in engineering graduate courses, of which at least six hours must be at the 5500/5600-level.

Qualifying Examination Guidelines

A qualifying exam will be completed by the Ph.D. student as a core program requirement. The exam will be administered by the graduate committee in conjunction with the research advisor in the first year of study. The exam will consist of two parts: (1) a written exam based on core areas in civil/mechanical engineering OR an engineering problem related to the student's emphasis area AND, (2) an oral defense of the exam and other discipline fundamentals or the problem solution. The department will keep a record of whether the student has passed or failed the exam. The student may request one more attempt to retake the exam in the event of a failed grade. The student will be recommended for termination from the doctoral program after two failed attempts.

Comprehensive Examination Guidelines

To advance to degree candidacy, an Interdisciplinary Ph.D. student is required to pass a comprehensive examination administered by the student's research advisor and supervisory committee. This comprehensive exam will consist of two parts. Part One will be a written exam over the student's Ph.D. coursework or the submission of a grant proposal to the committee. Part Two will be an oral defense of the student's dissertation research proposal.

English

Discipline Coordinator

Anthony Shiu Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=shiu), (816) 235-5205, shiua@umkc.edu

English faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplineENGLISH)**.**

English is a discipline in the Interdisciplinary Ph.D. Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

For new students selecting English as a discipline, admission will normally be for the fall term. Application dossiers must be complete by Jan. 15.

Applicants who select English as their primary discipline will be expected to have the M.A. in English or equivalent coursework as determined by the English department doctoral committee. Applicants who select English as a co-discipline should have completed a master's degree or equivalent coursework. In most cases, students will be expected to have completed, with a grade of B or better, 12 hours of English courses at the 300- or 400-level (or appropriate equivalents) that are approved by the English department doctoral committee.

An applicant who plans to pursue a degree with English as a discipline is required to provide the English department doctoral committee with the names of three individuals who are academically or professionally qualified to assess the applicant's ability to pursue doctoral work. References submitted to the School of Graduate Studies for admission to doctoral studies may be judged by the English department doctoral committee as sufficient evaluation, but the department reserves the right to request further information.

Applicants also are required to submit samples of written work to the English department doctoral committee. The applicant's narrative statement, submitted with the application form, should provide a well-focused justification of the proposed course of study that is compatible with the department's resources. Applicants should consult with the Interdisciplinary Ph.D. coordinator in English for advice on the preparation of the narrative. Applicants may also seek advice on the narrative from doctoral committee members with special expertise in the applicant's chosen fields of study.

Applications will be evaluated by a committee of the doctoral faculty in the English department; the committee will recommend to the department chair and dean of the School of Graduate Studies whether the applicant should be admitted. These English-specific requirements apply to all applicants intending to have English as primary discipline or co-discipline.

Students who expect to write a dissertation that draws primarily on research in English must apply for English as their primary discipline.

In cases where an applicant has not yet met the foreign language requirement or GRE scores are still pending, provisional admission may be recommended.

Alternate Admission Criteria

The department's required GRE score is independent of, and takes precedence over, the School of Graduate Studies' minimum of 1500 points.

Qualifying Requirements for Full Admission

In addition to the below criteria, the committee considers the applicant's writing sample, letters of recommendation, personal statement, and the overall viability of the applicant's proposed dissertation project.

English as Primary Discipline

GRE scores

Either (1) a general verbal score in the 60th percentile or better; or (2) a score in the 60th percentile or better in the English subject examination.

Relevant Foreign Language Skills

Applicants must demonstrate facility in a foreign language relevant to study in English. The language requirement will ordinarily be met by two years of satisfactory college-level language study. Students may be required to demonstrate additional language skills to undertake or complete their dissertations.

English as a Co-discipline

GRE scores

A general verbal score in the 60th percentile or better.

Foreign Language Skills

Demonstrate foreign language competence in the same manner as students with English as the primary discipline.

Suggested Compatible Co-disciplines

Curriculum and instruction and history

Core Program Requirements

All students who list English as a discipline, whether as primary discipline or co-discipline, are required to take ENGLISH 5500 or its equivalent.

Students admitted with English as the primary discipline are subject to the following requirements:

- Only English courses numbered 400 or above will be accepted for the Ph.D. degree. Courses taken in other disciplines may be taken at the 300-level or above.
- No grade below B in any course will be accepted to apply toward the Ph.D. degree.
- In most cases, no more than one-third of coursework in English, exclusive of credit for dissertation work, that is classified as independent study will be accepted for the Ph.D. degree.
- Students will be expected to complete the majority of their coursework at UMKC.
- In certain cases, exceptions to these requirements may be allowed.

Other Discipline-Specific Special Requirements

For foreign language requirement, see "Qualifying Requirements for Full Admission" for this discipline.

Comprehensive Examination Guidelines

Before advancing to Ph.D. candidacy, students whose primary discipline is English will take three examinations: a written general examination, an oral interdisciplinary subject examination and a co-disciplinary examination. The examinations must be taken within a year of completing coursework. Prior to taking exams, students must have an assigned supervisory committee, an approved plan of study on file with the School of Graduate Studies and completed all required coursework. See Comprehensive Examination guidelines (p.) from the School of Graduate Studies for full details.

The general examination is a six hour exam, written in two three-hour sittings. This exam is administered by the English faculty on the supervisory committee, led by the chair of the committee. The subject examination is a two-hour oral interdisciplinary exam that is administered by the entire supervisory committee, led by the chair of the committee. The co-disciplinary exam will be administered by the co-disciplinary faculty on the supervisory committee.

Exam areas shall be designated at the time of the submission of the program of study. These may be changed only with the consent of the entire supervisory committee. Exam questions shall not be distributed in advance for either the general or subject examination. At least six months before the student plans to take his or her exams, the student shall notify committee members of his or her choice of areas/periods and submit a tentative reading list of primary and critical works for all examinations. The supervisory committee shall then meet to approve the areas, review the proposed reading list and address any oversights or imbalances.

The general examination consists of two parts, each covered in a three-hour sitting and each receiving equal weight. The examination is designed to test the breadth of the candidate's knowledge in the fields in question. The student will choose two areas in which he or she wishes to be examined, whether periods of literary history (e.g., British 19th century, American literature from 1865, British and American literature since 1945) or other areas of expertise (e.g., linguistics, history of the language, rhetoric, genre studies, literacy studies). The reading list, which is subject to the approval of the supervisory committee, should consist of works from the selected periods or areas of expertise which have achieved broad recognition or influence.

For the oral interdisciplinary subject examination, the student will prepare in advance, in the period specified above, a tentative reading list on the subject of the proposed dissertation for approval or revision by the supervisory committee. The subject examination will deal with current scholarship and methodology as well as with primary sources and other standard works in the field. The exam will be administered in a single two-hour sitting.

For students whose co-discipline is English, a single three-hour written examination will be designed in consultation with the coordinating discipline.

Doctoral Dissertation Requirement

The dissertation defense will be a one and a half hour discussion of the dissertation that includes all members of the Supervisory Committee. The majority of the committee must vote for approval of the dissertation in order for the student to graduate. See the School of Graduate Studies guidelines for further procedures and deadlines.

Entrepreneurship

Discipline Coordinator

Michael Song, (816) 235-5841, songmi@umkc.edu

Entrepreneurship and Innovation faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/bloch.asp#DeptandorPrimaryDisciplineEntrep)**.**

Entrepreneurship and Innovation is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Program Intent

The Ph.D. program in Entrepreneurship and Innovation is designed to train and develop research and teaching scholars in entrepreneurship and innovation. The Institute for Entrepreneurship and Innovation (IEI) has established a research agenda that focuses on the ways in which entrepreneurs develop, lead and transform today's dynamic global businesses. Specifically, the Institute is assessing the values and risks of emerging technologies and investigating effective techniques for market opportunity analysis and the identification of new ventures in high-tech industries. In addition, the Institute is examining the success and failure factors of high-tech start-up firms, as well as the links between entrepreneurship, government policy, innovation, economic development and global competitiveness.

Discipline-Specific Admission Requirements

We expect prospective students to hold an undergraduate or master's degree in business administration, entrepreneurship, marketing, mathematics, economics, statistics, engineering or science. Students are expected to have completed a master's level intermediate statistical analysis course prior to enrolling in the program. All students must submit an application to the Interdisciplinary Ph.D. Program and to the IEI. The student must complete the Interdisciplinary Ph.D. application and prepare a formal written statement outlining his or her interests in and preparation for the program. To enter the entrepreneurship program, the applicant is expected to have an overall GPA of at least 3.3 on a 4.0 scale on all quantitative course work. Applicants should pay particular attention to the narrative statement that accompanies their application. The IEI doctoral faculty gives substantial weight to this statement. It should provide a clear description of the applicant's intellectual interests, how those interests evolved and should describe the research direction(s) that the applicant intends to pursue.

Suggested Compatible Co-disciplines

Economics, mathematics, social science, engineering, computer science, physics, and public administration.

Program Requirements

Students who select entrepreneurship and innovation as their primary discipline must complete 12 credit hours of coursework in entrepreneurship theory and 12 credit hours in research methods. In addition, students must select 16 credit hours in electives from classes offered by their co-discipline or other departments. Students in the entrepreneurship program will take nine hours of coursework a semester for the first two years and three to six hours of coursework a semester for the third year while working as research assistants for designated faculty. The fourth and fifth years will be devoted to graduate research assistance and the dissertation. Upon completion of the coursework, students are expected to successfully complete a written examination in entrepreneurship. During the doctoral program, students are also required to participate in the Teaching Effectiveness Training program and teach two courses. In addition, each student must complete at least one academic paper per year that will be submitted to a national research conference (by the end of the first year) or to top refereed academic journals.

Core Program Requirements

Theory		
ENT 5691	Doctoral Seminar In Theoretical Foundations Of Entrepreneurship I	3
ENT 5692	Foundations Entrepreneurship	3
ENT 5693	Technology, Innovation, And Entrepreneurship	3
ENT 5694	Doctoral Seminar In Theories Of The Fim And Strategy	3
Research Methods		
DSOM 5516	Multivariate Statistical Methods	3
ENT 5681	Multivariate Statistical Methods-II	3
ENT 5682	Structural Equation Modeling	3
ENT 5683	Mathematical Models For Entrepreneurship	3

Requirements for Entrepreneurship as a Co-discipline

Students who select entrepreneurship as a co-discipline must complete four doctoral seminars (12 credits) in Entrepreneurship Theory. Specific classes must be approved by the program director.

Other Discipline-Specific Special Requirements

A faculty supervisory committee is appointed by the program director at the end of the second year to assist each student in constructing a program of study that fits that individual's background and interests. Students select one major area of specialization and complete requirements in an additional minor area that supports their major area of specialization. Throughout the program, doctoral students receive support and training that hone their skills as researchers, teachers and course developers. Any deviations from the program requirements must be recommended by the supervisory committee and must be approved by the program director.

Research Paper

Each student must complete at least one academic paper per year. The first-year paper must be submitted to a national research conference by the end of the first year of the program. All other papers must be submitted to top refereed academic journals. Each student must have at least two "revise/resubmit" or accepted academic papers before graduating from the program. Failure to meet these research and publication requirements will result in the student being placed on probation or being dismissed from the program. Faculty will set a deadline by which doctoral students must complete an independent research paper and present their findings in a research workshop. The research project is supervised by a faculty advisor on a topic selected by the student and approved by the faculty advisor.

Comprehensive Examination and Admission to Candidacy

To be eligible to apply for candidacy, students must maintain an overall GPA of at least 3.3. Admission to candidacy is a formal University process signifying that a student has completed specific degree requirements and that the faculty expects that the student will successfully complete the degree program. Students are admitted to candidacy upon completion of the comprehensive examination in entrepreneurship. The supervisory committee administers this test after all area requirements are completed.

Dissertation

After earning candidacy, students must successfully complete a dissertation that demonstrates their ability to identify a significant research question or problem in entrepreneurship and apply appropriate research techniques to its resolution. The dissertation must be an original and independent piece of work. Dissertations are supervised by a reading committee. After the dissertation has been written to the satisfaction of the reading committee, the student defends his or her dissertation research in a final oral examination by program faculty.

In-Residence Study

A doctoral student must spend at least four years of full-time, in-residence study beyond the baccalaureate degree. Experience has shown that the probability of successful completion of the program diminishes substantially unless the student is committed to full-time, in-residence work until all requirements are fulfilled. Prospective students should plan on full-time studies, including the summer semester, from the time of enrollment until the completion of the dissertation.

Teaching Effectiveness Training

Each year, the academic market places increasing weight on teaching skills. Many business schools, in fact, now require teaching presentations of all prospective faculty. All students are required to participate in the Teaching Effectiveness Training Program. Students will observe other instructors, including someone teaching their spring course assignment, draft a syllabus, and receive feedback on a microteaching session. Teaching assistants assigned to teach core courses will receive additional guidance from faculty course coordinators.

During the doctoral program, students will be required to teach two courses. They will receive feedback from peer classroom observations and an opportunity to share experiences and ideas informally at lunch gatherings of teaching assistants. Students are expected to put together formal teaching presentations that aid them both in the interview process and in the transition to full-time, tenure-track faculty.

Application Review Process and Timetable

Applications for admission and financial aid must be complete, including all supporting materials, by February 1 of each year. Applicants should take the GMAT or GRE in November or earlier because scores from later examinations will not arrive by the admissions deadline.

Geosciences

Discipline Coordinator

Jejung Lee, (816) 235-6495, leej@umkc.edu

Geosciences faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplineGEOSCIENCES)**.**

Geosciences is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Specific admission requirements defined by the faculty of the Department of Geosciences follow the guidelines established by the School of Graduate Studies. Typically, a student would be expected to hold an undergraduate or master's degree in environmental sciences, geology, geography or a closely-related field. Opportunities within the department range from the physical sciences to the humanities. Because of the wide range of faculty expertise, and in keeping with the general spirit of the entire interdisciplinary program, the faculty of the Department of Geosciences has deliberately chosen to establish broad guidelines for admission of Interdisciplinary Ph.D. students. All prospective graduate students must attain a GPA of 3.0 or above, on a 4.0 scale, in all university work prior to admission. Three letters of recommendation from professors as well as a proposal from the prospective student detailing goals and expectations are needed for an evaluation of the application. Students are expected to have an advisor at the time of admission.

Non-native English-speaking applicants seeking geosciences as a primary discipline must demonstrate proficiency in English. This requirement can be satisfied by obtaining English proficiency certification from UMKC.

Suggested Compatible Co-disciplines

Faculty members in the Department of Geosciences conduct research in applied geophysics, atmospheric sciences, engineering geology, and environmental geology, stratigraphy, geochemistry, GIS, mineral deposits, neotectonics, geoarcheology, geomorphology, Quaternary environments, cultural and historical geography (Europe, Latin America, the Caribbean and West Africa) and historical cartography. Suitable co-disciplines for the Interdisciplinary Ph.D. program are practically unlimited (see http://cas.umkc.edu/geosciences/phd.asp for possibilities). Consultation with the principal graduate advisors for geology and geography would be a good way for the student to explore the possibilities. Previous and existing geology students have designated co-disciplines of chemistry, curriculum and instruction, engineering, computer science, and physics. Previous geography Ph.D. students have designated the social sciences consortium (p. 542) and curriculum and instruction as a co-discipline. Other excellent possibilities would include political science, economics, and history.

Core Program Requirements

Specific core program requirements follow the guidelines established by the School of Graduate Studies and are otherwise defined by the student's supervisory committee in consultation with each individual student.

Other Discipline-Specific Special Requirements

While there is no set minimum number of hours for all students, at least 50 percent of the course credit hours for students who select geosciences as their primary discipline must be taken in the Department of Geosciences. Students who have selected geosciences as a primary disicpline or a co-discipline are expected to take no less than three courses from the Department of Geosciences as determined by their supervisory committee. Other special requirements are defined by the student's supervisory committee in individual consultation with each student.

Requirements for Comprehensive Examinations

Comprehensive examinations of all Ph.D. students who select the Department of Geosciences as the primary discipline will contain both written and oral components and may include questions from each of the co-disciplines and from related fields as determined by the student's examining committee. The examining committee consists of the student's supervisory committee and others who may be appointed by the dean of the School of Graduate Studies.

Interdisciplinary Work

The faculty of the Department of Geosciences are committed to an interdisciplinary approach and expect that all Ph.D. students, whether enrolled in the primary or the co-disciplinary category, will complete courses and conduct research with this principle in mind.

History

Discipline Coordinator

Andrew Bergerson, (816) 235-5728, bergersona@umkc.edu

History faculty who are members of the doctoral faculty.

History is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements. Please refer to the UMKC History Department website for up-to-date information on the Intedisciplinary Ph.D. program in History.

Discipline-Specific Admission Requirements

Except in unusual circumstances, students who select History as a discipline in the Interdisciplinary Ph.D. program must begin their work during the fall term. Applications must be received by the School of Graduate Studies no later than January 15. The doctoral faculty of the Department of History will review applications and make their recommendations for admission by the end of February. Applications that are incomplete as of January 15, and completed applications submitted after this deadline, may not be considered until the following year.

Applicants who choose History as their primary discipline, or applicants whose coursework in History will comprise at least 50 percent of the Ph.D. plan of study, must meet the criteria for admission specified by the School of Graduate Studies. In addition, they must:

1. Possess a master's degree in History or its equivalent.
2. Have earned a GPA of 3.5 on a 4.0 scale in graduate courses.

Students who choose History as a co-discipline and whose coursework in History will constitute less than 50 percent of the Ph.D. plan of study must meet the criteria for admission specified by the School of Graduate Studies. In addition, they must fulfill other entrance requirements specified by the doctoral faculty of the Department of History.
1) Co-discipline applicants who have a background in History will be considered as candidates for full admission.

2) Co-discipline applicants who have little or no background in History will normally be considered only as candidates for provisional admission. These applicants, if provisionally admitted, will be required to take a certain number of content courses at either the undergraduate or graduate level, to be determined by the student's prospective mentor, and maintain a B+ average before being considered for full admission.
All applicants for admission must submit in addition to the requirements specified by the School of Graduate Studies:

1. A sample of written work.
2. A brief statement of academic and professional goals.
3. A 1,000-word essay that specifies a dissertation topic, demonstrates its interdisciplinary nature and shows how historical methods and approaches would be utilized.
4. A signed mentorship form.
   Primary discipline students must have a statement of support from at least two members of the department willing to serve on the student's supervisory committee.
   Co-discipline students must have a statement of support from at least one member of the department willing to serve on the supervisory committee

Primary and Co-discipline applicants granted provisional admission will receive notification of deficiencies and of the conditions that must be met before full admission can be considered.

The doctoral faculty of the Department of History, in consultation with the History faculty as a whole, makes recommendations to the dean of the School of Graduate Studies on each application for admission. These recommendations reflect the majority vote of the doctoral faculty.

Applicants are advised that meeting the criteria of the School of Graduate Studies and the Department of History does not automatically result in admission to the Interdisciplinary Ph.D. program. When making recommendations to the School of Graduate Studies, the History faculty considers other factors as well, particularly the availability of faculty qualified to work in the applicant's area of interest and the availability of library resources and research materials.

Alternate Admission Criteria

In exceptional cases, candidates who do not meet either the School of Graduate Studies' or the History Department's minimum requirements for admission may be admitted under alternate criteria. The doctoral faculty of the department have adopted the following alternate criteria, one or more of which will be used to assess the applicant's ability: satisfactory performance in 5500- or above-level classes taken in the department's master's degree program; positive, written recommendations of our faculty willing to work with the applicant who have evaluated his or her previous work; satisfactory completion of specified courses in the department before consideration or reconsideration of a candidate's application; publications or comparable professional achievements related to the study of History.

The Plan of Study

If full admission is granted, the student who chooses History as a discipline must satisfy the residency requirements of the School of Graduate Studies, and must fulfill the course requirements of the Ph.D. plan of study as prepared by the student and his or her advisor(s) and approved by the Interdisciplinary Ph.D. Executive Committee.

A student whose primary discipline is History will be required to list at least 18 hours of graduate-level history courses (exclusive of dissertation credits) on the plan of study. These will include: 3 hours of HISTORY 5581GR (How To History I) if this course or its equivalent has not been taken before; 3 hours of HISTORY 5582GR (How To History II); 3 graduate colloquia; and at least one graduate-level research seminar. The remainder of the program must be in courses numbered 5500 or above.

Students for whom History is a co-discipline will be required to take, at the minimum, the five core courses of the department's M.A. program: HISTORY 5581GR (How To History I); HISTORY 5582GR (How To History II); two graduate colloquia; and one graduate-level research seminar. In exceptional or unusual circumstances, some of these hours may be waived upon petition to the student's supervisory committee.

Any student who switches disciplines in the course of his or her graduate career, either adding history as the primary or co-discipline, or changing History from the co-discipline to the primary discipline, must fulfill all of the requisite doctoral requirements in History for that level (e.g., number of course hours, distribution requirements, exams).

Requirements for Comprehensive Examinations

The School of Graduate Studies guidelines for the comprehensive examination can be found here.

The History Department requires that the comprehensive examination of a student listing History as a discipline include both a written and an oral component. The History members of the supervisory Committee will determine the structure and duration of the History component of the comprehensive exam.

For students with History as the primary discipline, there is a list of doctoral fields appended below. The written comprehensives will consist of three examinations, the first from a Chronological/National field; the second from a Topical/Interdisciplinary field; and the third from either the Chronological/National or Topical/Interdisciplinary list of fields.

For co-discipline students, the written comprehensives will consist of questions drawn from one of the Chronological/National fields, and questions from one of the Topical/Interdisciplinary fields appended below.

For both primary and co-discipline students, it is assumed that each examination will include a historiographical component.

Written comprehensives will be administered in the first two weeks of November and the first two weeks of March, unless the supervisory committee has allowed an exception.

In the oral examination conducted by the supervisory committee, both primary and co-discipline students will be expected to answer questions of an interdisciplinary nature.

A student with History as either a primary or co-discipline is considered to have passed the comprehensive examination if the History member/s of the examining committee vote that the candidate passes, and if no more than 20 percent of the examining committee vote to fail the student. If failure is reported, the examining committee will either recommend termination as a Ph.D. student or suggest additional work or other remedial measures. Furthermore, a student who has failed may not take a second examination for at least 12 weeks. Failure of a second comprehensive examination shall automatically preclude candidacy at this institution.

Dissertation Requirements

A student for whom History is a discipline must meet the requirements of the History Department for the discipline, as well as those of the School of Graduate Studies. On a Ph.D. plan of study, where history is the primary discipline, there must be a minimum of 12 credits in HISTORY 5699R (dissertation hours).

The final examination in defense of the dissertation is open to all members of the doctoral faculty, who may attend as interested observers. The supervisory committee and its chair will determine the format and procedures of the defense. The date, time and location must be announced and published at least two weeks before each final examination takes place.

For a student with History as a discipline, this examination may be conducted only after the dissertation has been approved by the History member/s of the supervisory committee, and may not be administered when UMKC is not officially in session.

The defense of the dissertation is approved when a majority of the supervisory committee, including the History member/s of the committee, recommends approval and signs the Report of Result of Final Doctoral Examination form. Within 48 hours of the defense, the supervisory committee chair will report the results of the final dissertation examination in writing to the candidate.

Language Requirements

Those students for whom History comprises their Primary discipline must complete a competency examination in at least one foreign language that will be relevant to their dissertation research and/or future career. The language exam format will be determined by the student's supervisory committee and will be assessed by a member of the department of foreign languages and literatures or another expert in the field. Students can also choose to complete two years of undergraduate language study in lieu of a challenge exam. Students with research interests that require competency in more than one language will be encouraged to be certified in relevant languages, but will be examined at the discretion of the supervisory committee.

Those students with History as their co-discipline will ordinarily not be required to demonstrate language competency unless their research topic requires it. It is strongly recommended, however, that all I PhD students choosing History as either primary or co-discipline should pursue some kind of language study or equivalent research skill, such as in quantitative methods.

Retention in the Doctoral Program

A doctoral student must maintain a 3.0 grade-point average in each semester of coursework taken at UMKC. A person receiving a failing grade in a class will normally not be retained in the doctoral program. In exceptional cases, such a student may petition to be placed on probation for one semester.

A student who falls below a 3.0 grade-point average, or whose work is deemed unsatisfactory at any stage of doctoral work by the History member/s of the supervisory committee, with the concurrence of a majority of the resident doctoral faculty of the department, may be declared ineligible for further study.

History Department Policies Regarding Doctoral Faculty

No doctoral student shall be permitted to form a supervisory committee on which the only History faculty members are former faculty at UMKC or adjunct faculty members. Refer to the Web site of the School of Graduate Studies for a list of current doctoral faculty.

Ordinarily, emeritus professors of doctoral faculty status in History shall be allowed to serve on doctoral committees for no more than five years after retirement. Such service shall only be on committees that the required faculty member was already on at the time of retirement. Emeritus faculty members can have their doctoral status extended beyond five years only if at least two-thirds of the members of the History doctoral faculty vote to approve this.

Emeritus professors in History cannot chair dissertation committees. They can, however, co-chair with the approval of a majority of the regular resident doctoral faculty.

The History department adheres to the guidelines of the American Historical Association with regard to student ethics and the responsible conduct of research. The AHA Statement on Standards of Professional Conduct can be found at http://www.historians.org/pubs/Free/ProfessionalStandards.cfm.

Doctoral Fields

Areas	Chronological/National	Topical/Interdisciplinary
Europe	a. Medieval Europe	a. Material Culture & Everyday Life
	b. Early Modern Europe	b. History of Science or Medicine
	c. Modern Europe	c. Area Focus: Medieval Italy; British Isles; Modern Germany
		d. Women, Gender, & Family
		e. State Formation & National Identity
		f. Global Interactions
Middle East	a. Medieval Jewish/Islamic	a. Material Culture & Everyday Life
	b. Ottoman	b. Women, Gender, & Family
	c. Modern Middle East	c. State Formation & National Identity
		d. Comparative Religions
		e. Global Interactions
Latin America	a. Encounter & Colonial	a. Identity & Culture
	b. Post-Independence	b. Women, Gender, & Family
		c. State Formation & National Identity
		d. Area Focus: Mexico, Central America; Cuba; Puerto Rico, the Souther Cone
		e. Global Interactions
East Asia	a. Pre-1600	a. Area Focus: Japan; China
	b. Post-1600	b. Women, Gender, & Family
		c. Material Culture and Everyday Life
		d. History of Science or Medicine
		e. Comparative Religions
		f. State Formation & National Identity
		g. Global Interactions
United States	a. Early America	a. Identity & Culture
	b. Modern America - 1800 to the Present	b. History of Science or Medicine
		c. Area Focus; South; West; Midwest
		d. Women, Gender, & Family
		e. Material Culture
		f. Environmental History
		g. African-American History
		h. Global Interactions

Humanities Consortium

Discipline Coordinator

Larson Powell, (816) 235-1316, powelllar@umkc.edu

Humanities Consortium is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

The Humanities Consortium is only available as a co-discipline option, not as a primary discipline.

Application dossiers for the Humanities Consortium must be complete by January 15 for fall admission or September 1 for spring admission. Dossiers should include:

- an application for graduate study
- a brief statement of academic and professional goals (1 page)
- three (3) letters of recommendation from individuals who are academically or professionally qualified to assess the applicant's ability to pursue doctoral work
- transcripts from all post-secondary schools attended
- a well-focused research proposal that demonstrates the applicant's rationale for application to the Humanities Consortium as a co-discipline and the interdisciplinary nature of the plan of study (1 pages)
- a sample of academic writing (20 pages or less)

Qualifying Requirements for Full Admission to the Humanities Consortium

Applicants to the Humanities Consortium as a co-discipline will be expected to hold a master's degree (MA, MFA, MM, or appropriate MS) or equivalent coursework in a Humanities-related field.

- TOEFL minimum composite score of 550 or IELTS score of 6.0 (international applicants). Applicant should be able to demonstrate facility in English appropriate for graduate work
- a GPA of 3.5 or better in previous graduate study

Applicants who do not meet the requirements above may be granted provisional admission for one year by the doctoral faculty in the Humanities Consortium. An applicant admitted provisionally receives notification of deficiencies and of the conditions which must be met within the first year before the doctoral faculty will consider an applicant for full admission. At the end of the first year, the provisional admission will be reviewed.

Applicants are advised that meeting the criteria of the School of Graduate Studies and the Humanities Consortium does not automatically result in admission to the Interdisciplinary Ph.D. program. When making admission decisions, the doctoral faculty of the Humanities Consortium considers other factors as well, particularly the availability of faculty qualified to work in the applicant's area of interest and the availability of library resources and research materials.

Recommendations for admission are made by a sub-committee of the Humanities Consortium doctoral faculty which reviews all applications. Newly admitted students are assigned an interim Humanities Consortium faculty advisor, pending formation of their supervisory committee.

Foreign Language Study

Applicants must demonstrate competency in the foreign language or languages necessary to pursue the stated research plan (or describe a plan of study to achieve this facility). Students may be required, at the discretion of their dissertation committees, to demonstrate or acquire additional language skills to undertake or complete their dissertations.

Suggested Compatible Coordinating Disciplines

Art history (p. 493), Curriculum and instruction (p. 505), English (p. 513), and history (p. 518).

Core Program Requirements

As a means of introducing doctoral students to interdisciplinary work and to the various fields of inquiry in the Arts & Humanities, the Humanities Consortium Program of Study requires 15 hours of dedicated coursework.

The following three courses (9 hours) are required:

HMNTY 5510	Methods in Critical Theory	3
Two additional courses (HMNTY 5500, Introduction to Interdisciplinary Humanities and HMNTY 5520, Research & Creative Methodologies in Humanities are also required)		6
Total Credits		9

Two graduate-level courses (3 credits each, numbered at the 400 level or above) are also required, totaling 6 hours. The two elective courses may be in any discipline except the student's primary discipline, but these courses are subject to approval by the student's primary advisor, the Humanities Consortium Director, and the instructors of the chosen courses. No more than one course that is classified as independent study may be used as an elective course in the Humanities Consortium.

No grade below B in any course will be accepted to apply toward the Ph.D. degree.

Transfer credit will be at the discretion of the dissertation committee in consultation with the Humanities Consortium Coordinator. No more than 6 hours of transfer credit will be allowed.

Retention in the Doctoral Program

Students are expected to maintain a 3.0 GPA during their program of study. A student who falls below a 3.0 GPA, with the concurrence of the doctoral faculty in the Humanities Consortium, may be declared ineligible for further study. A student receiving the grade of F in any graduate course during the program of study will not normally be retained in the program.

Comprehensive Examination Guidelines

The School of Graduate Studies guidelines for the comprehensive examination can be found here.

Before advancing to Ph.D. candidacy, students in the Humanities Consortium will take a comprehensive examination that includes both written and oral components. Each student's dissertation committee will be charged, in accordance with SGS guidelines, with setting the requirements for the comprehensive examination and for evaluating the results of this exam.

Interdisciplinarity

Students in the Humanities Consortium will be expected to devise a program of study that demonstrates a commitment to interdisciplinary work and to develop a dissertation that illustrates interdisciplinary practices.

Mathematics

Discipline Coordinator

Noah Rhee, (816) 235-2854, rheen@umkc.edu

Mathematics faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplineMATHEMATICS)**.**

Mathematics is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Mathematics as a Primary Discipline

To get full admission, an applicant should have

1. Preferably a Master's degree in mathematics/statistics with strong records that include graduate level courses in mathematics/statistics courses offered by an accredited college or university;
2. An overall grade-point averge of at least 3.0 out of 4.0 scale;
3. At least 155 on Quantitative Reasoning in GRE;
4. In the case of foreign students, at least 80 on the internet based TOEFL test.

An applicant may be given a provisional admission if the condition (1) in the above is not met, provided one of the following two conditions is satisfied: a Bachelor's degree in mathematics/statistics from an accredited college or university, or a Bachelor's degree in another subject including evidence of a strong performance in at least three mathematics courses beyond Calculus I, II, and III.

Mathematics as a Co-discipline

To get full admission, an applicant should have a Bachelor's degree in mathematics/statistics from an accredited college or university, or a Bachelor's degree in another subject including evidence of a strong performance in at least three mathematics courses beyond Calculus I, II, and III. An applicant with mathematics as Co-discipline may get a provisional admission if the above conditions are not fully satisfied at the time of application.

Qualifying Requirements for Students with Mathematics as a Coordinating Discipline

A student who has a Master's degree in mathematics or statistics from an accredited university with full admission may be qualified to the interdisciplinary Ph.D. program in the Department of Mathematics and Statistics if s/he has met the qualifying course requirements (if not, s/he has to take the deficient courses to be qualified). See the department website for details and the list of Interdisciplinary Ph.D. qualifying courses.

Suggested Compatible Co-disciplines

Cell biology and biophysics (p. 496), molecular biology and biochemistry (p. 524), computer science, (p. 501) telecommunication and computer networking (p. 543), electrical and computer engineering (p. 510), chemistry (p. 498), curriculum and instruction (p. 505), physics (p. 536), geosciences (p. 517), and engineering (p. 512).

Core Program Requirements

The requirements for the Ph.D. fall into five major categories: coursework, special requirements set by the supervisory committee, interdisciplinary work, comprehensive examination and dissertation.

Mathematics as Primary Discipline

A student can have either mathematics or statistics as the emphasis area when the student declares mathematics as the coordinating unit.

After fully qualified, students must take the doctoral core courses in their area of emphasis, and one additional doctoral core course from the other emphasis area. For the doctoral core courses, see the department website for details. Students may need to take additional graduate elective mathematics or statistics courses deemed necessary by the Interdisciplinary Ph.D. supervisory committee of the student. Transfer credit may be accepted (in accordance with the minimum 21 credit residency requirement set by the School of Graduate Studies). Students must satisfy the co-discipline course work requirement set forth by the co-discipline. The student with mathematics as the primary discipline must pass a comprehensive examination in mathematics or statistics after completing the doctoral core courses and completing any special requirements and interdisciplinary requirements. An oral examination will be given after a student passes a written comprehensive examination. Students must pass the comprehensive examination. Student's dissertation must represent a significant contribution to mathematics.

The student with mathematics as the primary discipline must pass a comprehensive examination in mathematics or statistics after completing the doctoral core courses and completing any special requirements and interdisciplinary requirements. An oral examination will be given after a student passes a written comprehensive examination.

Mathematics as a Co-discipline

The number of hours required in mathematics for a student who chooses mathematics as a co-discipline will be at least 12 graduate credit hours. Up to six of these credit hours may be at the 400-level. After completing the required course work, students must file the form entitled "Department of Mathematics and Statistics Comprehensive Examination Approval Form for Interdisciplinary Ph.D. Students with Mathematics as the Co-discipline" with the Interdisciplinary Ph.D. coordinator of Mathematics.

Molecular Biology and Biochemistry

Discipline Coordinator

Karen Bame, (816) 235-2243, bamek@umkc.edu

Molecular Biology and Biochemistry faculty who are members of the Doctoral Faculty (http://sgs.umkc.edu/faculty/bioscience.asp#DeptandorPrimaryDisciplineMolBiolBiochem)

Molecular Biology and Biochemistry is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

No additional requirements. Due to the sequencing of coursework, new students selecting molecular biology and biochemistry as their primary discipline will normally only be admitted in the fall term.

Qualifying Requirements for Full Admission

Minimum of 16 hours of approved graduate coursework at UMKC toward the Ph.D. program with a grade-point average of at least 3.0 on a 4.0 scale. International students must establish English proficiency.

Suggested Compatible Co-disciplines

Chemistry, cell biology and biophysics, pharmaceutical sciences, pharmacology, oral and craniofacial sciences and physics.

Core Program Requirements

Molecular Biology and Biochemistry as a Primary Discipline

Minimum core requirement is 33 course credit hours and 15 dissertation research credits in molecular biology and biochemistry for a total of 48 post-baccalaureate credit hours, distributed as indicated below:

LS-MBB 5561	General Biochemistry I	3
LS-MBB 5562	General Biochemistry II	3
LS-MBB 5596	Advanced Experimental Molecular Biology I	2

or LS-MBB 5597	Advanced Experimental Molecular Biology II	
LS-MBB 5611	Seminar in Molecular Biology and Biochemistry ((2 x 1 cr. hr.)	2
LS-MBB 5690	Analytical Methods in Molecular Biology and Biochemistry	1-4
or LS-CBB 5690	Analytical Methods in Cell Biology and Biophysics	
BIOLOGY 5501	Proposal Writing	1
7 cr. hr. in discipline or related discipline courses (LS-CBB, LS-MBB, BIOL, PHARM, etc.) 15 cr. hr. LS-MBB 5699 Dissertation Research.		

Related Discipline Courses Required

Ten additional course credit hours in one related discipline or combination of disciplines. Related disciplines are defined as cell biology and biophysics, chemistry, pharmaceutical sciences, pharmacology, oral biology or other. Seminar courses may be part of this component of required courses, up to a maximum of three for the program, as are two additional credits of advanced experimental molecular or cell biology.

Electives

Each student's supervisory committee may require additional courses in any University-approved doctoral discipline as preparation for specific areas of research. These additional requirements may not exceed nine credit hours beyond the 33 credits required for the basic course core. These electives may be taken at any time during enrollment as a graduate student, up to the semester prior to that in which the dissertation defense will occur. No more than seven course credit hours of 5500-level courses, or their equivalent, can be taken at institutions outside UMKC. Remember that 5700-level courses may not be used to satisfy course requirements for the program.

Molecular Biology and Biochemistry as a Co-discipline

Required courses		
LS-MBB 5561	General Biochemistry I	3
LS-MBB 5562	General Biochemistry II	3
LS-MBB 5611	Seminar in Molecular Biology and Biochemistry	1
Additional SBS graduate courses (LS-CBB, LS-MBB or BIOL) for a minimum of 10 cr. hr.		

Other Discipline-Specific Special Requirements

Research

The School of Biological Sciences offers research opportunities in many areas of modern life sciences that address problems of basic life processes at the cellular, subcellular and molecular levels. Graduate studies offered with primary participation of the faculty in the Division of Molecular Biology and Biochemistry are based on the belief that training for research can be best accomplished by having an appropriate breadth of background coursework, combined with a depth of specialization in a particular research area. The faculty have established guidelines that have a minimum of formal requirements so that students have the flexibility to advance at a pace consistent with development of the individual. Diligence, creativity and independent thinking are the qualities desired in the candidate's dissertation work.

Teaching

As part of their graduate training, all Ph.D. students with molecular biology and biochemistry as the primary discipline participate in the teaching program of the School of Biological Sciences. This is an important component of preparation for a career in academia or other institutions and aids in the development of effective communication skills.

Seminars

Students will participate in seminars in which current developments in various areas of life sciences will be discussed and explored. Students also will present seminars on their own work or on work in the current scientific literature. The latter is taken as part of the core of graduate-level courses in the primary or co-disciplines.

Course Restrictions

5700-level courses may not be used to satisfy molecular biology and biochemistry discipline-specific course requirements.

Dissertation

The dissertation abstract and proposal must be submitted to and approved by the supervisory committee prior to beginning the third academic year of study after enrollment in the Ph.D. program.

Retention in Program

For students with this discipline as their primary discipline, no more than one C grade in a core course or two C grades in any course, and no D or F grades, are permitted. A student who receives more than two C grades will be recommended for termination from the doctoral program. A student who receives a D or F grade will be dropped from the program.

The doctoral faculty in molecular biology and biochemistry meets formally at the end of each academic year to discuss and evaluate the progress of all graduate students. Each student's committee also meets with the student at least once a year. After the annual doctoral faculty meeting, all students receive written evaluations of their status and a report is placed in each student's file.

Requirements for Comprehensive Examinations

To become a Ph.D. candidate, the student must pass a comprehensive exam that may be taken on completion of essentially all of the coursework specified in the student's study plan and on satisfactorily fulfilling the requirements for full admission. This must be done before the *beginning* of the third academic year after admission to UMKC with graduate student status, or (for part-time students) immediately after completion of 25 credit hours approved by the discipline-doctoral program at UMKC. This exam will be administered by the student's supervisory committee and will test the student's knowledge of background material, as well as the student's ability to analyze and interpret information and solve problems.

Written Portion

The written examination for students who have molecular biology and biochemistry as their primary discipline consists of an NIH-style grant proposal that the student will prepare. The topic of the research proposal will be determined by the student in consultation with the student's supervisory committee.

Oral Portion

The oral examination also has two aspects: (1) questions covering the grant proposal prepared by the student for the written examination and (2) other related material in the student's area of specialization, including fundamental knowledge of the primary and secondary disciplines.

Music Education

Discipline Coordinator

Lindsey Williams, (816) 235-2354, williamslin@umkc.edu

Music Education faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/conservatory.asp#DeptandorPrimaryDisciplineMusicEducation)**.**

Music Education is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

In addition to the general criteria, applicants selecting music education as a discipline must:

- Have an aggregate minimum undergraduate GPA of 3.0 and graduate GPA of 3.5 on a 4.0 scale.
- Submit a thesis or equivalent evidence of written scholarship.
- Have minimum scores of 143 on the verbal, 138 on the quantitative and 3.0 on the writing portion of the GRE.
- Have an acceptable on-campus interview with doctoral faculty members from this discipline.
- Demonstrate comprehensive musicianship through videotape, performance, classroom teaching, audition or jury.
- Music Education: Minimum 3 years K-12 teaching experience.
- Music Therapy: Minimum of 3 years fulltime musical therapy clinical experience or the equivalent.
- Comprehensive musicianship and/or clinical effectiveness submitted by videotaped or live demonstrations in solo performance, ensemble performance/conducting, classroom teaching, or clinical applications.
- In most cases, students entering the Interdisciplinary Ph.D. program will have earned at least one degree in Music Education and/or Music Therapy.

Alternate Admission Criteria

Applicants may ask to be considered under the following alternate admission criteria:

- Have an undergraduate GPA of 3.0 or a graduate GPA of 3.5 on a 4.0 scale.
- Submit a thesis or equivalent evidence of written scholarship.
- Score 900 or above on the SAT with both the verbal and math scores above 400; or score 21 or above on the ACT.

- Have an acceptable off-campus interview with at least two UMKC music education/therapy doctoral faculty or have two written recommendations from UMKC doctoral faculty.
- Music Education: Minimum 3 years K-12 teaching experience.
- Music Therapy: Minimum of 3 years fulltime musical therapy clinical experience or the equivalent.
- In most cases, students entering the Interdisciplinary Ph.D. program will have earned at least one degree in Music Education and/or Music Therapy.
- Comprehensive musicianship and/or clinical effectiveness submitted by videotaped or live demonstrations in solo performance, ensemble performance/conducting, classroom teaching, or clinical applications.

Qualifying Requirements for Full Admission

- Have a GPA of at least 3.5 in courses to be counted for the degree.
- Have an acceptable interview with members of the student's supervisory committee.
- Have acceptable scores on designated tests covering music history, music theory and music education/therapy.

Suggested Compatible Co-disciplines

Curriculum and instruction is the primary co-discipline. Other potential co-disciplines can be considered by students in consultation with primary discipline coordinator and faculty.

Core Program Requirements

Music education will function only as a primary discipline in the UMKC Interdisciplinary Ph.D. program. Because of this, the following minimum standards apply only to students with music education as their primary discipline.

Research

Two important goals for students with music education as their primary discipline and education as a co-discipline will be to develop research skills and increase their awareness of important research literature. Through introductory courses at the Conservatory, students will become acquainted with research techniques, problems and literature in music education/therapy. Additional research courses in the School of Education and other academic units will provide more tools for structuring research designs and analyzing data. Students in the program will assist their faculty mentors in research while developing a research agenda of their own. The number and nature of research classes placed on each student's program of study will be determined by the background, goals and interests of the student.

Teaching Techniques and Philosophies

While students may have widely divergent career goals, ranging from becoming a district music supervisor in a K-12 program, training undergraduate music therapists or being a college choral conductor, all will be actively involved in the education process in some form. To develop a comprehensive acquaintance with education at all levels, Ph.D. students will enroll in methods classes, will be assigned to observe and teach undergraduate classes at UMKC and will observe and help supervise student teachers in local K-12 schools. Courses in the Conservatory, the School of Education and other academic units will help students efficiently interpret the techniques and philosophies they observe in the classroom, determine their own goals and philosophies, and consequently, become better teachers.

Seminars and Core Courses

While research and teaching are areas of great importance, it is anticipated that most students will need theoretical information to structure their teaching and research endeavors. Courses in theories of learning in general and in music, as well as seminars on the latest teaching techniques and methodologies, will give students a knowledge base to better facilitate their own teaching and to prepare future students to teach. Particular attention will be given to cultivating critical thinking skills in students and nurturing multicultural values.

Program Requirements

It is anticipated that most students selecting music education and education as their disciplines will have completed a master's degree in music education or a related field. Students with backgrounds in music therapy are also encouraged to apply.

While total degree-hour requirements for the Ph.D. will vary depending on each student's career goals, previous experience and training, it is anticipated that for most students, course requirements will include 35 to 45 pre-dissertation hours. If a student has completed a bachelor's or master's degree in some area other than music education/therapy, additional work beyond this approximate range will probably be required. No specific course requirements are designated. Depending on the previous work of the individual and the career direction sought, each program of study, including foreign language requirements, will be considered on an individual basis.

Co-discipline Requirements

Curriculum and instruction is the most common co-discipline for music education in the Interdisciplinary Ph.D. program. It is anticipated there will be many permutations which are a product of this combination. Within the spirit of flexibility, which is the essence of the Interdisciplinary Ph.D. program, students are allowed to enroll in other fields of study such as history, philosophy, psychology, art and non-music education/therapy Conservatory

classes. The primary area of study outside music education and/or music therapy will constitute from 15 to 50 percent of pre-dissertation hours in the planned program of study.

Comprehensive Examination Guidelines

Written and oral comprehensive examinations will be taken during the semester when the student completes all, or (in some special cases) nearly all, of the classes outlined in the planned program of study or the semester immediately following the completion of classes. The exams must be scheduled with the supervisory committee no later than four weeks before they are to occur. The comprehensive exam will include a total of 18-24 hours of written and oral questions. The hours will be divided between the coordinating unit of music education/therapy (not to exceed 60 percent of the total number of hours on the exam) and the co-discipline (15-40 percent of the hours) so as to reflect the student's planned program. Exams in the coordinating area will include 12-18 hours of written questions in the student's major area.

An Interdisciplinary Ph.D. student may elect to substitute written research projects previously approved by the supervisory committee for this portion of the exam. In addition, a two-hour oral exam pertaining to research projects and courses completed by the student, a three-hour written exam relating to general knowledge of music research techniques and procedures, and a one-hour written exam pertaining to music education or music therapy history and philosophy will be required.

Oral and Craniofacial Sciences

Discipline Coordinator

Mary P. Walker, Director of Graduate Research Programs (816) 235-2825, walkermp@umkc.edu

Oral and Craniofacial Sciences faculty who are members of the doctoral faculty. (http://sgs.umkc.edu/faculty/dentistry.asp#DeptandorPrimaryDisciplineOralBiology)

Oral and Craniofacial Sciences is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Overview

In concert with the School of Graduate studies, the Department of Oral and Craniofacial Sciences offers a doctoral program that must include the in-depth study of at least two disciplines. Students in the Oral and Craniofacial Sciences program can choose to participate in any of the department's three areas of research focus:

- ***Biomaterials/Bioengineering of Biological Tissues and Replacements***
  The overall goal of this program is to apply an integrated approach involving innovative computer modeling and organic synthesis, novel biocompatibility evaluation, comprehensive materials characterization, and mechanistic development of improved dental biomaterials. One component of this program is an engineering component that emphasizes micro- and nano-structure/property characterization of natural biomaterials such as bone, dentin, and enamel as a tissue engineering approach to the development of replacement materials.
- ***Mineralized Tissue Biology***
  This program is aimed at determining basic biological mechanisms and the cause and treatment of disease of bone and teeth during development and in the adult. Approaches include the use of basic in vitro methods combined with genomics, proteomics, bioinformatics, and transgenic technology.
- ***Translational and Clinical Research***
  Translational and clinical research involves results from clinical observations translating into basic research and incorporates basic research findings into clinical assessment and practice. The identification, characterization and synthesis of materials for clinical use requires the combined efforts and expertise of clinical scientists, biostatisticians, bioengineers, geneticists, life scientists, chemists, physicists, and computer scientists.

Program

The Interdisciplinary Ph.D. program is composed of a significant supervised research effort along with courses in areas such as dental biomaterials, research design, clinical research methodology, statistics, grantsmanship, biochemistry, proteomics, genomics, histology, and pathology. The primary didactic effort will be in oral and craniofacial sciences (biomaterials/bioengineering of biological tissues and replacements, mineralized tissue biology, or translational/clinical research) and the student will select a secondary area of concentration from other Interdisciplinary Ph.D. disciplines.

Duration

The length of the program is dependent on the academic background and abilities of the applicant and may vary from two to five years. The program culminates with an Interdisciplinary Ph.D. in Oral and Craniofacial sciences degree and the designated co-discipline or co-disciplines.

Objectives

The course requirements for the Interdisciplinary Ph.D. are not predetermined, but rather are formulated by the student in consultation with the Oral and Craniofacial Sciences Director of Graduate Research Programs and the doctoral faculty who will serve on their supervisory committee. The developed program of study will meet the student's individual needs and research interests, satisfy discipline-specific requirements, and assure upon graduation that students are able to:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines
- Use skills of interdisciplinary scholarship and research to integrate multiple perspectives
- Work effectively in a collaborative environment
  Effectively communicate results of their research to diverse audiences
- Use objective assessment for personal and professional improvement and development
- Apply ethical principles to all aspects of their professional life
- Think critically and creatively as a self-directed interdisciplinary researcher
- Develop skills to become good mentors and communicators
- Successfully complete the CITI Research Ethics Tutorial at: https://www.citiprogram.org/default.asp. Upon completion they will print the Certificate of Successful Completion, and turn it in to the Oral and Craniofacial Sciences Administrative Office to be placed in their file

Eligibility

An applicant must meet the minimum general requirements for admission to Interdisciplinary Ph.D. study at UMKC and must satisfy grade point average requirements as stated in the admission requirements section of the Academic Regulations and Information of Doctor of Philosophy Studies at the University of Missouri-Kansas City (http://sgs.umkc.edu/iphd/index.asp). To advance to candidate status, the student must successfully complete written and oral comprehensive examinations relevant to their primary and co-discipline(s).

Discipline-Specific Admission Requirements

In addition to the general minimum requirements for admission to interdisciplinary Ph.D. study, an applicant must hold either (1) a baccalaureate degree or (2) a D.D.S. or equivalent degree. In general, an applicant will be expected to have a minimum cumulative GPA of 3.0 based on a 4.0 scale for all undergraduate work, including dental school (if applicable).

Applicants must also meet the minimum GRE requirements.

GRE	Old Score Scale	New Score Scale
Quantitative	533	145
Verbal	533	155
Analytical Writing	4.0	4.0

All application materials should be submitted prior to March 1 for students wishing to begin their study in the fall semester; however, applications will be accepted throughout the year. Evaluation criteria include the following:

- Transcripts. Analysis of transcripts from all prior institutions is required.
- Letters of recommendation. Three letters of recommendation are required from current or former teachers who are familiar with the applicant's past achievements and research ability.
- Personal statement from applicant. The applicant must submit a letter describing why he or she is interested in pursuing an Interdisciplinary Ph.D. study in oral and craniofacial sciences, how the experience of the program may be used by the candidate in the future, and a list of potential research interests.
- Interviews. Interviews are not required; however, interviews are preferred and will be arranged upon the candidate's request. Successful interviews may enhance the candidate's chance of acceptance.

Suggested Compatible Co-disciplines

Biomedical and Health Informatics (p. 494), Cell biology and biophysics, entrepreneurship and innovation, molecular biology and biochemistry, pharmacology, chemistry, physics, engineering, computer science, electrical and computer engineering, telecommunication and computer networking, curriculum and instruction, public affairs and administration (public health emphasis), and mathematics.

Core Program Requirements

The required minimum core curriculum for students with oral and craniofacial sciences as a discipline will consist of a minimum of nine credit hours in oral and craniofacial sciences. See minimum course requirements below. The student's supervisory committee may require additional courses for an Interdisciplinary Ph.D. program which includes the department of oral and craniofacial sciences as the primary discipline or as a co-discipline. Ph.D. students with oral and craniofacial sciences as their primary unit must either complete these courses at UMKC or must have completed equivalent coursework at approved institutions at the time of their admission to the Interdisciplinary Ph.D. program. Students are referred to other sections of the

current UMKC general catalog for listings of appropriate graduate-level courses. The curriculum requirements also include a minimum of 3 credit hours of ethics training.

In accordance with the general requirements for the Interdisciplinary Ph.D. program, a Ph.D. student must prepare a plan of study in conjunction with his or her dissertation supervisor and supervisory committee during the first year of Ph.D. studies. A student's plan of study must include coursework in oral and craniofacial sciences as well as in at least one other discipline.

Minimum Coursework Requirements

Coursework must satisfy all discipline-specific requirements and may include additional courses as appropriate to the student's research focus. Course selection will be made in conjunction with the Department of Oral and Craniofacial Sciences Director of Graduate Research Programs and the committee chair.
General requirements are listed below:

- The Plan must include coursework from all of the student's disciplines
- No more than 60 percent of the total coursework taken at UMKC and included on the Ph.D. Plan of Study, exclusive of dissertation hours, may be from any one discipline
- Coursework from disciplines other than the ones to which the student has been admitted may be included on the Plan of Study and counted in the total percentage
- No more than 25 percent of the total coursework may be from disciplines not formally participating in the Interdisciplinary Ph.D. Program
- The Plan must include at least 30 didactic hours beyond the baccalaureate degree, exclusive of dissertation research hours, in courses taken at UMKC or in courses taken at another institution which are approved for transfer by the student's Supervisory Committee
- The Plan must include a minimum of 9 credit hours, exclusive of dissertation research hours, in a co-discipline area to which the student has been admitted
- The Plan must include at least 12 hours of dissertation credits

Required Core Curriculum		
BIO-SCI 5751	Elements of the Scientific Method	1-2
BIO-SCI 5752	Research Methods in Oral and Craniofacial Sciences	1-5
RES-ME 5700	Introduction To Research Methodology	2-3
RES-ME 5704	Introduction to Biostatistics	2-3
RES-ME 5706	Dissertation Writing	1
Dissertation		
No less than 12 credits of the following are required:		12
OR-BIO 5699	Dissertation Research	
Applicable Courses		
Examples of additional courses applicable to the program:		
BIO-SCI 5700	Biomaterials Teaching	
BIO-SCI 5706	Growth and Development I	
BIO-SCI 5707	Growth and Development II	
BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology	
BIO-SCI 5739	Biomaterials for the Dental Specialist	
BIO-SCI 5740	Oral Pathology I	
BIO-SCI 5742	Biomaterials for the Restorative and General Dentist	
BIO-SCI 5743	Advanced Seminar in Dental Biomaterials	
BIO-SCI 5747	Research Instrumentation Used in Dental Biomaterials	
BIO-SCI 5750	Special Problems in Dental Biomaterials	
BIO-SCI 5759	Special Problems in Pharmacology	
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	
BIO-SCI 5790	Directed Research In Oral and Craniofacial Sciences	
BIO-SCI 5801	Readings in Immunology	
BIO-SCI 5802	Immunopathology	
BIO-SCI 5805	Molecular Biology of Oral Microflora	
BIO-SCI 5830	Structural Characterization of Dental Biomaterials	
MEDB 5561	Responsible Conduct of Research	

Departmental Research Orientation

Enrollment in BIO-SCI 5751 required

- Interdisciplinary Ph.D. students will select and rotate through a minimum of four laboratories in the Department of Oral and Craniofacial Sciences conducting a short research project in each. At the end of the semester, a report is required reviewing the research project and instrumentation in each laboratory. Students are also required to attend the weekly Department of Oral and Craniofacial Sciences Seminar Series and the monthly Professional Development Seminar Series. Research presentations cover a variety of biological, engineering and psychological disciplines relevant to oral science education and the oral health care profession. Presentations will be by faculty, students, and invited guest lecturers.

Enrollment in BIO-SCI 5752 required

- As the student identifies a research focus for the dissertation project, they will begin reviewing the literature and relevant instrumentation in conjunction with a selected research advisor.

Seminar Series

- Graduate students are expected to attend the weekly Department of Oral and Craniofacial Sciences Seminar Series and the monthly Professional Development Seminar Series
  - Information available from Department of Oral and Craniofacial Sciences website at http://dentistry.umkc.edu/oralbio/oralbiologyseminar.shtml
  - Information for the Professional Development and Craniofacial Sciences Series: http://dentistry.umkc.edu/oralbio/oralbioseminars2.shtml

Thesis and Dissertation Defense Exams

- Graduate students are expected to attend all thesis and dissertation defense exams

Other Discipline-Specific Special Requirements

Dissertation Research

In accordance with general Interdisciplinary Ph.D. program requirements, each student with oral and craniofacial sciences as the primary discipline must submit a dissertation proposal, prepared in consultation with the student's supervisory committee, which describes an interdisciplinary program of original research on a significant problem in oral and craniofacial sciences. The proposal will be reviewed by the student's Ph.D. supervisory committee. The student may be required to revise and resubmit the proposal to the supervisory committee. A copy of the accepted proposal will then be forwarded to the dean of the School of Graduate Studies.

The student must provide evidence that a substantial portion of the dissertation will be submitted for publication to refereed journals. Such proof may be in the form of a manuscript in preparation for submission or a submitted manuscript. The student must submit the complete dissertation, in electronic form, to his or her faculty advisor for review and preliminary approval at least eight weeks before the expected date of graduation.

Appeals

In the event of disputes or special requests concerning a student's Ph.D. program, written appeals or documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be affected at that level, the written appeals process must then progress through the following levels:

1. Doctoral studies committee of the Department of Oral and Craniofacial Sciences.
2. Interdisciplinary Ph.D. Executive Committee.
3. Dean, School of Graduate Studies.

Academic Retention

A 3.0 or better grade-point average is required of all work applicable to the Interdisciplinary Ph.D. program. A Ph.D. student with oral and craniofacial sciences as a discipline is subject to termination from the Interdisciplinary Ph.D. program if: (1) his or her grade-point average falls below 3.0; (2) more than four hours of C (2.0) grades are received; or (3) any grade of D or F is received.

A recommendation for termination from the program will be made by the student's supervisory committee to the Department of Oral and Craniofacial Sciences and forwarded to the Interdisciplinary Ph.D. executive committee and the dean of the School of Graduate Studies.

Comprehensive Examination Guidelines

A comprehensive examination will be administered to all students enrolled in the Interdisciplinary Ph.D. program whose subject emphasis area is oral and craniofacial sciences. The examination includes both written and oral components. Content of the comprehensive examination will be tailored to the student's field of research interest and prepared with input from all members of the student's supervisory committee.

Oral and Craniofacial Sciences as a Co-discipline

- The Plan of Study must include a minimum of 9 approved credit hours, exclusive of dissertation research hours, in the Oral and Craniofacial Sciences co-discipline area
- At least one member of the Department of Oral and Craniofacial Sciences doctoral faculty must serve on the dissertation committee
- The Department of Oral and Craniofacial Sciences Director of Graduate Research Programs will serve as the interim advisor to co-discipline Interdisciplinary Ph.D. students.

Students will select courses applicable to their program from the following list with guidance from the Department of Oral and Craniofacial Sciences Director of Graduate Research Programs.

BIO-SCI 5751	Elements of the Scientific Method	1-2
BIO-SCI 5752	Research Methods in Oral and Craniofacial Sciences	1-5
RES-ME 5700	Introduction To Research Methodology	2-3
RES-ME 5704	Introduction to Biostatistics	2-3
BIO-SCI 5710	Genetics and Biochemistry of Cranial Facial Biology	2
BIO-SCI 5739	Biomaterials for the Dental Specialist	1
BIO-SCI 5742	Biomaterials for the Restorative and General Dentist	2
BIO-SCI 5743	Advanced Seminar in Dental Biomaterials	1-2
BIO-SCI 5760	Physiology of Oral Mineralized Tissues	2
MEDB 5561	Responsible Conduct of Research	3

Pharmaceutical Sciences

Discipline Coordinator
Ashim Mitra, (816) 235-1615, mitraa@umkc.edu

Pharmaceutical Sciences faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/pharmacy.asp#DeptandorPrimaryDisciplinePharmSci)**.**

Pharmaceutical Sciences is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Due to course sequencing, new students will ordinarily be accepted only in the fall term. Applicants must hold a professional degree in pharmacy (Pharm.D. or B.S.) or a baccalaureate degree in a related field such as chemistry, biology or mathematics with an undergraduate GPA of at least 3.0 on a 4.0 scale. Students who hold a master's degree in an appropriate discipline may be admitted on satisfaction of the general requirements of the School of Graduate Studies.

Qualifying Requirements for Full Admission

Admission depends on agreement of a member of the doctoral faculty in the discipline to serve as research advisor. All students are admitted provisionally except those holding an M.S. in pharmaceutical sciences. Full admission will be granted on satisfactory completion of 16 credit hours of courses recommended by the provisional pharmaceutical sciences faculty advisor during the first calendar year on campus. Students seeking admission to the pharmaceutical sciences discipline of the Interdisciplinary Ph.D. program should have completed coursework in calculus, organic chemistry, physical chemistry, biochemistry, microbiology, human anatomy and physiology where appropriate to their interests. Graduate students will be given a placement examination administered by the primary discipline faculty in order to assess undergraduate preparation for graduate-level study. Deficiencies existing on admission must be discussed with the interim faculty advisor during the first two semesters of graduate work. Course equivalency is determined by the pharmaceutical-science discipline faculty on a case-by-case basis. Students are required to pass the discipline placement exams before appearing for the comprehensive exams administered by the supervisory committee.

On admission, all students are assigned interim faculty advisors as stated in the letter of admission. Graduate students must adhere to the guidelines as stated in the School of Pharmacy Graduate Programs section of this catalog pertaining to selection and changes of faculty advisors.

Suggested Compatible Co-disciplines

Biomedical and Health Informatics (p. 494), c (p. 498)hemistry, cell biology and biophysics, molecular biology and biochemistry, mathematics (p. 523), and oral and craniofacial sciences (p. 528), pharmacology.

Core Program Requirements

Pharmaceutical Sciences as the Primary Discipline

The minimum graduate credit hours generally required for the Ph.D. degree with pharmaceutical sciences as a discipline are 40 in didactic coursework, credit for presentation of three seminars and 20 dissertation research credits. Specific courses in pharmaceutical science will be agreed upon in consultation with the primary discipline supervisory faculty. Students will take a minimum of five courses offered by the primary discipline unit. Attendance at all seminars in the primary discipline is required, except when there is a scheduling conflict or an excuse approved by the seminar chair.

Three credit hours of statistics, plus 15 credit hours in pharmaceutical science coursework and 22 credit hours in one or a combination of related co-disciplines are all required.

Other electives. A supervisory committee may require that additional coursework be taken to prepare the student in a specific research area.

Pharmaceutical Sciences as Co-discipline

The pharmaceutical sciences doctoral faculty member(s) of the supervisory committee will confer regarding the student's program of study and recommend appropriate courses offered by the co-discipline. Generally, courses in the co-discipline will constitute successful completion of at least 20 percent of the approved course of study. All students choosing pharmaceutical sciences as a co-discipline must complete at least three graduate-level courses in pharmaceutical sciences compatible with research objectives recommended by the supervisory committee.

For provisionally-admitted co-discipline students in Pharmaceutical Sciences in fulfillment of their full-admission requirements must take at least 9 credits of the regular recommended courses:

Select three of the following:		9
PHARM 5521	Advanced Organic Medicinal Chemistry	
PHARM 5527	Analytical Methods	
PHARM 5531	Physical Pharmacy Equilibria	
PHARM 5533	Advanced Pharmacokinetics and Biopharmaceutics	
PHARM 5550	Stability of Pharmaceuticals	
PHARM 5588	Techniques in Biotechnology	
PHARM 5631	Pharmaceutical Formulations I	
PHARM 5634	Protein and Nucleic Acid Drug Delivery	
PHARM 5690A - Foundations of Pharmaceutical Sciences		
Total Credits		9

and pass with a "B" or better.

Other Discipline-Specific Special Requirements

Requirements for Retention

Students who receive two C grades or one D grade in didactic courses are subject to dismissal from the program. A student who receives one F grade will not be retained. Students will not be allowed to attain more than one C grade in a co-discipline course.

Appeals

Appeals by graduate students on matters pertaining to research or studies in the discipline will be routed initially to the supervisory committee and managed according to the appropriate procedures established for the Division of Pharmaceutical Sciences, School of Pharmacy.

Comprehensive Examination Guidelines

Ph.D. students who choose pharmaceutical sciences as the primary discipline must successfully pass a qualifying examination given by the division prior to applying to take their written and oral comprehensive examinations. Once the qualifying examination has been successfully completed, the comprehensive examinations will be given after the student has completed the majority of didactic coursework requirements but not later than the end of the third year. The examinations will be administered by the student's supervisory committee. The comprehensive examinations (written and oral) must be passed before a doctoral student can be admitted to candidacy. Before the comprehensive examination can be taken, the student must submit and have accepted a research proposal in a form satisfactory to the supervisory committee. The comprehensive examination will be administered by the student's supervisory committee and will consist of both written and oral components.

Pharmacology

Discipline Coordinator

Dr. Anil Kumar, (816) 235-1792, kumaran@umkc.edu

Pharmacology faculty who are members of the Doctoral Faculty.

Pharmacology is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Due to course sequencing, new students will ordinarily be accepted only in the fall term. Applicants must hold a professional degree in pharmacy (Pharm.D. or B.S.) or a baccalaureate degree in biological, chemical science or health science. In special situations, baccalaureate degrees in other disciplines will be evaluated for possible admission. For graduates of foreign schools, the applicant must have completed a course of study at least the equivalent of a U.S. baccalaureate degree.

Prospective students must have an aggregate minimum grade-point average of 3.0 on a 4.0 scale for all college work taken prior to the bachelor's degree, or an aggregate GPA of at least 3.5 on all post-baccalaureate work to date (minimum of nine hours). For graduates of foreign schools, the applicant must have above-average grades in previous college study.

Prospective students must have a minimum aggregate GRE score of 295 for verbal and quantitative and 3.5 out of 6.0 for analytical writing.

For graduates of foreign schools, the applicant must have a minimum score of 550 on written or 213 computer-based or 80 on Internet-based TOEFL exam or alternatively, a minimum score of 6 on the IELTS.

Qualifying Requirements for Full Admission

Students seeking admission to the pharmacology discipline of the Interdisciplinary Ph.D. program should have completed coursework in organic chemistry I and II, biochemistry I and II, calculus, anatomy, microbiology, physiology I and II and a biostatistics course. Deficiencies existing on admission must be satisfied during the first two semesters of graduate work. In addition, during the first year of graduate study, provisional Ph.D. students with pharmacology as a discipline must complete the following courses with a grade of B or better:

PHARM 5509	Clinical Toxicology	3
PHARM 5519	Pharmacology I [1]	4
PHARM 5520	Pharmacology II [1]	5
PHARM 5615	Methods In Pharmacology And Toxicology [1]	3
Total Credits		15

[1] Or an equivalent course. Equivalency is determined by the pharmacology discipline faculty on a case-by-case basis.

Suggested Compatible Co-disciplines

Pharmaceutical sciences, cell biology and biophysics, chemistry, molecular biology and biochemistry or other related fields in health sciences that offer Ph.D. degrees.

Core Program Requirements

Pharmacology as Primary Discipline

Specific course requirements will be determined by the student in consultation with the research advisor and the supervisory committee. Generally, 65 post-baccalaureate credit hours, including 20 hours of research and dissertation and 45 hours of coursework, are required for the Ph.D. degree. No more than 27 credit hours (60 percent) can be obtained from a single discipline (preferably in pharmacology). The remaining 18 credit hours (40 percent) can be obtained from one or more participating disciplines. No more than 25 percent of the coursework (~11 credits) from non-participating disciplines will be counted toward the Ph.D. degree. More co-disciplines will be required. As many as 15 credits may be allowed for courses taken in a master's degree program at another institution with the concurrence of the student's supervisory committee.

Pharmacology Requirements		
PHARM 5519	Pharmacology I	4
PHARM 5520	Pharmacology II	5
PHARM 5509	Clinical Toxicology	3

PHARM 5615	Methods In Pharmacology And Toxicology	3
PHARM 5580C	Seminar in Pharmacology/Toxicology	3
Additional Requirements		
EDUC-R&P 5505	Statistical Methods I	3
Co-Discipline courses [1]		7-11
Advanced courses (5500-level or above) [2]		3-7
Total		35

1 7-11 credit hours in one or a combination co-disciplines, which may include Cell Biology and Biophysics, Chemistry, Molecular Biology and Biochemistry, Oral Biology, Pharmaceutical Sciences or other pertinent areas as approved by the supervisory committee.

2 3-7 credit hours of advanced courses (5500 level or above) pharmacology or related areas as approved by the supervisory committee.

Other Electives

A supervisory committee may require that additional coursework be taken to prepare the student in a specific research area. This additional requirement may not exceed six credit hours, may be taken in any approved doctoral discipline and must be completed prior to the semester in which the dissertation defense occurs.

Pharmacology as Co-discipline

Students who apply for Pharmacology as a co-discipline should have completed coursework equivalent to LS-PHYS 399 and LS-PHYS 400 and LS-BIOC 365 and LS-BIOC 366, which are offered at UMKC. Deficiencies existing on admission must be satisfied during the first two semesters of graduate work. When pharmacology is chosen as the co-discipline, the minimum course requirements are completion of PHARM 5519, PHARM 5520 and one credit hour of PHARM 5580C, plus sufficient courses constituting the required percentage of their program of study, as approved by the supervisory committee. No C grade in any core course will be permitted. Students who receive more than one C grade on elective courses will be dropped from pharmacology as a co-discipline. Students must take and successfully pass a written and oral comprehensive examination administered by the supervisory committee members from the Division of Pharmacology. Co-discipline students should take the pharmacology comprehensive examination no later than one semester after completing their required co-discipline coursework.

Other Discipline-Specific Special Requirements

Additional Coursework

Students will be expected to complete at least three credit hours of statistics. Students are expected to take sufficient computer courses or training as to be proficient in word processing and the use of spread sheets and data bases.

Retention in Program

Graduate students are required to maintain a cumulative grade-point average of B (3.0 on a 4.0 scale). In any semester when the cumulative GPA falls below 3.0, the graduate student will automatically be placed on probation. The student is allowed one semester to return to good academic standing (cumulative GPA of 3.0). A graduate student should not let the cumulative GPA fall below 3.0 in two semesters throughout the entire program. Students who receive a grade of C in six credit hours or more, or who receive a grade lower than C, or one no-credit grade will be dismissed from the graduate school. Any C grade in courses offered by the pharmacology division should be repeated no more than once.

Appeals

For special requests or disputes concerning a student's Ph.D. program, written appeals with documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be obtained at the supervisory committee level, the written appeals process must then progress through the following levels:

1. Division Chair, pharmacology.
2. Graduate Programs Committee, School of Pharmacy.
3. Interdisciplinary Ph.D. Executive Committee.
4. Dean, School of Graduate Studies.

Comprehensive Examination Guidelines

The graduate school requires that a student demonstrate adequate intellectual mastery of the field of specialization and of appropriate co-discipline fields by passing a comprehensive doctoral qualifying examination before being admitted into candidacy for the Ph.D. degree. To satisfy this requirement the student must pass two parts of the comprehensive examination given by the supervisory committee within 6 months after full admission to the graduate study at UMKC.

The comprehensive examination must be taken before the beginning of the student's third year after admission to full-time graduate study at UMKC. The comprehensive examination consists of both written and oral components. The format of the comprehensive examination consists of the writing and

oral defense of a research proposal in the style of an NIH grant. This topic of the proposal is in an area distinct from the student's intended dissertation project and approved by the committee in advance of the examination.

Written Examination

The written examination will consist of a National Institutes of Health (NIH) grant proposal including Specific Aims, Methods, and Research Design sections; budget pages are unnecessary. The content will integrate fundamental knowledge from both the primary discipline and co-disciplines. The written proposal must be submitted to the supervisory committee at least two weeks in advance of the oral portion of the examination.

Oral Examination

The oral examination shall consist of the student's presentation of their grant to the supervisory committee in order that the committee can evaluate the student's critical thought process and the student's ability to develop and defend an original research proposal. The oral examination includes (1) questions covering the grant proposal prepared by the student for the written examination and (2) other related material in the student's area of specialization, including fundamental knowledge of the primary discipline and co-discipline(s).

On satisfactory completion of the written and oral portions of the comprehensive examination, the student becomes a candidate for the Ph.D. In the event a student does not pass the examination, one additional attempt may be made at a date no sooner than 12 weeks, and within one year, of the original attempt. A student who fails either the written or the oral examination a second time will be automatically dropped from the program.

A student must pass the doctoral comprehensive examination and advance to Ph.D. candidacy within four years from the beginning of doctoral coursework (within three years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of four years will be allowed for completion of degree requirements (three years for students with a master's degree). Failure to complete the work within the periods specified will necessitate re-evaluation of the entire program and may result in a notice of termination.

Physics

Discipline Coordinator

Anthony Caruso, (816) 235-2505, carusoan@umkc.edu

Physics faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplinePHYSICS)**.**

Physics is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

For admission to the program, an applicant must meet both the Interdisciplinary Ph.D. and specific physics admission requirements. The doctoral studies committee of the Department of Physics will review applications and make admission recommendations to the Interdisciplinary Ph.D. Executive Committee. The basic criterion for admission is the likelihood that an applicant will be successful in the Interdisciplinary Ph.D. program, particularly in the research component of the program. All applicants must satisfy the doctoral studies committee that they meet this criterion through such evidence as transcripts, letters of recommendation, statements of purpose, GRE scores (general and subject), performance on the department written examination, etc. Furthermore, a member of the doctoral faculty must be willing to accept the applicant as a research student. International students are required to have a TOEFL score of at least 550 (213 CBT) for admission and 575 (230 CBT) to be eligible for a teaching assistantship.

Qualifying Requirements for Full Admission

In addition to the above requirements, applicants must meet the following minimum requirements for the appropriate category listed below to be considered for full admission with physics as a discipline. The doctoral studies committee may recommend provisional admission for those applicants who fail to meet these requirements.

Applicants for admission to the Interdisciplinary Ph.D. program electing physics as their primary discipline must have a bachelor's or master's degree in physics or the equivalent. Those applicants holding only a bachelor's degree will be expected to provide exceptionally strong evidence of their academic ability and research capability in physics.

Applicants for admission to the Interdisciplinary Ph.D. program electing physics as their co-discipline must hold at least a bachelor's degree in a compatible field. These applicants must have successfully completed coursework in physics beyond a first (general or engineering physics) introductory course and must have mathematical background sufficient for advanced coursework in physics.

Suggested Compatible Co-disciplines

Computer science, mathematics, chemistry, geosciences, electrical and computer engineering, telecommunication and computer networking, curriculum and instruction, and engineering

Core Program Requirements

The credit hour requirement for Ph.D. students with physics as a discipline will depend on the student's entering status and individual program.

Physics as a Primary Discipline

PHYSICS 5500 & PHYSICS 5501	Methods Of Mathematical Physics I and Methods Of Mathematical Physics II	6
PHYSICS 5510 & PHYSICS 5511	Theoretical Mechanics I and Theoretical Mechanics II	6
PHYSICS 5520 & PHYSICS 5521	Electromagnetic Theory And Applications I and Electromagnetic Theory And Applications II	6
PHYSICS 5530 & PHYSICS 5531	Quantum Mechanics I and Quantum Mechanics II	6
PHYSICS 5540	Statistical Physics I	3
PHYSICS 5550	Atomic And Molecular Structure	3

Students with physics as their primary discipline must either complete these courses at UMKC or must have already completed equivalent coursework at approved institutions at the time of their admission to the Interdisciplinary Ph.D. program at UMKC.

Physics as a Co-discipline

Students are required to complete a minimum of three courses (9 credit hours) at the 300-level or above, from classes offered by the Department of Physics. At least three of these credit hours must be at the '5500+ level'. Labs, special topics and research courses do not satisfy any of the above requirements. Students who receive a grade of B- or less in two or more courses used to satisfy these requirements will be disqualified from using Physics as their co-discipline.Other Discipline-Specific Special Requirements

Retention in Program

Ph.D. students with physics as their primary discipline must maintain a 3.25 grade-point average. Students with physics as a co-discipline must maintain a 3.0 GPA in physics courses. A student's failure to maintain the minimum GPA will result in a probationary status for the following semester. A failure to remove the GPA deficiency during the probationary semester will then result in the student's dismissal from the Interdisciplinary Ph.D. program.

Appeals

Exceptions to any of the discipline-specific regulations must be approved by the student's supervisory committee and by the physics doctoral studies committee. In the event of disputes or special requests concerning a student's Ph.D. program, written appeals and/or documentation must first be submitted to the student's supervisory committee. If a resolution of the problem cannot be affected at that level, the written appeals process must then progress through the following levels: (1) Doctoral studies committee of the Physics Department; (2) Interdisciplinary Ph.D. Executive Committee; (3) Dean of the School of Graduate Studies.

Interdisciplinary Ph.D. Examination Guidelines

Physics as Primary Unit

Departmental Written Examination (a.k.a. M.S. Comprehensive Exam, Ph.D. Qualifying Exam)

During January of each year, the Department of Physics and Astronomy will administer a written, M.S. Comprehensive/Ph.D. Qualifying examination of all M.S.-level physics students and Interdisciplinary Ph.D. students with physics as their primary discipline. The two-part examination will be given during two sessions (morning and afternoon) of four hours each on the first Saturday after the start of the Spring Semester. Each part of the examination will contain approximately eight questions at varying levels of difficulty (introductory to advanced undergraduate). ThefA following subject areas will be addressed in the given order by the two examination sessions:

1. Mechanics and Electromagnetism.
2. Quantum Mechanics and Thermodynamics.

Students may pass the written examination at the following ascending levels of achievement:

1. "M.S. Comprehensive" - necessary for the M.S. degree.
2. "Ph.D. Qualifying" - necessary for invitation to take the comprehensive examination in fulfillment of the Interdisciplinary Ph.D. program requirements.

Students need only pass the written examination once at any given achievement level. But, all graduate students must attempt the exam every year until they pass it at the appropriate level, unless they are granted an exception via a petition to the physics and astronomy faculty.

A maximum of two attempts at each level (M.S. Comprehensive, Ph.D. Qualifying) will be permitted, and any student who does not attempt the examination when required to do so will be deemed to have failed the examination on that attempt, unless they have been given prior permission to delay taking the exam. Students who are required to take this examination are encouraged to consult with the Department of Physics and Astronomy Graduate Advisor (http://cas.umkc.edu/physics/department/contacts.shtml) for detailed information concerning procedures and regulations for the examination.

Ph.D. Comprehensive Exam

Ph.D. seeking students who have passed the Departmental Written Exam at the Ph.D. qualifying level must pass a Ph.D. Comprehensive Exam to advance to Ph.D. Candidacy. The Ph.D. Comprehensive Exam consists of a proposal of the Ph.D. research topic written in the format of a National Science Foundation proposal narrative with an oral presentation to the student's five-person Ph.D. committee. This exam should be completed within 12 months of completing the coursework and qualifying exam degree requirements. The exact timing and topic of this written and oral comprehensive exam will be determined by the student and their supervisory committee.

Defense of Ph.D. Dissertation

The dissertation defense administered by the student's supervisory committee can be taken only after the student has passed their Ph.D. comprehensive exam. The defense may be oral, written, or both and it may include the student's thesis or dissertation proposal and associated background material.

Physics as an Interdisciplinary Ph.D. Co-discipline

There are no formal qualifying or comprehensive examination requirements for students whose co-discipline department is Physics & Astronomy.

Political Science

Discipline Coordinator

Max J. Skidmore, (816) 235-2535, skidmorem@umkc.edu

Political Science faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplinePOLITICALSCIENCE)**.**

Note: The political science discipline is accepting applications for the co-discipline only.

Political Science is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Political Science only accepts students as a co-discipline in the Interdisciplinary Ph.D. program.

Applicants who designate political science as a co-discipline must have earned at least a 3.0 GPA on a 4.0 scale in 12 or more hours in political science or closely related courses or otherwise demonstrate sufficient background in the discipline. Applicants must also submit samples of written work, including a one- or two-page preliminary proposal for an interdisciplinary plan of study and fulfill other requirements for full admission as determined by the political science doctoral faculty.

The political science doctoral faculty will recommend to the dean of the School of Graduate Studies whether or not an applicant should be admitted. It should be understood that a student who satisfies the criteria of the School of Graduate Studies and the requirements of the Department of Political Science may or may not be granted full admission to the Ph.D. program. Availability of faculty and resources will be among the factors determining admission.

Qualifying Requirements for Full Admission

Applicants who designate political science as their coordinating-unit discipline and lack an M.A. in political science or a related field may be admitted provisionally pending completion of an M.A. in political science at UMKC. Applicants who have an M.A. in another field but lack adequate preparation in political science may be admitted provisionally pending completion of designated undergraduate courses in the discipline. For full admission, applicants must also present a master's thesis or its equivalent in graduate-level written work and demonstrate acceptable research skills.

Students who designate political science as a co-discipline but lack adequate preparation in political science may be admitted provisionally, pending completion of designated undergraduate courses in the discipline.

Suggested Compatible Co-disciplines

Economics, history, public affairs and administration, and educational leadership, policy and foundations.

Core Program Requirements

Students with political science as their primary discipline must take at least 12 hours in political science after the M.A., other than the dissertation. They also must take at least 12 hours in their co-discipline(s). If a co-discipline requires more than 12 hours, its requirement takes precedence. In general, students must take whatever specific courses are deemed necessary by their committees.

The amount of work required for the Ph.D. depends on the student's level of preparation. A student entering the Ph.D. program without an M.A. in political science may expect to do significantly more work than that required of a student with such a degree in hand.

Students with political science as their co-discipline must take at least 12 hours in political science as designated by their committees.

Requirements for Comprehensive Examinations

These examinations are given twice a year. Further information is available from the department.

Public Affairs and Administration

Discipline Coordinator

Nick Peroff, (816) 235-2341, peroffn@umkc.edu

Public Affairs and Administration faculty who are members of the doctoral faculty (http://cat-edit.umkc.edu/%7E/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=54666)**.**

Note: The public affairs and administration discipline is currently accepting applications for the co-discipline only.

Public Affairs and Administration is a discipline in the Interdisciplinary Ph.D. Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

The doctoral faculty committee in this discipline will consider applications for admission throughout the academic year. To have their credentials included in the review process, applicants should submit GRE scores and all other necessary supporting documentation.

The public affairs and administration (PAA) discipline in the Interdisciplinary Ph.D. program is designed to prepare students for research careers in universities, public and nonprofit agencies, or for other roles in which research training is needed. Successful applicants must show evidence of a strong interest in and ability to successfully engage in research, and when appropriate, exhibit promise as skillful teachers. The PAA doctoral faculty supports the development of strong research capacities and requires all Ph.D. students to complete an empirical study for the dissertation. The faculty expects all Ph.D. students to be competent in quantitative research; however, the faculty does not regard quantitative analyses and advanced statistical techniques as the only acceptable form of research.

Applicants are expected to submit scores for the verbal and quantitative portions of the Graduate Record Examination (GRE). Applicants must also submit official transcripts of coursework from all colleges and universities attended. No specific grade-point averages (GPA) are required. Admission is based on an applicant's overall record of academic achievement and the doctoral faculty's judgment of the applicant's likelihood of successfully completing the Ph.D. We expect that those admitted will have scored well on the GRE and have high GPAs.

Applicants should pay particular attention to the narrative statement that accompanies their application. The PAA doctoral faculty gives substantial weight to this statement. It should provide a clear description of the applicant's intellectual interests, how those interests evolved and should describe the research direction(s) that the applicant intends to pursue. A good statement also discusses the fit between the applicant's interests and the resources available at UMKC (for example, it might identify faculty with whom the applicant hopes to work). Narrative statements need not be limited to one page. Applicants should provide a writing sample (such as a master's thesis or a paper from a graduate seminar) that illustrates writing skills and a potential for scholarly work. Applicants are also encouraged to seek letters of recommendation from people who can address their potential for engaging in scholarly research.

The PAA doctoral faculty seeks to admit only students whose research interests fit the interests and capabilities of the doctoral faculty. We admit only students for whom a member of the doctoral faculty has agreed to serve as interim advisor, and after the student's plan of study is completed, that faculty member should also be willing to serve on the student's Interdisciplinary Ph.D. supervisory committee. This commitment from a member of the PAA doctoral faculty applies to all applicants seeking PAA as a co-discipline. We strongly recommend that applicants communicate with PAA doctoral faculty about their interests and attempt to secure commitments from faculty to serve as PAA co-discipline advisor or supervisory committee member. Since applicants are reviewed beginning in mid-March, applicants should contact faculty by e-mail, telephone or in person before that time.

Suggested Compatible Co-disciplines

Entrepreneurship and innovation, educational leadership, policy and foundations, curriculum and instruction, economics, history, political science.

Core Program Requirements

For those students with PAA as the co-discipline, the core requirements are:

Core Requirements		
Select four of the following:		16
PUB-ADM 5525	Financial Accountability And Policy Development	
PUB-ADM 5526	The Politics Of Administration	
PUB-ADM 5530	Capstone Seminar In Public Administration	
PUB-ADM 5544	Public Policy Evaluation and Analysis	
PUB-ADM 5548	Leadership For Public Service	
Additional Course Requirement		
PUB-ADM 5510	Research Methods In Public Administration	3

Typically co-discipline students are expected to complete the above listed courses, plus two electives from the public administration curriculum. Any of the above courses, except PUB-ADM 5510, may be waived if a student has had substantially equivalent courses.

Requirements for Comprehensive Examinations

The comprehensive examination for each PAA co-discipline student is developed, administered and evaluated by the student's co-discipline faculty advisor and supervisory committee.

Religious Studies

Discipline Coordinator

Gary L. Ebersole, (816) 235-5704, ebersoleg@umkc.edu

Religious Studies faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplineRELIGIOUSSTUDIES)**.**

The Religious Studies discipline is not currently accepting applications.

Religious Studies (http://cas.umkc.edu/Religious_Studies) is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

Generally, students who select religious studies as a discipline must begin their work during the fall semester. Applications received by **February 1** will be eligible for fellowship and scholarship consideration. Applications received after that date will be considered on a rolling basis. Except in very special situations, applications that are incomplete as of April 1 will not be considered until the following year.

In addition to the general admission criteria required of all applicants, those who choose religious studies as their primary discipline must:

1. Possess a master's degree in religious studies or theology, or a master's degree in any of the disciplines of the humanities or social sciences (under certain conditions, a master of divinity degree is acceptable).
2. Have earned a grade-point average of 3.5 in graduate courses.

Students who choose religious studies as a co-discipline must meet the criteria for admission specified by the School of Graduate Studies and should have some academic experience in religious studies or career experience related to religion.
All applicants must submit:

1. One or more samples of written work.
2. A brief statement of academic and professional goals.
3. A one- or two-page proposal outlining an interdisciplinary plan of study that tentatively specifies a dissertation topic or area of specialization.

Applicants are advised that meeting the criteria of the School of Graduate Studies and the discipline does not automatically result in admission to the Interdisciplinary Ph.D. program. When making recommendations to the School of Graduate Studies, the discipline's faculty steering committee considers other factors as well, particularly the availability of faculty qualified to work in the applicant's area of interest and the existence locally of necessary archival and library facilities.

Provisional Admission

Applicants who do not meet the requirements specified above may be recommended for provisional admission by the religious studies faculty. An applicant admitted provisionally will receive notification of deficiencies and of the conditions which must be met before full admission will be granted.

Suggested Compatible Co-disciplines

Curriculum and instruction, English, history, art history, and political science.

Core Program Requirements

The total number of courses and credits on the plan of study will vary depending on the student's degree of preparation prior to admission. All students are urged to take coursework in comparative studies of religion, as well as in cognate fields.

The core program requirement for a student whose primary discipline is religious studies includes a minimum of 21 hours of coursework in religious studies, including the five core courses listed below, plus coursework in the student's co-discipline(s) [not to exceed 60 percent of the total coursework in Religious Studies on the plan of study], and at least 12 dissertation credits.

Core Courses		
RELIG-ST 5510	Religions Of The World	3
RELIG-ST 5584RS	Sacred Narratives And Texts	3
RELIG-ST 5586RS	Methodological Approaches To The Study Of Religion	3
RELIG-ST 5587	Contemporary Approaches to the Study of Religion	3
RELIG-ST 5680RS	Doctoral Colloquium	3

The discipline's core requirement for a student whose co-discipline is religious studies includes four of the five courses listed above, plus other courses recommended by the religious studies member(s) of the student's supervisory committee.

Students who have taken any of the above required 5500-level core courses prior to admission may substitute other courses approved by their supervisory committee to satisfy the core course requirement. Graduate courses offered by other area institutions that have been approved by the student's supervisory committee may also be used to fulfill the core course requirements in religious studies.

Other Discipline-Specific Special Requirements

Foreign Language Requirement

All students with religious studies as either primary or co-discipline and whose dissertation requires work in foreign language sources must demonstrate the requisite language competency through a special examination approved by the student's supervisory committee or an alternative demonstration of competency. In addition, all Ph.D. students must demonstrate a reading ability in either French or German.

Requirements for Retention

A doctoral student with religious studies as a discipline must maintain a 3.0 (B) grade-point average in each semester of coursework taken. A student whose term GPA falls below 3.0, or whose work is deemed unsatisfactory by his or her supervisory committee, may be placed on probation for one semester. A person receiving an F grade in a class normally will not be retained in the doctoral program.

Requirements for Comprehensive Examinations

The student with religious studies as his or her primary discipline must take three comprehensive examinations in religious studies containing both a written and an oral component, plus an examination set by the co-discipline. The three religious studies examinations are: history and methods of the study of religion, comparative studies of religion, and special area. A student's special area may be defined by religious tradition (e.g., Christianity, Judaism, Buddhism) or by geographical area (e.g., American religious history, religions of Africa, Chinese religions). The content of the comprehensive examinations will be determined by the student's supervisory committee and will vary somewhat according to the religious studies component of the student's plan of study. Students will be provided with the requirements for the comprehensive examinations at the time of admission to the Ph.D. program. Students who have religious studies as the co-discipline will take two comprehensive examinations: History and Methods of the Study of Religion and Comparative Studies of Religion. Complete information on comprehensive exams, including previous exam questions, may be found on the Religious Studies web site.

Interdisciplinarity

Religious studies is an interdisciplinary, cross-cultural and comparative field of study. All students are expected to take coursework in a variety of traditional disciplines and to integrate the knowledge and methodological approaches used in these disciplines in their own research and writing during their graduate career and in the dissertation.

Social Science Consortium

Discipline Coordinator

Doug Bowles, (816) 235-1394, bowlesdh@umkc.edu

Social Science faculty who are members of the doctoral faculty. (http://sgs.umkc.edu/faculty/artandhistory.asp#DeptandorPrimaryDisciplineSOCIALSCIENCES)

Social Science Consortium is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

The Social Science Consortium (SSC) is only available as a co-discipline option, not as a coordinating-unit discipline, and has no discipline-specific admission requirements. Recommendations for admission are made by a designated sub-committee of SSC doctoral faculty which reviews all applications. Newly admitted students are assigned an interim SSC faculty advisor, pending formation of their supervisory committee.

Suggested Compatible Primary Disciplines

Curriculum and instruction, economics, geosciences (p. 517) (with a geography focus), history, political science, public affairs and administration, and educational leadership, policy and foundations. (p. 509)

Core Program Requirements

The Social Science Consortium Program of Study requires 15 hours of dedicated coursework.

Required Courses		
SOC-SCI 5610	Philosophy Of Social Science	3
SOC-SCI 5621	Consensus Social Theory	3
SOC-SCI 5630	Seminar in Research Methodology	3
Select one of the following in critical interdisciplinary social theory:		3
SOC-SCI 5622	Pragmatism & Evolutionary Social Theory	
SOC-SCI 5690A	Special Topics (Marxian Social Theory)	
SOC-SCI 5690B	Special Topics (Interpretive Social Theory)	
SOC-SCI 5690C	Special Topics (Critical Realism)	
Total Credits		12

The final course (3 hours) is elective, but must be approved by the student's SSC program advisor. Disciplinary graduate-level courses are, in general, eligible as electives.

The 3 hour elective can also be satisfied by taking an additional critical theory course (see listing above), or with 3 hours of Directed Readings (SOC-SCI 5690, or a disciplinary equivalent), subject to the advisor's approval.

Sequencing is a very important consideration in the program of study listed above, complicated by the constraint that most courses fulfilling the program are offered only in either fall or spring semesters It is highly recommended that students with the SSC as their co-discipline take SOC-SCI 5610(offered fall semesters only) as early as possible, preferably in the fall semester of the first year, followed by SOC-SCI 5621(offered winter semesters only), and then by the preferred critical theory course(s).

SOC-SCI 5630 is designed to assist students with preparation of a defensible dissertation proposal, providing interdisciplinary integration of the SSC program of study with the student's primary discipline. It is intended to be taken as the conclusion of both primary discipline and SSC program coursework.

Requirements for Comprehensive Examinations

In accordance with the School of Graduate Studies guidelines, comprehensive exams are administered on an individual basis by the members of each student's dissertation committee. Committees are required to have at least one member drawn from the co-discipline. SSC faculty representatives on each student's committee participate in administration of the comprehensive exam.

Telecommunication and Computer Networking

Discipline Coordinator

Deep Medhi, (816) 235-**2006**, dmedhi@umkc.edu

Telecommunication and Computer Networking faculty who are members of the doctoral faculty (http://sgs.umkc.edu/faculty/sce.asp#DeptandorPrimaryDisciplineTelecomNetworking)**.**

Telecommunication and Computer Networking is a discipline in the Interdisciplinary Ph.D. (p. 484) Program administered by the School of Graduate Studies.

Note: The discipline-specific requirements listed here are *in addition* to the requirements listed in Interdisciplinary Ph.D. Application Procedure and Minimum Criteria for Admission and Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.

Discipline-Specific Admission Requirements

A student who meets the minimum discipline requirements stated below will be considered for regular admission to the Ph.D. program. A student who does not meet some of the requirements but shows high potential for advanced-level work may be considered for provisional admission. Admission also depends on factors such as number of seats available, resources available in the area of student's interest, the quality of previous work, etc. A student not qualifying for admission to the Ph.D. program may be considered for admission to the M.S. computer science or electrical engineering program. Requirements for admission are similar whether the applicant is requesting telecommunication and computer networking as the primary discipline or co-discipline.

Academic Preparation

The applicant must have a bachelor's degree in computer science, computer engineering, electrical engineering, or related field requiring substantial training in at least one of the above fields and in mathematics with a GPA of 3.5 or better on a 4.0 scale, cumulative as well as in the major field. A master's degree is preeerred for admission.

Aptitude for Advanced Work

The student must demonstrate an aptitude for advanced-level work through national/international standardized examinations such as the GRE. The expected performance level is the 85th percentile in the quantitative portion of the GRE examination.

Proficiency in English

The student must demonstrate his or her proficiency in oral and written communication in English through national/ international standardized English examinations such as TOEFL, verbal portion of the GRE, etc. The expected proficiency level is the 50th percentile in the verbal portion of the GRE or a TOEFL score of at least 550 on the paper-based test or 213 on the computer-based test. For tests taken after Sept. 26, 2005, the minimum required score is 80. UMKC students may also satisfy this requirement by obtaining an English Proficiency Certification from the English Department.
Note: As per University policy, all international students are tested for proficiency in English upon arrival on campus, irrespective of their scores in TOEFL or verbal portion of GRE, or any other test. A student's advisor may also require the student to take the above test, irrespective of the student's native language. As a result of this test, the student may be required to improve his or her oral and written communication in English before enrollment in the courses of the chosen disciplines.

Recommendations

The student must provide at least *three* recommendation letters from the professors from his or her previous institution(s). If the applicant has been out of school for several years, recommendation letters from his or her supervisors (technical) will be acceptable. However, even in this situation, a recommendation letter from his or her last academic institution is highly recommended. A recommendation from a faculty member in the Computer Science Electrical Engineering (CSEE) Department at UMKC must be provided if the student has taken courses from or worked with the CSEE faculty.

Statement of Goals and Objectives

The applicant must provide a 250- to 500-word essay on his or her goals and objectives of pursuing the Ph.D. in the chosen fields.

Admission at an Advanced Level

An applicant who has already completed significant graduate coursework (15 or more semester hours of the post-master's work or 30 or more hours of the post-bachelor's work) toward a Ph.D. at another institution must provide reasons for changing institutions. The applicant must also provide a letter of endorsement from a doctoral faculty member in telecommunication and computer networking indicating willingness to be the student's research advisor.

Alternate Admission Criteria

The applicant may have received a bachelor's degree or a master's degree in computer science, computer engineering, electrical engineering or electronics or any other related field with substantial training in mathematics. An applicant not meeting the minimum admission requirements, or not having sufficient academic preparation (stated below under prerequisite knowledge) for advanced work in the chosen discipline(s), may be considered for provisional admission by the CSEE Department's Ph.D. committee if the committee sees high potential for advanced work from the rest of the applicant's credentials. Evidence of high potential might be pertinent work experience, published papers or extremely high achievement in related areas. In any case, the required GPA (or GPAs) must be at least 3.0. Applicants with an established research or publication record in a quantitative science are encouraged to apply to this discipline.

Qualifying Requirements for Full Admission

Prerequisite Knowledge

A Ph.D. student selecting telecommunication and computer networking as the primary discipline is expected to have the level of preparation represented by the following courses before attempting advanced study. Every student must have coursework in mathematics at MATH 250 or above level, and at least four of the following course sequences (or their equivalent):

COMP-SCI 291	Discrete Structures II	3
COMP-SCI 303	Data Structures	3
COMP-SCI 404	Introduction to Algorithms and Complexity	3
E&C-ENGR 330	Electronic Circuits	3
E&C-ENGR 380	Signals and Systems	4
COMP-SCI 394R	Applied Probability	3
COMP-SCI 420	Introductory Networking and Applications	3
COMP-SCI 421A	Foundations of Data Networks	3
E&C-ENGR 477	Introduction to Wireless Networking	3
COMP-SCI 431	Introduction to Operating Systems	3
E&C-ENGR 474	Introduction to Communication Systems	3
E&C-ENGR 426	Microcomputer Architecture and Interfacing	3

A Ph.D. student selecting telecommunication and computer networking as a co-discipline is required to have at least three of the CS/ECE courses listed above.

Length of Time to Complete Qualifying Requirements

When a student is admitted provisionally, the CSEE Ph.D. committee will specify, and the UMKC Interdisciplinary Executive Committee will confirm, the conditions and length of time available to satisfy conditions to achieve regular-admission status.

Suggested Compatible Co-disciplines

Computer Science, electrical and computer engineering, mathematics, physics, engineering (p. 512) (civil and mechanical focus), geosciences and economics. A co-discipline outside of this list may be considered only in exceptional cases.

Core Program Requirements

The amount of work required for the Ph.D. depends on the student's level of preparation. For example, a student entering the Ph.D. program after earning a bachelor's degree may expect to do significantly more work compared to a student who enters after earning a master's degree.

Qualifying and Comprehensive Examination Guidelines

The Qualifying Exam is a written test administered by the CSEE Department's Ph.D. committee. The test questions are from a set of fundamental courses spanning computer science, electrical and computer engineering, and telecommunication and computer networking The Comprehensive Exam is administered by the doctoral committee of the candidate. A student can either take a written test or opt for an oral presentation covering both primary discipline and co-discipline areas. Discussion with and agreement from the student's doctoral committee is required before choosing the best option.

The candidates should contact the CSEE Division office and the chair of their doctoral committee for more information.

Telecommunication and Computer Networking as a Co-Discipline

The number of hours required for a student who chooses telecommunication and computer networking as a co-discipline will be at least 12 graduate credit hours. Up to three of these credit hours may be at the 400-level. Each student is required to take CSEE 5110 as part of the minimum 12 credit hours. Contact the Discipline coordinator for the list of approved courses.

Financial Aid

Various forms of financial aids (such as graduate research assistantships, graduate teaching assistantships, graduate fellowships) are available through the Computer Science and Electrical Engineering Department and the School of Graduate Studies. Contact the discipline coordinator for more information.

School of Law

School of Law (http://www.umkc.edu/virtualtour/law-school.asp)

Mailing Address and Physical Address

University of Missouri-Kansas City
School of Law
500 E. 52nd Street

Kansas City, MO 64110-2499

(816) 235-1644
Fax: (816) 235-5276
law@umkc.edu
http://www.umkc.edu/law/

Dean:
Ellen Y. Suni Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=suni)

Associate Deans:
Jeffrey B. Berman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=berman)
Jeffrey Thomas Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thomas)
Barbara Glesner Fines Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=fines)

This catalog covers the academic programs of the School of Law. Prospective students should be aware that the School reserves the right to make changes in admission requirements and other specifications in the catalog. All statements in this publication are announcements of present policies only and are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

Faculty

Jasmine Abdel-khalik Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=abdel); associate professor of law; B.A. (Cornell University); J.D. (University of Michigan).

David J. Achtenberg Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=achtenberg); professor of law and Law Foundation scholar; B.A. (Harvard University); J.D. (University of Chicago).

Mark Berger Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=berger); professor emeritus of law; B.A. (Columbia University); J.D. (Yale University).

Jeffrey B. Berman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=berman); Associate Dean and Patrick D. Kelly Peer professor of law; B.S. (City University of New York); J.D. (Brooklyn Law School); M.S. (University of Denver).

William K. Black Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=black); associate professor of economics and law; A.B., J.D. (University of Michigan); Ph.D. (University of California at Irvine).

Bruce Bubacz Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bubacz); Curators' professor of philosophy and professor of law; B.A. (Ripon College); M.S., Ph.D. (University of Washington-Seattle).

Paul D. Callister Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=callister); professor of law and Director, Leon E. Bloch Law Library; B.A. (Brigham Young University); J.D. (Cornell Law School); M.S. in Library & Information Science (University of Illinois at Urbana-Champaign).

Edward Cantu Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cantu); associate professor of law; B.A. (Texas State University); J.D. (University of Texas.

June Rose Carbone Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=carbone); professor and Edward A. Smith/Missouri Chair in law, the Constitution and society; A.B. (Princeton University); J.D. (Yale Law School).

Julie M. Cheslik Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cheslik); associate professor of law; B.A., J.D. (University of Iowa).

Corinne Cooper; professor emerita of law; B.A., J.D. (University of Arizona).

Robert C. Downs Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=downs); professor of law and Law Foundation scholar; B.A. (Kansas State University); J.D. (University of Nebraska); LL.M. (University of Missouri-Kansas City).

William G. Eckhardt Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=eckhardt); teaching professor of law and Director, Urban Affairs Outreach; B.A. (University of Mississippi); LL.B. (University of Virginia).

Kenneth D. Ferguson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ferguson); associate professor of law; B.A. (Drake University); J.D. (O.W. Coburn School of Law).

S. Rafe Foreman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ferguson); Douglas Stripp Dean's Distinguished professor of law & Director of advocacy; B.S. (Texas A&M); J.D. (Texas Tech).

Robert H. Freilich; professor emeritus of law; B.A. (University of Chicago); M.I.A. (Columbia University); J.D. (Yale University); LL.M., J.S.D. (Columbia University).

Barbara A. Glesner Fines Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=glesner-fines); Executive Associate Dean and Rubey M. Hulen professor of law; B.Ph. (Thomas Jefferson College); J.D. (University of Wisconsin); LL.M. (Yale University).

Francis M. Hanna Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hanna); professor of law; B.Ed. (Chicago State University); J.D. (Northwestern University).

Christopher Holman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=holman); professor of law; B.A. (California State University, Hayward); Ph.D. (University of California, Davis); J.D. (Boalt Hall).

Edwin T. Hood Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hood); Ruby M. Hulen professor emeritus; B.B.A., J.D. (University of Iowa); LL.M. (New York University).

Aaron M. House Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=house); assistant clinical professor of law; B.A., J.D. (University of Missouri-Kansas City).

Christopher R. Hoyt Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hoyt); professor of law; B.A. (Northwestern University); M.S., J.D. (University of Wisconsin); C.P.A.

Mary Kay Kisthardt Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kisthardt); Tiera M. Farrow faculty scholar and professor of law; B.A. (King's College); J.D. (Dickinson State College); LL.M. (Yale University).

John Q. LaFond; Edward A. Smith/Missouri emeritus Chair in law, the Constitution and society; B.A. (Yale University); J.D. (Yale University).

Rana R. Lehr-Lehnardt Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lehr-lehnardt); visiting assistant teaching professor of law; B.A., J.D. (Brigham Young); LL.M. (Columbia).

Nancy Levit Contact Informaiton (http://www.umkc.edu/lookup/search.cfm?LastName=levit); Curators' and Edward D. Ellison professor of law; B.A. (Bates College); J.D. (University of Kansas).

Douglas O. Linder Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=linder); Elmer N. Powell senior faculty scholar and professor of law; B.A. (Gustavus Aldolphus College); J.D. (Stanford University).

Anthony J. Luppino Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=luppino); Rubey M. Hulen professor of law and Director, LL.M. tax program; A.B. (Dartmouth College); J.D. (Stanford Law School); LL.M (Boston University School of Law).

Timothy E. Lynch; associate professor of law; B.A. (University of Chicago); M.B.A (Indiana University); J.D. (Harvard Law School).

Ann Marie Marciarille Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=marciarille); associate professor of Law; B.A. (Amherst), J.D. (Harvard).

Danielle Merrick; associate clinical professor of law; B.S.W. (University of Kansas); J.D. (University of Missouri-Kansas City); LL.M. (University of Missouri-Kansas City).

Andre Moenssens Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=moenssens); Douglas Stripp/Missouri emeritus professor of law; J.D. (Chicago-Kent College of Law); LL.M. (Northwestern University).

Marcia L. Narine Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=narine); visiting assistant professor of law; B.S. (Columbia); J.D. (Harvard).

Sean D. O'Brien Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=o%27brien); associate professor of law; B.A. (Northwest Missouri State University); J.D. (University of Missouri-Kansas City).

Mary Kay O'Malley Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=o%27malley); associate clinical professor and Director of child and family services clinic; B.A. (St. Mary-of-the-Woods College); J.D. (Washburn University); M.A. (University of Missouri-Kansas City).

Laura O'Sullivan Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=o%27sullivan); assistant clinical professor of law and Legal Director, Midwest Innocence Project; B.A. (University of Kansas), J.D. (St. Louis University).

Judith Popper Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=popper); associate clinical professor of law; B.A. (Agnes Scott College); J.D. (University of Missouri-Kansas City).

John W. Ragsdale Jr. Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ragsdale); William P. Borland Distinguished Faculty scholar and professor of law; B.A. (Middlebury College); J.D. (University of Colorado); LL.M. (University of Missouri-Kansas City); S.J.D. (Northwestern University).

Allen K. Rostron Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rostron); William R. Jacques Constitutional Law scholar and professor of law; B.A. (University of Virginia); J.D. (Yale Law School).

Leo Salinger Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=salinger); visiting associate teaching professor of law; B.A. (Williams College); J.D. (University of Missouri-Kansas City).

Judith A. Sharp Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Sharp); Staff Director, Entrepreneurial Legal Services clinic and clinical professor of law; B.A. (Stephens College); M.A. (Bowling Green [Ohio] State University); J.D., L.L.M. (University of Missouri-Kansas City).).

Ellen Y. Suni Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=suni); Dean and professor of law; B.A. (City College of New York); J.D. (Boston University).

Wanda M. Temm Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=temm); clinical professor of law and Director, Legal Writing and Bar Services; B.A. (Ottawa University); M.S. (Purdue University); J.D. (University of Kansas).

Jeffrey Thomas Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thomas); Associate Dean, Daniel L. Brenner Faculty scholar and professor of law; B.A. (Loyola Marymount University); J.D. (University of California-Berkeley).

Daniel Weddle Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=weddle); clinical professor and Director of academic support; B.S. (University of Kansas); J.D. (University of Kansas).

Barbara Wilson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wilson);associate clinical professor of law; B.A. (University of Missouri - Columbia); M.A. (University of Nebraska); J.D. (University of Missouri - Columbia).

Judith Frame Wiseman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wiseman); teaching professor and Associate Director of LL.M. tax program; B.B.A. (University of Wisconsin); J.D. (University of Tulsa); LL.M. (New York University).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Academic Rules and Regulations for Juris Doctor Degree Program

- Attendance
- Examinations and Grades
- Credit in Lieu of Grade Option
- Appeal of Grades
- Withdrawal from Courses
- Scholastic Probation and Dismissal
- Latin Honors

- Dean’s Honor List
- Employment by Juris Doctor Degree Candidates
- Plagiarism Policy and Guidelines
- Honor Code

Attendance

Preamble

All ABA-accredited law schools are required to abide by the Standards for Approval of Law Schools of the American Bar Association, including the rule that, "A law school shall require regular and punctual class attendance"[1]. This provision carries with it a clear, affirmative duty on the part of each institution:

- A law school shall demonstrate that it has adopted and enforces policies insuring that individual students satisfy the requirements of this Standard, including the implementation of policies relating to class scheduling, attendance and limitation on employment[2].

Consistent with these directives, the UMKC School of Law faculty believes that dependability is an essential characteristic of a good lawyer. The Law School’s objective is not only to ensure academic success, of which attendance is a major component, but also the development of good professional habits.

Over the years the Law School faculty has experimented with different attendance policies and has found that, without such a policy, attendance becomes noticeably lax, which in turn can contribute to poor performance on the bar examination.

Moreover, the faculty recognizes that sound academic reasons exist for adopting a uniform attendance policy that allows some classes to require even more stringent attendance requirements.

Finally, the faculty recognizes that, if it imposes a mandatory attendance policy on students, the faculty also needs to impose compulsory attendance-taking on itself, using a standardized system, to ensure uniformity, fairness and predictability in the implementation of its attendance policy.

1 Standard 304(d), Standards for Approval of Law Schools of the American Bar Association.

2 Interpretation 304-6, Standards for Approval of Law Schools of the American Bar Association.

Procedures

1. Every faculty member shall take attendance each day of class by distributing a sign-in sheet consisting of a current class roster, or a suitable alternative. If a sign-in sheet is used, each student in attendance must sign the roster next to his or her name. The faculty member or her administrative assistant shall deliver completed attendance sheets or the results of the suitable alternative method of taking attendance to the Director of Student Services promptly.
2. Each student shall be allowed absences up to, but not exceeding, two times the number of credit hours in a course. (For example, a student in a three-hour class that meets in two 75-minute sessions each week may miss a total of four such sessions. A student in a three-hour class that meets in three 50-minute sessions may miss a total of six such sessions.) In their discretion, faculty members may require fewer, but may not allow more, absences. If a faculty member intends to impose a more stringent attendance policy, he/she must notify students of the policy by announcement in class or in writing or by electronic posting during the first week of the semester.
3. Each absence exceeding the limitation imposed by paragraph 2, above, shall result in a one-step letter grade reduction for the course to be assessed by the Dean’s Office, e.g., from "B" to "B-" or from "A-" to "B+". (For example, a student who misses five classes in a three hour class that meets in two 75-minute sessions will be assessed a one-step grade penalty. If that student misses a sixth class, he or she will be assessed an additional one-step grade penalty.) A faculty member may in his or her discretion in consultation with the Associate Dean impose other academic requirements in lieu of the grade reduction.
4. Accumulated absences exceeding three times the number of credit hours in a course shall result in the student’s administrative withdrawal from the course provided the student is in good standing at that time, i.e., provided the student has not earned the grade of "F" for work completed at the time of withdrawal. Students who are not in good standing will receive a grade of "WF" for the course.
5. Students may appeal a grade-assessment or involuntary course withdrawal to the Associate Dean in writing within one week of notification of the assessment/withdrawal.
6. This policy does not affect a faculty member’s guidelines for the turning in of out-of-class assignments and papers. The individual faculty member, not the Dean’s office, has the sole discretion to award late penalties for failing to turn in an assignment or paper on time or to excuse the late handing in of assignments and papers. For this reason, the Dean’s office only oversees student absences from class.
7. Students and faculty will be responsible for monitoring their own compliance with this policy.
8. Falsification of attendance records constitutes a violation of the UMKC School of Law Honor Code.

Examinations and Grades

In most courses, the final grade is based on the student's achievement on an examination given at the end of the semester. Examinations are anonymous, and papers are identified solely by number. Each student is expected to take examinations at the scheduled times. For failure to do so, a grade of F is assigned.

Grading of student work is on a 4.0 system:

A+	4.3
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	0.7
F	0

Some courses are graded on a pass/fail basis.

A student receiving a grade of F in a required course must repeat and pass the course. Grades of F remain on a student's transcript and count toward a student's grade-point average even if a course for which an F is given is repeated and passed.

The temporary grade of I (incomplete) is recorded when the student has not completed the work required for the course. It may only be entered with the written permission of the professor teaching the course. If the work is not completed and a permanent grade not submitted to the school's records office by the end of the following semester, the I grade will be replaced with a grade of F.

Final Examination Rescheduling Policy

A student may request that one or more final examinations be rescheduled under the following circumstances:

- Two final examinations in the same calendar day.
- An evening final examination followed by a morning final examination the next calendar day.
- Three final examinations on three consecutive days (in the first week of examinations only).
- Four final examinations in five days (in the first week of examinations only).
- An emergency warrants rescheduling (request must be documented).

The policy with respect to take-home final examinations is as follows:

- If the take-home final examination is "floating," (e.g. the student may choose when to take it within a defined timeframe) the student may not **create** a conflict by opting to take it during an interval conflicting with another final examination.
- A take-home final examination does not conflict with the preceding final examination(s) under the first or third rules above (two exams in the same calendar day or three exams on three consecutive days), if it may be checked out at least four hours after the prior examination is scheduled to conclude.
- A take-home final examination does not conflict with the preceding final examination(s) under the fourth rule above (four exams in five days), if it may be checked out on Friday, at least four hours after the prior final examination is scheduled to conclude.
- Perceived conflicts involving take-home final examinations of greater than 48 hours in length will be dealt with on a case-by-case basis.

Requests to reschedule a final examination should be directed to the School's Director of Student Support Services.

Once a conflict has been identified, the director will determine which final examination(s) to move, and to what day and time, in order to eliminate the conflict.

Requests to reschedule a final examination on short notice because of severe illness or an emergency must be documented, and will be considered on a case-by-case basis. All such requests must be presented to the Director of Student Support Services for the School of Law **immediately** (See Student Support Services (Law) (http://www.umkc.edu/umkc/catalog/html/stu-aff/0740.html)).

The policy with respect to requests to reschedule based upon disability is as follows:

- All disability-based requests must be approved by the Assistant Director for Student Disability Services (See http://www.umkc.edu/disability and Non-Discrimination Policy (http://www.umkc.edu/umkc/catalog-grad/html/law/0180.html), above).
- The Director of Student Support Services will reschedule a final examination because of disability only on request of the Assistant Director for Student Disability Services.

Credit in Lieu of Grade Option

After completion of the first year, a student may take one elective course ordinarily graded (except a 4-credit-hour class) on an ungraded basis. For a "pass" to be posted on the student's record, work done for the course must be equivalent to a grade of C- or better; otherwise, the actual grade received will be posted.

The student must make this election before the beginning of the semester by completing and filing the appropriate form (available at the Law School) in person at Registration and Records (Administrative Center (http://www.umkc.edu/virtualtour/admincenter.asp), Room 115, 5115 Oak).

Appeal of Grades

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the professor.

The school's grade appeal procedure is available only for the review of allegedly capricious grading, and not for review of a professor's evaluation of a student's academic performance.

Capricious grading, for grade appeal purposes, consists only of any of the following:

- The assignment of a grade to a particular student on some basis other than the performance in the course.
- The assignment of a grade to a particular student by resort to more exacting or demanding standards than were applied to other students in the course.
- The assignment of a grade by a substantial departure from the professor's previously announced standards.

1. **Step 1:** The student should first discuss the course grade fully with the professor. This must be done within six weeks after the professor turns in the grade or the beginning of the succeeding regular academic semester, whichever is later.
2. **Step 2:** If the matter is not resolved through consultation with the professor, the student may appeal to the dean. This must be done within 10 days after notification of the decision of the professor. The appeal to the dean shall be in writing, and shall state which of the three charges of capricious grading is alleged to have been violated and shall specify such facts as are relied upon to support the charge.
3. **Step 3:** The dean shall review the appeal and, if found to be without merit, shall dismiss it. If it is determined that the appeal may have merit, the dean shall appoint an ad hoc faculty committee to review the record and provide advice on the matter. The grade in any course that is based on an anonymously-graded examination shall be presumed not to be capricious.
4. **Step 4:** If the dean believes a change in the grade to be warranted, he or she shall present a report to the faculty of the Law School in order that the faculty may act on the matter.
5. **Step 5:** If the student is dissatisfied with the action of the dean or the faculty, the student, within 10 calendar days of the decision of the dean, may appeal to the provost in accordance with the University of Missouri-Kansas City Procedure for the Appeal of Grades.

Withdrawal from Courses

A student enrolled in a course cannot unilaterally withdraw from it but must secure permission from the associate dean to do so, and must follow prescribed withdrawal procedures. A student who is not in good standing in the course at the time of withdrawal (has earned a grade of F at that point) will receive a grade of F for the course.

Scholastic Probation and Dismissal

A student who obtains a GPA below 1.8 in his/her first semester will be automatically dismissed from law school. Such student may apply for readmission in the summer of that academic year as under then existing standards and procedures for readmission, and may apply for admission, as a new student to the law school beginning no earlier than the following fall semester. Only under extraordinary circumstances beyond the student's control will the Student Affairs Committee consider a student's petition prior to that summer. If extraordinary circumstances exist, at least one faculty member of the committee and its chair must grant permission for early consideration.

A student will be placed on academic probation if his/her cumulative GPA falls below 2.0. Any student on probation will have one semester to raise the cumulative grade-point average to the required level (2.0) or be dismissed for academic deficiency. A student on academic probation may not work or engage in significant law school extracurricular activities.

Students readmitted to the School after dismissal on the grounds of academic deficiency will have one semester to raise the academic average to the required level, unless the faculty decides that a longer period is warranted.

If a probationary student successfully raises his or her average to the required level at the end of the probationary period and subsequently falls below 2.0 again, the student will be dismissed and a second probationary period will be granted only after a petition and favorable faculty action.

Readmissions Policy Guidelines

1. **Readmissions Committee**
   The Faculty Readmissions Committee considers all petitions for readmission in the first instance. Petitioners are afforded the opportunity for a personal interview with the Readmissions Committee.
2. **Criteria for Petitions for Readmission**
   a. No petition for readmission will be granted unless the petitioner establishes to the satisfaction of the Readmissions Committee in the first instance or the faculty upon appeal under 3.(b.)(ii.)-(iii) that:
      i there is a substantial likelihood that the student will be able to make up his or her grade deficiency within an appropriate time and manner in accordance with a plan approved by the Readmissions Committee or the faculty, and
      ii the grade deficiency is substantially attributable to circumstances or events which do not reflect on the student's abilities to perform in law school and which do not reflect the absence of qualities which bear on the ability of a person to successfully deliver legal services. Circumstances that may meet this test are:
         1. serious personal illness or other medical problems, or
         2. the occurrence of an event or series of events causing severe emotional stress (e.g., death of a family member, divorce or separation from a longstanding partner, assault), or
         3. documented disability that can be, but has not previously been, reasonably accommodated, or
         4. any other serious problem significantly affecting law school performance.

   b. Any situation which the student feels contributed to his or her academic difficulties should be clearly stated in the petition for readmission and documented to the extent practicable. Remedies the student wishes to see taken should also be addressed in the petition. The petitioner must certify the truthfulness of all statements provided in the petition.
3. **Decisions to Admit or Deny Readmission**
   a. Decisions to Admit
      i If the decision of the Readmissions Committee is to readmit, that decision is final.
      ii Upon a decision to readmit, the Readmissions Committee or the faculty shall construct a plan and specify conditions for remedying the grade deficiency. Ordinarily, the student will be required to raise his or her cumulative grade point average to a 2.0 within one semester. In appropriate cases, the Readmissions Committee or the faculty may specify additional conditions for remedying the grade deficiency.

   b. Decisions to Deny
      i If the decision of the Readmissions Committee is to deny readmission and that decision is unanimous, there is no appeal permitted, except as detailed in B(iii.) below.
      ii If the decision to deny readmission is not unanimous, the student has a right of appeal to the full faculty. [Automatic right to appeal]. If the faculty votes to deny readmission, that decision is final and no possibility of appeal within the Law School, campus, or university exists.
      iii If there is no entitlement to appeal in accordance with the above provisions, then the Dean or his or her designee may, in that person's discretion but only in extraordinary circumstances, refer an appeal from a Readmissions Committee decision to the faculty. Such referral shall be accompanied by a written explanation for the granting of the appeal. [Discretionary appeal]. A student must request the Dean's review within ten days of notification of the committee's decision. If the Dean or his or her designee decides not to refer to the faculty, that decision is final.
4. **Notification of Decision of the Committee**
   a. After the Readmissions Committee deliberates, the petitioning student shall be notified either that
      i the student is readmitted, or
      ii the student is denied readmission and the decision is final, but that the student may seek leave to appeal from the Dean upon a showing of extraordinary circumstances or
      iii the student is denied readmission but has the right to appeal to the faculty.

   b. The full faculty shall constitute the appellate body for petitions after the fall semester. The executive committee of the faculty shall constitute the appellate body for petitions after the spring semester. Faculty may participate at their request in the faculty deliberations by teleconference.
5. **Attendance in Classes Pending Petition**
   a. Initial Petition
   Students may continue in their classes until either the dean makes a determination to deny referral to the faculty under 3.(b.)(iii.) or the faculty makes a determination under 3.(b.)(ii.)-(iii). At that time, the student must cease attending classes if the decision is to deny readmission.

b. Subsequent Petitions
Students may not attend classes until the Readmissions Committee has made a decision to readmit under III(A) or the faculty has made a decision to readmit under 3.(b.)(ii.)-(iii).

c. Dismissal as a First Semester Student
Students dismissed from the Law School for achieving a grade point average under 1.8 after their first semester must cease attending classes immediately upon notification. The student may make their initial petition in the summer following their dismissal. These students do not have the right to enroll or continue in any classes during the pendency of their petition.

6. **Subsequent Petitions**
   a. Re-Petitions After Denial
   A subsequent petition is a petition that has previously been denied. A subsequent petition may be considered by the Readmissions Committee only if it presents new evidence. New evidence is evidence not available or not reasonably discoverable with a prior petition. Subsequent petitions shall be determined by the same process and standard of review as petitions for readmission.

   b. Petitions By Persons Who Have Previously Been Readmitted.
   Only in exceptional circumstances will a student who has previously been readmitted and subsequently dismissed be readmitted again.

Latin Honors

Three types of Latin honors are awarded to those UMKC School of Law graduates who have achieved academic distinction, they are:

- Summa Cum Laude ("with highest honor")
- Magna Cum Laude ("with great honor")
- Cum Laude ("with honor")

While the University’s degree regulations provide some restrictions on the number of graduates in each class that may receive Latin honors which may reduce the percentage of students graduating with Latin honors in each category, in general, Latin honors are awarded as follows:

1. Summa: A student with at least a 3.7 GPA who is also ranked in the top 5 percent of the graduating class.
2. Magna: A student with at least a 3.5 GPA who is also ranked in the top 10 percent of the graduating class.
3. Cum Laude: A student who is in the top 20 percent of the graduating class.

Dean's Honor List

The Dean’s Honor List recognizes students who have demonstrated academic excellence in a semester. To be so recognized, a student must have achieved at least a 3.0 GPA for the semester, carrying a course load of at least 12 School of Law course credit hours; with at least three of those courses being graded courses; and not have any incomplete grades in graded courses that semester.

Employment by Juris Doctor Degree Candidates

Full advantage of the opportunity for a sound legal education only can be gained by devotion of sufficient energy and attention to legal studies. The excessive diversion of time and energy to employment can seriously impair success in law school and preparation for law practice. For this reason, full-time first-year law students should not engage in any outside work, and upper-class students should not engage in excessive outside work.

Accreditation requirements mandate that a student may not be employed more than 20 hours per week in any week in which the student is enrolled in more than twelve class hours. The School has the obligation to adopt and enforce policies assuring that its students meet this requirement.

Students on academic probation may not work.

Activities and Services

- Urban Mission (p. 554)
- Professional and Social Activities (p. 553)
- Scholarly Publications (p. 553)
- Competitions (p. 553)
- Fee Information (p. 553)
- Financial Aid (p. 553)

Competitions

The School of Law has a comprehensive program of advocacy training that involves both intra-school competition and participation in external programs. The school has established a strong tradition of excellence in inter-school competition both at the regional and national levels. The program receives strong support from the School, alumni and friends, both financially and through assistance from leading members of the bar.

National Mock Trial Competitions

Students compete in intra-school competition to demonstrate their abilities in trial skills. Those achieving the best scores represent the school in regional and national mock trial competitions, including the National Trial Competition (coordinated by the American Bar Association's Section on Litigation and the Texas Young Lawyers Association) and the American Association for Justice Mock Trial Competition. Our trial team was a Regional winner in 2008 and advanced to Nationals. UMKC School of Law hosts the Show Me Challenge, the only voir dire tournament in the United States.

National Moot Court Competitions

All students may participate in intra-school moot court competition. Additionally, students showing outstanding appellate advocacy abilities represent the school in annual regional and national moot court competitions, including the National Moot Court Competition, sponsored by the Association of the Bar of the City of New York. UMKC teams have been very successful in advancing into the elimination rounds at regional tournaments.

Outstanding student advocates also participate in a variety of other competitions, including the ABA National Appellate Advocacy Competition, the Frederick Douglass Moot Court Competition, the International Human Rights Moot Court Competition and the Jessup International Law Moot Court Competition. Teams compete locally, nationally and internationally in these competitions.

Client Counseling and Negotiation Competitions

Each year the School selects teams to compete in the ABA Negotiation Competition and the ABA Client Counseling Competition. Selection is based on intra-school competitions open to all students. Our Negotiating Team has an outstanding record, having advanced to Nationals almost every year and finishing in the "final four" nationally four times in the past twenty years.

The Scott Welch Memorial Advocacy Fund

This fund was endowed by alumnus Lantz Welch in memory of his son, and by memorial contributions of friends of the family. The fund provides travel expenses and recognition for students representing the School of Law in national appellate advocacy and mock trial competitions.

The UMKC Law Foundation also provides significant support for internal competitions and travel to regional and national competitions.

Fee Information

Educational fees and student program/use fees are set by the University of Missouri Board of Curators. For the most current fee schedule, contact the Cashier's Office at (816) 235-**1365** or visit their Web site at http://www.umkc.edu/adminfinance/finance/cashiers/.

Financial Aid

For information on financial aid, contact the UMKC Financial Aid and Scholarships Office at (816) 235-**1154** or visit their Web site at http://www.sfa.umkc.edu.

Professional and Social Activities

Student Organizations

At UMKC, the law school experience extends far beyond the classroom. We offer many ways for students to get involved through organizations matching a variety of interests within the law school and the larger university community. These organizations are listed at http://law.umkc.edu/current-students/student-organizations.asp.

Scholarly Publications

The UMKC School of Law offers several opportunities for students to develop research, writing and editorial skills through journal participation. Through the unique joint staff system for all of the Law School's journals, students have the opportunity to become staff members simultaneously for all three law reviews.

Law Review

The UMKC Law Review is a scholarly legal publication, managed by the UMKC Law Review Editorial Board and edited by the board and staff. Law students are invited to become a member of the Law Review based on their scholastic performance and achievement in a writing and editing

competition done jointly with the Law School's other journals at the beginning of the spring semester. Law Review membership is considered one of the highest Law School honors. The Law Review is responsible for publishing four issues a year. Each issue contains articles by leading authorities in the legal community and comments on legal topics written by members of the editorial board and staff members. The Law Review periodically includes a Law Stories section containing stories about personal experiences or lessons learned in legal practice or training, from unique clients or enlightening client interactions to illuminating episodes in legal education. The UMKC Law Review is the only law review in the country with a section devoted to law and narrative The Law Review also has De Jure, an online component that features essays by legal experts and Law Review board and staff members. By participating in Law Review, students greatly improve their writing, analytical and editing skills and have the opportunity to take leadership roles in the production of a distinguished legal publication.

The Urban Lawyer

The UMKC Law School is proud to publish *The Urban Lawyer*, an American Bar Association (ABA) law journal. *The Urban Lawyer* is published quarterly by the ABA Section of State and Local Government Law with UMKC Law faculty members as its editors and UMKC law students as its staff members. In its 46th year of publication, *The Urban Lawyer*, has been housed at UMKC School of Law for its entire existence. Truly one of the "crown jewels" of ABA law journals, *The Urban Lawyer* has an extremely large circulation for a law journal of any type: a hard-copy distribution or circulation of nearly 6,000, and an additional nearly 3,000 online subscribers.

The Urban Lawyer is a subject-matter specialty journal; the subject matter is broadly defined as those legal and policy issues relevant to state and local government law. Thus *The Urban Lawyer* focuses on topics and issues relevant to cities and states including land use and development, public education, state and local government law and ethics, constitutional law, real estate development, and environmental law. We are proud to be the journal of choice for professors and policy makers in the areas of land use and regulation, state and local government, urban planning, urban affairs, public education, public finance and a myriad of other issues relevant to state and local government law.

Journal of the American Academy of Matrimonial Lawyers

The American Academy of Matrimonial Lawyers, is a national organization of 1600 leading family law attorneys from all 50 states. The AAML has chosen the School to assume editorial responsibility for its twice-yearly publication. The Journal uses a symposium style format with featured articles on a selected family-law theme and an annotated bibliography of articles related to the issue's theme. The Journal is edited by a faculty member with student editorial assistance. Under the faculty member's supervision, students research and write papers on a topic designated for an upcoming issue and edit submitted lead articles. Papers submitted by students are considered for publication in the Journal.

Urban Mission

The following programs and activities are illustrative of the many ways in which the School of Law serves its urban mission.

Child and Family Services Clinic

The UMKC Child and Family Services Clinic provides legal services and representation in cases involving children under the jurisdiction of the juvenile division of the Jackson County Family court. The clinic students ordinarily represent those adults seeking to give these children a permanent, safe home: family members seeking permanent guardianship, a father seeking paternity, or an adoptive family. In some instances, the clinic students will represent juveniles themselves in delinquency cases or may act as guardians ad litem on behalf of children in a variety of cases. Working under the supervision of the clinical professor, law students investigate, research and advocate legal positions necessary to ensure safe, stable family structures for children.

Kansas City Metropolitan Bar Association

The School of Law enjoys a close relationship with the Kansas City Metropolitan Bar Association. Each year, the Young Lawyers Section of the Association presents a number of educational programs of interest to law students, helping them bridge the gap between theory and practice. In addition, it hosts a beginning-of-the year picnic at which students meet area lawyers and judges, and presents an end-of-the year bar examination information session. As a result of such activities, UMKC law students have access to excellent programs, make important contacts and enjoy the collegiality of an association dedicated to the highest standards of professional integrity and skill.

Kansas City Tax Clinic

The Kansas City Tax Clinic is a project of the UMKC Graduate Tax Law Foundation, with support from the UMKC School of Law, which houses the clinic. Participating students include UMKC School of Law students in the LL.M. in Taxation program, the combined J.D./LL.M. in Taxation program, and other interested law students with the permission of the director of the tax program. Since 1999, under the supervision of the director and volunteer tax practitioners, students have represented clients of limited means in tax controversy matters. The clinic has been awarded Internal Revenue Service grants to assist low-income taxpayers with appeals.

Law Practice and Externships

Pursuant to Missouri Supreme Court Rule 13, a student who has completed legal studies amounting to one-half of the credits required for graduation and who is in good standing and of good character, fitness and moral qualification to practice law may appear in courts or before administrative tribunals in Missouri on behalf of an indigent person, if accompanied by a supervising attorney. The student may perform other legal work, such as preparation of pleadings and briefs on behalf of an indigent, so long as the work is done under the guidance of an attorney. An eligible student also may appear in

any matter on behalf of the state with the written approval of a supervising lawyer. Similar opportunities for student practice are available under Kansas Supreme Court Rule 709. Additionally, similar skills experience is possible in the Federal Government. Many UMKC law students participate in the law school's externships in the community serving clients under this Rule 13 authority.

Midwest Innocence Project

The Midwest Innocence Project provides pro bono investigative and legal assistance to prisoners with persuasive actual innocence claims. Students learn legal and investigative strategies through Wrongful Convictions and the Innocence Project Clinic. In Wrongful Convictions, students learn the causes of wrongful convictions and the ways to raise successful innocence claims in both state and federal courts. The Innocence Project Clinic provides students hands on work with cases receiving transcripts, state records, and case documents in addition to the briefs and opinion in the case. Students report on the likelihood that an inmate is innocent and the strategies available for pursuing the claim of innocence.

Public Interest Litigation Clinic

The PILC is an independent non-profit legal services organization that represents innocent prisoners and prisoners facing the death penalty across the United States. The Clinic's cases include all stages of criminal litigation, including trial, appeal, post-conviction, habeas corpus, certiorari and executive clemency proceedings. The School's Death Penalty Clinic and the "Problems and Issues in the Death Penalty" course are taught in conjunction with the PILC, and the center's staff provides valuable opportunities for the students in those classes.

UMKC Entrepreneurial Legal Services Clinic

Initially funded by the Kauffman Center for Entrepreneurial Leadership, students participating in the UMKC Entrepreneurial Legal Services Clinic, working under the supervision of licensed attorneys, assist a wide variety of owners of new and existing small businesses who do not have, or cannot afford, the market price for professional assistance. Each Fall and Spring semester, up to 15 students who have taken certain courses (Business Organizations and Federal Taxation are required, and Business Planning or other business or tax law education or experience preferred) are selected for enrollment in the clinic.

The clinic is located in the UMKC Institute for Entrepreneurship & Innovation building, at 4747 Troost. Students gain "hands-on" practical experience, under the supervision of experienced faculty who are licensed attorneys, by creating clients' business entities (such as limited liability companies and corporations) and drafting documents such as operating and partnership agreements, employment contracts and non-competition contracts. Students may enroll in the clinic in the fall or spring semesters.

General Information

- History
- Accreditation
- Academic and Professional Training at UMKC
- Law Building
- Law Library
- Study Spaces in Suites
- The School of Law in the Community
- The Law Foundation
- Nondiscrimination Policy
- Disabled Student Services
- Admission to the Bar
- Law Alumni Association
- Continuing Legal Education
- Career Services

History

In 1895, three young lawyers with energy and vision, William P. Borland, Edward D. Ellison and Elmer N. Powell, founded the Kansas City School of Law with the active assistance of leading members of the bench and bar. Borland, the first dean of the school, was elected to Congress in 1910 and was succeeded by Ellison, who served as dean until the School of Law merged with the University of Kansas City in 1938. After affiliation with the University of Missouri System in 1963, the school assumed its present name as the University of Missouri-Kansas City School of Law.

Accreditation

The school is accredited by the American Bar Association and is a member of the Association of American Law Schools.

UMKC LAW SCHOOL POLICY ON STUDENT COMPLAINTS REGARDING ACCREDITATION STANDARDS

UMKC School of Law values student input regarding any aspect of the educational process and encourages students to raise concerns and suggestions at any time with the Dean or any Associate Dean. Students' concerns with accreditation standards or any other matter may often be resolved quickly and directly without the need for formal complaint. If, however, a student believes that his or her concerns regarding the law school's compliance with ABA accreditation standards has not been resolved or chooses to forgo informal complaint mechanisms, the following formal complaint procedure is available.

Student Complaints Regarding Compliance with Accreditation Standards
As an ABA-accredited law school, The University of Missouri-Kansas City is subject to the ABA Standards for Approval of Law schools. The Standards may be found at http://www.americanbar.org/groups/legal_education/resources/standards.html. Any student at the School of Law who wishes to bring a formal complaint to the Administration of the School of Law of a significant problem that directly implicates the School's program of legal of education and its compliance with the ABA Standards should take the following steps:

1. The student complaint should be submitted in writing to the Dean or any Associate Dean of the School.
2. The writing should describe in detail the behavior, program, or process complained of, and demonstrate how it implicates the School's program of legal education and the School's compliance with a particular identified ABA Standard.
3. The writing must provide both the name of the student submitting the complaint, the student's official University of Missouri-Kansas City email address, telephone number, and a street address for further communication about the complaint.

Procedures for Addressing Complaints Regarding Compliance with Accreditation Standards:

The Dean to whom the complaint is submitted should acknowledge the complaint within ten business days of receipt of the written complaint or as soon as is reasonably possible under the circumstances. Acknowledgment may be made by email, U.S. mail, or by personal delivery.

Within one month of acknowledgment of the complaint or as soon as is reasonably possible under the circumstances, the Dean or the Dean's designee shall either meet with the complaining student or respond to the substance of the complaint in writing. The student should either receive a substantive response to the complaint or information about what steps are being taken by the School to address the complaint or further investigate the complaint.

Appeals may be taken to the Dean of the School, or, if the Dean of the School has decided the merits of the complaint, to the Executive Committee of the School of Law.

Any decision made on appeal by the Dean or the Executive Committee shall be final.

A copy of the complaint and a summary of the process and resolution of the complaint shall be kept in the office of the Dean of the School of Law for a period of eight years.

Academic and Professional Training at UMKC

UMKC School of Law provides academic and professional training to students seeking careers in law. Our faculty are outstanding scholars who have extensive practice experience. Faculty at UMKC are actively engaged with students both inside and outside the classroom. Our classes are relatively small (by law school standards) and many of our substantive courses incorporate simulations and service learning opportunities. Our faculty and students are collegial and the school provides many opportunities for interaction and development of close personal relationships that will last throughout one's career. We like to think of ourselves as the urban, public law school with the small, liberal arts feel.

We are a law school that teaches students to become lawyers in the best tradition of the profession and introduces them to the opportunities and obligations of the legal profession and its role in the greater community. We appreciate the work of lawyers and their many contributions, which include educating people and institutions about their rights, helping to design prosperous business and community ventures, and working towards the effective and efficient resolution of disputes. We maintain a faculty devoted both to professional service and to advancing knowledge through the production of excellent academic scholarship.

UMKC School of Law is a community of scholars, with faculty and students working together to address the legal issues and problems confronting society today on the local, state, federal and international levels. Because we train many of the region's practitioners, business people, judges and politicians, we have a special responsibility to see that they are competent members of the bench and bar, advisers and administrators; technically proficient, professionally responsible, and knowledgeable about the range of social, political, and economic ideas that influence our society. In doing so, we are aware that our graduates must be comfortable in a variety of professional settings with people from a variety of experiences, from land-use planning meetings with the local town council to trade negotiations in Mexico City, from an opening statement in the county courthouse to an appellate argument before the United States Supreme Court. While the details of such settings change over time, we can prepare students for such varied work by concentrating always on the foundations of good lawyering: respect for people, respect for knowledge and ideas, and respect for justice.

As a Law School, we build on a strong tradition of advocacy, civic engagement and academic excellence - a program that has not only produced some of the region's best lawyers and judges, but one that has also trained a U.S. Supreme Court Justice (Charles Whittaker) and an American President (Harry Truman). We embrace and foster a collegial, collaborative model of professional education and maintain an intellectual and cultural environment that fosters broad thinking, local and global awareness and creative problem-solving.

Law Building

Nestled among giant oak trees on the corner of 52nd and Oak streets, in the center of Kansas City and at the center of the nation, is the home of the UMKC School of Law. Among the unique features of this building are office suites shared by faculty and students. The school continues to take great pride in its efforts to foster faculty-student interaction. One ongoing initiative involves assigning many second- and third-year students to offices located within suites that also house their professors' offices. This "intellectual migration" was designed to foster the exchange of ideas and more generally to promote collegiality between faculty and students. Additionally, lounges or conference rooms within the suites provide opportunities for both formal and informal meetings of students and faculty.

The school has more than 121,000 square feet of modern, usable space, including classrooms equipped with Internet-connected teaching workstations with audiovisual and video conferencing capabilities. The school has two courtrooms, the E.E. "Tom" Thompson Courtroom and the Arthur H. Stoup Courtroom. Both are equipped with audiovisual equipment used to augment the advocacy training program of the school. Auxiliary rooms allow for live trials and hearings of the many area courts and agencies in the courtrooms and a unique viewing theatre above the E.E. "Tom" Thompson Courtroom allows for real-time commentary on court proceedings. A spacious student commons area, including the Truman Terrace (a scenic outdoor courtyard filled with tables, benches and fountains) and a vending area, is located near classrooms. Offices for many student organizations are located near the student commons area as well.

Wireless Technology Environment

The School has installed technology in the building which provides freedom from wired connections--enabling students, staff and faculty to access e-mail and multiple databases on the Internet of use to lawyers and law students using personal computers with wireless capability from offices, classrooms, study areas, the suites and the Leon E. Bloch Law Library.

The Rooniverse

The Rooniverse , aka RooLaw, is the Law School's intranet, internal communications, platform. RooLaw is used for all communications with large, identifiable groups of students, faculty and staff, serving as the primary (and in many cases only) source of information about official and unofficial happenings at the School. A student's home page is a one stop shop for important information about courses, announcements, events, deadlines and the like.

Leon E. Bloch Law Library

The Leon E. Bloch Law Library is not only a place to study, but a laboratory for students to master legal research skills, both in traditional print and electronic media. In fall 2011, a newly renovated library space opened. The space is designed to focus on first year legal research and writing and it provides a new collaborative technology learning lab to facilitate mastery of on-line legal research skills. In 2010, space in the first floor of the library was converted to provide three additional study rooms for students and a student lounge.

The library serves as a forum for self-directed learning; a place students take control of their educational experience through researching selected paper topics and their own law review notes.

The library contains holdings in major areas of legal scholarship and practice. It is home to rare, early seventeenth century editions of Sir Edward Coke's treatises and case reports. It also preserves the Charles D. Gould Jr. Collection, consisting of photographs and memorabilia from the Nuremburg trials. The collection focuses on trial advocacy, urban law, family law, small business entrepreneurship, and tax law. The library's foreign law holdings are targeted for expansion and access to historical materials have dramatically expanded. What is not held in print in the library, or in its many database services, is conveniently available through the library's online catalog request and delivery service. This service provides access to seventy Missouri libraries and about 18 million items. The service includes access to the holdings of the three other law school libraries in Missouri. Additional hard to locate items can usually be retrieved through other specialized interlibrary loan services. Besides its collections, the UMKC's law library is especially strong with respect to the expertise of its librarians, most of whom teach courses in legal research and have practiced law for many years or worked as paralegals.

Electronic Resources

Technology has reshaped legal publishing in ways that will forever alter how attorneys and judges approach their work. The information professionals of the Leon E. Bloch Law Library have embraced this transformation in a variety of ways. The new Courtney Turner Trust Collaborative Technology Classroom allows for creative use of technology using laptops and cutting-edge software in both a classroom setting and for student group study. Stand-alone computers that allow access for research on the Internet, printing, and numerous database services are available as well. A fee is charged for some law student printing and for all other patron printing. The Library also provides a scanner and a dedicated workstation for the visually impaired.
In addition, each law student receives a password free of charge for accessing law school and university databases from home or at other locations on campus. Wireless access to the Internet is provided to students throughout the law school and library. Perhaps, unique among law schools, the newly renovated lower level of the Library hosts a free laptop clinic, where law students can go with computer and technology problems, many of which can be fixed at the clinic. In Spring 2012, the Library installed state of the art book scanners on all three library floors. The scanners will provide digitization

workflow solutions for library business processes, student needs, and other law school business processes. The scanners can create PDFs, OCR documents, as well as audio files for the visually impaired.

Study Spaces in Suites

The design for the school's modern building manifests a commitment to providing desirable spaces for study and interaction by students who live throughout the metropolitan area. Double- or single-occupancy offices are provided to most second-year students, research assistants and teaching assistants. Most third-year students are assigned carrels or space in Club 3L, a communal area for studying or lounging. Library study spaces, far in excess of the number of first-year students, also are available.

The second and third-year assigned spaces are located in suites that include faculty offices. Each suite is named after a distinguished former justice of the United States Supreme Court. This innovative building plan fosters student-faculty interaction, the exchange of ideas and general collegiality.

The Law Foundation

The Law Foundation was incorporated in 1959 by outstanding alumni and leading citizens of Missouri, including Harry S. Truman, Charles E. Whittaker, H. Roe Bartle and other judges, lawyers, government officers and friends, to promote and advance the cause of legal education. The Law Foundation is a fiscally autonomous 501(c)(3) organization whose purpose is to raise money and steward endowed funds for the benefit of UMKC School of Law. Operating with its own board of trustees but working closely with the School of Law leadership to meet the long- and short-term financial needs of the school, the Law Foundation funds programs that are not met by other sources of revenue to the LawSchool. With the support of the Law Foundation, the school is able to sustain and cultivate diverse aspects of a superior education program.

The Law Foundation funds scholarships on an annual basis. In addition, it provides significant financial assistance for student competition participation; faculty development; library acquisitions and research materials; technology improvements; and the school's public communications program.

Over the years, the foundation and its many friends have successfully built an endowment of more than $5 million for the benefit of UMKC School of Law.

The School of Law in the Community

UMKC takes pride in being the urban law school in the University of Missouri system. From this unique vantage point, faculty and students actively lead and participate in professional activities with greater Kansas City bar associations, continuing legal education programs, lawyers, law firms and the judiciary located in both Kansas and Missouri. In addition, the community serves as an integral part of the School's educational program, with students providing legal services under the direction of faculty and supervising lawyers in clinical programs and externships. The Law School, student groups and individual faculty have won awards for this high degree of community service and engagement.

The School of Law community enjoys strong partnerships with many area causes and concerns. A variety of community-based projects, ranging from the rehabilitation of inner-city houses to tax preparation services, receive benefits from this involvement. Students work with faculty on research of value to the community and are often involved in drafting or commenting on pending legislation. The Law School houses and assists the Kansas City Youth Court, a diversion program from juvenile court, where high school students act as lawyers and judges. Faculty, students, staff and alumni volunteers also help introduce inner-city high school students to careers in law.

Graduates of the UMKC School of Law have important responsibilities in legal arenas throughout the city, state and country. From corporate counsel positions in more than 25 national companies to the library of the Supreme Court of the United States, Law School alumni provide distinguished service.

On a local level, the annual listing of "Outstanding Lawyers in the Kansas City Metropolitan Area" names more UMKC alumni than from any other school. In addition, only two women have served as president of the Kansas City Metropolitan Bar Association and only one African-American has served as president of the Missouri Bar; all are UMKC Law School alumni. A majority of the active judges of the U.S. District Court for the Western District of Missouri, the Missouri Court of Appeals (Western District) and the Sixteenth Judicial Circuit of Missouri are graduates of the School of Law. Moreover, the first African-American Chief Justice of the Missouri Supreme Court graduated from the school and one of the present sitting judges graduated from the school. Courts throughout the multi-county metropolitan area are populated with UMKC alumni.

The Law School is proud of the fine reputation of its alumni and the outstanding contributions they have made and continue to make in both the legal and overall Kansas City communities.

Nondiscrimination Policy

The Board of Curators of the University of Missouri and the University of Missouri-Kansas City are committed to the policy that there shall be no discrimination on the basis of race, color, creed, sex, sexual orientation, age, national origin, disability or Vietnam era veteran status. For additional information, see the Statement of Human Rights information included in the Introduction section of this catalog.

Disabled Student Services

The University of Missouri-Kansas City endeavors to make all activities, programs and services accessible to students with disabilities. A campus coordinator is available to assist students with a documented disability to arrange for reasonable accommodations concerning all aspects of campus life. It is recommended that students contact the coordinator at least six weeks prior to the beginning of classes to arrange appropriate documentation and reasonable accommodations in the classroom. For information call (816) 235-5696. Individuals with speech or hearing impairments may use Relay Missouri, 1-800-735-2966 (TT) or 1-800-735-2466 (voice).

Admission to the Bar

Graduation from law school does not guarantee admission to the bar. Each applicant should get information on the character and other qualifications for admission to the bar in the state in which the applicant intends to practice. Information regarding law student registration and bar admissions in Missouri and Kansas is made available to all first-year students.

Law Alumni Association

The UMKC Law Alumni Association, the primary friend-raising organization for the law school, was revitalized in 1992 as a division of the university-wide Alumni Association. It strengthens and extends the educational mission of the law school and its energies are devoted to bridging the passage between student and professional life, encouraging service and illustrating a commitment to a society based on law and justice. The Law Alumni Association sponsors events that facilitate student-faculty-alumni interaction. Annual activites include assisting in student recruitment, mentoring and advising; supporting student programs and activities; assisting with social and professional activites connected to local and state bar associations, and participating in alumni recognition events.

Continuing Legal Education

The Kansas City Metropolitan Bar Association (“KCMBA”) and the University of Missouri - Kansas City School of Law (“UMKC”) began collaborating in January 2013, combining their Continuing Legal Education operations and making it the largest CLE provider in the area. The new entity, called KCMBA UMKC CLE, operates from KCMBA’s headquarters and incorporates staff and best practices of both entities. The decision to combine the two providers was arrived at after careful consideration of the CLE needs in this area and the efficiencies that could be achieved, with a goal of providing the highest quality and and variety of CLE to our legal community.

UMKC Law School students, faculty and staff are encoyuraged to attend CLE evnts and may register at a signifiant reduction in attendance fees.

Career Services

The Law School Career Services Office (CSO) provides career planning, strategy counseling, and employer information to the student body and alumni. CSO also handles all employer outreach, organizes employer events, teaches strategy workshops, and acts as a liaison to the legal community. Law firms, government agencies, companies, the judiciary, and other employers seeking law students and graduates for positions may utilize CSO’s resources to meet their hiring needs. CSO maintains a variety of professional development and career-related resources for the use of law students and alumni. An on-campus interview program hosted in the spring and fall of each year facilitates the collection of application materials, coordination of interviews, and provides interview space to potential employers in order to recruit our students.
CSO provides individual career counseling to students and alumni, as well as advice and assistance in resume preparation and interviewing skills. Programming throughout the school year introduces students to a variety of career opportunities, teaches networking skills, and provides opportunities for mock interviews with practicing attorneys.
An annual public interest and government career week sponsored by CSO and the Public Interest Law Association provides students with information about internships in the community and highlights career opportunities with public interest and government employers.
CSO participates with the Kansas City Metropolitan Bar Association in its Heartland Diversity Legal Job Fair and 1L Summer Diversity Clerkship Program, and the SHB Diversity Writing Program to promote law clerk opportunities for diverse students. CSO also coordinates Diversity Initiatives. CSO also provides counseling, in conjunction with the Entrepreneurial Lawyering Program, to students and graduates who choose to pursue employment in solo or small firms, including connecting with the Solo and Small Firm Incubator that helps recent graduates start their law firms with affordable office space, guidance managing a legal practice, and attorney mentors. CSO coordinates the Pro Bono Honors Program.

The University of Missouri-Kansas City School of Law (UMKC Law) is committed to its policy against discrimination. The military’s hiring practices are inconsistent with the School’s non-discrimination policy and the AALS bylaws. Because Congress enacted the Solomon Amendment, the Law School allows military recruitment on Campus. However, the Law School remains committed to the policy of non-discrimination.

Career Opportunities

UMKC Law graduates pursue a wide variety of job opportunities which utilize the Juris Doctor degree. The largest numbers of graduates join law firms, ranging in size from one to more than 500 attorneys. Some of these firms specialize in specific areas of law practice. Other firms offer a general practice that spans corporate, civil and criminal law. Some law graduates do not practice law in a traditional law firm setting, desiring instead to use their legal skills in the business world. These graduates are recruited by corporations, accounting firms, title companies, banks and insurance companies, among other entities. The government agencies also employ graduates, as well as prosecutors’ offices, public defenders and legal service organizations. Other graduates become law clerks for judges or administrators in law schools. You may find detailed employment data on our UMKC Law website.

J.D./MBA and J.D./M.P.A. Combined-degree Programs

The School of Law has established combined-degree programs with the Henry W. Bloch School of Business and Public Administration. The program allows students to earn a juris doctor degree and a master of business administration or a master of public administration degree on an accelerated basis through cross-acceptance of some credit hours.

Applicants to the program must satisfy the admission requirements of each school and, if admitted into the program, may enroll in the first year of law school either before or after beginning M.B.A. or M.P.A. courses. Further information on admission and dual-degree requirements is contained on the School's Web site at http://www1.law.umkc.edu/Academic/index.htm.

Student Learning Outcomes

Graduates will be prepared for admission to the Bar and effective and responsible participation in the legal profession and in their communities.

Graduates will demonstrate effective problem-solving skills by:

- Critically examining complex facts.
- Identifying client needs and determining legal issues.
- Efficiently finding relevant law, policy and factual information.
- Applying appropriate legal rules and standards to the problem.
- Generating alternative solutions and developing plans for implementation.
- Continually reviewing and reassessing a plan of action.

Graduates will demonstrate effective communication skills by:

- Communicating appropriately and effectively with relevant audiences.
- Relating effectively to professionals from other disciplines.
- Listening actively.
- Writing and speaking clearly.
- Demonstrating cultural sensitivity.

Graduates will demonstrate entry-level competence in legal skills by:

- Identifying appropriate forums and means for resolution of legal problems.
- Being able to determine legal issues for analysis and research.
- Possessing elementary skills in interviewing, counseling and negotiation.
- Drafting documents to implement basic legal transactions.
- Dealing sensitively with people in conflict.

Graduates will demonstrate knowledge of the practice of law by:

- Being aware of career and job options in law practice.
- Having systemic knowledge of legal bibliography and resources.
- Possessing basic skills to enter practice as an associate.
- Having knowledge of basic techniques of law practice operation and management.

Graduates will demonstrate commitment to justice, competence and service to the profession and the community by being:

- Aware of the history and values of the legal profession.
- Committed to ethical practice.
- Aware of the rules governing the profession.
- Able to critically assess laws and rules and propose alternatives.
- Committed to lifelong learning and self-development.
- Appreciative of the value of ideological and cultural diversity.

Juris Doctor Degree

Program Description

The school's juris doctor degree program is designed to prepare students for the general practice of law and for policy-forming functions in government, business and other organizations in society. Courses provide students with a basic knowledge of the principles and processes of the Anglo-American system of law and of the integration of law into other disciplines and institutions.

The curriculum and program recognize that in order to be of the utmost service to clients, the lawyer must "see life whole" and appreciate the relationships among legal, social and political aspects of human endeavor. They also recognize that the best interests of society require a lawyer to be a thinker and scholar as well as a skilled technician.

Both the curriculum and methods of instruction are designed to meet these objectives. Although the casebook method is the predominant form of classroom instruction in larger classes, the faculty also employ other approaches. Classes such as lawyering skills, negotiating mergers and acquisitions, mediation, and law practice management combine theory with opportunities to learn about lawyering first-hand. Many of the classes use documents and "real life" problems to demonstrate concepts studied in class. The curriculum also includes opportunities for research and writing, seminar discussions, clinical instruction and skills training.

Academic Support and Success (p. 562)

Admission (p. 562)

Scholarships (p. 564)

Six-Year Law Scholars Program (p. 571)

Areas of Study

Law students do not have a formal major, but have options for obtaining sequenced and advanced training in areas of interest to them, including:

- Advocacy and Litigation
- Business and Tax Law
- Commercial Law
- Estate Planning and Administration
- Criminal Law and Procedure
- Domestic Relations
- Labor and Employment
- International Law
- Property and Real Estate
- Civil Liberties and Civil Rights
- Environmental Law

In addition, through participation in the Inns of UMKC program (http://www1.law.umkc.edu/career/UMKC Inns/inns.htm), externships, competitions, journals and student organizations, students are able to develop skills and contacts in specialized areas of the law.

Students may also elect to participate in one of the Law School's formal areas of emphasis within the Juris Doctor degree program:

- Business & Entreprenurial Law (p. 573)
- Child & Family Law (p. 576)
- International, Comparative & Foreign Law (p. 578)
- Litigation (p. 580)
- Urban, Land Use and Environmental Law (p. 584)

Students interested in particular practice areas are guided by faculty members and practitioners in developing their programs. The school, in conjunction with the Student Bar Association and the Kansas City Metropolitan Bar Association, sponsors a course scheduling and registration convocation and advisement program each semester at which representatives of the various practice areas give advice and guidance to students. In addition, an Elective Course Information Handbook is prepared each semester prior to course pre-registration that provides additional details regarding course sequencing, prerequisites and relevance of courses to practice and the bar exam.

Academic Support and Success

The School of Law is committed to its students' success. Although the study of law is a difficult and challenging endeavor, the school attempts to work with students to maximize their efforts and see them through the process successfully. Several programs contribute to this effort.

The Law School Strategies Program is a comprehensive program including academic skills lectures and courses, study group opportunities, and individualized assistance.

The Law School Strategies Program is available to all students. It is especially beneficial for those students who feel they need assistance in the transition to law study. The Law School Strategies Program is not remedial in nature. Rather, it is designed to maximize the potential of students who participate by teaching skills and strategies for success in law school.

The program begins with a brief summer program immediately before orientation. This is a limited enrollment program to give students a "jump-start" to their legal education. This program is followed up during the academic year with academic skills lectures and workshops focusing on learning styles, learning strategies, time management and development of skills necessary for law school success.

Study group programs maximize student learning through peer teaching. In Structured Study Groups, first-year students have the opportunity to participate in guided study groups in one of their first-year courses. The groups are led by an upper-class student who has successfully completed that course. The student leader attends the class with the first-year students and conducts weekly small-group sessions in which the leader models successful learning strategies for that class. These year-long study group programs are open to all students.

Many of the materials used in the Law School Strategies Program are available to students through the program's Web site at http://www.umkc.edu/law/enrichment.

Admission to the Juris Doctor Program

Eligibility

To be eligible to apply for admission to the School of Law's Juris Doctor degree program, a person must have either:

- A bachelor's degree based on a program of courses with substantial intellectual content (such as history, English, accounting, philosophy, calculus or chemistry) from an approved institution; or
- Completed at least 90 acceptable hours of credit in courses with substantial intellectual content in an approved institution, completed all non-elective coursework toward a bachelor's degree and made arrangements with the school that will award the degree to accept law school credits for the remainder of the work required to earn that degree, so that the student will earn the degree prior to the granting of the J.D. degree.

Criteria for Admission

The School of Law restricts the number of students admitted each year in order to maintain a favorable faculty-student ratio and to provide the best possible legal education for each student enrolled. Because many more people apply to the Law School than there are seats available, admission is competitive.

Students are drawn to the School of Law because of its intellectually stimulating academic environment, vibrant and diverse campus life and interaction with and in the surrounding community. In addition to being highly skilled and ethical attorneys, graduates are expected to leave UMKC able and committed to making a difference in their families, workplaces, communities, organizations and society at large. While substantial weight is given to each applicant's LSAT score and undergraduate GPA, the law school and its faculty also consider other factors in shaping an entering class. These factors, consistent with the University's values of diversity, inclusiveness and respect, include:

- Advanced or specialized educational achievement demonstrating potential for academic excellence in the study of law.
- Contributions to the cultural diversity of the School of Law.
- A history of overcoming challenges and barriers based on societal discrimination or economic disadvantage.
- Demonstrated leadership qualities.
- A significant and sustained commitment to public or community service.
- Other accomplishments or qualities that indicate the applicant will contribute to the School of Law's academic and service missions.

Admissions Process

Applicants are required to submit a completed, signed application form, the application fee, a personal statement and a resume. All undergraduate transcripts and two letters of recommendation must be sent to the Law School Admission Council Credential Assembly Service (LSAC). Instructions for this service may be found on the LSAC website. Once all materials have been submitted, a file is considered complete and ready for committee review.

The Admissions Committee conducts a personal interview with every applicant to the School of Law before an offer of admission is made.The law school makes admission decisions on a rolling admissions basis. That is, decisions are made as files are completed. This process begins in October of the

year preceding the academic year applicants are applying for and continues until sufficient admissions are granted to fill the entering class. Accordingly, applications should be submitted as early as possible.

A seat deposit fee must be paid by April 1 or a designated period after admission, whichever is later. The fee is nonrefundable but will be credited toward first-semester fees. An additional nonrefundable seat deposit fee is due May 1. This fee will also be credited toward first-semester fees.

LSAT/LSAC

In order to gain admission, an applicant must take the LSAT. The test may be taken at various locations, including UMKC. It normally should be taken no later than February for purposes of admission for the following fall. Information concerning the test is available online at http://www.lsac.org/ or by writing to the

Law School Admissions Council (LSAC)
662 Penn Street
Newtown, PA 18940

Applicants also must arrange for evaluation of their college and university transcripts by the LSAC. Further information and a registration form for this purpose may be obtained at the website and mailing address above.

Once the student applies, the school will request a copy of the law school report from LSAC. Please make sure the report is paid for so there is no delay in transmission.

Prerequisites

No undergraduate courses are specifically required for admission to the Law School. The best preparation is a broad liberal-arts education designed to provide an understanding of the institutions and values with which the law deals and the development of those skills and habits of thought essential to legal reasoning.

Any course of study leading to an undergraduate degree will be sufficient for admission, as long as the emphasis was an intellectually demanding one that challenged the student to employ critical-thinking skills and communicate effectively. Particularly helpful to law school study, however, are courses in history, as rules of law are best understood in terms of the historical milieu in which they were pronounced or enacted. Courses in political science and economics are beneficial, because lawyers must understand the institutions of government and the economic system with which they will be dealing. Courses in speech, logic, debate and the various language arts also are useful, because they expand and sharpen reasoning and communication skills. Courses with a strong emphasis on writing are particularly encouraged in light of the crucial role effective writing plays both in law school and law practice.

Matriculation Options: Full-Time and Part-Time Progress

Most students matriculate on a full-time basis. Some students, however, may do so on a part-time basis.

The ability to proceed part-time in the day program is designed for students who are unable to enroll on a full-time basis, e.g. disabled students, or those with family or career responsibilities. These students must enroll in 8 to 9 hours of classes each semester in the first year, and 8 to 12 hours per semester thereafter. In all other respects, students enrolled part-time are required to satisfy all graduation requirements applicable to full-time students, including the requirement that they complete all degree requirements within five years. Part-time day students develop programs with the associate dean that are designed to parallel, as much as possible, the sequence of courses for full-time students. Part-time student eligibility for *Law Review, Urban Lawyer*, honors and other activities will parallel, as much as possible, eligibility of full-time students.

A full-time student may not become a part-time student without permission of the associate dean. Part-time students may not become full-time students until they have completed all first-year courses, unless they obtain permission to proceed full-time from the associate dean. Once part-time students have completed all required first-year courses, they may enroll full-time or part-time for remaining coursework at their option. Students are cautioned, however, that enrollment in 13 or more hours triggers the rule limiting outside work to no more than 20 hours per week and full-time first-year law students should not engage in any outside work.

Admission with Advanced Standing

Except for transfer applicants enrolled at the University of Missouri-Columbia (to whom transfer is granted more liberally), an applicant for admission with advanced standing must meet the requirements applicable to entering students; be eligible to return as a student in good standing to their current law school; and present a letter from the Dean of their law school showing such eligibility. In order to be considered for admission, a transfer applicant who would not have been admissible (based on LSAT score, undergraduate GPA, etc.) had such applicant applied for initial admission at UMKC, must have at least a B average after at least one full year of law study in an approved law school. Otherwise, a transfer applicant must have at least a C+ average in all law work in order to receive consideration. Admission decisions on transfer applications typically are not made before mid-July, once the number of available seats in the second-year class have been determined.

A maximum of 30 semester hours credit may be allowed for work successfully completed at another law school, with the right being reserved to refuse to transfer credit, in whole or in part, for any such coursework.

Except in the case of students transferring from the University of Missouri-Columbia, hours for a course in which less than a C was earned will not transfer, but retaking the course may be waived on an individual basis. Grades earned at another law school are not transferred, nor do such grades count for class ranking purposes. Transfer students must earn at least a C+ average in courses taken at the UMKC School of Law in order to graduate.

Admission Without Undergraduate Degree

Students who have completed at least 90 acceptable hours of credit in courses with substantial intellectual content and have completed all non-elective coursework toward a bachelor's degree, may be admitted on the condition that the undergraduate degree be earned prior to or simultaneously with the granting of the J.D. degree. Usually this condition can only be met if the institution which will grant the undergraduate degree will accept credits earned in the UMKC Law School.

Since the UMKC Law School does not confer the undergraduate degree and assumes no responsibility in regard to it, it is the duty of the student to make certain that the requirements for the degree are satisfied. Questions concerning requirements for the undergraduate degree or of the transferability of law credits to complete the degree should be directed to the institution granting the undergraduate degree.

A letter from the institution confirming that it will accept credits earned in the UMKC Law School to complete the undergraduate degree must be submitted as part of the application for admission.

Six-Year Law Scholars Program

The School of Law has partnered with the College of Arts & Sciences (p. 220) to allow high school seniors applying for undergraduate admission to UMKC to gain entry into a six-year law program. Eligible applicants must have a minimum ACT score of 28 (or SAT score of 1240 on the 1600-point test that excludes the writing score or 1980 on the 2400-point test that includes the writing score); possess a high school GPA demonstrating success in a demanding curriculum; provide at least two letters of recommendation and a personal statement; complete a supplemental online application; and successfully complete an interview conducted by the School of Law Admissions Committee.

Students accepted into the six-year law program must maintain a minimum 3.3 undergraduate cumulative GPA to remain in the program and be accepted automatically to the School of Law without being required to take the LSAT.

Scholarships

Scholarships are awarded to students based on the following criteria. Selection for most scholarships is based solely on material in the student's admission file. Information on scholarships for which applicants may apply will be included in their admission materials or financial aid packet. The renewability of scholarships is based on academic performance.

- **Scholarships Based on Merit** (p. 568)
- **Assistance to Students with Financial Need** (p. 564)
- **Minority Nonresident Scholarships**
  - **Chancellor's Nonresident Minority Scholarships** - The University awards nonresident fee scholarships to students who are members of historically under-represented minority groups (African-American, Hispanic and Native-American) who are newly admitted to the University. Students must identify themselves as members of these minority groups in the application for admission in order to obtain the scholarships.
- **Prizes and Awards** (p. 567)
- **Law Book Publishers**
  - West Publishing Company - Awards are provided annually to recognize outstanding scholastic achievement.
- **Other** (p. 566)
- **Research Assistantships**
  - A number of salaried positions as research or teaching assistants are available each year for second- and third-year students with superior academic records. Research assistant positions provide excellent training in legal research on important and interesting research projects being conducted by members of the law faculty. Students are selected to serve as teaching assistants for the Lawyering Skills program, the Structured Study Group program and Academic Enrichment. These students work closely with program faculty to enhance first year student success.

Assistance to Students with Financial Need

There are various government loan programs administered by the UMKC Financial Aid and Scholarships Office. They include the Federal Stafford Subsidized and Unsubsidized Loan Programs, the Perkins Loan Program and the Access Loan Program. The office also administers a limited amount of scholarship funds in which law students may participate.

The following funds administered by the Law School and the Law Foundation provide assistance to students with financial need.

Michael J. Albano Scholarship Fund

The UMKC Alumni Association has provided an endowment honoring Michael J. Albano for need based scholarship awards to Missouri resident students in the School of Law. The recipient must be in the high need category for financial aid.

The James A. Bayless Emergency Loan Fund

A fund established to provide emergency short-term loans for law students.

The Joseph S. Chartrand Memorial Fund

This is a memorial fund established from contributions in memory of Joseph S. Chartrand, an alumnus who taught part-time at the University of Kansas City (UKC was the predecessor to UMKC). The Chartrand fund provides an annual amount to assist students in purchasing law books. Selection is based on applications by both incoming and current students.

The Tiera Farrow Memorial Scholarship

A memorial fund established by Tiera Farrow, a 1903 graduate of the Law School, provides a partial scholarship to a worthy woman law student in need of financial aid. Selection is based on applications by both incoming and current students.

Max Foust Scholarship

Established by colleagues of Max Foust, this scholarship is awarded to a law student with financial need. Preference is given to a student who has experience or skills which can be indicators of success in the area of trial advocacy. Selection is based on applications by both incoming and current students.

Judge Fernando J. Gaitan Scholarship

The Honorable Fernando J. Gaitan is the Chief Judge of the U.S. District Court, Western District of Missouri and a 1974 graduate of UMKC School of Law. The Scholarship was established in 2007 by The Honorable Ann Mesle (Law 1972) to assist the law school in its recruitment of a diverse student body. Judge Mesle chose to honor Judge Gaitan because he "has all of the attributes of leadership, character, integrity and judicial temperament that make him a person worthy of being a role model for aspiring attorneys." Selections are based on admission files.

Suzanne Gilmore Memorial Scholarship

Family, friends and classmates established this scholarship in memory of Suzanne Gilmore, an alumna of the class of 1991. The scholarship is awarded to an older-than-average law student who is a single custodial parent pursuing a law degree as a second degree. Selection is based on applications by both incoming and current students.

The Hispanic Bar Association of Greater Kansas City Scholarship Fund

The Hispanic Bar association of Greater Kansas City has established a fund to provide scholarships to UMKC School of Law students of Hispanic descent with financial need.

The Elmer B. Hodges Memorial Scholarship

An endowment fund established in the memory of Elmer B. Hodges provides scholarships for second- and third-year law students in need of financial aid.

Kavanaugh Family Trust

The law firm of Kenner & Kavanaugh has provided funding to award a scholarship to one or more worthy law students with financial need.

C.R. Krimminger Scholarships

Established by a gift from C.R. (Law 1934) and Katheryn L. Krimminger, the C.R. Krimminger Scholarships are awarded each year to academically qualified students who demonstrate financial need. An application is required.

Lathrop & Gage Diversity Scholarship

The law firm of Lathrop & Gage has created an endowment for the Law School to fund a scholarship for an outstanding student with financial need whose presence in the school furthers the goal of diversity to which the Law School is committed. Selection is based solely on admission files.

Judge Gene R. Martin Scholarship Fund

The Honorable Gene R. Martin has established a fund to award scholarships to deserving law students based upon need.

John Sublett Logan Scholarship

This scholarship was established by the John Sublett Logan Foundation in memory of Mr. Logan. It is designed to assist students in their legal education who, it is believed, will succeed in the legal profession and will give of themselves and their talents to the community in which they live. Selection is based on applications by incoming students. Preference will be given to those applicants who are natives or permanent residents of the St. Joseph, Missouri area.

The Robert B. McCreight Loan Fund

A memorial fund established by bequest from the estate of Gevene S. McCreight in memory of her husband Robert B. McCreight (Class of 1932), who had a long and distinguished career as an officer and director of stockyard companies and as president of the American Stockyards Association.

The Thomas McMorris, Jr. Scholarship Fund

A scholarship fund for the recruitment of under-represented students enrolling full-time at the School has been established to honor the memory and promote the vision of Thomas McMorris, Jr., who was active in the civil rights' movement and served as president of the local chapter of the NAACP. Mr. McMorris believed that for African-Americans to reach their potential and have a voice, they need to be represented where it matters—in the courtroom, boardroom and at every level of government. Applicants must have an undergraduate grade point average of 3.0 or higher and must demonstrate financial need. Selection is based solely on admission files.

Larence Schrader Scholarship

A fund was established by Diane King to endow a scholarship in her father's memory to assist a worthy student who cares about the law and has a need for financial assistance.

Fred L. and Emma E. Wiese Scholarship

Established in 2005 by their daughter, Sarah (Law 2001), this scholarship is given in memory of Mrs. Emma Wiese and in honor of Mr. Fred L. Wiese. Sarah credits her parents with encouraging her to pursue a legal career, especially her mother. The scholarship intent is to provide financial assistance to highly qualified women who wish to attend law school with primary consideration given to rural applicants (Beloit & Russell counties in Kansas) , an undergraduate gpa of 3.75 or better, and demonstrated financial need.

Other

American Bankruptcy Institute Medal for Excellence in Bankruptcy Studies

The American Bankruptcy Institute annually provides a medal to a UMKC graduating law student who has demonstrated excellence in the study of bankruptcy law.

The Center for Computer-Assisted Legal Instruction (CALI) -Excellence for the Future Awards

Awarded to the student who achieves the highest grade in each course.

The Kansas City Estate Planning Symposium Prize

The prize competition was established to encourage student participation and excellence in the study of estate planning at the UMKC School of Law. UMKC law students compete for two first place and two second place cash awards which recognize students of superior character, academic achievement, and potential who plan to pursue an estate planning practice.

The National Association of Women Lawyers

A one-year honorary membership in the association and a year's subscription to the NAWL Law Journal is awarded to an outstanding woman law graduate.

The Order of Barristers

Certificates are awarded annually by this national honorary society to 10 graduates who have excelled in moot court, mock trial and other advocacy programs.

Prizes and Awards

Law School and Law Foundation

The Thomas E. Deacy Trial Lawyer Award

Endowed in the memory of Thomas E. Deacy Sr., an eminent trial lawyer, by his wife and son, Mrs. Thomas E. Deacy and Thomas E. Deacy Jr., the Deacy Award is presented annually to a third-year law student who demonstrates trial skills and attributes possessed by Thomas E. Deacy Sr.

The Jay B. and Frances Dillingham Public Service Award

An annual cash award is given to a student for participation in, or the study of, public service. Preference is given to students with strong ties to Clay or Platte County, Missouri.

Sanford B. Ladd Award

This fund provides an annual cash prize to the student earning the highest grade in Real Estate Finance.

Ralph S. Latshaw Award

An annual award of law books is given to a graduating student who has excelled in criminal law.

Law Alumni Association Harry S. Truman Leadership Award

This prestigious award is given annually to a graduating third-year student who exemplifies commitment to the legal profession; service; and leadership standards as set by the Law School's most famous alumnus, Harry S. Truman. A cash award and plaque are presented.

Law Alumni Association Charles E. Whittaker Award

The Law Alumni Association's Whittaker Award recognizes the outstanding third-year student who has advanced the intellectual life of the Law School. Both a cash award and plaque are presented.

Mdivani Immigration Law Scholarship Award

Mira Mdivani (Law 1999), a nationally-recognized attorney in the practice of immigration law, established this scholarship in honor of her father, Archil Mdivani, in 2006. This scholarship is awarded each year to the winner of an essay contest.

Annette Moore Award

An annual cash prize provided by this fund is given to the student earning the highest grade in Commercial Transactions.

Outstanding Academic Achievement Award

This award provides a certificate to the member of the third-year class who has achieved the highest cumulative grade-point average during three years of study.

Marvin and Patricia Rich Corporate Law Prize

A merit-based annual award which recognizes second-year UMKC law students of superior character, academic achievement and potential who plan to pursue a corporate legal specialty after graduation.

The Candler S. Rogers Writing Award

This award was endowed in memory of Candler S. Rogers, a former UMKC law professor, by a close personal friend and colleague. It recognizes Professor Rogers' long tenure as faculty advisor to the Law Review and his distinguished achievement in legal writing. It is given annually to the student who submits the most outstanding work of legal writing to the UMKC Law Review.

The John L. Sheridan Appellate Advocacy Awards

The Sheridan Awards were endowed by Norman O. Sanders in memory of his law partner, John L. Sheridan, a distinguished alumnus of the Law School. They are presented annually to students who have shown outstanding achievement in the Ellison Appellate Moot Court Competition.

Trial Practice Achievement Award

Endowed by contributions from classmates in memory of Terry T. Thomas, a Law School graduate, this award provides an annual cash amount and certificate to the student who has made the most significant progress in trial advocacy.

UMB Bank's Excellence in Estate Planning Award

An annual award, consisting of both a cash prize and plaque, is presented to a graduating student who has demonstrated an outstanding aptitude for estate planning and achieved an overall excellent academic record.

The UMKC Law Review Honor Award

Endowed by attorney Wilbur L. Pollard, this award is presented annually to the student who has rendered the greatest service to the UMKC Law Review.

Scholarships Based on Merit

Elizabeth Montague Averill Scholarship

Family, friends and alumni established this fund to enhance diversity among the UMKC School of Law student body by providing a scholarship to an older-than-average student who is returning to school to obtain a law degree. Special consideration is given to single, custodial parents. Selection is based on applications by incoming students.

Timothy L. Brake Scholarship

Of Counsel with the law firm of Davis, Bethune and Jones, Timothy Brake (Law 1973) is an accomplished plaintiff's attorney. He has established scholarships at his undergraduate institution as well as UMKC School of Law. Mr. Brake believes that giving back to the institutions that provide outstanding education is a responsibility of those who have achieved success. Scholarships are awarded each year to outstanding law students. Selection is based solely on admission files.

Alan E. Brooks Family Scholarship

Established in memoriam of Alan E. Brooks, a military combat and civilian industrial engineer who provided unwavering support to his non-traditional law student wife, Debbie Brooks class of 2001. To be awarded to a non-traditional law student. Financial and underrepresentation status may be considered.

Harry L. Browne Memorial Scholarship

Helen L. Browne established this scholarship in memory of her late husband, Harry L. Browne, who devoted his professional career to the practice of labor law and who was recognized nationally as a specialist in that field. The aim of the scholarship is to attract to the UMKC Law School an outstanding entering law student who has demonstrated academic merit and who may be expected to practice employment and labor law with distinction. The scholarship is offered once every three years. Selection is based on applications by incoming students.

Judge David T. and Hope Cavanaugh Scholarship

Scholarships are awarded each year to students from a fund established by Hope Cavanaugh, widow of Judge David T. Cavanaugh. Judge Cavanaugh was a 1940 law alumnus and judge in Jackson County, Mo. Selection is based on admission files, as well as applications by current students.

Julian Klein Davidson Scholarship

One entering student is selected annually based on merit as the Davidson Scholar. The award was created by Mary Davidson Cohen to honor her father, a 1905 graduate of the Kansas City School of Law (a predecessor of the UMKC School of Law), who left an enduring legacy of inquiry, learning and education. It includes full-tuition, books, the UMKC bar preparation course and tuition to attend one of the School's summer abroad programs in Ireland or China. The award is renewable for Scholars who maintain a 3.0 cumulative grade point average.Selection is based on an application and interview process.

Diversity Scholarships

Several honor scholarships are awarded each year to entering students who demonstrate merit, and who, based on background and experience, contribute to the diversity of the school. Funds were established y the University and the scholarships are renewed annually if academic performance is satisfactory.

Mark A. Dover Memorial Scholarship

A scholarship for entering students was established by family and friends of Mark Dover, a 1992 graduate of the School of Law, who died after a courageous battle with cancer. Mark entered law school after several years working in the court system and had great intellectual curiosity and a love for the law. The recipient should demonstrate these qualities that distinguished Mark Dover as a lawyer as well as have financial need. Preference may be given to students pursuing law as a second career.

Professor Robert C. Downs Recruitment Scholarship

Scholarships are awarded to recruit highly qualified incoming law students who have demonstrated excellence in academics in undergraduate and graduate work, excelled on the LSAT, and participated in community improvement activities.

Professor Robert C. Downs Scholarship

One scholarship is awarded each year to a second-year student who demonstrates a commitment of service to the School of Law, the local bar and future generations of law students by virtue of being an active member of the School of Law community. Students who have earned at least 40 credit hours and not more than 65 credit hours, and who are in good academic standing at the time of application, may apply. Selection is based on applications by current students.

William P. Eckels Memorial Scholarship

Scholarships are awarded each year to outstanding entering law students from a fund established by Mr. and Mrs. Philip Eckels, John S. Eckels, Katherine Rehkopf and Elizabeth Emerson in memory of their son and brother. Selection is based solely on admission files.

Judge Jack E. Gant Scholarship

The Honorable Jack E. Gant (Law 1954) served on the bench of the Jackson County (MO) Circuit Court for 21 years following a successful 10 year career in the Missouri General Assembly and many years in private practice. In establishing this scholarship, Judge Gant leaves a legacy for recipients to aspire to public service and pursuit of justice in the law. Scholarships are awarded each year to outstanding law students. Selection is based solely on admission files.

Elizabeth Pope George Memorial Scholarship

In memory of Elizabeth Pope George, an alumna of the Class of 1924, a scholarship fund has been provided by her son and daughter. The fund awards one scholarship every three years to an outstanding female first-year student. Selection is based solely on admission files.

Rollin C. Goodale Scholarship Fund

The Honorable Rollin C. Goodale (Law 1942) Scholarship Fund was established by Mr. Charles S. and Dorothy Goodale through a charitable remainder trust to memorialize Judge Goodale. Scholarships are awarded each year to outstanding law students. Selection is based solely on admission files.

The SFP and John Hardy Academic Achievement Scholarship

A scholarship created to honor the co-founder and executive vice president of Specialty Fertilizer Products' (SFP), John Hardy, a 1982 alumnus of the School, on the occasion of the tenth anniversary of the founding of SFP. In light of Mr. Hardy's outstanding career as an attorney, the award will be based primarily on scholastic merit and academic achievement. Recipients must be full-time students at the School. Preference will be given to incoming first-year students having a cumulative undergraduate GPA of at least 3.0, or UMKC law students having a cumulative law school GPA of 2.75 or more. Applicants are required to submit an essay of no more than 500 words explaining the value of education and his/her future contributions to society.

Rubey M. Hulen Memorial Honor Scholarships

Honor scholarships are awarded each year to outstanding entering law students from a fund provided by the will of Anna Hulen, widow of Rubey M. Hulen, a distinguished alumnus of the school. The scholarship is renewed each year if the recipient's academic performance is satisfactory. Selection is based solely on admission files.

The Kansas City Lesbian, Gay and Allied Lawyers (KC LEGAL) Scholarship

A scholarship program has been established at the School by The Kansas City Lesbian, Gay and Allied Lawyers (KC LEGAL) to provide financial support to a student at the School who plans to work in pursuit of equal treatment of and justice for the lesbian, gay, bisexual, and transgender ("LGBT") community. Applicants should submit a statement explaining the work he/she plans to do in that regard.

Dean and Professor Emeritus Patrick D. Kelly Scholarship Award

As Dean of the Law School from 1966-1978, Pat Kelly recognized the importance of scholarships to recruit highly qualified students to UMKC School of Law. Accordingly, he established the scholarship fund during his tenure as Dean. Beginning in 2005, alumni and friends hold an annual poker tournament to benefit the scholarship fund. Scholarships are awarded each year to outstanding entering law students and may be renewed each year if the recipient's academic performance is satisfactory. Selection is based solely on admission files.

Law Foundation Scholarship

Honor scholarships are awarded each year to outstanding entering law students. The following funds, held by the Law Foundation, support these scholarships: the James A. Bayles Memorial Scholarship Fund, the James P. Kem Memorial Scholarship Fund and the Howard Allen Yost Memorial Fund. Selection is based solely on admission files.

Law Foundation/University Multicultural Scholarships

Each year, up to four partial or full fee-waiver scholarships, plus cash amounts, are awarded to entering law students who have demonstrated scholastic superiority and who, because of diverse backgrounds and achievements, broaden the educational experience of all students at the school. They are

supported in part by the memorial funds listed above that were established from contributions given to the Law Foundation. Recipients receive the scholarships each year if academic performance is satisfactory. Selection is based solely on admission files.

Law School Class of 1980

This scholarship was created by the class of 1980 in honor of the 25th anniversary of their graduation. Financial need may be considered.

The Jack and Helyn Miller Scholars Program

The Miller Scholars Program was established to recognize students who, through academic achievements and demonstrated leadership, are likely to enhance the UMKC School of Law, the legal profession and the community. Miller Scholar awards are made on a merit basis, without regard to financial need, to first-year law students. The award covers full-tuition, books, the UMKC bar preparation course and tuition to attend one of the School's summer abroad programs in Ireland or China. Selection is based on an application and interview process.

Filbert Munoz Memorial Scholarship

A memorial fund was established by the family and friends of Filbert Munoz to provide scholarships to students (including entering students) who have a demonstrated record of ability, desire and interest in using their education to help members of the Hispanic community.

The Nailling Society/Richard L. Files Scholarship

Ms. Bobbi Lou Nailling served as Executive Director of the Kansas City Metropolitan Bar Association (KCMBA) for 24 years. Upon her retirement, the KCMBA raised money in her honor and established a foundation. Ms. Nailling requested that the fund create a scholarship in her name and that of her late husband, businessman Richard L. Files at UMKC School of Law. The scholarship will be awarded annually to an incoming 1L student who demonstrates interst and intent to practice in the area of public service and/or the administration of justice. The recipient will have an opportunity to be introduced at the annual KCMBA "Liberty and Justice" Gala. The award is not renewable. Recipients will be selected based on a completed application reviewed by a selection committee.

Nonresident Tuition Scholarships

A limited number of nonresident scholarships are awarded each year to entering first-year law students with outstanding credentials who are not Missouri residents and who have not otherwise qualified for in-state fees. (See Missouri Tax Scholarship.) This scholarship pays the nonresident portion (roughly half) of the student's fees. Students will be awarded this scholarship for their first year of law school and will be expected to qualify for Missouri residency their second and third years, although the scholarship may be extended upon a showing of special circumstances. Selection is based solely on admission files.

Catherine N. & Clinton T. (Duke) Paddock Fund

A fund established to provide scholarships for excellence at the School of Law. Selection is based solely on admission files.

David Wilbur Pansing Memorial Scholarship

An annual scholarship award recognizing a student who plans to use the legal education in government or political service. The Pansing Scholarship was established in 1995 by Judge Jane Pansing Brown, Class of 1982, in honor of her father, a 1954 graduate of the Law School. Selection is based on applications by current students.

Dean and Professor Emeritus Robert Popper Scholarship

Established in 2005 by friends and family of Dean and Professor Emeritus Robert Popper, this scholarship will be awarded to an entering law student at UMKC School of Law with demonstrated interest in and commitment to civil liberties, a core principle of Dean and Professor Popper as a lawyer and teacher of law. The scholarship honors and recognizes the memory of Dean Popper, who was a proud civil libertarian, specializing in criminal law, criminal procedure and constitutional law , who had a strong love for and commitment to the UMKC School of Law. An application is required.

Ruth and John Rhiner Scholarship Fund

John Rhiner (Law 1937) was proud of his legal career and thought highly of the Kansas City Law School, the predecessor of UMKC School of Law. In his estate, Mr. Rhiner provided for a s cholarship to be awarded to incoming law students at UMKC School of Law. Scholarships may be renewed each year if the recipient's academic performance is satisfactory. Selection is based solely on admission files.

Omar E. Robinson Memorial Scholarships

Honor scholarships are awarded each year to outstanding entering law students from a fund established by the will of Ida C. Robinson, widow of Omar E. Robinson. Selection is based solely on admission files.

Joseph A. Sherman Memorial Scholarship Fund

A 1955 graduate of UMKC School of Law, Mr. Sherman was known as a "gentleman of the bar" among his peers. Upon his death in 1997, family, friends and colleagues established a scholarship fund in Mr. Sherman's memory. Mr. Sherman had been an active volunteer with the UMKC Law Foundation and this scholarship pays tribue to his years as a member of the bar and volunteer at his law school. Scholarships are awarded each year to outstanding law students. Selection is based solely on admission files.

Trans World Airlines Inc. Scholarship

A scholarship is awarded each year to a student entering the second or third year of law school and who intends to pursue a career in natural resources or environmental law. Selection of the recipient, who must be a Missouri resident, is made according to procedures established by the deans of the two University of Missouri law schools. Selection is based on applications by current students.

Six-Year Law Scholars Program

The School of Law has partnered with the College of Arts & Sciences to allow high school seniors applying for undergraduate admission to UMKC to gain entry into a six-year law program. Eligible applicants must have a minimum ACT score of 28 (or SAT score of 1240 on the 1600-point test that excludes the writing score or 1980 on the 2400-point test that includes the writing score); possess a high school GPA demonstrating success in a demanding curriculum; provide at least two letters of recommendation and a personal statement; complete a supplemental online application; and successfully complete an interview conducted by the School of Law Admissions Committee.

Students accepted into the six-year law program must maintain a minimum 3.3 undergraduate cumulative GPA to remain in the program and be accepted automatically to the School of Law without being required to take the LSAT.

J.D. Degree Requirements

Student Learning Outcomes

Graduates will be prepared for admission to the Bar and effective and responsible participation in the legal profession and in their communities.

Knowledge:

While law is constantly changing, all graduates will know and be able to use core legal doctrine. In addition, graduates will have basic knowledge relevant to their practice area, such as business or psychology. Graduates will be efficient in acquiring and evaluating new knowledge.

Analysis

Graduates will have mastered the skills of legal analysis. Legal analysis requires the ability to identify legal issues, identify relevant legal rules, generate multiple interpretations of these rules and their application to legally significant facts, and draw conclusions appropriate to the attorney's role. In particular, the knowledge of how legal rules are structured in codes and the ability to read those rules are core legal skills. Moreover, in a common law system, the ability to work with case law precedent is a foundational legal skill.

Professionalism

Graduates will demonstrate commitment to justice, competence, ethical practice, life-long learning, and service to the profession and the community.

Legal Research

Graduates will be able to identify and evaluate various legal sources and create and carry out effective and efficient research plans.

Legal Writing

Graduates will be able to write clearly, concisely, simply and precisely in the appropriate mode for their role.

Gathering and Using Facts

Regardless of the practice context, all attorneys must be gather facts effectively through interviewing and investigation. Accordingly, graduates will be able to exercise basic interviewing skills, the most fundamental of which is active listening. They will be able to evaluate the relevancy and credibility of facts and translate those facts into evidence as part of a legal narrative.

Cultural Competency

Graduates will gain an increased awareness of their own culture and biases and be able to understand and work with people with diverse backgrounds, abilities, values, and cultures.

Problem Solving

Graduates will have developed elementary skills in interviewing, counseling, negotiation, problem-solving, and persuasion. These include the skills of assessing client goals, identifying available alternatives and processes for achieving those goals, assisting clients in choosing among those alternatives, and exercising skills to solve problems, negotiate agreement, and influence decision.

.

Required Courses

First Year Required Courses

All students must complete the following required courses during the first year:

Full-Time Progress

Fall Semester		
LAW 8501	Contracts I	3
LAW 8634	Criminal Law	3
LAW 8531	Lawyering Skills I [1]	3
LAW 8541	Property I	3
LAW 8511	Torts	3
Spring Semester		
LAW 8521	Civil Procedure I	3
LAW 8631	Constitutional Law	4
LAW 8502	Contracts II	3
LAW 8532	Lawyering Skills II [1]	2
LAW 8542	Property II	3
Total Credits		30

1 **Lawyering Skills I and II:** These two first-year courses introduce students to legal reasoning; analytical and critical thinking; case research and analysis; legal writing, including office memoranda, briefs and letters to and on behalf of clients; advocacy; and all forms of legal research. They offer education in many of the fundamental skills and processes of legal practice through a combination of lecture classes and small group sessions. They are required of all first-year law students in order to supply a strong foundation of thinking, research and writing skills upon which all later, advanced courses will depend.

Part-time Progress

Students enrolled on a part-time basis must take three of the required courses, including Lawyering Skills, in their first year. The remaining courses must be completed in their second year of study.

Other Required Courses

Students must complete the following courses as a condition of graduation:

Required to be Taken During the Summer Preceding or During the Fall of the Second Year		
LAW 8601	Business Organizations	3
LAW 8552	Federal Taxation	3
LAW 8522	Civil Procedure II	2
Required to be Taken During the Summer Preceding or During the Second Year		
Evidence		3
Required to be Taken During the Second or Third Year:		
LAW 8635	Criminal Procedure I	3
LAW 8731	Professional Responsibility	2
A course that fulfills the school's jurisprudential requirement		2-3
Professional Skills Requirement (see below)		
Required to be Taken at any Time Prior to Graduation and May be Taken During the Second Semester of the First Year		

A course that fulfills the school's advanced torts requirement (NOTE: This is not longer a requirement effective for the entering class of 2012. Accordingly, only students entering prior to 2012 must meet this requirement.)	3
Total Credits	21-22

Professional Skills Requirement

A student must meet the school's professional skills requirement. It may be met in one of the following ways:

1. Completion of one credit hour of professional skills education. This requirement may be completed by successfully completing one or more courses designated as meeting all or a portion of the professional skills education requirement.
2. Completion of a one credit hour independent study providing professional skills education, which independent study is certified to the School's Records Office as meeting the one credit hour professional skills education requirement.
3. Participation in law school programs that, even if not for credit, provide professional skills education (this would primarily consist of the various advocacy, counseling and negotiation competitions which do not provide course credit.

Graduation Requirements

Requirements for the J.D. Degree

1. Completion of 91 credit hours, 80 of which must be classroom credits.
2. A cumulative GPA of at least 2.0 (see Administrative Rules and Regulations, Scholastic Probation and Dismissal, in this section).
3. Six semesters in residence carrying not less than 10 classroom credit hours each semester.
   Acceleration. For purposes of being considered "in residence", two UMKC summer sessions may count together to form one semester in residence (except with respect to the School's summer abroad courses). Thus, students taking five regular semesters and two summer sessions at the Law School having at least ten classroom credit hours may graduate in 2 1/2 years. A student desiring to attend a summer abroad program offered by another school should check with the Associate Dean for Students to see if the program may count as 1/2 of an in-residence semester.
4. Completion of all required courses (see Required Courses in this section).
5. Fulfilling the school's research and writing requirement. This requires students to have a rigorous writing experience evidencing legal analysis resulting in a paper of professional quality.
6. Fulfilling the school's professional skills requirement.
7. Regular and punctual class attendance.
8. Successful completion of all coursework within five years from the day students began their course of studies leading toward the degree. A student will not be allowed to enroll in any course after the five-year period.

Business & Entrepreneurial Emphasis Area Requirements

Emphasis in Business & Entrepreneurial Law

The Emphasis in Business and Entrepreneurial Law program is designed to provide within the J.D. degree a well-rounded course of study for students interested in an emphasis in business law and transactional practice. Reflecting the multidisciplinary nature of conducting business in compliance with a variety of modern laws and regulations, the required courses and electives for this program have been selected to expose students to a wide range of substantive law education and skills training opportunities. Thus, in addition to required and elective courses in pertinent areas of law, the curriculum requirements include a course with a practical skills component, as well as training in ethics and a research and writing project targeted at business and entrepreneurial law topics. Students who qualify for and successfully complete the credential requirements in the Business and Entrepreneurial Law program should thereby be in an excellent position to pursue and succeed in careers as advisors to entrepreneurs and to for-profit or not-for-profit businesses, whether in private practice or in company legal departments. This program would also be suitable for students destined for public sector careers, particularly in areas involving the regulation of businesses and business transactions.

Admission

To be admitted to the Emphasis in Business & Entrepreneurial Law program, an applicant must have a cumulative law school grade point average of at least 2.5, and must have a grade point average of at least 2.8 in all program courses or prerequisites which the student has completed prior to application for admission to the program. For this purpose, the two prerequisite Business and Entrepreneurial (Business Organizations and Federal Income Taxation) will be counted, along with all other J.D. program courses completed by the applicant prior to the date of application.

The deadline for application to the program shall be no later than the beginning of the second week of classes of the student's sixth semester of law school. Any student who applies after the beginning of his or her fourth semester must demonstrate that the program can be completed by the end of the

sixth semester of law school. Appropriate adjustments will be made to deal with part-time students not on the regular semester schedule. Exceptions to the deadlines may be made with approval of the Emphasis Faculty Advisors, by majority vote.

Student Learning Outcomes

Graduates will be prepared for admission to the Bar and effective and responsible participation in the legal profession and in their communities.

Graduates will demonstrate effective problem-solving skills by:

- Critically examining complex facts.
- Identifying client needs and determining legal issues.
- Efficiently finding relevant law, policy and factual information.
- Applying appropriate legal rules and standards to the problem.
- Generating alternative solutions and developing plans for implementation.
- Continually reviewing and reassessing a plan of action.

Graduates will demonstrate effective communication skills by:

- Communicating appropriately and effectively with relevant audiences.
- Relating effectively to professionals from other disciplines.
- Listening actively.
- Writing and speaking clearly.
- Demonstrating cultural sensitivity.

Graduates will demonstrate entry-level competence in legal skills by:

- Identifying appropriate forums and means for resolution of legal problems.
- Being able to determine legal issues for analysis and research.
- Possessing elementary skills in interviewing, counseling and negotiation.
- Drafting documents to implement basic legal transactions.
- Dealing sensitively with people in conflict.

Graduates will demonstrate knowledge of the practice of law by:

- Being aware of career and job options in law practice.
- Having systemic knowledge of legal bibliography and resources.
- Possessing basic skills to enter practice as an associate.
- Having knowledge of basic techniques of law practice operation and management.

Graduates will demonstrate commitment to justice, competence and service to the profession and the community by being:

- Aware of the history and values of the legal profession.
- Committed to ethical practice.
- Aware of the rules governing the profession.
- Able to critically assess laws and rules and propose alternatives.
- Committed to lifelong learning and self-development.
- Appreciative of the value of ideological and cultural diversity.

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, see http://www1.law.umkc.edu/Academic/Emphasis/BusinessEntrepEmphasis.pdf

Requirements

Minimum Total Hours Required

The program will require satisfaction of the required courses (Group A) and a minimum of 9 credit hours of courses from the approved elective courses (Group B) listed below . Any course in Group A or B may be counted toward the required total hours even if it is also used to satisfy the student's Emphasis Research and Writing Requirement.

Writing Requirement

Students must complete an academic research paper of high professional quality, sufficient to meet the Research and Writing Requirement standards of publishable quality, concerning a business or entrepreneurial law topic. The research paper must be certified as acceptable by one of the Emphasis Faculty Advisors. Students may fulfill this requirement, with a research paper on a business or entrepreneurial law topic, in conjunction with any of the Group A or B courses, or independently as part of the general J.D. Research and Writing Requirement, as part of an Independent Study option, or through one of the Law Schools' journal offerings. There is no separate requirement that the research paper be graded.

Practical Skills Component

Students must complete at least one course containing a substantial practical skills component. The following courses satisfy this requirement:

LAW 8757	Business Planning	2-3
LAW 8837	Negotiating Mergers And Acquisitions	2-3
LAW 8875	Real Estate Transactions	2-3
LAW 8757R	Entrepreneurial Law & Practice Clinic	2-3
LAW 8638R	Entrepreneurial Lawyering: Solo And Small Firm Practice	2-3
LAW 8601L	Transactional Lawyering Skills Lab	1
Also, an Advanced Research course on business, tax or securities law, or on another area of law approved by the Emphasis Faculty Advisors		

In lieu of one of those courses, the Practical Skills Requirement may be met by such other internships, externships, simulation courses, drafting courses, or other courses designed to provide exposure to the type of work commonly performed by lawyers in the business and entrepreneurial law field, as the Emphasis Faculty Advisors find acceptable.

Ethics Component

Each candidate for the Emphasis must attend at least four clock hours of these ethics offerings prior to graduation, provided through lectures, seminars, workshops, or other instruction dealing with ethical issues that frequently arise in the business and entrepreneurial law field, as approved by the Emphasis Faculty Advisors.

Research Requirement

All students in the program must satisfy an advanced research requirement which provides familiarity with materials and sources frequently consulted by lawyers practicing in the business and entrepreneurial law field. Subject to approval by the Emphasis Faculty Advisors this may entail a separate course, a component of an existing course, a separate lecture, seminar or workshop offering, or demonstrably satisfactory training on advanced research in connection with the Emphasis Writing Requirement.

Curriculum Requirements

Prerequisites or Co-requisites

- Business Organizations
- Federal Taxation

Required Courses(Group A) (All must be taken on a graded basis)

- Securities Regulation
- Legal Accounting (or other approved prior accounting education)
- Either Taxation of Business Organizations or Corporate Tax I and Partnership Tax
- Either Secured Transactions or Real Estate Finance

Grouped Required Courses (Group B) (Must take at least 9 credit hours, all taken on a graded basis, from among these courses)

- Business Planning
- Administrative Law
- Real Estate Finance (If not taken to satisfy a Group A course), Real Estate Finance or Legal Context of Real Estate Decision Making (only one of those three may be counted)
- Negotiating Mergers & Acquisitions
- Secured Transactions (If not taken to satisfy the Group A Required Courses requirement)
- Commercial Transactions
- Sales & Leasing
- Debtor/Creditor
- Bankruptcy or Debtor/Creditor (only one of those two may be counted))

- Entrepreneurial Legal Services Clinic or Entrepreneurship & New Venture Creation, (only one of those two courses may be counted)
- Entrepreneurial Lawyering: Solo & Small Firm Practice or Special Topics in Entrepreneurial Lawyer (only one of those two may be counted)
- Social Entrepreneurship Ventures or Social Venture Creation (only one of those two may be counted)
- Alternative Dispute Resolution, Arbitration, and Mediation (only one of those three may be counted.)
- International Business Transactions or Law of International Trade & Finance (only one of those two may be counted)
- Labor Law, Employment Discrimination Law, Employment Law (only one of those three may be counted)
- Intellectual Property Law, Copyright Law, and Patent Law (only one of those three may be counted.)
- Antitrust and Competition Law
- Tax Exempt Organizations

If a Group B course is properly counted toward the 9 credit hour Group B requirement and also listed above as a course satisfying the Practical Skills Requirement, it may be applied to satisfaction of both the those requirements. A course listed above as a course satisfying the Practical Skills Requirement but not listed as a Group B course may not be applied to satisfaction of the Group B requirement.)

Graduation

For a student to be recognized as having graduated with an Emphasis in Business & Entrepreneurial law, the student must have achieved a grade-point average of at least 3.0 in the minimum number of Emphasis course requirements listed as Required (Group A) or Grouped Required (Group B); provided that a student may, at the student's option, omit a grade received in either Corporate Tax or Partnership Tax, while still counting the course to reach the required number of academic credit hours for the Emphasis; and that a student may also omit any grade received in any Grouped Required (Group B) course, so long as the student has grades from at least 9 credit hours of other Group B courses properly included and counted in the grade point average necessary for the Emphasis.

Child & Family Law Emphasis Area Requirements

UMKC School of Law Emphasis in Child and Family Law

The UMKC School of Law Emphasis in Child and Family Law prepares students to serve these pressing and unique legal needs. The program prepares students to serve the whole family -- from infants to elders -- and maintains a unique collaborative and interdisciplinary framework. The emphasis program requires that students master the basic doctrine and legal theories involved when the legal system interacts with families. In addition, however, students undertake study exposing them to the perspectives of other disciplines such as psychology and social work. Students study the unique ethical dilemmas of this area of law in specialized workshops and gain hands-on experience in representing children and families in the program's clinical components. Finally, all students in the emphasis complete an in-depth capstone research and writing project.

Students who qualify for and successfully complete the credential requirements in the Child and Family Law program should be in an excellent position to pursue and succeed in careers serving children, families, and elders, whether in private or government practice or in other leadership roles.

Admission Requirements

Students may apply after completing their second semester (or 29 credit hours). Students who are close to completing the hourly requirements may petition for early admission for good cause shown.

An application form will be available and must be submitted by the deadline announced by the Child and Family Law Faculty. Decisions as to whether a student will be admitted to the Emphasis in Child and Family Law will be made in the semester in which the student applies.

Procedure and Criteria for Selection:

The Child and Family Law Faculty will select the students to be admitted to the program. Criteria to be considered may include previous general academic performance in law school, previous academic performance in courses seen as particularly relevant to the emphasis area, level of interest in serving children or families, and ability to identify an advisor willing to advise and supervise the student.

No student shall be admitted to the Child and Family Law program unless he or she has a grade-point average of 2.6 or above in all law school classes previously taken.

The Child and Family Law Faculty is authorized to make appropriate adjustments in the deadlines for part-time students or other students whose schedules do not substantially conform to the six semester paradigm.

Student Learning Outcomes

Graduates will be prepared for admission to the Bar and effective and responsible participation in the legal profession and in their communities.

Graduates will demonstrate effective problem-solving skills by:

- Critically examining complex facts.
- Identifying client needs and determining legal issues.
- Efficiently finding relevant law, policy and factual information.
- Applying appropriate legal rules and standards to the problem.
- Generating alternative solutions and developing plans for implementation.
- Continually reviewing and reassessing a plan of action.

Graduates will demonstrate effective communication skills by:

- Communicating appropriately and effectively with relevant audiences.
- Relating effectively to professionals from other disciplines.
- Listening actively.
- Writing and speaking clearly.
- Demonstrating cultural sensitivity.

Graduates will demonstrate entry-level competence in legal skills by:

- Identifying appropriate forums and means for resolution of legal problems.
- Being able to determine legal issues for analysis and research.
- Possessing elementary skills in interviewing, counseling and negotiation.
- Drafting documents to implement basic legal transactions.
- Dealing sensitively with people in conflict.

Graduates will demonstrate knowledge of the practice of law by:

- Being aware of career and job options in law practice.
- Having systemic knowledge of legal bibliography and resources.
- Possessing basic skills to enter practice as an associate.
- Having knowledge of basic techniques of law practice operation and management.

Graduates will demonstrate commitment to justice, competence and service to the profession and the community by being:

- Aware of the history and values of the legal profession.
- Committed to ethical practice.
- Aware of the rules governing the profession.
- Able to critically assess laws and rules and propose alternatives.
- Committed to lifelong learning and self-development.
- Appreciative of the value of ideological and cultural diversity.

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, see http://www1.law.umkc.edu/Academic/Emphasis/famlaw.pdf.

General Requirements

See requirements: http://law.umkc.edu/academics/j-d-emphasis-child-and-family.asp

Curriculum Requirements

Of the 15 hours required for the emphasis, the student must complete

- The basic family law course (three credit hours).
- The Child & Family Services Clinic
- At least two courses from a list of core curriculum (listed below)
- The remainder of the required credit hours from other core curriculum courses or a list of elective courses (listed below).

Prerequisite Course

All students in the emphasis must take Family Law. Because this foundation course is a prerequisite for most other courses in the emphasis, students accepted for the emphasis will be given a priority in enrollment in the course.

Core Courses

Students must take at least two courses from the classes listed below:

- Children in the Law
- Juvenile Offenders & The Law
- Family Violence
- Gender and Justice
- Elder Law

Clinical Component

All students in the Child and Family Law program must enroll in the Child & Family Services Clinic

Elective Courses

- Mediation
- Journal of the American Academy of Matrimonial Lawyers
- Dispute Resolution and Lawyers
- Elder Law For Estate Planners
- Disabilities and the Law
- Immigration Law and Process
- Education Law: Government & Legal Aspects of Education
- Independent Study (if approved by Child and Family Law advisor on the basis that the course of study relates directly to the emphasis area)
- All Journals Staff (if approved by Child and Family Law advisor on the basis that the student's note or comment relates directly to the emphasis area)
- Fact Investigation
- Legal Aid Clinic
- Internship
- Guardian Ad Litem Workshop
- Familty Law Clerkship
- Estate Planning & Drafting
- Leadership in Disability Studies: A Multidisciplinary Approach
- Miniterm courses designated as family law courses. In the past, these have included: Poverty Law, Violence Against Women Act, Law & Human Trafficking and Family Law and Film

Any other law school course if, before beginning the course, the students obtains written approval from the Child and Family Law Faculty. Such approval shall not be granted unless the Child and Family Law Faculty find that, in light of the student's other courses and the student's goals in the emphasis study, the course will advance the student's study of Child and Family Law to an extent equivalent to other Child and Family Law electives.

Courses may be added or deleted from the lists contained in the sections above with approval of the Child and Family Law Faculty and the Law School faculty.

Graduation Requirements

For a student to be recognized as having graduated with an Emphasis in Child and Family Law, students must have

- timely completed all emphasis requirements
- received the approval of the Child and Family Law faculty of the student's portfolio and
- earned a 3.0 grade point in emphasis course work (required and elective courses).

This grade-point average shall be computed considering all Required and Elective Courses in the emphasis taken by the student, including any that exceed the minimum hour requirements for the Emphasis.

International, Comparative & Foreign Law (ICF) Emphasis Area Requirements

Admission Requirements

After their first year and before their final semester, or with approval in other circumstances, students may be admitted to the International, Comparative, and Foreign Law ("ICF") Emphasis if their cumulative law school GPA is 2.7 or above.

Student Learning Outcomes

Graduates will be prepared for admission to the Bar and effective and responsible participation in the legal profession and in their communities.

Graduates will demonstrate effective problem-solving skills by:

- Critically examining complex facts.
- Identifying client needs and determining legal issues.
- Efficiently finding relevant law, policy and factual information.
- Applying appropriate legal rules and standards to the problem.
- Generating alternative solutions and developing plans for implementation.
- Continually reviewing and reassessing a plan of action.

Graduates will demonstrate effective communication skills by:

- Communicating appropriately and effectively with relevant audiences.
- Relating effectively to professionals from other disciplines.
- Listening actively.
- Writing and speaking clearly.
- Demonstrating cultural sensitivity.

Graduates will demonstrate entry-level competence in legal skills by:

- Identifying appropriate forums and means for resolution of legal problems.
- Being able to determine legal issues for analysis and research.
- Possessing elementary skills in interviewing, counseling and negotiation.
- Drafting documents to implement basic legal transactions.
- Dealing sensitively with people in conflict.

Graduates will demonstrate knowledge of the practice of law by:

- Being aware of career and job options in law practice.
- Having systemic knowledge of legal bibliography and resources.
- Possessing basic skills to enter practice as an associate.
- Having knowledge of basic techniques of law practice operation and management.

Graduates will demonstrate commitment to justice, competence and service to the profession and the community by being:

- Aware of the history and values of the legal profession.
- Committed to ethical practice.
- Aware of the rules governing the profession.
- Able to critically assess laws and rules and propose alternatives.
- Committed to lifelong learning and self-development.
- Appreciative of the value of ideological and cultural diversity.

Program Requirements

1. **Courses:**
   Student will have to take a total of 16 credit hours from the below mandatory and elective courses.
   a. **Required:** The following two mandatory classes must be taken:
      - **International Law** (3 hours)
      - **Global Legal Systems** (3 hours)
        The above classes will include consideration of ICF professional responsibility issues.

   b. **Electives:**
      The remaining hours to be satisfied from the following courses (note: not all below are offered every year):
      - **Conflict of Laws**
      - **Immigration Law & Policy or Immigration Law & Process**
      - **International Business Transactions**
      - **International Human Rights**

- **International Legal Response to Climate Change**
- **International Taxation**
- **International Trade & Finance**
- **National Security Law**
- **Transnational Litigation & Arbitration**
- **Courses offered as part of an approved overseas experience** (only one approved overseas experience will count towards the emphasis)
  Other Courses may be **approved** by the ICF advisor to count towards the Emphasis. Where a course includes a substantial component of ICF law, part of that course may count towards the 16 hour requirement with advance approval from the ICF advisor.

2. **Required Overseas Legal Experience**
   This would include such experiences as:
   - The **Ireland, China, Oxford** or other law summer programs; or
   - An **overseas Mini-Term** course (if offered); or
   - Another experience approved in advance by the ICF advisor.
     These experiences may constitute a “skills” component, depending on the specifics of the experience. The credits earned from **ONE** approved overseas experience may be counted towards the required 16 hours for the Emphasis.
3. **Required Writing Project:**
   - A paper satisfying the R&W requirement or an equivalent independent study writing project (including law review notes or comments) must be undertaken by writing on an ICF subject (subject to be approved by the ICF advisor).
   - This requirement may also be satisfied through participation on the Jessup International Moot Court Team or other equivalent international competition with approval of the ICF advisor.
   - Class papers do not satisfy this requirement, but may be expanded as an independent paper or the R&W paper, and with approval of the ICF advisor, the expanded paper may satisfy this requirement. Any credits earned through satisfaction of this writing requirement will **NOT** be counted towards the 16 hours.

Graduation Requirement

To graduate with the ICF Emphasis, students must have a cumulative minimum GPA of 2.7 and a minimum GPA within the emphasis area of 3.0.

Litigation Emphasis Area Requirements

Emphasis in Litigation

UMKC’s long tradition of educating distinguished litigators is an important reason that many students choose UMKC for their legal education. To enhance that tradition, the law school has established within the J.D. degree an Emphasis in Litigation, a program designed to help outstanding students focus on those courses that will give them the skills and knowledge necessary to excel in the ever-changing world of twenty-first century litigation. In addition to taking a rigorous yet varied menu of required and elective courses, each student pursuing the Emphasis in Litigation works closely with an assigned faculty advisor and is provided with additional training in legal writing, litigation ethics, and legal research.

Admission Requirements

Selection of Students for Admission to the **Emphasis in Litigation**

- Deadline for admission to the Emphasis in Litigation program: Students should apply not later than their fifth semester of law school. An application form will be available and must be submitted by the deadline for applications set by the litigation concentration advisors committee and circulated to the student body. Decisions as to whether a student will be admitted to the Emphasis in Litigation will be made in the semester in which the student applies.
- Procedure and Criteria for Selection:
  - The maximum number of students who will be permitted to enter the litigation program each year will be set by the litigation advisory committee taking into account the ability of the advisors to provide adequate supervision and advising. Each litigation advisor may set a maximum number of students that he or she will advise.
  - The litigation advisory committee will select the students to be admitted to the program. Criteria to be considered may include previous general academic performance in law school, previous academic performance in courses seen as particularly relevant to litigation, level of interest in litigation, and ability to identify an advisor willing to advise and supervise the student.
  - No student shall be admitted to the Litigation program unless he or she has a grade-point average of 2.7 or above in all law school classes previously taken.
- Part-time Students and Other Students with Unusual Schedules: The litigation advisory committee is authorized to make appropriate adjustments in the deadlines for part-time students or other students whose schedules do not substantially conform to the six semester paradigm.

Student Learning Outcomes

Graduates will be prepared for admission to the Bar and effective and responsible participation in the legal profession and in their communities.

Graduates will demonstrate effective problem-solving skills by:

- Critically examining complex facts.
- Identifying client needs and determining legal issues.
- Efficiently finding relevant law, policy and factual information.
- Applying appropriate legal rules and standards to the problem.
- Generating alternative solutions and developing plans for implementation.
- Continually reviewing and reassessing a plan of action.

Graduates will demonstrate effective communication skills by:

- Communicating appropriately and effectively with relevant audiences.
- Relating effectively to professionals from other disciplines.
- Listening actively.
- Writing and speaking clearly.
- Demonstrating cultural sensitivity.

Graduates will demonstrate entry-level competence in legal skills by:

- Identifying appropriate forums and means for resolution of legal problems.
- Being able to determine legal issues for analysis and research.
- Possessing elementary skills in interviewing, counseling and negotiation.
- Drafting documents to implement basic legal transactions.
- Dealing sensitively with people in conflict.

Graduates will demonstrate knowledge of the practice of law by:

- Being aware of career and job options in law practice.
- Having systemic knowledge of legal bibliography and resources.
- Possessing basic skills to enter practice as an associate.
- Having knowledge of basic techniques of law practice operation and management.

Graduates will demonstrate commitment to justice, competence and service to the profession and the community by being:

- Aware of the history and values of the legal profession.
- Committed to ethical practice.
- Aware of the rules governing the profession.
- Able to critically assess laws and rules and propose alternatives.
- Committed to lifelong learning and self-development.
- Appreciative of the value of ideological and cultural diversity.

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, see http://www1.law.umkc.edu/Academic/Emphasis/LitigationEmphasis.pdf.

General Requirements

Minimum Total Hours Required

1. A student must take a total of at least 26 hours in approved courses. Approved courses are those listed as "Required Courses," "Grouped Required Courses" and "Elective Courses".
2. No more than three hours of required upper-level courses, (including those used by the student to satisfy the Jurisprudence requirement) may count toward the required 26 hours.
3. A course (including Law 8746) used to satisfy the student's writing requirement (see below) may be counted toward the total hours requirement even if it is also used to satisfy the student's Research and Writing Requirement.

Writing Requirement

1. Each student in the program must complete a written project, approved by an emphasis area supervisor, on a topic dealing directly with litigation.
2. The written project must be of a scope and quality that would satisfy the law school's research and writing requirement for a J.D. degree.
3. The written project may satisfy both the program's requirement and the J.D. requirement.

Practical Skills Component

All students in the program must take at least two of the following courses:

- Advanced Legal Writing: Litigation Drafting
- Appellate Advocacy II
- Appellate Advocacy III
- Appellate Advocacy IV
- Trial Advocacy I
- Trial Advocacy II
- Trial Advocacy III

Ethics Component

1. Each student in the program must participate in at least one, substantial, non-credit workshop on ethical issues for litigators.
2. Workshops will be organized by the advisors and conducted by faculty, practicing lawyers, or judges.

Research Component

1. Each student in the program must participate in at least one, half-day, non-credit workshop on research materials and sources frequently consulted by litigators on issues directly related to the litigation process.
2. Workshops will be organized by the program advisers and the librarians. They will be conducted by faculty, librarians, practicing lawyers or judges.

Supervising and Advising Component

1. Each student in the program shall be assigned an advisor.
2. Each student in the program shall meet with his or her advisor not less than twice a semester.

Curriculum Requirements

Distribution of Courses

1. Required Courses: All students in the program must take each of the following courses:

LAW 8521	Civil Procedure I	3
LAW 8522	Civil Procedure II	2-3
LAW 8635	Criminal Procedure I	3
LAW 8621	Evidence	3

2. Grouped Required Courses:

All students in the program must also satisfy the Core Course Requirement, the Advanced Course Requirement, and the Skills Requirement set forth below:

a. Core Course Requirement: All students in the program must take at least two of the following core courses:

LAW 8702	Conflict of Laws	2-3
LAW 8765	Federal Jurisdiction	2-3
LAW 8822	Post Conviction Remedies	2-3
LAW 8711	Remedies	2-3
LAW 8706	Complex Litigation	2-3
LAW 8636	Criminal Procedure II	2-3

b. Advanced Course Requirement: All students in the program must take at least one of the following advanced courses:

LAW 8732	Lawyers and Dispute Resolution	2-3
LAW 8850	Applied Evidence	1-3

LAW 8636A	Federal Trial Practice	2-3
LAW 8791	Civil Rights	2-3
LAW 8820	Criminal Trial Techniques	2
LAW 8734	Mediation	2
LAW 8740M	Missouri Civil Procedure	2-3

c. Skills Requirement: All students in the program must take at least two of the following courses:

LAW 8707C	Advanced Legal Writing: Litigation Drafting	2-3
LAW 8747	Appellate Advocacy II	1
LAW 8748	Appellate Advocacy III	2
LAW 8775	Appellate Advocacy IV	1-2
LAW 8903	Fundamentals of Legal Investigations	2
LAW 8700	Trial Advocacy I	2
LAW 8703	Trial Advocacy II	2-3
LAW 8705	Trial Advocacy III	2

3. Electives: The following electives may also help satisfy the minimum total hours requirement:

a. Clinics and Externships

LAW 8814E	Appellate Practice Clinic	2
LAW 8877	Bankruptcy Court Clerkship	2
LAW 8752S	Child & Family Services Clinic	2-3
LAW 8713	Death Penalty Clinic	1-2
LAW 8768R	Department Of Labor Clinic	2-3
LAW 8662F	Family Court Clerkship	2-3
LAW 8662	Federal Court Internship	2-3
LAW 8656F	Federal Public Defender Externship Clinic	2-3
LAW 8713P	Innocence Project	1-3
LAW 8656P	Jackson County Prosecutor Clinic	1-3
LAW 8656C	Jackson County Prosecutor Clinic-Family Law Prosecution	2-3
LAW 8790	Legal Aid Clinic	1-3
LAW 8656A	Missouri Attorney General’s Office Clinic	2
LAW 8656	Public Defender Trials Clinic	3
LAW 8637R	U.S. Attorney’s Office Law Clinic	2-3

b. Other Coursework

LAW 8764	Administrative Law	1-3
LAW 8710	Advanced Lawyering Processes	1-3
(2nd semester only)		
LAW 8820	Criminal Trial Techniques	2
LAW 8813	Employment Discrimination Law	2
LAW 8609	Ethical Issues In Family Law Representation	1-2
LAW 8735	Seminar In Famous Trials	2-3
LAW 8743	Global Legal Systems	1-3
LAW 8746R	Independent Study	0.5-3
(if approved by student’s emphasis area adviser on the basis that the course of study or legal research relates directly to litigation)		
LAW 8911	Winning Voir Dire	1
LAW 8745S	UMKC All Journal Staff	1-4
LAW 8635S	Wrongful Convictions	2-3
LAW 8635T	Wrongful Convictions II	2-3

Any other course if, before beginning the course, the student obtains written approval from both the emphasis area litigation adviser committee and the student's emphasis area adviser. Such approval shall not be granted unless the committee and the adviser find that, in light of the student's other courses and the student's litigation-related goals, the course will advance the student's study of litigation to an extent equivalent to other litigation electives.

Courses may be added or deleted from the lists contained in sections 1 through 3 above with approval of the litigation emphasis area adviser committee and the faculty.

Graduation Requirements

For a student to be recognized as having graduated with an Emphasis in Litigation, the student must have fulfilled the following requirements:

- The student must have satisfied all general and curriculum requirements set forth above.
- The student must have achieved a grade-point average of at least 3.0 in the field. This grade-point average shall be computed considering all Required Courses, Grouped Required Courses, and Elective Courses in the emphasis taken by the student, including any that exceed the minimum hour requirements for the Emphasis in Litigation.

Urban, Land Use and Environmental Law Emphasis Area Requirements

Emphasis in Urban and Land Use Law, Environmental Law

UMKC students can engage in a course of study within the J.D. degree with an emphasis in Urban and Land Use Law, Environmental Law or both. This program builds on a tradition of excellence in urban and land use law at the law school and on the UMKC law faculty and students' 35-year editorship of The Urban Lawyer, the national quarterly law journal of the American Bar Association Section of State and Local Government Law. Students in this specialized course of study will be able to choose from a variety of courses, seminars, internships, and externships in the law school and in other units and departments of the university including public administration, urban planning and architecture, geosciences, political science and economics. Students who choose to pursue this program will be prepared to enter the job market with specialized knowledge of the issues and law relevant to land use; real estate development; state, regional and local government and the environment.

Admission Requirements

Students in their second or third year may elect to specialize in the "Urban, Land Use and Environmental Law" curricular emphasis program. To do so, a student must apply no later than the end of the second year. Advice about compliance with the requirements is available from the Emphasis Faculty Advisors.

Student Learning Outcomes

Graduates will be prepared for admission to the Bar and effective and responsible participation in the legal profession and in their communities.

Graduates will demonstrate effective problem-solving skills by:

- Critically examining complex facts.
- Identifying client needs and determining legal issues.
- Efficiently finding relevant law, policy and factual information.
- Applying appropriate legal rules and standards to the problem.
- Generating alternative solutions and developing plans for implementation.
- Continually reviewing and reassessing a plan of action.

Graduates will demonstrate effective communication skills by:

- Communicating appropriately and effectively with relevant audiences.
- Relating effectively to professionals from other disciplines.
- Listening actively.
- Writing and speaking clearly.
- Demonstrating cultural sensitivity.

Graduates will demonstrate entry-level competence in legal skills by:

- Identifying appropriate forums and means for resolution of legal problems.
- Being able to determine legal issues for analysis and research.

- Possessing elementary skills in interviewing, counseling and negotiation.
- Drafting documents to implement basic legal transactions.
- Dealing sensitively with people in conflict.

Graduates will demonstrate knowledge of the practice of law by:

- Being aware of career and job options in law practice.
- Having systemic knowledge of legal bibliography and resources.
- Possessing basic skills to enter practice as an associate.
- Having knowledge of basic techniques of law practice operation and management.

Graduates will demonstrate commitment to justice, competence and service to the profession and the community by being:

- Aware of the history and values of the legal profession.
- Committed to ethical practice.
- Aware of the rules governing the profession.
- Able to critically assess laws and rules and propose alternatives.
- Committed to lifelong learning and self-development.
- Appreciative of the value of ideological and cultural diversity.

Important Note: Because the School is committed to keeping up with changes in the practice of law, the requirements for emphasis areas may change during the course of a student's enrollment at the School. The requirements at the time a student is granted admission into the emphasis area are the requirements that govern completion of the student's emphasis requirements. For possible revised requirements that will take effect with the next academic year, see http://www1.law.umkc.edu/Academic/Emphasis/UrbanEmphasis.pdf.

General Requirements

Minimum Total Hours Required

Students must complete seven of the listed courses: students must complete all courses in Group A, three courses from Group B and one course from Group C. All courses must be taken for a grade (with the exception of those courses for which a grade option is not available). Course work satisfying this requirement must total at least 15 hours.

Writing Requirement

Students must complete an academic research paper of high professional quality concerning a topic within the field of the emphasis area. They may fulfill this requirement in conjunction with any of the listed courses, or as part of the Research and Writing requirement, as part of an Independent Study option, through one of the Law School's journal offerings, or through a research project pursued at the Center for the City at UMKC. Unless written to meet the R&W requirement, the paper must be written for a grade. Advance approval of the topic and faculty advisor is required by one of the land-use and environment faculty.

Practical Skills Component

Students must participate for at least one semester in a practical skills component. The following opportunities satisfy this requirement: the EPA Law Clinic, Region VII; the EPA Law Clinic, Agricultural Center; or a service placement with the Center for the City at UMKC. Participation in the EPA Law Clinics can simulataneously be used to satisfy the minimum hours requirement.

Ethics Component

Ethical considerations will be incorporated into the listed emphasis area courses.

Research Component

All students in the program must complete an advanced research offering which will provide advanced skills in research in the urban, land use and environmental law field. This may entail a separate course of study, a component of an existing course, or separate lecture, seminar or workshop offerings as designated by the Program Faculty Advisors.

Curriculum Requirements

Group A: Core Courses (must take all)

- Administrative Law
- Environmental Law
- Land Use Planning

Group B: Specialized Courses (must take three)

- Air & Water Regulation
- Cities and the Environment "J"
- Current Issues in Property Law Seminar
- Environmental Law Seminar
- International Environmental Law
- Law and the American Indian
- Natural Resources Law
- Preservation Law
- Seminar in Urbanization
- State & Local Government Law
- Toxic Torts
- Urban Lawyer Board
- U.S. Environmental Protection Agency Law Clinic: Region VII Headquarters
- U.S. Environmental Protection Agency Law Clinic: National Agricultural Compliance Assistance Center
- Water Law

Group C: Related Law Courses and Interdisciplinary Courses (must take one)

- Alternative Dispute Resolution (2)
- Complex Litigation (3)
- Economics and the Law (2) "J"
- Federal Jurisdiction (3)
- Legislation (3)
- Real Estate Finance (3-4)
- Real Estate Transactions (2)
- State and Local Government Tax (2-3)
- Biogeography and Landscape Ecology (3) (Department of Geosciences)
- Managing Urban Economic Development (3) (Bloch School)
- Urban and Regional Planning for Urban Administrators (3) (Bloch School)
- Urban Planning Theory and Practice (3) (Department of Architecture)
- Urban Planning and Design (This course would have additional assignments for law students)

Graduation Requirements

To be recognized as having graduated with an emphasis in Urban, Land Use and Environmental Law, students must complete all requirements with an average grade of B or better (and no grade below a C). Students who have met the program requirements by the time of graduation will have this distinction noted at that time.

LL.M./M.P.A. Combined Degree Program

A combined LL.M./M.P.A. degree program between the School of Law and the Henry W. Bloch School of Business and Public Administration can be arranged with the approval of the Law School graduate studies committee.

Master of Laws Degree

Eligibility for the LL.M. Program

The School of Law offers three graduate study programs in law leading to the master of laws degree: the LL.M. (Taxation); the LL.M. (Urban Affairs); and the LL.M. (General). The LL.M (General) permits students to emphasize their study in a particular area of the curriculum, subject to availability of courses and instructors. Admission to the LL.M program is limited to applicants who have attained the juris doctor or equivalent degree from an approved law school and who have a law school GPA of at least 2.7 on a 4.0 scale.

The School of Law also offers the LL.M (General) degree program to foreign students. Eligibility criteria, admissions process, degree requirements, curriculum and other pertinent information specific to this program is detailed separately in this catalog. See "General Master of Laws Degree for Foreign Students."

Admissions Process

An LL.M. admission application, application fee and official law school and undergraduate transcripts must be submitted for admission. There is no formal application deadline, but early submission of applications is recommended.

Academic Rules and Regulations (p. 587)

Scholarships (p. 587)

Master of Laws (General) (p. 588)

Master of Laws (Taxation) (p. 589)

Master of Laws (Urban Affairs) (p. 590)

Foreign Student LL.M (p. 591).

Master of Laws Degree Requirements

1. Completion of 24 credit hours, 18 of which must be taken from the list of required and elective courses provided for each program.
2. A cumulative GPA of at least 3.0 (2.7 for the LL.M. [Taxation]).
3. Completion of all required courses. See the "Required Courses" for each program.
4. Enrollment in a minimum of 2-4 credit hours each semester.
5. Successful completion of all coursework (including thesis, if applicable) within three years from the beginning of the course of studies leading toward the degree.

Upon enrollment in the graduate program, a student is assigned a faculty advisor. In consultation with the advisor, the student develops a plan of study that meets the requirements for the degree in the program area selected. The advisor must approve enrollment in all courses.

Post-J.D. study may be undertaken on a non-LL.M. basis. Applicants who wish to obtain an LL.M. degree but who do not have the required grade-point average may be permitted to enroll as a non-degree candidate. They may be considered for later admission to the degree program on the basis of performance in courses taken as a non-degree candidate.

LL.M. Academic Rules and Regulations

Appeal of Grades,

The rules and regulations for the LL.M. programs in regard to appeal of grades is the same as specified for the Juris Doctor degree program.

Scholastic Probation and Dismissal

A student will be placed on scholastic probation whenever the student's GPA falls below 3.0 (2.7 for the LL.M. [Taxation] degree). A student on probation must attain an overall 3.0 GPA (2.7 for the LL.M. in [Taxation]) by the end of the next semester of coursework, or, unless an exception is made by the Graduate Studies Committee, the student will be dismissed from the program for academic deficiency.

Attendance, Examinations and Grades, and Withdrawal from Courses

The rules and regulations for the LLM programs in regard to attendance; examinations and grades; and withdrawal from courses are the same as specified for the Juris Doctor degree programs, unless modified by the student's LLM advisor with the consent of the graduate studies committee.

LL.M. Scholarships

Arthur Mag Graduate Law Fellowship

In recognition of Arthur Mag's service to the University of Kansas City and UMKC, the Edward F. Swinney Trust has provided a grant for the establishment of Arthur Mag graduate fellowships to support full-time graduate study at UMKC. Arthur Mag Fellows work closely with distinguished professors in their graduate degree programs. These professors serve as mentors throughout the fellows' graduate work.

One of these fellowships is designated for the School of Law, and is provided each year to an outstanding student in the School of Law's LL.M. program.

The *Arthur Mag Graduate Fellowship in Law* includes a stipend of $10,500 for the 2006-2007 academic year; remission on non-resident fees, if applicable; and remission of 18 hours of graduate law educational fees, for a total possible compensation of nearly $28,000.

Applicants must be U.S. citizens who are planning to pursue the graduate program on a full-time basis.

More information, including a "generic" application form that may be copied and used and a faculty recommendation form, may be obtained/downloaded from the School of Graduate Studies Web site at: http://sgs.umkc.edu/scholarships-financial-assistance/index.asp.

John B. Gage Memorial Fellowships

Fellowship awards are provided annually to outstanding students entering as full-time LL.M. degree candidates from a fund endowed by friends of alumnus John B. Gage, a teacher of law, former mayor of Kansas City and eminent lawyer.

Minority Graduate Student Fellowships

The UMKC School of Graduate Studies annually awards up to three Minority Graduate Fellowships of $600 each, applicable to the student's graduate educational fees. The fellowship is renewable for one additional year provided the student maintains a 3.0 grade-point average and the law school certifies that the student is in good standing and making normal progress toward the degree. Those eligible for nomination for these fellowships at the law school include blacks, Hispanics, Native Americans and Asian Americans who are degree-seeking LL.M. students admitted or enrolled at UMKC for the ensuing academic year and who are U.S. citizens. Fellows must maintain a minimum enrollment of six credit hours per semester.

UMKC Graduate Tax Law Foundation Scholarship

The Graduate Tax Law Foundation provides a periodic cash award to outstanding LL.M. (Taxation) students and outstanding J.D. tax students.

Curriculum, Master of Laws (General)

Student Learning Outcomes

1. All General LL.M. students will have developed and completed an individualized plan of ongoing learning that meets their professional goals. Students will have a written plan of study with a professional goal statement, concrete learning outcomes, and a timeline for completion.

2. General LL.M. students will be able to demonstrate expert knowledge of the basic history, doctrines, and procedures in their area of study. General LL.M. students are required to complete a publishable quality thesis in their field of study. For general LL.M. students pursuing individual plans of study, the Master's students' thesis must be of publishable quality and demonstrate advanced knowledge and expertise in their chosen field. For General LL.M. students pursuing a comparative and international program, a series of papers that demonstrates competence in research, analysis and communication about American law takes the place of the publishable scholarly paper.

3. General LL.M. students in an individualized program will be able to share their expertise in their area of legal study through effective teaching techniques in presentations or in clinical supervision. For LL.M. students in the graduate fellowship program, graduates will have taught or co-taught a law school course in their area of expertise.

Program Requirements

There are no specific course requirements for the LL. M (General). Rather, the course of studies is one developed by the student and his/her advisor based upon a set of courses related to a specific thematic goal and approved by the graduate studies committee. It must include a thesis related to the subject area chosen. Foreign students seeking the LL.M (General) should consult the the admissions criteria and program requirements specific to that program. All other LL.M (General) students arrange their specialized degree requirments in consultation with their advisor.

Jurisprudential Requirement

Students must take one jurisprudential course approved by their advisor.

Thesis Requirement

A minimum of four and a maximum of eight credit hours (to be determined by students in consultation with their thesis advisor) may be given for a written thesis on a subject approved by the student's thesis committee. The thesis must show substantial evidence of original research or development of the principles of at least one interdisciplinary field related to the student's thematic goal; be at least 75 pages in length; and be of high scholastic quality, suitable for publication as a lead article in a scholarly journal.

The thesis committee, consisting of the thesis advisor (selected by the student with the advisor's consent) and the UMKC School of Law graduate studies committee, must approve the topic and the final form and substance of the thesis. In appropriate cases the committee may substitute a substantial scholarly project equivalent to the thesis and appropriate to the degree focus. For foreign students, the thesis requirement is fulfilled through papers written in conjunction with specialized courses required for these students.

Other Courses

The UMKC Law School graduate studies committee may approve up to six credit hours of courses in other schools and departments of the University related to the student's thematic goal. Generally, students may not take required or basic bar examination J.D. courses for graduate credit.

Curriculum, Master of Laws (Taxation)

Student Learning Outcomes

1. KNOWLEDGE: Graduates will acquire in-depth knowledge in a variety of required tax subjects relevant to their practice careers. Graduates will understand the policies underlying systems of taxation and procedures relating to the administration of tax laws and the resolution of disputes with taxing authorities. Students will have acquired an understanding of the context of tax rules, so that analysis of uncertain areas of the law can be aided by an appreciation of underlying theory and policy
2. SKILLS: Graduates will acquire skills in researching and analyzing tax issues. Students will have learned to read carefully and comprehend intricate statutes and regulations, exercising the patience and diligence needed to work with detailed definitions, cross-references and exceptions to general rules. Students will have mastered issue-spotting and problem-solving skills through detailed analysis of tax problems. Students will have demonstrated an ability to communicate tax advice to in clear terms understandable to clients and non-tax professionals.
3. ETHICS: Students will appreciate the ethical obligations associated with giving tax advice, and have acquired familiarity with statutory, regulatory and common law anti-abuse rules.

Required Courses

LAW 8834	Tax Procedure	2
or LAW 8834R	Tax Clinic	
LAW 8838R	Tax Practicum I	2
or LAW 8746R	Independent Study	
LAW 8886	Corporate Taxation I	2-3
LAW 8887	Corporate Taxation II	3
LAW 8888R	Partnership Taxation	3
LAW 8893R	Taxation Of Property Transactions	2-3
Total Credits		14-16

Elective Courses

LAW 8612R	Tax Planning With Life Insurance	1
LAW 8614R	Estate Planning For Retirement Plan Benefits	1
LAW 8615R	Estate Planning For Charitable Giving	1
LAW 8617R	Elder Law For Estate Planners	1
LAW 8746R	Independent Study	0.5-3
LAW 8838L	Legal Accounting	1
LAW 8838R	Tax Practicum I	1-3
LAW 8838L	Legal Accounting	1
LAW 8838R	Tax Practicum I	1-3
LAW 8843	Federal Income Taxation Of Estates And Trusts	2
LAW 8845	Deferred Compensation	2-3
LAW 8848R	State And Local Taxation	2-3
LAW 8874	Tax-Exempt Organizations	2
LAW 8888A	Advanced Partnership Taxation	1-2
LAW 8889	International Taxation	2-3
LAW 8892R	Taxation Of Estates, Gifts And Trusts	2-3
LAW 8908	Family Tax Law	1

In addition to those approved electives, the Director of the Graduate Tax Program may approve a post-J.D. Tax, LL.M. student taking up to 6 credit hours of other elective courses offered at the UMKC School of Law or other UMKC graduate or professional schools, without the necessity of obtaining Graduate Studies Committee approval, if, in the Director's judgment, such courses are graduate level courses suitable to prepare the student for a tax-sensitive practice area (e.g., business planning, estate planning or real estate development). The following courses are currently pre-approved for purposes of that option (but students may petition the Director of the Graduate Tax Program for approval of other courses if the Director finds such courses appropriate under the standard set forth in the previous sentence).

LAW 8757	Business Planning	2-3
LAW 8601R	Doing Business In Ireland, Part I	1
LAW 8757R	Entrepreneurial Law & Practice Clinic	2-3

LAW 8638R	Entrepreneurial Lawyering: Solo And Small Firm Practice	2-3
LAW 8771	Public Finance	2-3
LAW 8754	International Business Transactions	2-3
LAW 8757N	Entrepreneurship & New Venture Creation	3
LAW 8614	Estate Planning and Drafting	3-4
LAW 8875L	Legal Context of Real Estate Decision Making	2-3
LAW 8837	Negotiating Mergers And Acquisitions	2-3
LAW 8861	Real Estate Finance	2-4
LAW 8875	Real Estate Transactions	2-3
LAW 8757L	Special Topics In Entrepreneurial Lawyering	2
LAW 8832	Law Of International Trade And Finance	3
LAW 8915	Social Venture Creation	1
LAW 8757V	Social Entrepreneurship Ventures	1

Special Rules for Application of Courses Taken at Other Law Schools Toward Tax, LL.M. Degree

The Director of the Graduate Tax Law Program may allow Tax, LL.M. candidates to count towards degree requirements up to 6 credit hours of tax courses taken as J.D. or LL.M. students at other law schools so long as (i) they are, in the judgment of both the Director and the applicable instructor here, of comparable coverage and quality to the corresponding required or elective tax courses eligible or required for LL.M credit at UMKC and (ii) the student earned a grade of “B” or higher in such course(s). A student seeking to have one or more coures taken at another law school counted toward the UMKC Tax, LL.M. degree requirements under this provision must petition the Director of the Graduate Tax Program for such treatment and provide the Director with the necessary information to determine if such treatment is in order (this would normally involve reviewing the student’s transcript and the syllabus and assignments list for the subject course(s) taken elsewhere).

Combined J.D./LL.M. (Taxation) Degree Program

Qualified UMKC J.D. students will be permittted to apply up to 10 credit hours (12 with the permission of the Graduate Studies Committee) of UMKC graduate courses approved for this purpose toward an LL.M. (Taxation) degree as well as toward a J.D. degree. This will allow students to earn the Tax, LL.M. on an accelerated basis.

This “combined” J.D./Tax, LL.M program is available to qualified students who begin their legal studies at the UMKC School of Law, and to students who transfer to the UMKC School of Law or who attend it as visiting/certification students during their fifth or sixth semester of law study. With respect to students who take some courses at a different law school and some at UMKC School of Law (as a transfer or visiting/certification student) in no event will more than a total of 12 credit hours toward the Tax, LL.M be awarded for courses approved under “Special Rules for Application of Courses Taken at Other Law Schools Toward Tax, LL.M Degree” above and the Combined J.D./Tax, LL.M program. For further information on admissions and combined degree requirements, contact the Director of the GraduateTax Law Program.

.

Curriculum, Master of Laws (Urban Affairs)

Student Learning Outcomes

Graduates will be able to demonstrate expert knowledge of the basic history, doctrines, and procedures of the law relevant to state and local government law, land use, and urban planning law. Within these general parameters, students will have developed and completed an individualized plan of ongoing learning that meets their professional goals. Students will have a written plan of study with a professional goal statement, concrete learning outcomes, and a timeline for completion.

Courses Available

LAW 8732	Lawyers and Dispute Resolution	2-3
LAW 8898	Construction Law	2
LAW 8773	Environmental Law	2-3
LAW 8766	Land Use Law	2-3
LAW 8728	Law And The American Indian	2-3
LAW 8641R	Legislation	2-3
LAW 8783	Federal Public Land & Resource Law	2-3
LAW 8729	Preservation Law	2-3
LAW 8861	Real Estate Finance	3
LAW 8875	Real Estate Transactions	2-3

LAW 8770	State And Local Government Law	2-3
LAW 8725	Water Law	2-3
LAW 8773C	Environmental Compliance Auditing and Permitting	3
LAW 8725E	Energy Law	3
LAW 8729C	Cultural Preservation Law	3
LAW 8783P	Preservation Law of Fed. Public Lands & Natural Resources	3

Thesis

LL.M. – Urban Law students are required to complete a publishable quality thesis in the field of Urban Law, on subjects approved by the students' thesis committee, as outlined in their plan of study. The thesis must show substantial evidence of original research or development of the principles of at least one interdisciplinary field related to the area of urban studies pursued; be at least 75 pages in length; and be of high scholastic quality, suitable for publication as a lead article in a scholarly journal; and must demonstrate advanced knowledge and expertise in a field of law related to Urban law. A minimum of four and a maximum of eight credit hours (to be determined by the student in consultation with the thesis advisor) may be given for the written thesis .

The thesis committee, consisting of the thesis advisor (selected by the student with the advisor's consent) and the School of Law graduate studies committee must approve the topic and the final form and substance of the thesis.

Other Courses

The School of Law graduate studies committee may approve other law school courses and up to six credit hours of courses in other schools and departments of the University related to the area of urban affairs pursued. Generally, students may not take required or basic bar examination J.D. courses for graduate credit.

Before enrollment, the student will work with the associate dean toward developing an individualized urban affairs course of studies.

Foreign Student LL.M. Curriculum

Admissions

The School of Law offers the Master of Laws (General) to foreign law students. Admission generally is limited to applicants who have a College degree in law from a recognized school. There is no minimum GPA required for admission, but applicants' academic ability will be considered, and applicants must have demonstrated English proficiency, which will be evaluated by an interview and through test scores. The LSAT is not required, but students should take either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) exam. Successful applicants typically have a minimum TOEFL score of 550 on the paper exam, or 80 on the Internet version, or a minimum IELTS score of 5.5) . The required interview, however, is an important component of evaluation, and not all students with scores in the low range will be admitted. In some cases, the law school may require additional English study at UMKC prior to the start of the LL.M. program as a condition of admission.

A foreign law student applying for admission to the Master of Laws (General) degree program must submit the following:

- The Master of Laws (General) for Foreign students application form;
- The application fee;
- An autobiographical essay or personal statement
- Official academic credentials for undergraduate and, if applicable, graduate study (transcripts and, if applicable, degree certificates), including literal English translations of academic credentials if the official credentials are not in English;
- An official TOEFL or IELTS score report;
- An original or certified copy of a financial statement proving financial ability, including a notarized letter of support explaining the relationship to the applicant and pledging financial support if funding is from a family member or sponsor (non-English documents must be accompanied by an English translation)
- One signed letter of recommendation;
- A copy of the biographical information/photo page from your passport (this can be supplied later if you do not have a passport)

There is no formal application deadline, but applications should be submitted by April 1 for optimal consideration. Applications are reviewed once the file is complete, and admission is available so long as there are seats available in the incoming class.

In addition to the admissions packet, applicants must have an interview with the Director of the program, the Associate Dean for International Programs, or a designee of one of them. Interviews in person are preferred, but can also be conducted by telephone. Information on arranging the interview is available on the website of the program: http://www1.law.umkc.edu/academic/china/LLM/overview.htm

The law school offers several partial tuition scholarships (valued at more than $12,000) and one full tuition scholarship. To be considered for a scholarship, the applicant must have a complete application and must fill out the scholarship application form, which is available at the website of the foreign student LL.M. (general) degree program: http://www1.law.umkc.edu/academic/china/LLM/overview.htm

The grading scale is as follows:

- A (including + and -)
- B (including + and -)
- C (including + and -)
- Pass
- Not Pass

The A, B, C grades are given consistent with standards for juris doctor students, and if a foreign LL.M. (general) degree program student achieves this level of grade, he or she may transfer the credit to the juris doctor program, if admitted to the juris doctor program. A “pass” grade signifies that the student has not performed to the level required of a juris doctor student, but that the student has demonstrated basic competency on course objectives as those objectives relate to the foreign LL.M. (general) degree program. If the student earns a grade of “pass” the student receives LL.M. credit, but cannot transfer the credit to the JD program. A “not pass” indicates that the student did not demonstrate basic competency on course objectives, and that course does not count towards fulfilling the graduation requirements for the LL.M.(general) degree.

Accommodation of LL.M. students.

A professor in his or her discretion may allow additional work beyond that assigned generally in the course to allow a foreign LL.M. (general) degree student to achieve a “pass” grade. The professor should indicate at the beginning of the course whether he or she will allow additional work, and what conditions or standards may apply. Supplemental work is to be decided upon by the faculty member. Examples include a paper, re-taking of an exam, an oral examination, field observations and reports.

The academic rules and regulations set forth for the juris doctor degree program covering these matters also apply to the master of laws degree programs.

Student Learning Outcomes

Masters of Law (LL.M.) General

1. All General LL.M. students will have developed and completed an individualized plan of ongoing learning that meets their professional goals. Students will have a written plan of study with a professional goal statement, concrete learning outcomes, and a timeline for completion.

2. General LL.M. students will be able to demonstrate expert knowledge of the basic history, doctrines, and procedures in their area of study. General LL.M. students are required to complete a publishable quality thesis in their field of study. For general LL.M. students pursuing individual plans of study, the Master’s students’ thesis must be of publishable quality and demonstrate advanced knowledge and expertise in their chosen field. For General LL.M. students pursuing a comparative and international program, a series of papers that demonstrates competence in research, analysis and communication about American law takes the place of the publishable scholarly paper.

3. General LL.M. students in an individualized program will be able to share their expertise in their area of legal study through effective teaching techniques in presentations or in clinical supervision. For LL.M. students in the graduate fellowship program, graduates will have taught or co-taught a law school course in their area of expertise

Degree Requirements

1. Completion of three required courses with grades of pass or better: Introduction to Law and Lawyering – International (3 credit hours), Introduction to American Law and Culture (2 credit hours), and Introduction to American Legal Skills (2 credit hours).
2. Completion of an additional 17 credit hours from courses approved by the Foreign LL.M. advisor with grades of pass or better.
3. Successful completion of all coursework within three years from the beginning of the course of studies leading toward the degree.

Upon enrollment in the graduate program, a student is assigned a faculty advisor. In consultation with the advisor, the student develops a plan of study that meets the requirements for the degree in the program area selected. The advisor must approve enrollment in all courses.

Beyond the required courses, students work with their advisor to select courses suitable to their plan of study. Most students take a variety of courses that provide exposure to U.S. law and a foundation for preparing for a bar examination in a U.S. jurisdiction. However, some students may specialize in a particular field, such as one of the School’s Emphasis areas (Business & Entrepreneurial Law; Litigation; Urban, Land Use & Environmental Law; Child and Family Law) or in another area with significant course offerings (such as International Law or IP). Unlike some LL.M. programs for foreign students, the students in UMKC’s program have access to J.D. courses, and have the opportunity to interact with J.D. students.

School of Law Administrative Rules

Inclement Weather Policy

In the event of inclement weather and a determination by the University that classes are to be cancelled and/or closed, the University will provide for immediate distribution of information through UMKC Alert!, the University's mass notification system program, including: text messaging, personal and UMKC voice mail, personal and UMKC email, and pagers; mass email/voicemail notice to UMKC Everyone (faculty, staff & students); and postings on UMKC home page (http://umkc.edu/), Law School Intranet a/k/a the Rooniverse ((http://catalog.umkc.edu/colleges-schools/law/law-administrative-rules/%28https://mylaw.umkc.edu/%29)https://mylaw.umkc.edu) (http://catalog.umkc.edu/colleges-schools/law/law-administrative-rules/%28https://mylaw.umkc.edu/%29) and UMKCAlert! (umkc.edu/umkcalert) (http://www.umkc.edu/umkcalert). The policy is contained in the UMKC Business Interruption Policy at http://www.umkc.edu/hr/master/BusinessInterruptionPolicy11-12.pdf. Faculty/staff and students can opt to have the emergency notification, which includes school closing and class cancellations sent by text or voice mail to their personal phones. The link to the emergency notification FAQ page is http://www.umkc.edu/umkcalert/umkcalert_faq.asp.

Alcoholic Beverages

It is a violation of University regulations to use, sell, purchase or serve alcoholic beverages on University property unless specifically approved by the Vice Chancellor for Student Affiars and Enrollment Management.

Student groups desiring approval must request the approval at least two weeks prior to the date of the intended use. Request forms are available on the All Organizations Council Site on the Law School Intranet a/k/a the Rooniverse (https://mylaw.umkc.edu/) (https://mylaw.umkc.edu).

Parking

The parking lot and driveway on the north side of the law building are for faculty and staff parking. Violators deprive faculty and staff of parking spots they pay for and violators will be ticketed and their vehicles may be towed or locked by a "boot." Students must register their vehicles at UMKC Parking Operations and pay for a student parking permit. Student permits are valid only in student parking lots. Parking regulations are enforced Monday through Friday, 6 a.m.-10 p.m. throughout the year, including the time between semesters. The following link pertains to parking operations: http://www.umkc.edu/adminfinance/parking/.

Henry W. Bloch School of Management

Bloch School (http://www.bloch.umkc.edu)
5110 Cherry Street
(816) 235-2215
bloch@umkc.edu
http://www.bloch.umkc.edu/

Mailing Address
University of Missouri-Kansas City
Henry W. Bloch School of Management
5110 Cherry Street
Kansas City, MO 64110-2499

Dean:
David Donnelly

Associate Dean for Academic Affairs and Programs:
David Cornell

Assistant Dean for Student Services:
Kami Thomas

Assistant Dean for Strategy and Planning:
Sheri Gormley

Chair, Department of Accountancy:
Georgia Smedley

Chair, Department of Global Entrepreneurship:
Jeff Hornsby

Chair, Department of Finance:
Fred Hays

Chair, Department of Management:
Sidne Ward

Chair, Department of Marketing & Supply Chain Management:
Raj Arora

Chair, Department of Public Affairs:
David Renz

Director, Executive MBA Program:
Kimberly Young

Director, Lewis White Real Estate Center
James R. DeLisle

Coordinator, Doctoral Studies in Public Affairs and Administration:
Nicholas Peroff

Coordinator, Doctoral Studies in Entrepreneurship and Innovation:
Lisa Zhao

Degree Programs

The Bloch School offers the degrees of bachelor of business administration (B.B.A.), bachelor of science in accounting (B.S.A.), master of business administration (MBA), master of public administration (M.P.A.), master of science in accounting (M.S.A.), master of science in finance (M.S.F.), and master of entrepreneurial real estate (M.E.R.E.). Within the MBA program there is an Executive MBA (EMBA) offering, and within the M.P.A., there is an Executive M.P.A. (E.M.P.A.). Additionally, the School has two joint degree programs with the UMKC School of Law, the J.D./MBA and the J.D./M.P.A. degrees, participates in the Interdisciplinary Ph.D. program and offers a Ph.D. in Entrepreneurship & Innovation. The Bloch School also offers business and entrepreneurship minors.

History

The University has offered business courses since 1933. In 1953, with the support and encouragement of the Kansas City community, the School of Business Administration was established. Since that time, the Bloch School has grown to a student body of 2000 and a faculty of approximately 45 professional educators. In January 1988, the School was renamed for Henry W. Bloch, co-founder of H&R Block, and moved into a newly expanded building. In 2010, the School officially changed its name to the Henry W. Bloch School of Management to reflect our differentiation as a school that integrates business management, public administration and the infusion of a global, innovative and entrepreneurial mindset. In the fall of 2013, a second building was added to the Bloch School, the Bloch Executive Hall for Entrepreneurship and Innovation.

Mission and Vision

The Henry W. Bloch School of Management develops purposeful, entrepreneurial and innovative leaders to meet changing global demands, and advances knowledge and practice through excellent teaching, scholarship, outreach and service.

The Bloch School aspires to be Kansas City's nationally and globally preeminent school of management focusing on entrepreneurship and innovative thinking as the foundation for transforming talent and achieving sustainable growth in for-proft, public, and nonprofit enterprises.

Accreditation

The Bloch School is accredited by AACSB International - The Association to Advance Collegiate Schools of Business and by the Network of Schools of Public Policy, Affairs, and Public Administration (NASPAA).

Advising and Student Services

Staff in the Student Services Office, room 115 of the Bloch School, assist students in applying for admission, planning programs and registering for courses. Freshmen and junior students must be advised each semester and advising is required for new students and students on probation. Advising information can be found at http://bloch.umkc.edu/students/student-services/advising.aspx. Faculty of the School's six curricular departments are also available to discuss students' programs. Students in the M.P.A. and M.S.A. programs are advised by departmental faculty.

Scholarships

The Bloch School offers numerous scholarships for students enrolled in Bloch degree programs. Information and applications are available on the Bloch School Web site at http://bloch.umkc.edu/students/paying-for-school/bloch-scholarships.aspx. March 1 is the deadline for the majority of these scholarships, which are awarded for the following academic year. For information on loans, grants and other financial aid, contact the UMKC Student Financial Aid and Scholarships Office.

Internships

Students who want to experience work opportunities while in school are encouraged to take their learning beyond the classroom through internships. For-credit internships typically carry one to three hours of credit. To earn academic credit, students should identify a Bloch School faculty member qualified and willing to supervise an internship, complete an internship form available on the Bloch School Web site at http://bloch.umkc.edu/students/student-services/forms.aspx and enroll in an approved internship course. Interested students may contact the UMKC Career Services Office or refer to the Bloch School Career Launcher (available on Blackboard for students admitted to the Bloch School) for internship opportunities.

International Study Abroad

Bloch School students have the opportunity to study abroad for credit. Students may study for a week, a semester, an academic year or in a special summer program at business schools in Europe and other parts of the world. Students who are interested in study abroad opportunities should contact the Bloch School Student Services office or the UMKC International Academic Programs office.

Faculty

Arif Ahmed[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ahmed); associate professor of health administration; B.D.S. (Dhaka Dental College); M.S.P.A., Ph.D. (University of Illinois - Urbana-Champaign).

Latheff N. Ahmed; professor emeritus of public administration; B.A. (University of Mysore); M.A., Ph.D. (University of Kansas).

M. Ishrat N Ali; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ali); assistant professor of entrepreneurship and innovation; B.S., M.S. (University of Dhaka); M.B.A., Ph.D. (Darden School of Business, University of Virginia).

Richard J. Arend Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=arend) ; professor of strategy and entrepreneurship; B.A.Sc. (University of Toronto); M.B.A. (York University); Ph.D. (University of British Columbia); P.E..

Rajinder Arora[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=arora); Schutte Professor of Marketing and chair, Department of Marketing and Supply Chain Management; B.S., M.S. (University of Southern California); Ph.D. (Claremont Graduate School).

Roy E. Baker; professor emeritus of accounting; B.S., M.B.A. (University of Kansas); D.B.A. (Harvard University); C.P.A.

Brian L. Belt; professor emeritus of business and public administration; B.I.E, M.S.I.E (Ohio State University); M.B.A. (Texas Christian University); Ph.D. (University of North Texas).

Lee G. Bolman[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bolman);Marion H. Bloch/Missouri Endowed Chair in Leadership; B.A. (Yale College); Ph.D. (Yale University).

Gene Brown Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brown); Valentine Radford/Missouri Endowed Professor in Marketing; B.S. (Florida Institute of Technology); M.A., Ph.D. (University of Alabama).

Rita M. Cain[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cain); professor of business law; B.A. (Rockhurst University); J.D. (University of Kansas).

Jered B. Carr Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=carr); Victor and Caroline Schulte/Missouri Professor of urban affairs; B.A., M.A. (Florida Atlantic University); Ph.D. (Florida State University).

John Clark[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=clark) ; associate professor of finance; B.A., M.A., Ph.D. (University of Alabama).

David W. Cornell[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cornell); associate professor of accounting; B.S. (University of Kentucky); M.B.A. (Eastern Kentucky University); Ph.D. (Louisiana State University); C.P.A., C.M.A.

Nancy Day[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=day); associate professor of human resources; B.S. (Missouri State University); M.A. (University of Missouri-Kansas City); Ph.D. (University of Kansas).

James R. DeLisle; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=delisle); director of the Lewis White Real Estate Center and associate professor of entrepreneurship and innovation; B.B.A., M.S., Ph.D. (University of Wisconsin).

Kalpesh Kaushik Desai; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=desai); professor of marketing and supply chain management; B.Commerce (Bombay University); M.B.A. (Jamnalal Bajaj Inst. of Mgmt. Studies, India); Ph.D. (University of Texas at Austin).

David Donnelly[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=donnelly); dean, Bloch School; professor of accounting; B.S.B.A., M.B.A. (Kansas State University); Ph.D. (University of Illinois); C.P.A.

Shad Dowlatshahi[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dowlatshahi); professor of operations management; B.S. (Tehran, Iran); M.B.A. (Emporia State University); M.S. (University of Missouri-Columbia); Ph.D. (University of Iowa).

William B. Eddy; dean emeritus, Bloch School, and professor emeritus; B.S., M.S. (Kansas State University); Ph.D. (Michigan State University).

Nolen M. Ellison; professor emeritus of public administration; B.S. (University of Kansas); Ph.D. (Michigan State University).

Joan Gallos[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gallos); professor of leadership; B.A. (Princeton University); M.Ed., Ed.D. (Harvard University).

J. Randall Gardner[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gardner); professor of accounting; A.B. (Harvard University); M.B.A., J.D. (University of Kansas); LL.M., (University of Missouri-Kansas City); C.P.A.; C.F.P.

Larry R. Garrison[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=garrison); Helen Kemper/Missouri Professor of accounting; B.S.B.A. (University of Central Missouri); M.S. (University of Missouri-Kansas City); Ph.D. (University of Nebraska-Lincoln); C.P.A.

David M. Gilgor; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gilgor); assistant professor in operations management/ supply chain; B.S. (University of Tennessee); M.B.A. (Kennesaw State University); Ph.D. (University of Tennessee).

Burton Halpert[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=halpert); associate professor of sociology and joint professor in the Department of Public Affairs; B.A. (Drake University); M.A. (University of Manitoba); Ph.D. (University of Minnesota).

Fred H. Hays[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hays); Henry W. Bloch/Missouri Endowed Chair in financial services and chair, Department of Finance; B.B.A., M.S. (Baylor University); Ph.D. (Louisiana State University).

Robert D. Herman; professor emeritus of organizational behavior; B.A. (Kansas State University); M.S., Ph.D. (Cornell University).

Jack D. Heysinger; dean emeritus, Bloch School, and professor emeritus of law and administration; B.A., J.D. (University of Iowa); LL.M. (University of Michigan).

Jeffrey S. Hornsby; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hornsby); professor of entrepreneurship and innovation / Henry W. Bloch Missouri Endowed Chair in entrepreneurship and innovation; B.A. (Miami University, Ohio); M.A. (Western Kentucky University); Ph.D. (Auburn University).

Doranne M. Hudson; Executive-in-Residence, associate teaching professor of leadership; B.A. (Duke University); M.S.W. (Washington University); M.B.A. (Harvard University).

H.S. Jin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jin) ; associate professor of marketing; B.A., M.A. (Sogang University); Ph.D. (University of North Carolina - Chapel Hill).

Jeff S. Johnson; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=johnson); assistant professor of marketing; B.S., M.B.A., Ph.D. (University of Nebraska-Lincoln).

Karl F. Johnson; professor emeritus of public administration; B.B.A., M.P.A. (University of Missouri-Kansas City); Ph.D. (University of Oregon).

Jae C. Jung[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jung); assistant professor of international business; B.A., M.B.A. (Korea University); Ph.D. (University of Western Ontario).

Allan Katz; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=katz); distinguished professor of public affairs, B.A. (University of Missouri-Kansas City); J.D. (American University Washington College of Law, Washington DC).

LaVern E. Krueger Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=krueger); Olson Professorship, associate professor of accounting; B.S. (University of Wisconsin - Whitewater); M.S.B.A. (University of Denver); D.B.A. (University of Colorado); C.P.A.

David Kuipers[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kuipers); associate professor of finance; B.S. (Iowa State University); M.S. (University of Houston-Clear Lake); Ph.D. (University of Missouri-Columbia).

Atul Kulkarni Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kulkarni); assistant professor of marketing; M.S., M.B.A., Ph.D. (University of Illinois at Urbana-Champaign).

Dirk Libaers[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=libaers); assistant professor of entrepreneurship and innovation; B.S. (Free University of Brussels); M.B.A. (The George Washington University); M.S. (University of Sussex, Brighton, United Kingdom); Ph.D. (Georgia Institute of Technology).

Sarah Martin-Anderson; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=martin-anderson); assistant professor of health administration; B.A. (California State University, Bakersfield); M.P.H., M.P.P., Ph.D. (University of California, Berkeley).

Nathan Mauck Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mauck); assistant professor of finance; B.S. (Kansas State University); Ph.D. (Florida State University).

Neil E. McNeill; associate professor emeritus of accounting; B.S. (University of Kansas); M.B.A. (University of Pittsburgh); D.B.A. (Harvard University); C.M.A.

Brent Never Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=never); assistant professor of nonprofit leadership; B.A. (Connecticut College); Ph.D. (Indiana University).

Alfred N. Page; professor emeritus of management, finance, and communication studies; B.A. (Macalester College); M.B.A., Ph.D. (University of Chicago).

Mark Parry[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=parry); Ewing Marion Kauffman/Missouri Endowed Chair in Entrepreneurial Leadership and professor of marketing; B.A. (Metropolitan State College); M.A. (University of Texas-Arlington); Ph.D. (University of Texas-Dallas).

Nicholas Carl Peroff[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=peroff); professor of public affairs and administration; B.S., M.A., Ph.D. (University of Wisconsin-Madison).

Roger A. Pick[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pick); professor of management information systems; B.S. (University of Oklahoma); M.S., Ph.D. (Purdue University).

George E. Pinches; professor emeritus of business economics and finance; B.S., M.B.A. (Oklahoma State University); Ph.D. (Michigan State University).

Stephen W. Pruitt[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pruitt); Arvin Gottleib/Missouri Endowed Chair in Business Economics and Finance; B.S. (Purdue University); M.B.A. (Ohio State University); Ph.D. (Florida State University).

David O. Renz[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=renz); director of the Midwest Center for Nonprofit Leadership, Beth K. Smith/Missouri Endowed Chair in Nonprofit Leadership and chair, Department of Public Affairs; B.S., M.A., Ph.D. (University of Minnesota).

Leon Robertson professor emeritus of strategic and international management; B.S., M.S. (Georgia Institute of Technology); Ph.D. (Georgia State University).

Pamela A. Rofol Dobies Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dobies); assistant teaching professor of leadership and organizational behavior; B.S. (Indiana Univeristy of Pennsylvania); M.P.A., I Ph.D. (Bloch School of Management).

Probir Roy; associate professor emeritus of quantitative analysis; B.S. (Indian School of Mines); M.B.A. (Indian Institute of Management); Ph.D. (University of Cincinnati).

Leigh Salzsieder Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=salzsieder); assistant professor of accounting; B.A. (Drury University); M.B.A. (University of Kansas); Ph.D. (University of South Carolina).

Robert D. Schrock; professor emeritus of finance; B.A. (McPherson College); M.A., Ph.D. (University of Kansas).

Eleanor Brantley Schwartz; chancellor emerita, UMKC; dean emerita, Bloch School; and professor emeritus of business and public administration; B.A.A., M.B.A., D.B.A. (Georgia State University).

William Self Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=self); assistant professor of leadership and organizational behavior; A.B. (Harvard University); Ph.D. (University of California at Berkeley).

Joseph F. Singer[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=singer); professor emeritus of business operations and analysis; B.S. (Morningside College); M.B.A. (University of Missouri-Kansas City); Ph.D. (University of Arkansas).

Georgia Smedley[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smedley); associate professor and chair, Department of Accounting; B.A. (Mesa College); M.S.A. (University of Arkansas); Ph.D. (Oklahoma State University).

Michael Song[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=song); Charles N. Kimball, MRI/Missouri endowed chair in management of technology and innovation, professor of marketing; B.S. (Jinan University); M.S. (Cornell University); M.B.A., Ph.D. (University of Virginia).

Sunny Li Sun Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sun); assistant professor of entrepreneurship and innovation; B.A. (Remin University of China); M.Phil. (Chinese University of Hong Kong); Ph.D. (University of Texas - Dallas).

Teng-Kee Tan Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=tan); professor of technology entrepreneurship; B.Comm. (Nanyang University); M.B.A. (Northwestern University); Ph.D. University of Cambridge).

Marilyn L. Taylor Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=taylor); Arvin Gottlieb/Missouri Endowed Chair of Strategic Management; B.A. (University of South Florida); M.B.A., D.B.A. (Harvard University).

Sidne G. Ward[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ward); associate professor of management information systems and chair, department of management; B.A., M.B.A. (University of Oklahoma); Ph.D. (University of California-Los Angeles).

Nancy Weatherholt[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=weatherholt); associate professor of accounting; B.S.B., M.B.A., Ph.D. (University of Kansas).

Edwin H. White; professor emeritus of law and administration; A.B., J.D. (University of Missouri-Columbia); M.A. (University of Missouri-Kansas City).

Walter B. Wright; dean emeritus of continuing education and extension; dean emeritus, Bloch School; and professor emeritus of business administration; B.A. (University of Iowa); M.B.A. (University of Kansas).

Lisa Z. Zhao[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=zhao); associate professor of entrepreneurship and innovation; B.S. (Shanxi Agricultural University); M.S., Ph.D. (Cornell University).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Undergraduate

Undergraduate Programs:

- Bachelor of Business Administration
- Bachelor of Science in Accounting
- Business Administration Minor
- Entrepreneurship Minor

Graduate

Graduate Programs:

- Graduate Certificate in Nonprofit Management and Innovation (p. 611)
- Graduate Certificate in Urban Policy Administration (p. 611)
- Master of Business Administration
- Master of Entrepreneurial Real Estate (p. 619)
- Master of Public Administration
- Master of Science in Accounting
- Master of Science in Finance (p. 626)
- PhD in Entrepreneurship and Innovation (p. 627)
- Interdisciplinary Ph.D. Programs

About the Bloch School

Degree Programs

The Bloch School offers the degrees of bachelor of business administration (B.B.A.), bachelor of science in accounting (B.S.A.), master of business administration (MBA), master of public administration (M.P.A.), master of science in accounting (M.S.A.), master of science in finance (M.S.F.), and master of entrepreneurial real estate (M.E.R.E.). Within the MBA program there is an Executive MBA (EMBA) offering, and within the M.P.A., there is an Executive M.P.A. (E.M.P.A.) offering. Additionally, the Bloch School has two joint degree programs with the UMKC School of Law, the J.D./MBA and the J.D./M.P.A. degrees, participates in the Interdisciplinary Ph.D. program and offers a Ph.D. in Entrepreneurship & Innovation. The Bloch School also offers business and entrepreneurship minors.

History

The University has offered business courses since 1933. In 1953, with the support and encouragement of the Kansas City community, the School of Business Administration was established. Since that time, the Bloch School has grown to a student body of 1900, and a faculty of approximately 45 professional educators. In January 1988, the School was renamed for Henry W. Bloch, co-founder of H&R Block, and moved into a newly expanded building. In 2010, the School officially changed its name to the Henry W. Bloch School of Management to reflect our differentiation as a school that integrates business management, public administration and the infusion of a global, innovative and entrepreneurial mindset. In the fall of 2013, the school opened a second building with a focus on entrepreneurship and innovation and executive education.

Mission and Vision

The Henry W. Bloch School of Management develops purposeful, entrepreneurial and innovative leaders to meet changing global demands, and advances knowledge and practice through excellent teaching, scholarship, outreach and service.

The Bloch School aspires to be Kansas City's nationally and globally preeminent school of management focusing on entrepreneurship and innovative thinking as the foundation for transforming talent and achieving sustainable growth in for-proft, public, and nonprofit enterprises.

Accreditation

The Bloch School is accredited by AACSB International - The Association to Advance Collegiate Schools of Business and by the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).

Advising and Student Services

Staff in the Student Services Office, room 115 of the Bloch School, assist students in applying for admission, planning programs and registering for courses. Freshmen and junior students must be advised each semester and advising is required for new students and students on probation. Advising information can be found at http://bloch.umkc.edu/students/student-services/advising.aspx. Faculty of the School's six curricular departments are also available to discuss students' programs. Students in the M.P.A., and M.S.A. programs are advised by departmental faculty.

Scholarships

The Bloch School offers numerous scholarships for students enrolled in Bloch degree programs. Information and applications are available on the Bloch School Web site at http://bloch.umkc.edu/students/paying-for-school/bloch-scholarships.aspx. March 1 is the deadline for the majority of these scholarships, which are awarded for the following academic year. For information on loans, grants and other financial aid, contact the UMKC Student Financial Aid and Scholarships Office.

Internships

Students who want to experience work opportunities while in school are encouraged to take their learning beyond the classroom through internships. For-credit internships typically carry one to three hours of credit. To earn academic credit, students should identify a Bloch School faculty member qualified and willing to supervise an internship, complete an internship form available on the Bloch School Web site at http://bloch.umkc.edu/students/student-services/forms.aspx and enroll in an approved internship course. Interested students may contact the UMKC Career Services Office or refer to the Bloch School Career Launcher (available on Blackboard for students admitted to the Bloch School) for internship opportunities.

International Study Abroad

Bloch School students have the opportunity to study abroad for credit. Students may study for a week, a semester, an academic year or in a special summer program at business schools in Europe and other parts of the world. Students who are interested in study abroad opportunities should contact the Bloch School Student Services Office or the UMKC International Academic Programs Office.

Special Programs and Centers

Bloch Executive Education Center

Bloch School (http://www.umkc.edu/virtualtour/bloch.asp)
Bloch Executive Education Center
5108 Cherry Street, BEH 417
(816) 235-6071
http://www.bloch.umkc.edu/executive-education/

Bloch Executive Education is Kansas City's university partner for executive and professional development. Our programs are designed to engage business, government, and non-profit leaders in applied learning to leaders and businesses locally and abroad. The Center offers customized programs, seminars and certificates that support innovation and leadership development in the U.S. and around the world. Custom programs are designed in concert with clients to support enterprise-wide initiatives and strategies. International programs serve to expose public and private international executives and scholars to the U.S. educational system as well as business operations. Management seminars are available to emerging leaders

and senior executives based on personal and professional competency needs. Our nationally-recognized faculty provokes thought and challenges perspectives through relevant curricula that feature innovative thought, research insights, and business best practices.

Cookingham Institute of Urban Affairs

Bloch School
5110 Cherry St.
(816) 235-2894
http://bloch.umkc.edu/cookingham/

The mission of the L.P. Cookingham Institute is to improve understanding of the sustainability of urban regions through research, educational programming, and community engagement. The Cookingham Institute also seeks to engage the UMKC community on issues related to urban and regional sustainability and to promote interdisciplinary research on urban topics. The Cookingham Institute is the means by which the Bloch School of Management supports research and teaching directed at improving our understanding of the factors affecting the fiscal and social sustainability of urban regions. The Greater Kansas City region provides an important context for our work, but the Institute is focused on producing knowledge relevant to urban regions across the country. In keeping with the Bloch School's commitment to research and education on entrepreneurship and innovation, a special focus of the Institute is on understanding innovation in the public sector.

Lewis White Real Estate Center

Bloch School (http://www.umkc.edu/virtualtour/bloch.asp)
5110 Cherry St. #217
(816) 235-6288/5188
http://www.umkc.edu/whitecenter/

The Lewis White Real Estate Center (The White Center) is a center that focuses on developing students to become real estate leaders in Kansas City and beyond, as well as enabling the experienced professional to take their real estate career to the next level. Faculty of the Center conduct state-of-the-art research in the field of real estate and provide an educational resource for the community. The newly established degree in Entrepreneurial Real Estate provides a comprehensive body of real estate knowledge essential for anyone involved in making decisions about real estate including wealth creation, location choices for business, financing, valuing or managing. It provides a thorough understanding of the financial risks and rewards of real estate development, particularly in an urban context, as well as the relationship between public policy and urban development.

Midwest Center for Nonprofit Leadership

Bloch School
5110 Cherry St.
(816) 235-2305
http://www.mcnl.org

The MIdwest Center for Nonprofit Leadership (MCNL) is the education, research and community service center of the Department of Public Affairs in the Henry W. Bloch School of Management whose mission is to strengthen the performance and effectiveness of nonprofit public service organizations and their leaders. The Center is dedicated to building healthier communities through nonproft leadership, and it does so through high quality community-oriented education, research and facilitation programs and services. The Midwest Center provides an extensive array of programs for the education, professional development and personal renewal of nonprofit organization leaders and managers, including programs on nonprofit boards and governance, ethical and effective leadership and management, financial management, and social entrepreneurship. It is especially dedicated to meeting the needs of the many small and medium-sized community-based organizations and agencies serving the Kansas City metropolitan region. The Center also operates a Nonproft Resource Center that is open to students and all members of the community.

Regnier Institute for Entrepreneurship and Innovation

Bloch School (http://www.umkc.edu/virtualtour/bloch.asp)
5108 Cherry Street
Kansas City, MO 64110-2499
P: (816) 235-6200
F: (816)-235-6529
http://www.entrepreneurship.bloch.umkc.edu/

The mission of the Regnier Institute for Entrepreneurship and Innovation at the Henry W. Bloch School of Management is to inspire and nurture entrepreneurs and innovators through transformational education and research. Our vision is to be a global leader in creating and disseminating knowledge to advance entrepreneurship and innovation. We encourage entrepreneurship, not just among business students, but among all students, and welcome those from any UMKC discipline who want to learn how to spark ideas and create new products and businesses.

The Institute offers entrepreneurship and innovation education at every educational level. Institute faculty and staff develop, deliver, and administer the Bloch School's Entrepreneurship programs at all levels, including two doctoral degree programs, MBA and Executive MBA programs, specialized Masters degree in Entrepreneurial Real Estate, an undergraduate program, certificate programs, and our renowned Entrepreneurship Scholars Program.

Our Entrepreneurship track, offered at the graduate and undergraduate levels, prepares students to create new business ventures. Students in that track will create and manage a startup before graduation. Our Innovation Management track, also offered at both the graduate and undergraduate levels, focuses on the tools, techniques, and roadmaps leading to exceptional value creation in existing firms.

Taught by an accomplished and influential cross-disciplinary faculty recognized as one of the best in the world, our graduate and undergraduate programs are both ranked among the top 25 entrepreneurship programs in the nation by The Princeton Review. The United States Association for Small Business and Entrepreneurship has recognized both our undergraduate and MBA Entrepreneurship programs as the National Model Undergraduate Entrepreneurship Program and the National Model Graduate Entrepreneurship Program, respectively, making UMKC one of only six schools to have achieved that distinction.

Student Organizations

Student Organizations

Alpha Kappa Psi

Alpha Kappa Psi is the oldest and largest co-educational professional business fraternity with more than 200 chapters internationally. They are open to all majors that are interested in business and becoming one of tomorrow's leaders. With professional and personal development, leadership, networking and entrepreneurial opportunities, they can help you enhance your resume, distinguish yourself from your peers, and teach you skills that employers want.

Beta Alpha Psi

UMKC's Epsilon Delta chapter of Beta Alpha Psi, the national scholastic and professional accounting organization, provides opportunities for self-development and association among student members, practicing accountants and accounting faculty. Activities include technical programs presented by members and professionals, tutoring, taxpayer assistance, off-campus activities and social events.

Beta Gamma Sigma

Beta Gamma Sigma is a national honor society for students in business administration and accounting, including students, faculty, members of the administrative staff, alumni and honorary members. Membership is by election from graduate students in the upper 20 percent of their graduating class, with a minimum 3.5 GPA, and seniors in the top 10 percent of their graduating class. Invitations are extended to qualifying students each spring.

Bloch School Student Association

The Bloch School Student Association (BSSA) is a board of directors to represent the student body on various campus and school administrative committees and sponsors a number of activities and events.

Delta Sigma Pi

Delta Sigma Pi, the nation's largest and most diverse professional business fraternity, is open to students interested in all fields of business. Through professional speakers and seminars, developmental workshops and interactive social events with business leaders, faculty members and prominent alumni, the fraternity provides students an excellent opportunity to explore the business environment while still concentrating on academics.

Enactus

Enactus (formerly SIFE) is one of the largest student organizations in the world with teams on more than 1,600 college and university campuses in the United States and in more than 40 countries throughout the world. Working together as a team, Enactus students apply their classroom experiences to develop and implement educational outreach programs that educate individuals in their communities about the principles of market economics, success skills, environmental sustainability, entrepreneurship, financial literacy and business ethics. At the end of the year, teams present their year's efforts and compete at regional competitions, with the winners going on to national and international competitions. The UMKC Enactus team has been very successful in these competitions, winning awards and receiving national attention. They have also received international recognition that resulted in team projects in several countires.

Financial Management Association

The Financial Management Association UMKC Student Chapter (FMA-UMKC) is affiliated with the Financial Management Association International (FMA), a premier global leader in developing and disseminating knowledge about financial decision making for academics, practitioners and students. Our members include UMKC students as well as FMA members in the Kansas City area. We are leaders in providing financial literacy related to financial decision-making and encouraging as well as developing college students' financial interests through investment competitions, community projects, an active speaker program, corporate tours, a business career fair and newsletters. Also, we aspire to excellence as an organization.

Public Administration Student Association

The Public Administration Student Association (PASA) is made up of MPA and I.Ph.D. students who are interested in networking and socializing with students, faculty and professionals outside the classroom to enrich their experience at UMKC. PASA's purpose is to engage students academically, professionally, and socially in the study and practice of public administration.

Undergraduate Programs

Undergraduate Policies and Procedures

Admission Requirements

Admission to undergraduate programs is available in the fall, spring and summer semesters. Students can elect to attend classes full-time or part-time and although the majority of courses are offered during the day, courses are also offered in the evening. First-time college students are eligible to be admitted to the Bloch School if they meet regular UMKC entrance requirements. Those transferring from other institutions must have 2.5 cumulative and University of Missouri (UM) GPAs. Intra-university transfers can enter Bloch School programs with a 2.25 UM GPA.

Retention Standards

Students in the bachelor of business administration (B.B.A.) or the bachelor of science in accounting (B.S.A.) programs are required to maintain a 2.25 cumulative University of Missouri GPA while enrolled in these programs. Students with GPAs that fall below the minimum 2.25 requirement are placed on probation and are allowed two successive semesters (including the summer semester, if enrolled) to restore their GPAs to the required 2.25. While on probation, undergraduates must achieve a 2.25 term GPA in order to enroll for the ensuing term. If a student's term GPA is below a 2.25 or, if after two successive semesters, the cumulative University of Missouri GPA is still below a 2.25, the student will be dismissed from the Bloch School. Good academic standing is achieved only if the GPAs are 2.25. A 2.25 average in all junior/senior in-major courses is required as well.

Graduation Requirements

All students must satisfactorily complete the RooWriter before enrolling in MGT 301. Information regarding the RooWriter is available at https://umkc.edu/RooWriter.

The B.B.A. and B.S.A. degrees will be awarded on satisfaction of the following:

1. Completion of the degree requirements and a minimum of 123 credit hours.
2. Achievement of a 2.25 GPA; satisfactory academic standing is based on:
   - Cumulative GPA of 2.25 for all University of Missouri courses; and
   - GPA of 2.25 for all required junior- and senior-level, in-major courses completed at UM schools.
3. Completion of the final 30 consecutive semester hours of coursework at UMKC and 50% of junior/senior in-major courses. Accounting students must complete at least 15 hours of upper-level accounting courses at UMKC.
4. Completion of the RooWriter, the ETS Proficiency Profile and other assessment exercises as assigned by the Bloch faculty.
5. Filing of a required application for graduation at the beginning of the senior year.

Students are responsible for ensuring their course of study falls within program guidelines.

Academic Loads

See the General Undergraduate Academic Regulations and Information section of this catalog.

Concurrent Enrollment

Concurrent enrollment (simultaneous enrollment at UMKC and any other institution of higher education) is prohibited under University and Bloch School policy unless approved in advanced of enrollment. Petitions are considered in limited situations including demonstrated scheduling conflicts, course cancellations, and in instances where needed courses are not offered. A separate petition is required. Submitting a petition does not guarantee approval. Concurrent enrollment in the final semester may result in a delay of graduation.

Credit by Exam

Students who have received credit by exam from a previous institution must present certified scores to the UMKC Records Office. These scores must be acceptable to the department at UMKC housing the subject area. Credit by exam is not permitted after admission into the junior/senior portion of Bloch School programs. Bloch School freshmen and sophomore students should talk with an academic advisor in the Student Services Office about credit by exam restrictions.

Credit/No Credit

All undergraduate courses in the Bloch School must be taken for a letter grade, except for internship courses (496) which are taken credit/no credit.

Course Repeat Policy

When undergraduate students repeat courses, they can request to have only the grade for the final attempt used in calculating their GPA. The course repeat policy will not automatically be applied to a student's GPA. After completing a repeated course, a student must submit a request for GPA adjustment form to his/her academic advisor.

The recalculation of a student's GPA is reflected only in the calculation of that student's current cumulative UM GPA and will not retroactively affect calculations for dean's list, graduation and honors, eligibility for financial aid and veterans' benefits and scholarships, athletic eligibility, discounts for insurance, or any other area.

- The GPA recalculation policy is applicable only to undergraduate students who repeat a course in which they earned a D+ or lower and in which academic dishonesty was not involved.
- Students can only replace grades if the original and the repeated course are taken at UMKC.
- Repeated courses must have been taken by Fall 2007 or later.
- Repeated courses may not be taken on a CR/NC basis.
- Original grades cannot be replaced with a 'W', 'WF', 'I', or 'T.'
- No more than 15 semester hours can be dropped from the calculation of a student's GPA by repeating course work.
- Requests approved for GPA recalculation will prefix the original grade with an 'R.' Transcripts will note that such grades are excluded from GPA calculations.

Exceptions

Exceptions to academic regulations must be approved by the Bloch School Student Services Office or the Associate Dean for Academic Affairs. To seek exceptions, students must file a formal written petition seeking an exception to academic policy with staff in the Bloch Student Services Office.

Independent Study

Students are limited to a total of six hours of Bloch School internship/independent study coursework, numbering 496 and 497. Interested students should consult with an advisor in the Bloch School Student Services Office.

Latin Honors

Students must complete a minimum of 60 hours of coursework at UMKC to qualify for Latin Honors.

General Education Requirements

General Education Requirements

Students are required to complete 30 hours of general education coursework as part of their undergraduate program. The University has a 30 hour standard set of general education requirements which are detailed at www.umkc.edu/core (http://www.umkc.edu/core). Students must also complete the following basic skills classes. Select courses from the basic skills area may also be used to satisfy focus requirements in the general education core. Whether completed to satisfy a focus area or taken separately, all students must have a course to meet the U.S. Missouri Constitution requirement.

Basic Skills

ACCTNG 210	Introduction To Financial Accounting [1]	3
ACCTNG 211	Introduction To Managerial Accounting	3
MIS 202	Computer Applications In Management	3
ECON 201	Introduction To Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	College Algebra	3
MATH 206	Brief Calculus And Matrix Algebra	3
STAT 235	Elementary Statistics	3
MGT 301	Effective Business Communication [2]	3
Total Credits		27

[1] A lab component, ACCTNG 210L, is also required. Students enroll for both courses at the same time.

[2] MGT 301 counts as part of the in-major GPA.

General Education Requirements for Students Transferring from Other Missouri Institutions with a Certified 42-Hour Core Curriculum

Students transferring into the Bloch School of Management with a certified 42-hour block of general education credit from another Missouri institution must complete additional coursework for baccalaureate degrees from the Bloch School. These courses include:

ACCTNG 210	Introduction To Financial Accounting [1]	3
ACCTNG 211	Introduction To Managerial Accounting	3
MIS 202	Computer Applications In Management	3
ECON 201	Introduction To Economics I	3
ECON 202	Introduction To Economics II	3
MATH 110	College Algebra	3
MATH 206	Brief Calculus And Matrix Algebra	3
STAT 235	Elementary Statistics	3
MGT 301	Effective Business Communication [2]	3
Total Credits		27

[1] A lab component, ACCTNG 210L, is also required. Students enroll for both courses at the same time.

[2] MGT 301 counts as part of the in-major GPA.

RooWriter.

The preceding requirements can be satisfied by equivalent courses from other institutions. Additionally, some of the courses may satisfy general education requirements in the 42-hour core. Check with individual institutions for more information.

UMKC's 42-Credit Hour Certified General Education Core (http://cat-edit.umkc.edu/%7E/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=54464) for Students Transferring to Another Missouri Institution

Bloch School students wishing to complete the 42-hour core should also consult with an academic advisor in the Student Services Office, room 115 of the Bloch School.

Bachelor of Business Administration

Student Learning Outcomes

Upon graduation from the B.B.A. program, a student will be able to:

- Demonstrate technical competence in domestic and global business through the study of major disciplines within the fields of business.
- Define, analyze and devise solutions for structured and unstructured business problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials and data.
- Conceptualize a complex issue into a coherent written statement and oral presentation.
- Exhibit competence in the uses of technology in modern organizational operations.
- Demonstrate the fundamentals of creating and managing innovation, new business development and high-growth potential entities.

Program Requirements

Courses for the B.B.A. program are listed below. All students must complete the core curriculum and choose one of five emphasis areas:

- Enterprise Management
- Entrepreneurship
- Finance
- Marketing
- Real Estate

Prior to enrolling in any course, students must ensure they have completed the necessary prerequisites. Seniors in the B.B.A. program may begin work on the MBA degree if pre-approved by the Bloch School based on their formal application to the MBA program.

Core B.B.A. Curriculum		
DSOM 309	Intermediate Business Statistics	3
DSOM 326	Production/Operations Management	3
ECON 302	Microeconomic Analysis	3
ENT 460	Creating the Enterprise	3
FIN 325	Financial Management	3
MGT 306	Legal, Ethical And Regulatory Environment Of Business	3
MGT 330	Understanding the Individual in the Organization	3
MGT 355	Organizational Effectiveness and Leadership	3
MGT 370	International Management	3
or MGT 470	International Study in Business	
MGT 471	Strategic Management	3
MIS 402	Information Management	3
MKT 324	Marketing Concepts	3
General Electives		
General Elective courses [1]		16
Total Credits		52

[1] A maximum of two hours of PE activity is accepted as elective credit. Applied or military science and vocational courses may not be taken for elective credit.

Emphasis Areas

Enterprise Management

Required Courses		
DSOM 346	Management Analysis	3
MGT 337	Managing Human Capital	3
Electives		
Select three of the following:		9
DSOM 431	Quality and Process Improvement	
ENT 364	Entrepreneurial Management and Innovation	
FIN 419	Financial Statement Analysis	
MGT 470	International Study in Business [1]	
or MGT 370	International Management	
MIS 415	Managing the Information Systems Resource	
MKT 348	Market Analysis	
Total Credits		15

[1] ***The course taken to meet the Business Core requirement may not count toward the required electives in Enterprise Management***

Entrepreneurship with Entrepreneurship and Innovation Track

Required Courses		
ENT 215/315	Introduction to Entrepreneurship	3
ENT 327	Creating the New Venture: Experiential Learning	3
or ENT 328	Creating the E-Business Experiential Learning	
ENT 332	Managing the New Venture: Experiential Learning	3
Electives		
Select two of the following:		6
ENT 325	Creativity for Innovation, Problem Solving and Entrepreneurship	
ENT 326	Creativity, Innovation, and Problem Solving	

ENT 341	Technology Entrepreneurship	
ENT 361	New Product Development	
ENT 364	Entrepreneurial Management and Innovation	
ENT 412	Entrepreneurial Finance and Venture Capital Investment	
ENT 425	Corporate Entrepreneurship	
ENT 432	Entrepreneurial Marketing and Selling	
ENT 446	Entrepreneurial Selling and Sales Force Management	
ENT 491	Entrepreneurial Consulting	
Other ENT courses approved by faculty		
Total Credits		15

Students in the Entrepreneurship emphasis replace the Bloch School capstone course, ENT 460, with a 300- or 400-level Bloch School elective.

Entrepreneurship with Innovation Management Track

Required Courses		
ENT 215/315	Introduction to Entrepreneurship	3
ENT 361	New Product Development	3
Electives		
Select three of the following:		9
ENT 321	Real Estate Principles	
ENT 325	Creativity for Innovation, Problem Solving and Entrepreneurship	
ENT 326	Creativity, Innovation, and Problem Solving	
ENT 327	Creating the New Venture: Experiential Learning	
ENT 328	Creating the E-Business Experiential Learning	
ENT 332	Managing the New Venture: Experiential Learning	
ENT 341	Technology Entrepreneurship	
ENT 364	Entrepreneurial Management and Innovation	
ENT 412	Entrepreneurial Finance and Venture Capital Investment	
ENT 421	Real Estate Finance Fundamentals	
ENT 425	Corporate Entrepreneurship	
ENT 432	Entrepreneurial Marketing and Selling	
ENT 446	Entrepreneurial Selling and Sales Force Management	
ENT 491	Entrepreneurial Consulting	
Or, select two courses from the above list and one of the following:		
FIN 345	Investments	
FIN 419	Financial Statement Analysis	
MKT 348	Market Analysis	
MKT 442	Internet/Direct Marketing	
MKT 476	Services Marketing	
MKT 480	Marketing Strategy	
Total Credits		15

Students in the Entrepreneurship emphasis replace the Bloch School capstone course, ENT 460, with a 300- or 400-level Bloch School elective.

Finance

Required Courses		
FIN 326	Financial Management 2	3
FIN 345	Investments	3
FIN 435	Advanced Corporate Finance	3
FIN 445	Advanced Investments	3
Elective		
Select one of the following:		3
FIN 340	Global Financial Markets and Institutions	

FIN 350	Introduction to Risk Management and Insurance	
FIN 351	International Financial Management	
FIN 369	Payment Systems	
FIN 419	Financial Statement Analysis	
FIN 427	Debt Instruments And Markets	
FIN 428	Commercial Bank Management	
Total Credits		15

Marketing

Required Courses		
MKT 335	Consumer Behavior in Marketing	3
MKT 348	Market Analysis	3
MKT 480	Marketing Strategy	3
Electives		
Select two of the following:		6
ENT 361	New Product Development	
MKT 418	Sales and Promotion Strategies	
MKT 442	Internet/Direct Marketing	
MKT 465	Introduction to Retailing and Pricing	
MKT 476	Services Marketing	
Total Credits		15

Real Estate

Required Courses		
RL-EST 321	Real Estate Principles	3
RL-EST 421	Real Estate Finance Fundamentals	3
RL-EST 425	Principles of Real Estate Property Management	3
Electives		
Select two of the following:		6
RL-EST 322	Real Estate Principles II	
RL-EST 496	Internship: Real Estate	
ENT 215/315	Introduction to Entrepreneurship	
ENT 327	Creating the New Venture: Experiential Learning	
or ENT 328	Creating the E-Business Experiential Learning	
ENT 361	New Product Development	
ENT 412	Entrepreneurial Finance and Venture Capital Investment	
Several Real Estate courses are crosslisted with Entreprenuership courses. Students pursuing the Real Estate emphasis should enroll in the courses designated as RL-EST where appropriate.		
Total Credits		15

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Accounting

Student Learning Outcomes

Upon graduation from the B.S. in accounting program, a student will be able to:

- Demonstrate entry-level technical competence in financial accounting, taxation, cost/managerial and auditing. The competency level is not sufficient to meet the technical requirements for professional certification but will serve as the technical foundation for graduate education.
- Demonstrate technical competence in domestic and global business through the study of major disciplines within the fields of business.
- Define, analyze and devise solutions for structured and unstructured business problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials and data.
- Recognize and apply the AICPA code of professional conduct to ethical problems that occur in accounting practice.
- Conceptualize a complex issue into a coherent written statement and oral presentation.
- Exhibit competence in the uses of technology in modern organizational operations.
- Demonstrate the fundamentals of creating and managing innovation, new business development and high-growth potential entities.

Program Requirements

Upon graduation from the B.S.A. program, a student will have the skill set and professional mindset needed to perform in entry-level financial accounting, taxation, cost management and auditing positions.

Sophomore Year			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
ACCTNG 210	3	ACCTNG 211	3
MIS 202	3	ACCTNG 310	3
	6		**6**
Junior Year			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
ACCTNG 307	3	ACCTNG 311	3
ACCTNG 350	3	MKT 324	3
DSOM 309	3	DSOM 326	3
Economics Elective[1]	3	MGT 330	3
		MGT 370 or 470	3
	12		**15**
Senior Year			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
ACCTNG 405	3	ACCTNG 409	3
ACCTNG 408	3	ACCTNG 421	3
FIN 325	3	MGT 320	3
MGT 306	3	MGT 471	3
ACCTNG 420	3	ENT 460	3
		Approved Finance Elective[2]	3
	15		**18**

Total Credits: 72

1 Economics Elective (ECON 301, ECON 302)

2 Approved Finance Elective (FIN 340, FIN 345, FIN 419, FIN 427, FIN 428, FIN 435)

Note: Students should ensure that prerequisites are taken in the proper sequence.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Business Administration Minors

Students interested in business may complete a minor in either business administration or entrepreneurship. The minors are open to degree-seeking undergraduate students, with the exception of students pursuing a degree in programs that do not recognize minors. Additionally, students pursuing a degree in business or accounting are not eligible for the minor in Business Administration.

Students must achieve a minimum GPA of 2.25 in all Bloch School courses. Transfer students with equivalent course credit will be required to take a more advanced course in that same area. Students are limited to 30 hours of coursework in the Bloch School. All coursework toward the minors must be completed at UMKC.

Students interested in the Business Administration or Entrepreneurship minors should contact staff in the Bloch School Student Services Office, room 115, Bloch Heritage Hall.

Business Administration Minor

Student Learning Outcomes

Upon graduation from the minor program, a student will be able to:

- Demonstrate technical competence in domestic and global business through the study of major disciplines within the fields of business.
- Define, analyze and devise solutions for structured and unstructured business problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials and data.
- Conceptualize a complex issue into a coherent written statement and oral presentation.
- Exhibit competence in the uses of technology in modern organizational operations.
- Demonstrate the fundamentals of creating and managing innovation, new business development and high-growth potential entities.

The minor consists of the following coursework and is subject to the student satisfying all applicable prerequisites.

Required for Admission to the Business Minor		
MIS 202	Computer Applications In Management	3
ACCTNG 210	Introduction To Financial Accounting	3
Required Courses		
MKT 324	Marketing Concepts	3
FIN 325	Financial Management	3
MGT 330	Understanding the Individual in the Organization	3
Business Elective		
ENT 215/315	Introduction to Entrepreneurship (or one 300/400 level course)	3
Total Credits		18

Entrepreneurship Minor

Student Learning Outcomes

Upon graduation from the minor program, a student will be able to:

- Demonstrate technical competence in domestic and global business through the study of major disciplines within the fields of business.
- Define, analyze and devise solutions for structured and unstructured business problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials and data.
- Conceptualize a complex issue into a coherent written statement and oral presentation.
- Exhibit competence in the uses of technology in modern organizational operations.
- Demonstrate the fundamentals of creating and managing innovation, new business development and high-growth potential entities.

The Entrepreneurship minor is designed to help students acquire and refine their entrepreneurial skills. The minor is intended both for Bloch School students and for students outside of the Bloch School who would like to bring an entrepreneurial perspective to their major field of study.

Required Courses		
ENT 215/315	Introduction to Entrepreneurship	3
ENT 327	Creating the New Venture: Experiential Learning	3
or ENT 328	Creating the E-Business Experiential Learning	
Entrepreneurship Electives		
Select four of the following:		12
ENT 332	Managing the New Venture: Experiential Learning	
ENT 341	Technology Entrepreneurship	
ENT 361	New Product Development	
ENT 364	Entrepreneurial Management and Innovation	
ENT 412	Entrepreneurial Finance and Venture Capital Investment	
ENT 432	Entrepreneurial Marketing and Selling	
Total Credits		18

Students have the option of replacing up to two entrepreneurship electives noted above with two discipline-related electives that are consistent with their entrepreneurial focus. These classes must be pre-approved by the Bloch School Student Services Office.

Graduate Programs

Graduate Policies and Procedures

Admission Requirements

Admission to Bloch School graduate programs is based on evaluation of qualifications. Applicants to the MBA, M.S. in finance (M.S.F.), Master of Entrepreneurial Real Estate (M.E.R.E.) and M.S. in accounting (M.S.A.) programs are considered for admission based on their scores on the Graduate Management Admission Test (GMAT), undergraduate cumulative grade point averages and other criteria established by the faculty. M.E.R.E. will consider certain professional designations in lieu of the GMAT.

Applicants to the M.P.A. program are considered for admission on the basis of undergraduate cumulative grade point average and Graduate Record Examination (GRE) scores. However, the requirement to complete the GRE is waived for applicants to the M.P.A. who have earned a cumulative undergraduate grade point average of 3.5 or higher (on a 4.0 scale).

Applicants to the Executive MBA (EMBA) and Executive M.P.A. (E.M.P.A.) programs are considered for admission based on educational record and career history, quality and length of professional and managerial experience, strength of personal interview and one written essay, two references and support of employer. A GMAT or GRE score are not required for applications to the executive programs, but may be requested by faculty.

Most classes are offered on weekday evenings. Selected courses may be offered in an intensive weekend format. EMBA and EMPA courses are offered on weekends (Friday/Saturday).

Retention and Graduation Requirements for Graduate Students

All students enrolled in any of the Bloch School graduate programs (MBA, EMBA, M.S.F., M.E.R.E., M.S.A., M.P.A. and E.M.P.A.) must maintain a minimum 3.0 grade point average (GPA) in all courses for which graduate credit is given. Students with GPAs that fall below the minimum 3.0 are placed on probation and are allowed two successive semesters (including the summer semester, if enrolled) to restore their GPAs to the required 3.0 level. While on probation, graduates must achieve a 3.0 term GPA in order to enroll for the ensuing term. If a student's term GPA is below a 3.0 or, if after two successive semesters, the cumulative GPA is below a 3.0, the student will be dismissed from the Bloch School. Good standing is achieved only if the GPA is 3.0 or above. No course with a grade below B- (2.7), in any 300- or 400-level course, or below C (2.0) in any 5000-level course or above, will count toward any advanced degree program; however, the grade will be included in the calculation of the student's GPA. Eighty percent of the credits for the degree must be passed with a grade of B (3.0) or better.

An official program of study must be filed with the Bloch School Student Services Office once an emphasis area has been declared. For the M.P.A. program, this must occur once a student has reached 18 hours. This form constitutes a contract and must be signed by the student, faculty advisor and department chair. Any changes to the program must be approved on a new form by the same three individuals. Students are responsible for ensuring their program of study falls within the program guidelines.

All students must file an application for graduation and program of study by the announced campus deadline during the student's last semester (students are encouraged to submit these forms earlier if possible). This application and the program of study must be filed by the announced deadline in order to obtain the degree. Both documents can be found on the Bloch School Web site at http://bloch.umkc.edu/students/graduation.aspx.

Transfer Credit

Students may transfer up to 20 percent of the graduate credit hours required for their program (for the M.S. in accounting, this applies only to courses in Stage Two and is limited to six hours). Coursework must be from an accredited institution, with a grade of B or better, and appropriate to the student's program. Also, the coursework must have been taken within seven years of completion of all requirements for the Bloch School degree. Credit must not be more than seven years old at the time of graduation. Evaluation of transfer credit is done by faculty and requires documentation provided by the student.

Course Repeat Policy

Whenever students repeat a graduate-credit course, they must submit a course repeat form to the Bloch School Student Services Office no later than the fourth week of the term. Students seeking graduate degrees are limited to repeating no more than 20 percent of the credits applicable toward a graduate degree. If approved by the school or department or Interdisciplinary Ph.D. supervisory committee, students may repeat a course once to improve their GPA or satisfy the program requirements. The second grade received will be used to calculate the GPA that will be used in satisfying degree requirements.

Independent Study

Students are limited to no more than six hours of independent study/internship and no more than three hours of any one practicum, including the small business practicum. For the M.P.A. program, students are limited to a total of six hours, of which three credit hours can be an internship. Interested students should consult with an advisor in the Bloch School Student Services Office.

Graduate Certificate in Nonprofit Management and Innovation

Graduate Certificate in Nonprofit Management and Innovation

The Department of Public Affairs offers an 18 credit hour professional Graduate Certificate in Nonprofit Management and Innovation. This certificate may be earned alone or in combination with another graduate degree at UMKC and is especially appropriate for those who aspire to a successful career leading and managing nonprofit and community-based organizations.

Admission requirements are the same as those required for admission to the department's regular M.P.A. program. Those who are students in good standing in a UMKC graduate degree program and who have completed at least nine hours of graduate credit with a minimum of a 3.5 GPA are eligible to participate in this certificate program without meeting any additional admission requirements.

Curriculum for the Nonprofit Management and Innovation Certificate:

PUB-ADM 455B	Non-Profit Leadership Issues: Board-Staff Relations	1
PUB-ADM 5526	The Politics Of Administration	3
PUB-ADM 5548	Leadership For Public Service	3
PUB-ADM 5551	Strategic Management In Nonprofit Organizations	3
PUB-ADM 5553	Legal Framework & Financial Management Of Nonprofit Organizations	3
PUB-ADM 5555A	Topics In Nonprofit Fund Raising: Organizing For Successful Fund Raising	1-3
Select at least one of the following:		
PUB-ADM 495	Voluntarism, Philanthropy & The Non-Profit Sector In The U.S.	
PUB-ADM 5556	Innovation In Nonprofit Management And Leadership	
PUB-ADM 5554	Seminar on Social Entrepreneurship	
Total Credits		18

Graduate Certificate in Urban Policy Administration

Graduate Certificate in Urban Policy and Administration

The Department of Public Affairs offers an 18 credit hour professional Graduate Certificate in Urban Policy and Administration. This certificate may be earned alone or in combination with another graduate degree at UMKC and is especially appropriate for those who aspire to a successful career leading and managing local and regional government or community-based nonprofit organizations.

Admission requirements are the same as those required for admission to the department's regular M.P.A. program. Those who are students in good standing in a UMKC graduate degree program and who have completed at least nine hours of graduate credit with a minimum of a 3.5 GPA are eligible to participate in this certificate program without meeting any additional admission requirements.

Curriculum for the Urban Policy and Administration Certificate:

PUB-ADM 5526	The Politics Of Administration	3
PUB-ADM 5535	Urban Policy And Administration	3
PUB-ADM 5539	Urban And Regional Planning For Urban Administrators	3
PUB-ADM 5540	Regional and Local Government Systems	3
PUB-ADM 5548	Leadership For Public Service	3
Select at least one of the following:		
PUB-ADM 5536	Managing Urban Economic Development	
PUB-ADM 5552	Community Organizations And Public Policy	
Total Credits		18

Master of Business Administration

Student Learning Outcomes

The Bloch School MBA graduate will develop a professional perspective for a career in business, and will be able to:

- Define, analyze, and evaluate business decisions in a global setting through an integrated analysis using tools found in the major business disciplines.
- Effectively demonstrate critical thinking skills in inference, analysis, and evaluation.
- Demonstrate the ability to work in teams.
- Conceptualize a complex issue into a coherent written statement and/or oral presentation.
- Demonstrate mastery of fundamental quantitative tools by successfully using those tools to interpret and evaluate quantitative information and synthesize that information with relevant non-quantitative information in order to arrive at a business decision.

Program Requirements

The Bloch School offers a master of business administration (MBA) and an executive master of business administration (EMBA (http://bloch.umkc.edu/graduate-program/emba/default.aspx)). Students enrolling in the MBA program have the option of choosing among nine emphasis areas, and their programs will consist of 42 credit hours. Most MBA students attend evening courses on a part-time basis and admission is available in all three semesters. EMBA students enter a cohort-based, lockstep program that offers an integrated curriculum with the themes of leadership, strategic thinking, and innovation woven throughout the program. This full-time program meets three times per month, (one Friday/Saturday and one additional Saturday) over a 21-month period, with admission taking place in the fall.

MBA core courses stress the knowledge and skills needed to deal with an organization and its personnel. The functional courses (accounting, finance, operations, economics and marketing) develop specialized knowledge and skills. In addition, the MBA program stresses leadership, innovation and the related social and public responsibilities for those in business.

The MBA Curriculum

The MBA degree is a 42 credit hour program. The curriculum is comprised of two distinct stages: core classes and classes taken beyond the core. Previous college work in business is not required, though students with no preparation in mathematics and computer applications must complete MATH 110 and MIS 202.

All core coursework is offered in the afternoon and evening and emphasis and capstone courses are offered in the evening.

The program has the following unique features that are combined to develop graduates that are broadly educated, socially responsible, and knowledgeable managers.

1. A 24 credit hour core curriculum that provides an integrative business foundation for decision-making.
2. An ecosystem integrated learning environment; this component is not for credit.
3. A fifteen credit hour emphasis/elective component that allows the student the flexibility to design a program that uniquely fits their needs including the option to complete 12 hours toward a specific emphasis area.
4. A three credit hour capstone experience.

The MBA Core (24 credit hours)

The MBA degree consists of a 24 credit hour core. The core must be taken by all students enrolled in the program and is designed to provide graduates with a unique educational experience. Each course in the core is 1.5 credit hours. As part of the core, each of the first two years begins with an immersion course. The immersion courses are held the week before normal classes begin and during the first week of classes. They meet in a combination of afternoon, evening and weekend times. These courses allow students to work in teams and immerse themselves into an integrative

business environment. Other than the two immersion courses, each core course is taught as an eight-week class. The core is designed to provide all students with a critical business foundation. Core courses should be taken in sequence and include the following:

Management in Context (Immersion)
Leadership in Organizations
Financial Performance and Assessment
Corporate Financial Management
Introduction to Entrepreneurship
Strategic Financial Management
Managerial Economics
Global Macroeconomics
International Business Environment
Legal and Ethical Management (Immersion)
Marketing Management
Management Information Systems
Human Capital Management
Decision Sciences
Operations and Supply Chain Management
Strategic Management

Ecosystem Integrated Learning Program (noncredit)

A critical part of being a successful leader is ecosystem awareness. In addition to ecosystem integration throughout the MBA coursework, the MBA degree program has a specific ecosystem-integrated learning component. Strong technical skills are not sufficient to be an effective manager. The success of our graduates also depends on their personal and professional growth while in our program. As part of the MBA program, students are provided with a number of weekend seminars, workshops, and professional experiences designed to offer opportunities that enhance their professional and personal capabilities.

This requirement serves several purposes. First, we want the interactions between the student and the School to include something beyond merely attending for-credit classes. Second, we want to build ties and networks among our current students, our alumni, and the business community by providing opportunities to interact and network. Third, we want students to have an opportunity to address self-diagnosed deficiences where the solution may not be found in the core program.

Students may attend as many of the programs as they want; however, they are required to attend at least 3 events during the MBA program. Examples of programs include:

- Business Plan Competition
- Business Writing Do’s and Don’ts
- Excel Tips and Tricks
- How to Manage Your Boss
- Independent Movie Making
- Job Search Strategies
- Personal Financial Planning
- Resume Workshop
- Social Media Opportunities

Students can earn credit toward the Ecosystem Integrated Learning Program through employer-sponsored training as well. Contact the MBA Program Director for more information and to receive credit for such involvement.

Students can also earn credit through leadership involvement in community service activities. To receive credit for such involvement, contact the MBA Program Director.

Capstone Course (3 credit hours)

After finishing the core, students are required to take a real-world problem solving capstone course. This requirement is designed to challenge the student to resolve an integrative issue. Students are allowed to select from specific classes providing different types of faculty/business leader supervised experiences. Students may take more than one capstone course, using the additional course as an elective.

Actual capstone course offerings will vary from semester to semester, but will be announced in advance to facilitate students’ planning. Capstone courses may be taken no earlier than the final core course (Strategic Management). Students must take one of the 3 credit hour courses listed below.

- Business Plan for a Startup Company
- Global Management Consultancy

- Leading and Managing Change
- The Capstone Consulting Project
- Developing and Maintaining a Customer Centric Organization Culture

Electives and Emphasis Areas (15 hours)

The MBA program allows students the flexibility of using 15 credit hours to meet their unique needs. Elective courses may make up the entire 15 hours or students can use 12 hours to obtain an emphasis (with 3 hours left over for an elective). The Bloch School offers the following nine emphasis areas (all are 12 credit hours):

- Entrepreneurship
- Finance
- General Management
- Global Business
- Leading and Managing People
- Management Information Systems
- Marketing
- Real Estate
- Supply Chain & Operations Management

Students are not required to complete an emphasis area. Each emphasis area is comprised of 12 hours. No more than 12 hours from any one area (beyond the core) can be used toward the MBA.

Students can, with the consent of appropriate faculty, select any other Bloch courses that might fit within the emphasis areas listed below (courses outside the Bloch School require special approval). Students are strongly encouraged to work closely with an advisor in planning their programs so that the courses they choose will be of interest and benefit to them while fulfilling the requirements of the degree. Not all classes are offered each semester. Emphasis areas follow.

Entrepreneurship with Entrepreneurship and Innovation Track

Required Courses		
ENT 5527	Creating the New Venture Experiential Learning	3
ENT 5532	Managing the New Venture Experiential Learning	3
ENT 5585	Entrepreneurial Finance and Venture Capital Investment	3
Elective		
Select one of the following:		3
ENT 5525	Entrepreneurship: Managing Creativity And Innovation	
ENT 5535	Small Business Management And Entrepreneurship	
ENT 5541	Personal Entrepreneurial Strategy	
ENT 5542	Technology and New Ventures I	
ENT 5543	Technology And New Ventures II	
ENT 5545	Entrepreneurship And New Venture Creation	
ENT 5552	Entrepreneurial Marketing	
ENT 5567	Innovation & Entrepreneurship I	
ENT 5571	Advanced Real Estate Finance	
ENT 5587	Seminar In Entrepreneurship	
ENT 5591	Small Business Management Practicum	
Total Credits		12

Entrepreneurship with Innovation Management Track

Required Courses		
ENT 5515	Creating the E-Business Experiential Learning,Entrepreneurship Boot Camp	3
ENT 5525	Entrepreneurship: Managing Creativity And Innovation	3
Electives		
Select two of the following:		6
ENT 5527	Creating the New Venture Experiential Learning	
ENT 5532	Managing the New Venture Experiential Learning	

ENT 5535	Small Business Management And Entrepreneurship	
ENT 5541	Personal Entrepreneurial Strategy	
ENT 5542	Technology and New Ventures I	
ENT 5543	Technology And New Ventures II	
ENT 5545	Entrepreneurship And New Venture Creation	
ENT 5552	Entrepreneurial Marketing	
ENT 5571	Advanced Real Estate Finance	
ENT 5573	Real Estate Market Analysis and Feasibility Study	
ENT 5576	Real Estate Property Management	
ENT 5578	Legal Context of Real Estate Decision Making	
ENT 5585	Entrepreneurial Finance and Venture Capital Investment	
Or, select one course from the list above and one of the following non-ENT courses:		
DSOM 5540	Service Operations Management	
DSOM 5543	Project Management	
FIN 5553	Investment Analysis	
FIN 5559	Strategic Financial Management	
MGT 5516	Leading Teams	
MGT 5545	International Management	
MKT 5539	Digital (and Direct) Marketing	
MKT 5562	Marketing Research	
MKT 5575	Advanced Marketing Strategy	
Total Credits		12

Finance

Required		
FIN 5550	Advanced Financial Management Theory And Policies	3
Electives		
Select three of the following:		9
FIN 5551	International Financial Management	
FIN 5552	Global Financial Markets and Institutions	
FIN 5553	Investment Analysis	
FIN 5556	Management Of Financial Intermediaries	
FIN 5557	Derivative Securities	
FIN 5559	Strategic Financial Management	
FIN 5560	Financial Modeling	
FIN 5561	Financial Statement Analysis	
FIN 5562	Fixed Income Analysis	
FIN 5563	Valuation/Mergers and Acquisitions	
FIN 5564	Portfolio Management	
FIN 5565	Alternative Investments	
FIN 5567	Payment Systems	
FIN 5582	Seminar In Finance	
RL-EST 5571	Real Estate Finance [1]	
RL-EST 5573	Real Estate Feasibility and Market Analysis [1]	
Total Credits		12

[1] ***Students may use only one real estate course for credit in the Finance emphasis.***

General Management

One course from four among the following nine areas:

- **Entrepreneurship**: see emphasis area listing
- **Finance:** see emphasis area listing
- **Global Business:** see emphasis area listing
- **Law & Society**: MGT 5506
- **Leading and Managing People:** see emphasis area listing
- **Management Information Systems:** see emphasis area listing
- **Marketing:** see emphasis area listing
- **Strategy & Planning:** MGT 5513
- **Supply Chain and Operations Management:** see emphasis area listing

Global Business

Required:		3
MGT 5545	International Management	
Select three of the following:		9
DSOM 5544	Global Supply Chain and Logistics Management	
FIN 5551	International Financial Management	
FIN 5552	Global Financial Markets and Institutions	
MGT 5546	Seminar in International Management	
MGT 5552	International Study in Business (a maximum of 3 hours can apply to the emphasis; additional hours may count toward electives)	
MKT 5555	International Marketing	
Total Credits		12

Leading and Managing People

Select 12 hours from the following:		12
MGT 5516	Leading Teams	
MGT 5517	Leading Through Influence and Persuasion	
MGT 5518	Leadership & Motivation	
MGT 5519	Conflict Management and Negotiation Strategies	
MGT 5520	Strategic Benefits Management (1.5 credit hours)	
MGT 5521	Building Human Capital (1.5 credit hours)	
MGT 5533	Leading and Managing Change	
MGT 5560	Strategic Human Resources	
MGT 5566	Strategic Staffing (1.5 credit hours)	
MGT 5567	Total Rewards Management (1.5 credit hours)	
PUB-ADM 5548	Leadership For Public Service	
PUB-ADM 5570	Diversity In The Workplace	
Total Credits		12

Management of Information Systems

Select four of the following:		12
ACCTNG 5565	Advanced Accounting Systems	
ACCTNG 5567	Information Systems Control And Audit	
MIS 5529	Decision Support Systems	
MIS 5552	Data Base Management	
MIS 5554	Systems Analysis, Design And Engineering	
MIS 5558	Management of Information Technology	
Select additional elective courses from the following:		
DSOM 5514	Forecasting Theory And Applications	
DSOM 5542	ERP-Enterprise Resource Planning Systems	
DSOM 5543	Project Management	

DSOM 5544	Global Supply Chain and Logistics Management	
Total Credits		12

Marketing

Required		
MKT 5575	Advanced Marketing Strategy	3
Electives		
Select three of the following:		9
MKT 5539	Digital (and Direct) Marketing	
MKT 5560	Buyer Behavior	
MKT 5561	Promotional Strategies In Marketing	
MKT 5562	Marketing Research	
MKT 5555	International Marketing	
Total Credits		12

Real Estate

Required		
RL-EST 5556	Entrepreneurial Real Estate Process	3
RL-EST 5571	Real Estate Finance	3
RL-EST 5578	Legal Context of Real Estate	3
Electives		
Select one of the following:		3
RL-EST 5557	Urban Planning Contexts for Real Estate Decisions	
RL-EST 5558	Capital Markets	
RL-EST 5559	Corporate Real Estate	
RL-EST 5572	Global Real Estate	
RL-EST 5573	Real Estate Feasibility and Market Analysis	
RL-EST 5574	Real Estate Construction and Development	
RL-EST 5576	Real Estate Property and Portfolio Management	
RL-EST 5577	Real Estate Valuation	
Total Credits		12

Supply Chain and Operations Management

Required		
DSOM 5540	Service Operations Management	3
DSOM 5542	ERP-Enterprise Resource Planning Systems	3
DSOM 5543	Project Management	3
DSOM 5544	Global Supply Chain and Logistics Management	3
Select additional elective courses from the following:		
ACCTNG 5556	Cost Management	
DSOM 5514	Forecasting Theory And Applications	
Total Credits		12

Note: Students should ensure that prerequisites are taken in the proper sequence.

Executive MBA Program

Student Learning Outcomes

Graduates of the Bloch School's EMBA program will gain the business knowledge skills needed to excel as executives, entrepreneurs, and leaders. The EMBA graduate will:

- Apply strategic frameworks to complex business issues and identify viable options and forward-looking strategies, through the integrated analysis of multiple functional perspectives - e.g. marketing, product development/service delivery, finance, operations, and human capital.

- Demonstrate enhanced understanding of complex public sector systems, processes and leaders, and identify and define the various forces that shape and impact business policy.
- Demonstrate the skills needed to generate creative solutions that address unmet needs and wants, evaluate the relative attractiveness of competing solutions, and organize to exploit opportunities in the marketplace.
- Utlize a knowledge framework to 1) critically think about and assess the impact and linkage of global influences, issues, trends, and decisions in business models; and 2) demonstrate insight and agility in operating within a global business environment.
- Demonstrate the communication and interpersonal skills needed for effective collaboration and creative problem-solving, as well as the versatility to add value in a variety of team roles - leader, expert, facilitator, etc.
- Demonstrate the ability to 1) diagnose complex business situations, recognizing key issues, tensions and dilemmas; and 2) articulate decisions and action plans that reflect comprehensive understanding of the human, political and cultural context as well as nuanced ways of building influence and support.

The Bloch Executive MBA (EMBA) is a highly-selective degree program for experienced professionals. The program offers a comprehensive integrated curriculum, field experiences, and four residencies. It is distinguished by an emphasis on cohort-learning, teamwork, hands-on projects, leadership coaching and development, and learning activities that contribute substantial value to participants, employers, and the larger community.

Students are admitted each year to a new EMBA cohort through a special application process. Students begin coursework in mid-August, and program completion requires 21 months.

The program is composed of 16 semester-long, graduate-level courses and of four week-long immersion residencies that are focused on leadership, innovation, public policy, and the global marketplace. A variety of teaching formats are employed, including case studies, group projects, simulations and role playing, fieldwork, interactive discussions, and renowned guest lecturers. Daylong classes meet three days per month (one Friday/ Saturday and one additional Saturday). Classes do not meet in June and July. To ensure that all students are up to speed on academic and business basics, the program starts with required orientation and an introduction to key subject areas, such as finance, accounting, and statistics.

Admissions Requirements

The EMBA is designed for experienced professionals who possess an undergraduate degree from an accredited university and a minimum of 8 years of work experience with growing responsibilities for managing people, projects, and/or budgets. Admissions decisions are based on a combination of a solid academic record, demonstrated professional achievement, and evidence of a strong commitment to learning and to career and professional development. Further information on the Bloch EMBA program is available at (816) 235-6071 or at the program's web site http://bloch.umkc.edu/emba.

The Curriculum

Leadership Residency introduces students to fundamentals of business, organizational behavior, leadership, and teamwork.

Semester 1

- **Financial Reporting Systems** introduces generally accepted accounting principles and concepts along with the preparation and analysis of financial statements.
- **Applied Statistical Methods** investigates the use of detailed sample data for purposes of estimating, predicting, forecasting, and explaining correlations among varied observations.
- **Operations Management for World Class Competitiveness** explores the basic principles and strategic use of managing the production and distribution of goods and services.
- **Marketing Management** examines the role of marketing in driving profitable revenue growth in companies.

Semester 2

- **Organizational Finance** gives students a thorough introduction to financial management that blends appropriate amounts of relevant theory with practical application.
- **Influence, Persuasion and Change** presents ideas, strategies and tools for leading change in complex organizations and for defining an ethical approach to leading, influencing, and persuading others.
- **Public Policy Context for Business Decisions** provides intensive exposure to the forces, practices, and personalities in Washington that shape America's business policy. The course includes the required 5 day ***Washington, D.C. Residency*** to expand student understandings of the role of social leadership in the development of business policies, practices and processes.
- **Managerial Economics** studies the relationship between the economic theory and system as a whole and the ways in which both are affected by the behavior of the interdependent sectors of which they are composed.

Innovation Residency

- **Entrepreneurship and Innovation Immersion** is a 5-day, required, off-campus residency that gives students grounded understanding of how to identify and evaluate business opportunities. An engaging, true-to-life business simulation serves as an evolving "case" where students experience the opportunities and challenges in the day-to-day decisions and competitive worlds of the entrepreneur and of the general manager.

Semester 3

- **Leadership Accountability and the Legal Implications** highlights the full meaning of leadership accountability and of the legal challenges leaders face in a rapidly changing global world.
- **Strategic Management** examines the principles essential for the formulation and evaluation of strategy including industry analysis, strategic positioning, and the boundaries of the firm. The course also addresses the capacity of executive leadership to innovate and to create new or added values, as well as their responsibility for developing and communicating a clear vision and direction for a company's future.
- **Information Technology as a Strategic Tool** examines the critical linkage among an organization's business, culture, and information technology strategies and provides essential knowledge and frameworks for enhancing the IT role in innovation, change, and continuous organizational learning.
- **Leadership, Strategy and Human Resources** focuses on the leader as a catalyst in developing high-performance, market-based cultures and as a human resources strategist in marshalling the workforce toward productive ends.

Semester 4

- **Global Initiatives in Management** explores key, contemporary international business issues for leaders and for organizations in today's global economy and includes a required, 11 day, international residency experience in a major business center abroad.
- **Integrated Business Strategies - Capstone Course** explores critical factors involved in effective decision making, in organizational governance, and in developing the broad enterprise leadership perspective needed for effective executive planning and action.
- **Leadership and Organizations** focuses on how organizations work and how leaders can set direction, marshal resources, and build support to mvoe initiatives forward.

The fourth course in the final semester is a student's choice from among two electives:

- **Innovation and Entrepreneurship** explores the creative, entrepreneurial, and managerial processes involved in moving from a concept to the development of a new business and provides students hands-on opportunities to convert a dream into a high-growth business. ***-or-***
- **Advanced Topics in Finance** builds on the previous finance course in the program and delves deeper into topics such as valuation, enterprise risk management, securities and investments, regulatory frameworks, and corporate governance.

Combined J.D./MBA Program

The Bloch School and UMKC School of Law offer the combined J.D. and MBA program. Students must satisfy the admission and degree requirements for each school. For further information, contact the School of Law or consult the Bloch School Web site at http://bloch.umkc.edu/graduate-program/mba/jd-mba-joint-program.aspx.

Master of Entrepreneurial Real Estate

Student Learning Outcomes

Graduates of the Master of Entrepreneurial Real Estate degree program will:

- Have an understanding of advanced real estate investment theories and methods from ownership issues, financing commercial real estate and analyzing a commercial real estate investment through the after tax cash flow model for real estate analysis.
- Have an understanding of practical and successful techniques for a proactive approach to managing, marketing and leasing commercial properties.
- Have an advanced working knowledge of the essential steps in conducting a market analysis that will enable the student to obtain relevant data from the market and utilize the various metrics to measure the supply and demand for a particular type of real estate use.
- Have an understanding of key business and legal concepts in architectural and general construction contract negotiations; issues in buying, leasing and selling properties including due diligence, representations and default concepts; brokerage agreements; governmental issues, including zoning, entitlements and condemnation.

Program Requirements

The master of entrepreneurial real estate (M.E.R.E.) is designed for students interested in all aspects of real estate who have decided their career paths require an advanced level of knowledge. The Lewis White Real Estate Center works in partnership with the Bloch School of Management's Regnier Institute for Entrepreneurship and Innovation which provides a global and entrepreneurial focus to the program.

The M.E.R.E. program fulfills a vital need for graduate real estate education not offered by any university in the region. Enabling real estate entrepreneurs to keep up with today's ever-changing environment, the program addresses real estate trends such as the global shift in attitude towards eco-friendly developments, reducing carbon footprints and the expansion of green technology in new construction. The knowledge gained will allow participants to make real estate decisions that require mastery of complex, interdisciplinary skills and an ability to manage teams of professionals with expertise in various fields.

Curriculum

The M.E.R.E. is a 36-credit hour lock-step program that will generally be taken over a 2-year period. Students who are not experienced in real estate or are not working will be encouraged to complete a real estate internships durin the summer semester. Students who meet certain standards in terms of academic background and experience may also be able to complete the program on a one-year basis. Some students may also opt to pursue the degree on a part-time basis which may extend their program to three years.

The full-time program cycle begins each fall. To complete the program along with their cohorts, students are required to take two graduate level real estate courses each semester. In addition to the eight required real estate courses (24 credit hours), students will also complete 12 elective credit hours of interdiscipoinary studies. These electives may also be focused on a narrower set of courses that allow students to pursue individualized areas of focus that will help advance their careers in their chosen area of specialization. Due to scheduling changes, the list of electives may vary from semester to semester. Working with advisors, all students will have an approved program of studies.

The following courses are required:

RL-EST 5556	Entrepreneurial Real Estate Process	3
RL-EST 5571	Real Estate Finance	3
RL-EST 5572	Global Real Estate	3
RL-EST 5573	Real Estate Feasibility and Market Analysis	3
RL-EST 5574	Real Estate Construction and Development	3
RL-EST 5576	Real Estate Property and Portfolio Management	3
RL-EST 5577	Real Estate Valuation	3
RL-EST 5578	Legal Context of Real Estate	3
Total Credits		24

Electives

Elective courses are intended to allow a student to pursue individualized areas of study that will complement the intended goals in their chosen work profession. Graduate courses offered by Henry W./ Bloch School of Management do not have to be pre-approved. Any interdisciplinary courses not listed in the chart below must be pre-approved by the student's real estate advisor. List may be periodically updated.

Potential Non-Bloch School Interdisciplinary Elective Options (other electives may be selected with Real Estate advisor's approval)		
CIV-ENGR 5563	Construction Law	3
CIV-ENGR 5565	Project Finance	3
CIV-ENGR 5566	Green Building and Sustainable Infrastructure	3
POL-SCI 424	Urban Politics and Community Power Structures	3
POL-SCI 5524	Urban Politics	3
LAW 8501	Contracts I	3
LAW 8729	Preservation Law	2-3
LAW 8766	Land Use Law	2-3
LAW 8898	Construction Law	2

Master of Public Administration

Student Learning Outcomes

The Master of Public Administration program prepares entrepreneurial and innovative public service leaders and executives to be effective and successful in an increasingly complex and dynamic world. Public service offers a career filled with excitement, challenge and significance. Career opportunities are numerous, ranging from employment in local, state, national and international governmental and quasi-governmental agencies to employment in health care and nonprofit and nongovernmental organizations. Never has there been a time of greater opportunity for public service leaders and executives who can apply their knowledge and skills to the most important of leadership and management challenges confronting their organizations and communities. The Master of Public Administration (M.P.A.) degree and related certificate programs in Nonprofit Management and Innovation and Urban Policy and Adminisgtration are offered through the Department of Public Affairs.

Graduates of the Henry W. Bloch School of Management M.P.A. program have the knowledge and skills necessary to effectively and ethically lead and manage dynamic public service organizations. Specifically, M.P.A. graduates are prepared to:

- Lead and manage in public service organizations and settings in entrepreneurial and innovative ways.
- Engage in sophisticated decision making, grounded in disciplined analytical and critical thought, to effectively address the long term needs and interests of communities, organizations and their stakeholders.

- Understand the process as well as content dimensions of problem analysis and resolution and make effective use of state-of-the-art administrative and management practices and methods, including the effective use of technology.
- Communicate effectively, verbally and in writing.
- Exhibit competence in understanding and addressing the ethical dimensions of public service leadership and management.
- Understand the wide variation that exists in the principles, cultures, and practices of organizations and communities from different parts of the world, and the implications of this variation for effective public service leadership.
- Understand the value of diversity and inclusion and exhibit competence in ethical, effective, culturally competent leadership and management.
- Demonstrate self-confidence and capacity to deal with dynamic, complex, and ambiguous community problems and issues.
- Have the capacity to work effectively in collaboration with others through teams, alliances, and networks to achieve results.

Program Requirements

The Curriculum

The M.P.A. degree will be awarded on successful completion of 36 semester hours, consisting of 21 hours of required core courses, 9 to 12 hours in a selected emphasis area and up to 6 hours of electives. An internship is required for any M.P.A. student who does not have prior work experience in public, nonprofit or health administration. Individual courses may be waived if a student presents evidence of significant relevant undergraduate study, but other graduate courses must be substituted to meet the minimum of 36 credit hours. **Note:** Students who repeat courses may not count the repeated course toward their degree.

Core Curriculum

The following courses are required for each student:

PUB-ADM 5510	Research Methods In Public Administration	3
PUB-ADM 5525	Financial Accountability And Policy Development	3
PUB-ADM 5526	The Politics Of Administration	3
PUB-ADM 5530	Capstone Seminar In Public Administration	3
PUB-ADM 5541	Public Policy Development and Analysis	3
PUB-ADM 5544	Public Policy Evaluation and Analysis	3
PUB-ADM 5548	Leadership For Public Service	3
Total Credits		21

Students selecting the health services administration emphasis have the following core requirements:

PUB-ADM 5510	Research Methods In Public Administration	3
PUB-ADM 5526	The Politics Of Administration	3
PUB-ADM 5548	Leadership For Public Service	3
HLTH-ADM 5580	Economics of Health and Medicine	3
or PUB-ADM 5541	Public Policy Development and Analysis	
HLTH-ADM 5571	Financial Management Issues: Health & Human Services Organizations	3
or PUB-ADM 5525	Financial Accountability And Policy Development	
HLTH-ADM 5578	The Evaluation And Control Of Health Services	3
or PUB-ADM 5544	Public Policy Evaluation and Analysis	
PUB-ADM 5530	Capstone Seminar In Public Administration	3
Total Credits		21

Note: Students should ensure that prerequisites are taken in the proper sequence.

Electives (Up to 6 hours)

Elective courses may be selected from public administration, including courses in the student's chosen emphasis area. Courses may also be selected from political science, economics, psychology, sociology, management as well as from other graduate fields with approval of the faculty advisor.

Emphasis Areas (9-12 hours)

Students seeking the master of public administration degree may choose to specialize in three emphasis areas:

- Health Services Administration
- Nonprofit Management

- Urban Policy and Administration

A student may also tailor a general or specific program in order to meet individual talents, needs or job requirements. Such a program must be developed in consultation with a faculty advisor. Each course is worth three credits unless otherwise noted.

Health Services Administration

Select three of the following:		9
HLTH-ADM 5571	Financial Management Issues: Health & Human Services Organizations [1]	
HLTH-ADM 5577	Health Service Administration And The Health Professions	
HLTH-ADM 5578	The Evaluation And Control Of Health Services [1]	
HLTH-ADM 5580	Economics of Health and Medicine	
HLTH-ADM 5581	Health Policy in the United States	
HLTH-ADM 5586	Independent Study (independent study or internship)	
Total Credits		9

1 Students cannot count courses in both the core and emphasis area.

Nonprofit Management

Select 12 hours from the following:		12
PUB-ADM 455	Non-Profit Leadership Issues (1 hour)	
PUB-ADM 495	Voluntarism, Philanthropy & The Non-Profit Sector In The U.S. (1 hour) [1]	
PUB-ADM 5551	Strategic Management In Nonprofit Organizations [1]	
PUB-ADM 5552	Community Organizations And Public Policy	
PUB-ADM 5553	Legal Framework & Financial Management Of Nonprofit Organizations [1]	
PUB-ADM 5554	Seminar on Social Entrepreneurship	
PUB-ADM 5555	Topics In Nonprofit Fundraising (1-2 hours each)	
PUB-ADM 5556	Innovation In Nonprofit Management And Leadership [1]	
PUB-ADM 5582	Developing and Managing the Nonprofit Social Enterprise	
PUB-ADM 5585	Seminar In Public Affairs	
PUB-ADM 5598A	Supervised Research: Nonprofit Management (1-3 hours)	
HLTH-ADM 5571	Financial Management Issues: Health & Human Services Organizations	
Total Credits		12

1 Students choosing the nonprofit emphasis should choose **at least six** of their twelve emphasis area credit hours from among the following courses: PUB-ADM 495, PUB-ADM 5551, PUB-ADM 5553, and PUB-ADM 5556.

Urban Policy and Administration

Required		
PUB-ADM 5535	Urban Policy And Administration	3
Electives		
Select three of the following:		9
PUB-ADM 5536	Managing Urban Economic Development	
PUB-ADM 5539	Urban And Regional Planning For Urban Administrators	
PUB-ADM 5540	Regional and Local Government Systems	
PUB-ADM 5552	Community Organizations And Public Policy	
PUB-ADM 5554	Seminar on Social Entrepreneurship	
PUB-ADM 5565	Topics In Urban Administration (1 credit hour each)	
PUB-ADM 5581	Seminar In Urban Administration	
PUB-ADM 5595	Internship Seminar [1]	
PUB-ADM 5598C	Supervised Research: Urban Administration (1-3 hours)	
Total Credits		12

[1] Students choosing the urban administration emphasis are allowed no more than three hours of internship to fulfill the emphasis area. Additional internship hours will count as electives.

The Executive M.P.A. Program

Student Learning Outcomes

The Master of Public Administration program prepares entrepreneurial and innovative public service leaders and executives to be effective and successful in an increasingly complex and dynamic world. Graduates of the M.P.A. program have the knowledge and skills necessary to effectively and ethically lead and manage dynamic public service organizations. Specifically, M.P.A. graduates are prepared to:

- Lead and manage in public service organizations and settings in entrepreneurial and innovative ways.
- Engage in sophisticated decision making, grounded in disciplined analytical and critical thought, to effectively address the long term needs and interests of communities, organizations and their stakeholders.
- Understand the process as well as content dimensions of problem analysis and resolution and make effective use of state-of-the-art administrative and management practices and methods, including the effective use of technology.
- Communicate effectively, verbally and in writing.
- Exhibit competence in understanding and addressing the ethical dimensions of public service leadership and management.
- Understand the wide variation that exists in the principles, cultures, and practices of organizations and communities from different parts of the world, and the implications of this variation for effective public service leadership.
- Understand the value of diversity and inclusion and exhibit competence in ethical, effective, culturally competent leadership and management.
- Demonstrate self-confidence and capacity to deal with dynamic, complex, and ambiguous community problems and issues.
- Have the capacity to work effectively in collaboration with others through teams, alliances, and networks to achieve results.

Students with at least five years of increasingly-responsible career and leadership experience may apply for the Executive M.P.A. (E.M.P.A.) degree program. This 23-month cohort-version of teh MPA program is designed to prepare experience high-potential professionals and managers for executive and community leadership roles in government, nonprofit and health care organizations. The E.M.P.A. program includes a number of unique learning and professional development experiences and resources, including executive coaching, immersion courses, and issue-oriented residencies in locations such as Washington D.C. and Cape Town, South Africa. For more information about this option, please visit http://bloch.umkc.edu/graduate-program/empa/default.aspx.

The B.A. (Urban Affairs)/M.P.A. Program

Students obtaining a B.A. in Urban Affairs in the College of Arts and Sciences may pursue early admission to the master's degree program in public administration and obtain a master's degree in one additional year (three semesters). The program allows students to utilize some of the M.P.A. courses to satisfy urban affairs requirements, thereby reducing the number of courses needed to complete both degrees. Contact the Bloch School Student Services Office for more information on this program option.

The B.B.A./M.P.A. Program

Students completing the bachelor of business administration may complete their M.P.A. degree in one additional year at UMKC (three semesters) if they meet entrance requirements for the public administration graduate program. For more information about this option, contact the Bloch School Student Services Office.

Combined J.D./M.P.A. Program

The Bloch School and the UMKC School of Law offer a combined J.D. and M.P.A. program. Students must satisfy the admission and degree requirements for each school and program. Students *fully admitted* to the School of Law are exempt from the GRE requirement for admission to the M.P.A. program. For further information, contact the School of Law or consult the Bloch School Web site at http://bloch.umkc.edu/graduate-program/mpa/jd-mpa-joint-program.aspx.

Master of Science in Accounting

Student Learning Outcomes

Graduates of the Master of Science in Accounting degree program will:

- Meet the Missouri statutory educational requirements to sit for the Uniform CPA exam.
- Define, analyze and devise solutions for structured and unstructured problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials, and data.
- Recognize and analyze ethical problems and choose and defend resolutions for practical situations that occur in accounting in accordance with the accountant's professional responsibility.

- Conceptualize a complex issue into a coherent written statement and oral presentation.

The Curriculum

The master of science in accounting program encompasses advanced analysis in a variety of areas. The total hours required are dependent on the focus of the student's undergraduate coursework. Students may be exempt from certain course requirements based on prior business and accounting coursework and grades earned, with exemptions determined at the time of initial advising and enrollment. Students with no preparation in mathematics and computer applications must complete MATH 110 and MIS 202. **Note:** Students who repeat courses that have been waived from their program may not count the repeated course for credit toward their degree.

M.S. in Accounting - Non-Accounting Undergraduates

Student Learning Outcomes

Graduates of the Master of Science in Accounting degree program will:

- Meet the Missouri statutory educational requirements to sit for the Uniform CPA exam.
- Define, analyze and devise solutions for structured and unstructured problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials, and data.
- Recognize and analyze ethical problems and choose and defend resolutions for practical situations that occur in accounting in accordance with the accountant's professional responsibility.
- Conceptualize a complex issue into a coherent written statement and oral presentation.

This program is designed for students with little or no undergraduate accounting coursework. It provides comprehensive coverage of accounting topics necessary for a professional career in the field. Completion of the program also qualifies students for the various examinations leading to professional certification. Stage One identifies prerequisite accounting and business courses that provide the foundation for the Stage Two courses required for the M.S. in accounting degree. Stage One courses may be waived based on equivalent undergraduate coursework taken as part of a bachelor of business administration degree from UMKC or equivalent program. This program is outlined below.

Stage One

ACCTNG 5556	Cost Management	3
ACCTNG 5558	Financial Accounting Theory	3
ACCTNG 5550	Accounting Information Systems	3
ACCTNG 5517	Survey Of Accounting	3
DSOM 5505	Decision Sciences	1.5
DSOM 5507	Operations and Supply Chain Management	1.5
FIN 325	Financial Management	3
FIN 5504	Managerial Economics	1.5
FIN 5505	Global Macroeconomics	1.5
Business Law Course		
MKT 5501	Marketing Management	1.5
ENT 5502	Introduction to Entrepreneurship	1.5
or MGT 5509	Strategic Management	
Select two of the following:		3
MGT 5501	International Business Environment	
MGT 5502	Leadership in Organizations	
MGT 5507	Human Capital Management	
Total Credits		27

Stage Two

(30 credit hours beyond Stage One)

ACCTNG 311	Intermediate Accounting II	3
ACCTNG 409	Advanced Taxation (see advisor to determine which course best fits in your degree program)	3
or ACCTNG 5557	Introduction To Income Taxation	
ACCTNG 421	Governmental/Not-For-Profit Accounting	3
ACCTNG 5559	Advanced Financial Accounting Theory	3
ACCTNG 5560	Introduction To Auditing And Accounting Systems	3

ACCTNG 5562	(or higher) level course in Managerial Accounting	
ACCTNG 5562	(or higher) level course in Financial Accounting	
ACCTNG 5562	(or higher) level course in Auditing	
ACCTNG 5562	(or higher) level course in Tax	
Approved Accounting elective, 5561 or higher		3
Total Credits		18

M.S. in Accounting - Accounting Undergraduate

Students with an undergraduate degree in accounting may complete the M.S. in accounting program in a minimum of 30 semester hours. Examples of focus areas which students may select follow:

Accounting/Audit Focus

Student Learning Outcomes

Graduates of the Master of Science in Accounting degree program will:

- Meet the Missouri statutory educational requirements to sit for the Uniform CPA exam.
- Define, analyze and devise solutions for structured and unstructured problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials, and data.
- Recognize and analyze ethical problems and choose and defend resolutions for practical situations that occur in accounting in accordance with the accountant’s professional responsibility.
- Conceptualize a complex issue into a coherent written statement and oral presentation.

ACCTNG 5562	(or higher) level in managerial accounting, tax, auditing, and financial accounting	12
Approved electives in audit or financial accounting including (ACCNTG 5562, ACCTNG 5567, ACCTNG 5570, ACCTNG 5577, ACCTNG 5578, and ACCTNG 5579)		6
Approved electives including (ACCTNG 5561, ACCTNG 5562, ACCTNG 5565, ACCTNG 5567, ACCTNG 5570, ACCTNG 5571, ACCTNG 5572, ACCTNG 5573, ACCTNG 5574, ACCTNG 5576, ACCTNG 5577, ACCTNG 5578 and ACCTNG 5579)		12
Total Credits		30

Taxation Focus

Student Learning Outcomes

Graduates of the Master of Science in Accounting degree program will:

- Meet the Missouri statutory educational requirements to sit for the Uniform CPA exam.
- Define, analyze and devise solutions for structured and unstructured problems and issues by using cohesive and logical reasoning patterns for evaluating information, materials, and data.
- Recognize and analyze ethical problems and choose and defend resolutions for practical situations that occur in accounting in accordance with the accountant’s professional responsibility.
- Conceptualize a complex issue into a coherent written statement and oral presentation.

ACCTNG 5571	Individual Tax Problems	3
ACCTNG 5572	Tax Theory And Business Applications	3
ACCTNG 5573	Taxation Of Estates, Gifts, And Trusts	3
ACCTNG 5574	Tax Accounting	3
ACCTNG 5576	Tax Research, Procedure And Practice	3
ACCTNG 5562	(or higher) level in financial accounting, managerial accounting and audit	9
Approved electives including (ACCTNG 5561, ACCTNG 5562, ACCTNG 5565, ACCTNG 5567, ACCTNG 5570, ACCTNG 5577, ACCTNG 5578 and ACCTNG 5579)		6
Total Credits		30

Note: Students should ensure that prerequisites are taken in the proper sequence.

Master of Science in Finance

Student Learning Outcomes

The Bloch School master of science in finance (M.S.F.) graduate is proficient in the following areas:

- Demonstrate their ability to analyze financial data by successfully completing a financial statement analysis project.
- Demonstrate their ability to use financial modeling techniques by successfully employing those techniques to reach financial decisions on a case.
- Demonstrate their understanding of how to utilize various asset classes to achieve portfolio objectives inclujding risk management by completing a class project.
- Demonstrate their ability to value business entities (both public and private) by successfully analyzing case information to arrive at an appropriate fair value for a business entity.

The master of science in finance (M.S.F.) is for students and executives seeking specialized training in finance in preparation for financial certifications such as the Chartered Financial Analyst (CFA) and Certified Financial Planner (CFP), as well as for acquiring career advancement skills in a variety of financial fields.

Our nationally and globally diverse faculty is comprised of experienced educators and recognized scholars who combine theory with practice to provide a balanced learning experience.

The Curriculum

The M.S.F. is a 33 hour program and courses are offered in fall, spring, summer and intersessions. Students entering the program must meet prerequisites in accounting, economics, finance and statistics. Courses are offered in the evening and students can pursue the degree part-time or full-time.

The core curriculum for all tracks includes the following courses:

FIN 5552	Global Financial Markets and Institutions	3
FIN 5553	Investment Analysis	3
FIN 5560	Financial Modeling	3
FIN 5561	Financial Statement Analysis	3
Total Credits		12

Corporate Finance Track

FIN 5550	Advanced Financial Management Theory And Policies	3
FIN 5551	International Financial Management	3
FIN 5563	Valuation/Mergers and Acquisitions	3
Total Credits		9

Financial Analyst Track

Required Track Courses		
FIN 5557	Derivative Securities	3
FIN 5562	Fixed Income Analysis	3
FIN 5563	Valuation/Mergers and Acquisitions	3
Required Elective Courses		
FIN 5564	Portfolio Management	3
FIN 5565	Alternative Investments	3
Total Credits		15

Financial Services Management Track

FIN 5550	Advanced Financial Management Theory And Policies	3
FIN 5556	Management Of Financial Intermediaries	3
FIN 5562	Fixed Income Analysis	3
or FIN 5567	Payment Systems	
Total Credits		9

Flexible Design Track

Pick three FIN designated courses to fill in the track portion of your program. For the designated elective section of the program, at least two courses must have the FIN designation.

Wealth Management Track

ACCTNG 5561	Personal Financial Planning	3
FIN 5566	Financial Plan Development	3
Additionally, students choose Introduction to Risk Management and Insurance, that is in the process of being developed.		3
Required Designated Electives		
ACCTNG 5557	Introduction To Income Taxation	3
ACCTNG 5571	Individual Tax Problems	3
ACCTNG 5573	Taxation Of Estates, Gifts, And Trusts	3
Total Credits		18

Designated Electives

Twelve hours are required and at least 6 hours must be from Finance (with the exception of the Wealth Management track). Designated electives may include but are not limited to:

FIN 5550	Advanced Financial Management Theory And Policies	3
FIN 5551	International Financial Management	3
FIN 5556	Management Of Financial Intermediaries	3
FIN 5557	Derivative Securities	3
FIN 5559	Strategic Financial Management	3
FIN 5562	Fixed Income Analysis	3
FIN 5563	Valuation/Mergers and Acquisitions	3
FIN 5564	Portfolio Management	3
FIN 5565	Alternative Investments	3
FIN 5567	Payment Systems	3
FIN 5582	Seminar In Finance	3
FIN 5587	Special Topics	3
FIN 5595	Internship	1-3
ENT 5585	Entrepreneurial Finance and Venture Capital Investment	3
ENT 5681	Multivariate Statistical Methods-II	3
MGT 5552	International Study in Business	3

Selected courses in economics, management information systems, mathematics, law, real estate or other graduate programs can be approved by a finance faculty member.

Ph.D. in Entrepreneurship and Innovation

PROGRAM OVERVIEW

The Regnier Institute for Entrepreneurship and Innovation at the University of Missouri-Kansas City delivers exceptional entrepreneurship education and research programs. It was ranked among the top 25 graduate entrepreneurship programs in the United States by the Princeton Review. Eight full-time faculty members in Entrepreneurship and Innovation at IEI are productive scholars who regularly publish in top-tier academic journals in entrepreneurship and related fields. We are committed to building one of the best doctoral programs in the country and training the next generation of entrepreneurship professors.

The program will have theoretical and methodological rigor that is designed to position it among the 10 best entrepreneurship programs in the world. Students will complete two sequences of courses, one dealing with existing research in the areas of entrepreneurship and innovation and a second dealing with research methodologies. Through these courses, students will develop a solid grounding in the entrepreneurship and innovation literature. In addition, students will develop the research skills needed to (1) identify compelling research questions, (2) use theory to identify possible answers to those research question, (3) frame research projects to explore the validity of those answers, and (4) analyze the data generated by that research project using the statistical tools and techniques necessary for publication in leading management journals. All students in the program will take 6 hours of courses per semester for the first two years and 3 to 6 hours of courses per semester afterwards while working as research assistants for designated faculty and conducting dissertation research.

PROGRAM STRUCTURE

Total credits required for graduation; 45 credit hours
Total residency requirements, if any: 42 credit hours

Required Theory Courses (12 credit hours):		
ENT 5691	Doctoral Seminar In Theoretical Foundations Of Entrepreneurship I	3
ENT 5692	Foundations Entrepreneurship	3
ENT 5693	Technology, Innovation, And Entrepreneurship	3
ENT 5694	Doctoral Seminar In Theories Of The Fim And Strategy	3
Required Methodology Courses (15 credit hours):		
DSOM 5516	Multivariate Statistical Methods	3
ENT 5681	Multivariate Statistical Methods-II	3
ENT 5682	Structural Equation Modeling	3
ENT 5683	Mathematical Models For Entrepreneurship	3
ENT 5699	Dissertation and Research in Entrepreneurship and Innovation	1-12

Required Elective Courses (6 credit hours):

Students will select two electives in consultation with their advisor. in all cases, the timing and composition of electives will be chosen with the approval of the student's advisor so that these courses will support the doctoral candidate's research focus.

Research Papers
To demonstrate their mastery of the theoretical literature and supporting research methodologies, students will be required to submit one paper annually for either a conference presentation (year 1) or journal publication (years 2-4). Students who fail to meet this requirement will be placed on probation. Ultimately, if the student cannot meet this requirement, the student will be dismissed from the program. In addition, before graduation, each student must have received an invitation to revise a submitted paper from three major journals.

Comprehensive Exams
Students are expected to take their comprehensive exams after the completion of their second year. They must pass written and oral comprehensive examinations in Entrepreneurship Theory and Research Methods before starting their fourth academic year in the program. Exams are administered by the IEI faculty during the summer. Students who fail a comprehensive exam may retake the exam. However, a second failure will result in termination from the program.

Comprehensive examinations in the co-discipline may also be required either as part of major comprehensive exams or as separate exams.

Dissertation
In addition to the course work, research papers, and comprehensive exams, each Ph.D. candidate must successfully complete a dissertation in Entrepreneurship. The dissertation must be an original and independent piece of work.

Each dissertation is supervised by a five-member dissertation committee. The proposal must be approved by the dissertation committee before the end of the student's fourth year in the program. After the dissertation has been written to the satisfaction of the dissertation committee, the student presents the dissertation to the faculty and other Ph.D. students, and the student must defend the dissertation in a final oral examination by the committee. All dissertation requirements must be completed by the end of the sixth year in the program.

Teaching effectiveness training
All first-year students are required to participate in UMKC's teaching effectiveness training program. International students must pass a SPEAK test as part of the training. Teaching assistants assigned to teach core courses will receive additional guidance from faculty course coordinators. Each student will have the opportunity to independently teach at least two classes before graduating.

Financial support
We offer full tuition waivers and very competitive stipends to a limited number of students who are in the Stand-Alone Ph.D. program or the Interdisciplinary Ph.D. program with Entrepreneurship as the Coordinating Discipline. In addition, students are encouraged to compete for the UMKC graduate fellowships (http://sgs.umkc.edu/fellow).

Annual Evaluation
A student must complete a formal evaluation by the supervisory committee every year during the summer. Students are expected to maintain a minimum cumulative grade point average (GPA) of 3.3. Unsatisfactory performance on any of the requirements can lead to termination from the program.

Doctor of Philosophy

Student Learning Outcomes

The course requirements for the program are not predetermined, but rather formulated by the student in consultation with the UMKC doctoral faculty who will serve on their supervisory committee, to meet the student's individual needs and research interests, satisfy discipline-specific requirements and assure upon graduation students are able to:

- Demonstrate appropriate depth and breadth of knowledge in their disciplines.
- Use skills of interdisciplinary scholarship and research to integrate multiple perspectives.
- Work effectively in a collaborative environment.
- Effectively communicate results of their research to diverse audiences.
- Understand and value diverse approaches to problems.
- Use self-reflection for personal and professional improvement.

Program Requirements

The Bloch School participates in the Interdisciplinary Ph.D. program through the Department of Public Affairs (co-discipline in Public Affairs and Administration only) and through the Department of Global Entrepreneurship and Innovation. The Department of Global Entrepreneurship and Innovation also offers a stand-alone Ph.D. program. Information about discipline-specific admission and program requirements may be found in the School of Graduate Studies section of this catalog. Those interested in doctoral study in entrepreneurship and innovation should visit the Department of Global Entrepreneurship and Innovation (http://bloch.umkc.edu/about-us/academic-departments/global-entrepreneur-and-innovation/default.aspx) website.

All Interdisciplinary Ph.D. applicants and students must first meet the general requirements of the School of Graduate Studies for admission and retention in the Interdisciplinary Ph.D. program. (General Graduate Academic Regulations and Information, Application Procedure and Minimum Criteria for Admission, Minimum Interdisciplinary Ph.D. Academic Regulations and Degree Requirements.) In addition to these general academic regulations that have been outlined in previous sections of the general catalog, disciplines may set more stringent discipline-specific requirements that take priority over the general requirements. Discipline-specific requirements for disciplines eligible to participate in the Interdisciplinary Ph.D. program are listed in alphabetical order by name of discipline. These guidelines are subject to ongoing review and revision, and the doctoral faculty reserves the right to make judicious changes in discipline-specific requirements. The student is referred to coordinators in the disciplines for the most current information.

School of Medicine

Hospital Hill Campus
2411 Holmes Street
Tel: (816) 235-1808
Fax: (816) 235-5277
medicine@umkc.edu
http://www.med.umkc.edu
http://research.med.umkc.edu/

Mailing Address:
University of Missouri-Kansas City
School of Medicine
2411 Holmes Street
Kansas City, MO 64108-2792

Dean:

Betty M. Drees, M.D., F.A.C.P.

Senior Associate Deans:

Paul Cuddy, Pharm.D. (Academic Affairs)
Dev Maulik, M.D., Ph.D., FACOG, FRCOG (Women's Health)

Associate Deans:

Nash Bourtros, M.D. (Center for Behavioral Medicine)
Diana Dark, M.D. (Saint Luke's Hospital Programs)
Stefanie Ellison, M.D. (Council on Curriculum)
Christine Sullivan, M.D. Graduate Medical Education)
Brenda Rogers, M.D. (Student Affairs)

Mark T. Steele, M.D. (Truman Medical Center)
Michael Artman, M.D., Chair (Children's Mercy Hospital Programs)
Susan B. Wilson, Ph.D. (Office of Cultural Enhancement & Diversity)

Chairs:

Julie Banderas, Pharm.D., FCCP, BCPS (Graduate Council)
Stefanie Ellison, M.D. (Council on Curriculum)
Stephen R. Griffith, M.D. (Council on Selection)
Tarak Srivastava, M.D. (Faculty Council)
Sara E. Gardner M.D. (Council on Evaluation)
Brenda Rogers, M.D. (Council of Docents)
John Foxworth, Pharm.D. (CME Council)

Assistant Deans:

Alice Arredondo, M.S.Ed., (Admissions and Recruitment)
Julie Banderas, Pharm.D., FCCP, BCPS (Graduate Studies & Allied Health)
John Foxworth, Pharm.D. (Faculty Development)
(Year 1 & 2 Medicine) Raymond Cattaneo, MD
Felix Okah, M.D., M.S. (Career Advising)
Rose Zwerenz, M.D. (Truman Medical Center Lakewood Programs)

Overview

As a major medical research and educational institution, improving the health of our community is very important to us. Our focus is to create breakthrough research which impacts human health and to educate the next generation of world class physicians who will care for our citizens. UMKC have been meeting our community's healthcare needs for over 40 years utilizing unique educational and research programs within the urban core of Kansas City. We are committed to advancing scientific knowledge that will benefit all of our citizens in order for them to achieve a sustainable future well-being. We are achieving this by maintaining our unique regional partnerships, expanding our scientific research and educational programs, and reaching out to our community for guidance and direction.

Our History

Founded in 1971, UMKC School of Medicine has always been ahead of the curve in training physicians. Our medical degree program and our docent mentoring system have expertly prepared tomorrow's physicians in unique and innovative ways. We have graduated nearly 3,000 physicians in our 41 years of using cutting-edge methods that are now being implemented by other medical schools.

As other institutions retool and rethink their strategies, UMKC School of Medicine has always been at the forefront of medical education. The more time passes, the more we provide our students with the academic, personal and clinical training they need to be leading physicians in the 21st century.

Mission

The mission of the UMKC School of Medicine is to provide and foster excellence, innovation and scholarship in education, research and medical care.

Vision

The vision of the UMKC School of Medicine is to be a leader in academic medicine through innovative programs and vibrant community partnerships.

Goals

The UMKC School of Medicine will foster and support a vibrant health science learning community on the Hospital Hill Campus for students, residents, faculty, staff and community partners. The learning environment will consist of an outstanding academic program and experiences, comprehensive scholar support and a campus culture and environment that promote student, resident, faculty and staff engagement and community participation.

The School of Medicine will lead in innovative medical education programs, including education programs for medical students, graduate students, residents, faculty and community physicians.

The School of Medicine will develop strong research and scholarly programs that improve the health of our community with an emphasis in applied translational research to prevent disease, personalize medicine and improve population health.

Faculty

Louise M. Arnold; associate dean and director of the Office of Medical Education and Research and professor of medicine and sociology; A.B. (University of North Carolina); Ph.D. (Cornell University).

Michael Artman; associate dean for Children's Mercy Hospital Programs; chairman, Department of Pediatrics and professor of medicine; M.D. (Tulane University)

Julie Banderas; assistant dean of Graduate Studies; chair, of the Graduate Council and professor of medicine; B.A., Pharm.D., (University of Nebraska)

Paul Cuddy; senior associate dean for Academic Affairs and professor of medicine; B.S. (Massachusetts College of Pharmacy); Pharm.D. (University of Missouri-Kansas City)

Diana Dark; associate dean for St. Luke's programs and professor of medicine; B.A./M.D. (University of Missouri-Kansas City).

E. Grey Dimond; founder, school of medicine, and provost emeritus, health sciences, and professor emeritus for the health sciences and distinguished professor of medicine; B.S., M.D. (Indiana University).

Betty M. Drees; dean, school of medicine, and professor of medicine; B.A. (Wichita State University); M.D. (University of Kansas).

Stefanie Ellison; associate dean for curriculum; chair of the Council on Curriculum; associate professor of medicine; B.A., M.D. (University of Nebraska)

John Foxworth; assistant dean of Faculty Development and professor of medicine; B.A. (University of Missouri-Kansas City) Pharm.D. (University of Missouri)

Sara E. Gardner; chair for the council on evaluation and assistant professor of medicine; B.A./M.D. (University of Missouri-Kansas City)

Stephen Griffith; chair of the selection council; associate professor of medicine; A.B. (Washington University); M.D. (University of Missouri)

David C. Hermanns; chairman for faculty council and assistant professor of medicine; B.A. (University of Kansas); M.D. (Baylor College of Medicine); M.P.H. (Boston University School of Public Health)

Dev Maulik; senior associate dean for Women's Health; chairman, Department of Obstetrics and Gynecology and professor of medicine; M.D. (University of Calcutta); Ph.D (University of London)

Jill A. Moormeier; associate dean for Graduate Medical Education and associate professor of medicine; B.S. (Stanford University); M.D. (University of Nebraska College of Medicine); M.P.H. (St. Louis University)

Stuart. Munro; associate dean for Center for Behavioral Medicine programs; chairman, Department of Psychiatry and professor of medicine; B.A., M.D. (Emory University)

Felix Okah; assistant dean of Career Advising and professor of medicine; M.D. (University of Ibadan); M.S. (University of Cincinnati)

George R. Reisz; chair of the docent council; chairman, Department of Internal Medicine, and Dr. Edward H. Hashinger Distinguished Professor of Internal Medicine; M.D. (Indiana University)

Shauna R. Roberts; chair for the council on CME and associate professor of medicine; B.A./M.D. (University of Missouri-Kansas City)

Brenda Rogers; associate dean for Student Affairs and assistant professor of medicine; B.A./M.D. (University of Missouri-Kansas City)

Travis Solomon; associate dean for Research and research professor, Department of Basic Medical Science; Ph.D. (University of Texas Graduate School of Biomedical Science) M.D. (University of Texas Medical School)

Mark T. Steele; associate dean for Truman Medical Center programs and associate professor of medicine; B.A./M.D. (University of Missouri-Kansas City).

Richard W. Trullinger; assistant dean for Allied Health Programs; B.A., M.S. (Portland State University; Ph.D. (University of Oklahoma)

Susan B. Wilson; associate dean Diversity and Community Partnership and assistant professor, Department of Psychiatry; B.A., M.S., Ph.D. (University of Pittsburgh)

Rose Zwerenz; assistant dean for Truman Medical Center East programs and associate professor of medicine; B.A./M.D. (University of Missouri-Kansas City).

Graduate

Graduate Degree Programs:

Masters of Science Degrees: (p. 634)

Master of Science in Anesthesia (p. 638)
Master of Science in Bioinformatics (p. 637)
Master of Medical Science Physician Assistant (p. 635)

Master of Health Professions Education (p. 452)

Graduate Certificate Degrees: (p. 634)

Graduate Certificate in Clinical Research
Graduate Certificate in Health Professions Education (p. 448)

Medical

Medical Degree Programs:

Baccalaureate/M.D, Program (p. 641)

M.D. Program (p. 634)

For additional information about the above Medical Degree programs, please visit the website (http://www.med.umkc.edu) or contact:

UMKC School of Medicine
Council on Selection
2411 Holmes Street
Kansas City, MO 64108
(816) 235-1870
medicine@umkc.edu

Admission Requirements

Current High School Students

The School of Medicine offers a six-year B.A./M.D. program that requires students to complete both a baccalaureate degree and doctor of medicine degree. Admission to the B.A./M.D. program is highly competitive, and admitted students are challenged by a demanding curriculum scheduled for 35 weeks in the first year and 48 weeks in each of the remaining five years.

Applicants for admission to Year 1 of the six-year medical program must first be accepted by the University of Missouri – Kansas City. Admission to the university is determined by a combination of ACT score and class rank, as well as graduation from an accredited U.S. high school with completion of the following high school curriculum.

- Four units of English
- Four units of Mathematics (Algebra 1 or higher)
- Three units of science (including one unit of Biology and one unit of Chemistry)
- Three units of social studies
- Two units of a single foreign language
- One unit of fine arts (visual arts, music, dance, or theater).

For more information about UMKC admission requirements and/or the application procedures, please contact the UMKC Office of Admissions at:

Office of Admissions
University of Missouri – Kansas City
120 Administrative Center
5100 Rockhill Road
Kansas City, MO 64110-2499

In addition, School of Medicine applicants are also required to submit a supplemental application and additional supporting documents, consisting of the following:

- Personal statement (500 words or less)
- Short answer responses
- Listing of all health-related and co-curricular activities (high school only)
- References (minimum 3, must be provided on official School of Medicine Reference Forms)

The School of Medicine strongly encourages prospective students to earn credit though Advanced Placement (AP) courses, if available, in math, English, European history, or American history.

Students whose high school does not offer biology, chemistry, and/or foreign language are encouraged to contact the Council on Selection at the School of Medicine.

Students are selected to interview based on the information provided in a complete application. Once interviews are complete, the Council on Selection will convene to determine which students will be offered admission to the program. Most applicants to the combined degree program display outstanding academic credentials and backgrounds and strong leadership and involvement. The applicant pool is extremely competitive, and no one component of the application guarantees an offer of admission.

Current College Students

Students with 24 college credit hours or less:

Students with 24 hours or less of post high school graduation college credit at the time of application are eligible to apply for admission to the 6-year B.A./M.D. program. These applicants will be reviewed with the same criteria as freshman applicants.

If the applicant is currently enrolled in college in the semester in which they apply to the six-year program, the number of hours accumulated at the end of that semester must not exceed the 24-hour credit limit. While the application is being processed, applicants may continue taking college courses during the next semester.

Applicants must have earned a 3.0 GPA or higher at the end of the fall semester in order to be considered for admission. Official college transcripts must be submitted along with other application materials. Grades for courses completed in the fall semester in which the applicant applied must also be submitted upon completion of the semester. A current ACT test within the last three years is also required.

Students with more than 24 college credit hours:

Students who have completed more than 24 post high school college credit hours and have not yet received a Bachelor's degree are not eligible to apply to the School of Medicine.

Students who have earned, or will be earning in the year of application, a Bachelor's degree:

Students who have completed more than 24 post high school college credit hours and have earned, or will soon earn, a Bachelor's degree are eligible to apply to the M.D.Program.

A limited number of positions are available for students who have completed their baccalaureate degree. For admission requirements for entrance as an M.D. Program student, please contact the Council on Selection in the School of Medicine.

For more information about the combined B.A./M.D. program, please contact the Council on Selection at:

UMKC School of Medicine
Council on Selection
2411 Holmes
Kansas City, MO 64108

Application Deadlines

Completed application materials will be accepted during the following period:

- Earliest date - Aug. 1 of the year preceding the fall semester for which applying.
- Latest date - Nov. 1 of the year preceding the fall semester for which applying.

All applications must be complete with supporting documents by November 1. Late applications will be considered on a space available basis. Incomplete applications will not be considered.

(Applicants are urged to apply as soon after Aug. 1 as possible.)

High school students wishing to enter this program should recognize that many other well-qualified high school students with strong science backgrounds also will be applying. Because this is a state-assisted university, primary consideration is given to Missouri residents with over fifty percent of the incoming class from the state of Missouri.

Criminal background checks will be performed on combined-degree students and M.D. Program students before matriculation into the program.

Application Fee

Applicants are strongly advised to apply online. A $35 non-refundable application fee is required.
These fees are for students applying with the online application only. Paper applications may be assessed a higher fee.

Graduate Certificate in Clinical Research

Program Description

The Department of Biomedical and Health Informatics (DBHI) at the School of Medicine (SOM) offers a Graduate Certificate in Clinical Research. The Graduate Certificate is a valuable credential for health care professionals who want exposure to the fundamentals of clinical research methods and applications. Junior faculty, clinical fellows, physicians, nurses, pharmacists, dentists, clinical research coordinators, and other allied health professionals will advance their research careers and become more discriminate consumers of research upon completion of this program.

Please visit our Department Website (http://med.umkc.edu/dbhi) to learn more about this program.

Curriculum Description

Students must complete the following courses while maintaining a 3.0 or better grade point average to earn the Graduate Certificate:

MEDB 5501 Biostatistics I

MEDB 5510 Clinical Research Methodology

MEDB 5511 Principles and Applications of Epidemiology

MEDB 5512 Clinical Trials

MEDB 5513 Overview of Health Services Research

Since the Graduate Certificate includes the core courses required to complete the full Master of Science in Bioinformatics Master's Degree, Graduate Certificate graduates will be offered the option of applying to the MSB, Clinical Research program. If accepted, they will be able to apply 15 credit hours towards completion of the MSB degree.

Admission Requirements

Please visit our Admissions Page (http://med.umkc.edu/gc-clinical-research) to learn about our requirements.

Graduate Certificate in Health Professions Education

Student Learning Outcomes

- Demonstrate lifelong learning skills by continually setting learning goals, pursuing them, and applying the knowledge to his or her profession.
- Recognize and use bioinformatic factors/data to influence health, disease, disability, and access to care.
- Establish productive collaborations with academia, industry, and government agencies.
- Communicate effectively with diverse groups of professionals.
- Demonstrate commitment to the principles of responsible research: honesty, efficiency, accuracy, and objectivity.

MD Program

Program Overview

The UMKC School of Medicine offers an opportunity for medical education to students who have obtained, or will soon earn, a baccalaureate degree. This program is the M.D. Program. Students interested in the M.D. Program must apply for admission between May 1 and August 1. If selected for admission, students will begin coursework in January.

Clinical Experience and Physician Interaction

Students join a group of 10 to 12 fellow medical students, called a docent team. Early and continued contact with a team of clinical physicians, known as docents, builds student capacity for clinical judgment. Docent teams include a docent, a clinical pharmacologist, a clinical medical librarian, an Education Team Coordinator and other health care professionals.

Half a day every week for three-and-a-half years, students assist with outpatient care in continuing care clinics at two of our partner hospitals. This clinical assignment provides a continuity of patient care, as well as a wealth of clinical experience, and allows students to work with full-time, hospital-based staff, including physicians, nurses and residents.

Students practice skills through the use of state-of-the art simulators that replicate the human body and human conditions.

Two months a year for the last three years, students join their full docent team for daily ward rounds called DoRo, or docent rotation.

New students are paired with a senior partner who serves as another mentor, allowing advanced students to take additional responsibility. Peer and self-evaluations are used to augment student education and training.

Research

Students have the opportunity to work with faculty in both clinical and research settings. Students involved in research have the opportunity to present their findings each spring at the annual Student Research Summit, and funding is available to support student research projects. The Office of Research Administration facilitates student research programs as well as coordinates supplemental research lectures and seminars.

Service

Students at the UMKC School of Medicine have the opportunity to develop community partnerships, provide community service and reflect upon their experiences. Students participate in service-based programs, such as the Sojourner Clinic, a free outpatient clinic developed and managed by medical students, and the Kansas City Free Eye Clinic.

- - - - - -

For additional information regarding this program, please visit the SOM Admissions website:

http://med.umkc.edu

UMKC School of Medicine
Office of Admissions, M1-103
2411 Holmes
Kansas City, MO 64108
Phone: 816-235-1870
Fax: 816-235-6579
Email: medicine@umkc.edu

Master of Medical Science – Physician Assistant

PROGRAM DESCRIPTION

The Master of Medical Science Physician Assistant Program at the School of Medicine is designed to prepare students to become physician assistants (PAs). The mission of the program is to educate competent, compassionate, and culturally-aware Physician Assistants who are prepared to meet the healthcare needs of our community. Graduates will advance the Physician Assistant profession through clinical excellence, service, and dedication to lifelong learning.

STUDENT LEARNING OUTCOMES:

Following is an abbreviated list of the learning outcomes and competency areas expected of a graduate. Comprehensive information about these and the intermediate and advanced objectives associated with each outcome may be viewed at the Program Website (http://med.umkc.edu/pa).

1. Interpersonal and communication skills
2. Medical Knowledge
3. Professionalism
4. Practice-based learning and improvement
5. Systems-based practice
6. Interprofessional collaborative practice
7. Social, cultural, and community contexts of health care
8. Patient care

Please visit the Program Website (http://med.umkc.edu/pa) to learn more about this program.

DEGREE REQUIREMENTS

To complete the program students must complete a 7 semester plan of study.

Required Courses Include:

Year 1 Spring Semester (21 credit hours)		
MEDPA 5501	Anatomy for the Physician Assistant	3
MEDPA 5502	Foundations in Basic Medical Science	3
MEDPA 5503	Research Applications in Medicine	1
MEDPA 5504	Ethics, Law and Policy	1
MEDPA 5505	Clinical Assessment for the PA	2
MEDPA 5511	Clinical Practicum I	1
MEDPA 5521	PA Professions I	1
MEDPA 5531	Science and Practice of Medicine I	9
Year 1 Summer Semester (14 credit hours)		
MEDPA 5512	Clinical Practicum II	1
MEDPA 5522	PA Professions II	1
MEDPA 5532	Science and Practice of Medicine II	12
Year 1 Fall Semester (22 credit hours)		
MEDPA 5513	Clinical Practicum III	1
MEDPA 5523	PA Professions III	1
MEDPA 5533	Science and Practice of Medicine III	20
Year 2 Spring Semester (21 credit hours)		
MEDPA 5514	Clinical Practicum IV	1
MEDPA 5524	PA Professions IV	1
MEDPA 5534	Science and Practice of Medicine IV	19
Year 2 Summer Semester (16 credit hours)		
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
Year 2 Fall Semester (16 credit hours)		
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
Year 3 Spring Semester (19 credit hours)		
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
MEDPA 5600 Clinical Rotation		4
MEDPA 5580	Senior Seminar	1
MEDPA 5581	Professional Development for the PA	1
MEDPA 5595	Capstone	1

Total program hours 129

MEDPA 5600s are a series of required and elective clinical rotations. Required clinical rotations include Family Medicine, Rural Medicine, Adult Internal Medicine, Women’s Health, Emergency Medicine, Pediatrics, General Surgery, Behavioral Medicine, and Geriatrics. Student schedules are supplemented with additional 2 to 4 week elective rotations.

Master of Science Program in Bioinformatics

Program Description

The Department of Biomedical and Health Informatics (DBHI) at the School of Medicine (SOM), in cooperation with the School of Biological Sciences (SBS) and the School of Computing and Engineering (SCE), offers the Master of Science in Bioinformatics (MSB) with emphasis areas in Clinical Research, Computational Bioinformatics, and Genomic Bioinformatics.

- Clinical Research: Emphasizes the creation and understanding of data generated by patient care and clinical studies and on the statistical methodology needed for clinical research and improved bedside care.
- Computational Bioinformatics: Emphasizes the development and use of the next generation of bioinformatics tools and software.
- Genomic Bioinformatics: Emphasizes the use of existing software for biological analysis and the analysis of a diverse set of biological data. (Additional information regarding this area is available).

Please visit the Department Website (http://med.umkc.edu/msb) to learn more about this program.

The program is designed to prepare a new generation of informatics professionals who will have the necessary skills to work constructively for the advancement of health sciences. Students will master core competencies, which allow them to participate in biological research, clinical, and population health research, and research to develop innovative information systems. Our goal is to produce the next generation of health researchers by emphasizing patient-oriented research in the context of state-of-the-art medical informatics.

Graduates are expected to be effective team members who can contribute to multidisciplinary approaches to education, research, and development in the fields of bioinformatics and/or clinical research. This program will prepare students to assume responsible positions, which may include informatics support for basic and translational research and development, institutional management, public policy, information systems, hospitals or industry development or as members of a clinical research team. Alternatively, students completing their Master's degree may choose to continue their education at advanced graduate levels.

Student Learning Outcomes

- Demonstrate lifelong learning skills by continually setting learning goals, pursuing them, and applying the knowledge to his or her profession.
- Recognize and use bioinformatic factors/data to influence health, disease, disability, and access to care.
- Establish productive collaborations with academia, industry, and government agencies.
- Communicate effectively with diverse groups of professionals.
- Demonstrate commitment to the principles of responsible research: honesty, efficiency, accuracy, and objectivity.

Curriculum Description

A minimum of 36 credit hours are required to earn the Master of Science in Bioinformatics degree in one of the three emphasis areas and include:

- 12 credit hours of core courses
- Required coursework in the respective emphasis areas
- Electives
- Thesis or Capstone Project

In addition to the Core requirements of all students in the program, each student will have requirements that vary by emphasis area and are supplemented by appropriate electives.

Required coursework includes the following:

Clinical Research Emphasis

MEDB 5501	Biostatistics I	3
MEDB 5502	Biostatistics II	3
MEDB 5510	Clinical Research Methodology	3
MEDB 5511	Principles and Applications of Epidemiology	3
MEDB 5512	Clinical Trials	3
MEDB 5513	Overview of Health Services Research	3
MEDB 5520	Intro-Medical Informatics	3
MEDB 5561	Responsible Conduct of Research	3

Computational Emphasis

MEDB 5501	Biostatistics I	3
MEDB 5502	Biostatistics II	3
MEDB 5510	Clinical Research Methodology	3
MEDB 5520	Intro-Medical Informatics	3
COMP-SCI 470	Introduction to Database Management Systems (or)	3
or COMP-SCI 371	Database Design, Implementation and Validation	
COMP-SCI 5566	Introduction to Bioinformatics	3
COMP-SCI 5567	Machine Learning in Bioinformatics	3

Genomic Emphasis

MEDB 5501	Biostatistics I	3
MEDB 5502	Biostatistics II	3
MEDB 5510	Clinical Research Methodology	3
MEDB 5561	Responsible Conduct of Research	3
LS-CBB 5530	Cell and Molecular Biology I	3
LS-CBB 5520	Cell and Molecular Biology II	3
LS-MBB 5561	General Biochemistry I	3
LS-MBB 5562	General Biochemistry II	3
BIOLOGY 5519	Principles of Evolution	3
BIOLOGY 5525	Bioinformatics and Data Analysis	3
COMP-SCI 470	Introduction to Database Management Systems	3
or COMP-SCI 371	Database Design, Implementation and Validation	

Admission Requirements

Please visit our Admissions page (http://med.umkc.edu/msb) to learn about our requirements.

Master of Science in Anesthesia Program

Program Description

The Master of Science in Anesthesia Program at the School of Medicine is designed to prepare students to become anesthesiologist assistants (AAs). The mission of the program is to prepare and educate students with advanced specialized knowledge and skills; thereby graduates will become compassionate, competent and ethical patient-centered anesthesiologist assistants who work within an Anesthesia Care Team.

Student Learning Outcomes

Graduates will demonstrate competency in

1. Patient care including preoperative preparation/anesthetic plan, patient monitoring, airway management, patient positioning, and anesthesia record documentation
2. Integration of basic medical knowledge into clinical practice through application of concepts from foundational coursework in the clinical setting.
3. Clinical management through mastery of skills in multitasking, problem solving, specialty specific management and techniques, responding to changes in patient status, and overall case management.
4. Self-learning and professionalism
5. Communication with preceptors, operating room staff, other health professionals, and patients

Please visit the Program Website (http://med.umkc.edu/msa) to learn more about this program.

DEGREE REQUIREMENTS

To complete the program students must complete a 7 semester plan of study and 2000 clinical hours (obtained during Anesthesia Clinical Experience courses).

Required Courses Include:

Semester 1 (January to May) (20 credit hours)

ANESTH 5505	Anatomy for AAs	3
ANESTH 5518	Professionalism for the Anesthesiologist Asst I	1

ANESTH 5540	Patient Monitoring and Instrumentation	3
ANESTH 5556	Physiology for Anesthesiologist Assistants I	3
ANESTH 5560	Introduction to Anesthesia	2
ANESTH 5561	Orientation to Simulation and Clinical Application	6
ANESTH 5575	Pharmacology for Anesthesiologist Assistants I	2
MEDPA 5503	Research Applications in Medicine	1

Semester 2 (May to August) (12.5 credit hours)

ANESTH 5538	Professionalism for the Anesthesiologist Asst III	0.5
ANESTH 5541	Methods of Anesthesia I	2
ANESTH 5557	Physiology for Anesthesiologist Assistants II	3
ANESTH 5558	Anesthesia & Co-existing Disease I	2
ANESTH 5563	Anesthesia Clinical Experience I	4
ANESTH 5585	Physiological Model-based Simulation I	2

Semester 3 (August to December) (18.5 credit hours)

ANESTH 5538	Professionalism for the Anesthesiologist Asst III	0.5
ANESTH 5559	Anesthesia & Co-existing Disease II	2
ANESTH 5562	Anesthesia Clinical Correlation I	1
ANESTH 5565	Anesthesia Clinical Experience II	8
ANESTH 5576	Pharmacology for Anesthesiologist Assistants II	2
ANESTH 5577	Methods of Anesthesia II	2
ANESTH 5586	Physiological Model-based Simulation II	2

Semester 4 (January to May) (17 credit hours)

ANESTH 5564	Anesthesia Clinical Correlation II	1
ANESTH 5567	Anesthesia Clinical Experience III	16

Semester 5 (May to August) (13 credit hours)

ANESTH 5568	Anesthesia Clinical Correlation III	1
ANESTH 5569	Anesthesia Clinical Experience IV	12

Semester 6 (August to December) (17 credit hours)

ANESTH 5570	Anesthesia Clinical Correlation IV	1
ANESTH 5571	Anesthesia Clinical Experience V	16

Semester 7 (January to May) (16 credit hours)

ANESTH 5573	Anesthesia Clinical Experience VI	16

Your program credit hours - 114

Medical Student Organizations, Publications and Awards

Alpha Omega Alpha

The Delta Chapter of the Alpha Omega Alpha Honor Society is an organization open to the no more than 1/6th of the graduating class. In accordance with the national constitution, scholastic achievement should be the primary but not sole basis for election of a student. Leadership capabilities, ethical standards, fairness in dealing with colleagues, potential for achievement in medicine, integrity, compassion, professionalism, conscientiousness, and a record of service to the school and community at large should be criteria considered in addition to the academic record. Memberships are also granted each year to a faculty member, an alum of the school, and a member of the housestaff or fellow each year.

American Medical Association - Medical Student Section

Dedicated to representing medical students, improving medical education, developing leadership and promoting activism for the health of America.

American Medical Student Association

The primary goal of AMSA is the initiation of student-organized projects for the benefit of medical students and the community on local, state and national levels. The development of hypertension clinics, presentations about venereal disease to area high schools, AIDS awareness programs and a drug-replacement program represent some of AMSA's projects in past years.

American Medical Women's Association

The AMWA promotes an understanding of the individual in medicine. Its membership is open to all interested men and women. AMWA's programs include speakers on special topics, field trips, social projects and other activities of benefit to all students.

Association of American Medical Colleges - Organization of Student Representatives

The OSR is the student branch of the Association of American Medical Colleges (AAMC). The OSR is charged with the representation of the undergraduate medical student body of the United States to the academic medical community.

Asian Pacific American Medical Students' Association

The goals of APAMSA are to educate all medical students about health-care needs specific to the Asian Pacific community and to address issues important to Asian Pacific American medical students.

Christian Medical/Dental Society

This group is open to students of all faiths. The organization fosters greater understanding of spiritual concerns in relationship to health and well-being.

Global Medicine Relief Program

GMRP's mission is to promote quality health care in under-served communities around the world by working with local doctors and health care professionals and by providing medical supplies and equipment; to provide dental, hygiene and basic health care supplies in areas of natural disaster; to promote human rights in developing regions by improving health infrastructure; to participate in a global community of organizations which are similarly dedicated to providing health care in developing regions; and to organize student groups at all educational levels in these humanitarian efforts. GMRP especially seeks to touch the lives of the most vulnerable people in any population and believes in the importance of assisting both internally and externally displaced refugees.

Gold Humanism Society

The Gold Humanism Society is sponsored by the Arnold P. Gold Foundation and is closely linked to the Sirridge Office of Medical Humanities.

Medical Student Advisory Council

The MSAC serves as the student government body in the School of Medicine and is comprised of student-elected representatives who focus on promoting student interests, keeping the administration informed of student opinion and organizing social activities. MSAC serves as an umbrella organization for student interest groups in the areas of Anesthesiology, Emergency Medicine, Family Medicine, Geriatric Medicine, Internal Medicine, International Medicine, Med/Peds, Obstetrics/Gynecology, Physical Medicine and Rehabilitation, Psychiatry, Spanish in Medicine, and Surgery

Sojourner Clinic

The Sojourner Health Clinic is a free clinic developed and managed by UMKC Medical Students to provide outpatient care to the homeless and underprivileged population served by GrandAvenueUnitedMethodistTemple. On Sunday afternoons, the students, with faculty supervision, provide acute and chronic medical care to the Sojourners of downtown Kansas City, many of whom also are served a free hot lunch at Grand AvenueTemple.

Student National Medical Association

The promotion of the interests of minority students is the foundation of the SNMA. Leadership development, social awareness, service to humanity and excellence as physicians are the major objectives of this group

Student Wellness Council

The Student Wellness Council promotes healthy habits and wellness amongst UMKC School of Medicine students

Publications

A monthly publication of the school, P.R.N., provides information on school programs, policies and student activities and is distributed online to School of Medicine students, their families and faculty. A quarterly magazine, Panorama, is primarily distributed to alumni, affiliated hospitals and friends of the school and is available throughout the school.

Philosophy

The fundamental purpose of medical schools is to educate physicians. The prime objective of all professionals, physicians included, is to apply a sophisticated body of knowledge and skills to the solution of problems faced by people. In doing so, the individual will follow standards of the profession for competence, ethics and communication and will demonstrate commitment to the principles of professionalism - altruism, humanism, excellence and accountability.

The school does not separate the several obligations of a medical school: to educate the student, the house officer and the physician; to attract new talent to the health-care field and to ensure that talent remain active and prepared; to maintain maximum standards of ethics and care; to have concern equally for the individual and for the community; and to foster inquiry, to find answers and to apply those answers.

Requirements for Graduation in the B.A. - M.D. Combined Program

B.A./M.D. Program

In order to graduate from the UMKC School of Medicine B.A./M.D. Program, students must complete the following graduation requirements.
Baccalaureate Degree

- Students must select an undergraduate B.A. major or emphasis area from a variety of disciplines
- The most common baccalaureate degrees are in liberal arts, biology, chemistry, communication studies, philosophy, psychology and sociology.
- Students may earn up to 30 semester hours of college credit through the Advanced Placement Program, International Baccalaureate Program or specific subject-area examinations of the College Level Examination Program (CLEP).
- Students must satisfactorily complete a minimum of 90 semester hours of non-medical courses on the UMKC Volker campus in the following subject areas: English, fine arts, government, history, humanities, literature, natural science, philosophy and social/behavioral science.
- Thirty additional semester hours toward the baccalaureate degree are awarded from required concurrent medical coursework.
- Students enrolled in the combined degree program at UMKC are required to complete a minimum of 38 hours of credit through the College of Arts and Sciences and/or the School of Biological Sciences subsequent to matriculation into the B.A./M.D. program regardless of the amount of previous credit earned.

Doctor of Medicine Degree

Students in the combined B.A./M.D. program must have satisfactory completion, certified by the UMKC registrar, of requirements for the baccalaureate degree and 38 months of medical curriculum credit.

- Students must achieve Certification in Advanced Cardiac Life Support.
- Students must receive docent certification of clinical competence.
- Student must earn a cumulative GPA of 2.8 – 4.0.
- Students must earn passing scores on Step 1 and Step 2 CS & CK of the United States Medical Licensing Examination (USMLE).
- Students must complete 48 months of enrollment in the School of Medicine, Years 3 – 6.
- At least three clinical electives are required and these must come from a minimum of three of the nine School of Medicine approved clinical elective categories. One of these electives must be a critical care elective.
- Students are expected to evaluate the quality of their experiences through course and performance evaluations, a graduation questionnaire and a survey of their performance at the end of their first postgraduate year.

Six Year Program Description

B.A./M.D. Program

Program Overview

From high school student to medical student

A medical student’s journey begins as soon as they enter the UMKC School of Medicine’s B.A./M.D. program. Immediate exposure to a curriculum that builds a strong foundation in medical science and clinical skills is integrated with the liberal arts and humanities into a year-round program. Our program allows students to choose an undergraduate major and earn their B.A. and M.D. in six years.

During the first two years of the program, three-fourths of a student’s time is dedicated to the arts and sciences to fulfill baccalaureate degree requirements, while one-fourth is spent in medical school coursework. In the final four years of the program, the majority of the student’s time is spent in medical school coursework with a smaller percentage of time spent completing baccalaureate degree requirements.

Students pursue baccalaureate degrees in a variety of areas:

- Liberal Arts
- Chemistry
- Biology
- Psychology
- Sociology
- Communication Studies
- Spanish
- Mathematics

The ability to pursue certain undergraduate degree options is dependent on the college credit a student is able to transfer in from high school. College credit may be accepted for Advanced Placement, International Baccalaureate, CLEP or dual-enrollment courses.

Clinical Experience and Physician Interaction

Students begin clinical experiences in the third week of the program through the docent system. A docent is a teaching physician who also serves as a mentor as a student advances through the curriculum. In years 1 – 2, students are assigned to docent teams of 10 – 12 students from their class. In this early docent experience, students are educated and mentored on the fundamentals of medicine.

In years 3 – 6, students are assigned to docent teams of 12 year 3 – 6 students, a docent, a clinical pharmacologist, a clinical medical librarian, an education team coordinator and other health care professionals. In this docent experience, students spend a half day per week every week assisting with outpatient care in a continuing care clinic. This team also works together on the internal medicine rotation two months out of the year in years 4 – 6.

Research

Students have the opportunity to work with faculty in both clinical and research settings. Students involved in research have the opportunity to present their findings each spring at the annual Student Research Summit, and funding is available to support student research projects. The Office of Research Administration facilitates student research programs as well as coordinates supplemental research lectures and seminars.

Service

Students at the UMKC School of Medicine have the opportunity to develop community partnerships, provide community service and reflect upon their experiences. Students participate in service-based programs, such as the Sojourner Clinic, a free outpatient clinic developed and managed by medical students, and the Kansas City Free Eye Clinic.

- - - - - -

For additional information regarding this program, please visit the SOM Admissions website: http://med.umkc.edu

UMKC School of Medicine
Office of Admissions, M1-103
2411 Holmes
Kansas City, MO 64108
Phone: 816-235-1870
Fax: 816-235-6579
Email: medicine@umkc.edu

Student Learning Outcomes for Six Year B.A.-M.D. Program

Years 1-2

Effective Communication

- The student demonstrates competence in written communications such as laboratory reports, term papers and other classroom writing assignments.
- The student demonstrates competence in oral communications in a one-on-one setting, such as introducing and beginning a history with an individual patient. History-taking skills at this level will be very basic and straightforward.
- The student demonstrates effective listening skills with faculty members, other students and patients.

Clinical Skills

- The student is able to perform the basic elements of a history. The student will have observed a physical examination and observed some of the routine clinical procedures.

Using Basic Science in the Practice of Medicine

- The student has an introductory and very general understanding of anatomy and microbiology.
- The student has a more advanced understanding and an ability to apply some information to a few clinical situations in biochemistry and physiology.

Diagnosis, Management and Prevention

- The student has an introductory understanding of principles of diagnosis, management and prevention.
- The student is able to identify general, rather than specific approaches to management, but is usually not expected to carry them out in real settings.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student is proficient in framing a question, utilizing modern information searching modalities, organizing data, compiling and using information to answer the question in the context of a structured setting, such as an undergraduate course.
- The student has an introductory knowledge of the humanities and social science. Enough information is learned at this level to stimulate the student to desire further learning in medicine, humanities and social sciences.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student exhibits behaviors indicative of personal self-awareness through a process of self reflection. Students are able to identify potential areas of weakness and are able to conceive of potential options for addressing these areas.
- The student is able to identify areas of strength and is able to build on these strengths.
- The student is able to set goals for a self-study plan.
- The student is aware of his/her personal growth in regards to age specific developmental tasks.
- The student knows the elements of professional behavior and can explain the meaning of each element.
- The student can cite an example of how each of the elements applies in Year 1 and Year 2 coursework for the baccalaureate and M.D. degree.
- The student shows courteous regard for other students and faculty and acknowledges the views of others. The student shows courteous regard for his/her mentor on aging and for the patients they meet in their docent group experiences. The student interacts with patients they meet in their docent group experiences in an appropriately compassionate fashion. The student expresses empathy for his/her mentor on aging as appropriate.
- The student puts the legitimate needs of his/her mentor on aging, patients, docent group members and study group members first before his/her own needs.
- The student demonstrates academic honesty in all aspects of his/her coursework for the baccalaureate-M.D. degree.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings or classes; accepts personal responsibility for group projects; and completes course evaluations in a timely and thoughtful fashion.
- The student searches out opportunities to learn and tries to excel in their coursework.

Diversity and the Social and Community Contexts of Health Care

- The student appreciates some of the non-biological factors that influence health, disease, disability and access to care.
- The student attributes proper importance to identifying non-biological factors.
- The student is aware of different value systems and life styles.

Moral Reasoning and Ethical Judgment

- The student can identify and apply ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior.
- The student develops an introductory understanding of ethical choices related to a few controversial medical issues.

Problem-Solving Skills

- The student displays competence in basic problem-solving skills as applied to basic science courses or simple, straightforward medical problems.

Years 3-4

Effective Communication

- The student develops and demonstrates competency in using the written language effectively by:
  - Medical record documentation in the continuing care clinic and on docent rotation.
  - Writing papers for courses and rotations.
  - Essay examinations in medical ethics.
- The student develops and demonstrates competency in using oral language and listening effectively by:

- Communicating with patients and families in the continuing care clinic and on docent rotation.
- Communicating with senior partners, peers and faculty.
- Functioning as an effective junior partner.

Clinical Skills

- The student is able to perform a comprehensive history and physical examination of patients in the outpatient setting and the general medical wards, excluding critical care settings.
- The student is competent in performing venipuncture and basic CPR.
- The student is able to perform a gram-stain, vaginal smear wet prep, stool occult blood, urinalysis, urine pregnancy test, finger stick glucose determination and peak expiratory flow rate.
- The student has observed and is familiar with some of the more complex or specialized lab and diagnostic tests.
- The student knows the basics in the interpretation of plain x-ray studies; chest x-ray, abdominal x-ray.

Using Basic Science in the Practice of Medicine

- The student applies knowledge in the areas of behavioral science, anatomy, pathology, biochemistry, physiology, microbiology and immunology, and pharmacology to the overall care of patients.

Diagnosis, Management, Continuing Care and Prevention

- The student is able to interpret standard diagnostic studies and history and physical examination data. From these data, the student is able to state the most likely diagnosis when presented with straightforward presentations of common problems in general internal medicine. The student is expected to carry out management plans in those situations that are relatively straightforward and uncomplicated.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student is able to do a computerized literature search as it applies to patient problems.
- The student is able to comprehend the medical literature and understand basic statistics and the scientific method.
- The student is continually motivated by an awareness of the limits of his/her personal knowledge and experience.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student is reflective about him or herself in a group context.
- He or she is able to confront his/her own values as they relate to the practice of medicine.
- The student is able to identify real situations of stress and his/her response to these situations.
- The student is able to practice personal techniques for relaxation and time management and can modify behavior and respond to constructive criticism.
- The student is able to identify learning needs, plan a program to meet those needs and determine how well they have met them and what further learning issues they need to address.
- The student identifies the elements of professional behavior and can explain the meaning of each element: respect, compassion and empathy, altruism, honesty, responsibility, and excellence. The student can give an example of how each of the elements of professionalism applies to Year 3 and Year 4 coursework for the baccalaureate and MD degrees and actively demonstrates them by behavior.
- The student shows courteous regard for patients, students, faculty, and members of the health care team and acknowledges their views.
- The student interacts with patients, patients' families, and members of the health care team in an appropriately empathic and compassionate fashion.
- The student contributes to the docent team and other small groups by sharing knowledge and skills, expressing positive attitudes and accepting help from others to address his/her deficiencies.
- The student recognizes how potential conflicts between his/her own needs and the legitimate needs of patients, docent group members, and study group members might be resolved and can discuss a rationale for alternative resolutions.
- The student is honest in all aspects of coursework for the baccalaureate-MD degree and takes responsibility for his/her errors in the patient care setting after discussion with supervisors.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings, classes, rounds and clinics; accepts personal responsibility for group projects and for assigned patients; and completes course evaluations in a timely and thoughtful fashion.
- The student searches out opportunities to learn, demonstrates lifelong learning skills, and tries to excel in coursework and scholarship.

Diversity and the Social and Community Contexts of Health Care

- The student elicits and identifies non-biological factors as part of the routine history taking and includes those issues, as appropriate, in the problem list formulations and management plans.
- The student takes personal responsibility for discussing these issues with patients, assessing their needs and matching them to appropriate community resources.

- The student works with his/her individual patients and families to enhance their total well-being.

Moral Reasoning and Ethical Judgment

- The student is able to employ ethical concepts and reasoning when presented with typical ethical cases in medicine, and is able to recognize ethical issues in medical practice.

Problem-Solving Skills

- The student displays competence in problem-solving skills with common clinical problems utilizing a limited knowledge base.

Years 5-6

Effective Communication

- The student develops and demonstrates competency in using the written language effectively by:
  - medical record documentation on clinical rotations.
  - preparing written patient education material.
  - writing clinical papers.
  - journals, short stories, papers or poetry during medical humanities and social science courses.
- The student develops and demonstrates competency in using oral language and listening effectively by:
  - communicating with patients and families in the continuing care clinic and clinical rotations.
  - presenting new patients to faculty in continuing care clinic and clinical rotations.
  - delivering lectures on clinical rotations utilizing slides and handouts.
  - communicating with student partners, peers, faculty and the health care providers.
  - oral examinations.
- The student develops and demonstrates competency in respecting patients and sharing information effectively with patients, families and health care team members by:
  - interacting with the individuals on clinical rotations and the continuing care clinic.
  - working as an integral part of the docent team and teams on other clinical rotations.
  - functioning as an effective senior student partner.

Clinical Skills

- The student is able to perform the basic and emergency elements of a history and physical examination smoothly and efficiently in the outpatient setting, inpatient setting, critical care setting and emergency department settings.
- The student is able to perform and interpret basic clinical procedures, laboratory and diagnostic tests smoothly and efficiently as listed.
- The student is able to describe the procedural steps necessary to carry out advanced clinical procedures as listed.
- The student observes and is able to state the indications, complications, and limitations of advanced clinical procedures as listed.
- The student is aware of the indications, complications and limitations of and interpret from the written reports complex and specialized laboratory and diagnostic tests as listed.

Using Basic Science in the Practice of Medicine

- The student is able to explain a multi-system health problem in terms of pathogenesis, mechanisms of system-to-system interactions and potential complications. The student is able to present therapeutic goals and interventions aimed at the multiple pathophysiological forces in motion.
- The student is able to exhibit clinical decision analysis that weighs the pros and cons of proposed interventions, taking into consideration such factors as drug-drug interactions and the trade-off of proposed drug interventions in the context of multi-system problems.

Diagnosis, Management, and Prevention

- The student is able to state the most likely diagnosis and management plan when presented with presentations of common problems in any of the major disciplines.
- The student is able to integrate the approach of care to individuals, families and communities, taking advantage of opportunities for prevention and education in addition to the immediate physical care.
- The student through his/her experiences in the continuing care clinic is able to provide continuing care and management for both chronic and acute medical problems and provide appropriate plans for prevention.

Lifelong Learning in Medicine, Basic Sciences, the Social Sciences and the Humanities

- The student begins to explore new opportunities for intellectual growth and professional enlightenment in medicine, the social sciences and humanities.
- The student attends a continuing medical education course.

- The student continues to recognize his/her limits of knowledge and experience.
- The student is able to recognize the significance of valid scientific discoveries reported in medical journals and recognize unsubstantiated, inaccurate or poorly performed studies and conclusions.

Self-awareness, Self-care, Personal Growth and Professional Behavior

- The student utilizes skill in coping with stress during clinical rotations.
- The student develops and demonstrates appropriate personal values and beliefs relevant to his/her practice of medicine.
- The student identifies the elements of professional behavior and can explain the meaning each element: respect, compassion and empathy, altruism, honesty, responsibility, and excellence.
- The student gives examples of how each of the elements of professionalism applies to Year 5 and Year 6 coursework for the baccalaureate and MD degrees and actively demonstrates them by behavior. He/she teaches these elements of professional behavior to junior students by explicit role modeling.
- The student shows courteous regard for patients, student, faculty and health care team members, and acknowledges their views. He/she teaches respect for other people to junior students by explicit role modeling.
- The student interacts with patients, patient families and members of the health care team in an appropriately empathic and compassionate fashion.< He/she teaches compassion and empathy to junior students by explicit role modeling.
- The student contributes to the docent team and other small groups by exercising effective leadership and active teaching of teamwork.
- The student resolves potential conflicts between his/her own needs and the legitimate needs of his/her patients or health care team members appropriately and can discuss a credible rationale for the resolution.
- The student is honest in all aspects of coursework for the baccalaureate-MD degree and takes responsibility for his/her errors in the patient care setting after discussion with little or no supervision.
- The student carries through on assignments and other responsibilities; arrives promptly for meetings, classes, rounds and clinics; accepts personal responsibility for group projects and for assigned patients; and completes course evaluations in a timely and thoughtful fashion. He/she teaches junior students about responsibility through explicit role modeling.
- The student searches out opportunities to learn, demonstrates lifelong learning skills, and endeavors to excel in coursework and scholarship. He/she teaches junior students about life learning.

Diversity and the Social and Community Contexts of Health Care

- The student is able to identify and propose solutions for non-biological factors that influence health, disease, disability and access to care.
- The student is able to utilize resources in the community that may provide assistance to his or her patients.
- The student is an advocate for better health for the patients and the community.
- The student demonstrates knowledge of practice management, utilization review, quality improvement and economic and cultural issues in health care.

Moral Reasoning and Ethical Judgment

- The student is able to identify patient care and health policy ethical issues and choices in his or her own clinical experience; to evaluate critically alternative ethical courses of action by analyzing and articulating reasons for the relative importance of the different ethical considerations bearing on each choice; to select and ethically defend a course of action.
- The student recognizes the importance of the ethical treatment of research subjects and the functions of an Institutional Review Board.

Problem Solving

- The student displays competence in more advanced clinical problem solving using a comprehensive knowledge base.
- The student can effectively utilize a team approach in solving clinical problems.

Typical Six-Year Program of Study

Year 1

Medicine

- Fall
  - Medical Terminology
  - Learning Basic Medical Sciences
  - Fundamentals of Medical Practice I
- Spring
  - Fundamentals of Medical Practice II

Arts & Sciences

- Fall
  - Human Biology I (Anatomy) w/Lab
  - General Chemistry I w/Lab
  - Psychology
  - Courses for B.A. Degree*
- Spring
  - Human Biology III (Microbiology) w/Lab
  - General Chemistry II w/Lab
  - Sociology

Year 2

Medicine

- Summer
  - Hospital Team Experience
- Fall
  - Fundamentals of Medical Practice III
- Spring
  - Fundatmentals of Medical Practice IV

Arts & Sciences

- Summer
  - Organic Chemistry w/Lab
  - Cell Biology
- Fall
  - Human Biochemistry
  - Sociology - Life Cycles
  - Genetics
  - Courses for B.A. Degree*
- Spring
  - Structure/Function I, II, III
  - Courses for B.A. Degree*

Year 3

Medicine

- History of Medicine
- Clinical Correlations
- Clinical Skills
- Introduction to Pharmacology (Independent Study)
- CUES (Communication, Understanding, Education and Self-Awareness)
- Pathology I & II
- Medical Microbiology
- Medical Neurosciences
- Continuing Ambulatory Care Clinic

Arts & Sciences

- Structure/Function IV

Year 4

Medicine

- Pharmacology
- Behavioral Sciences in Medicine
- Docent Rotation
- Family Medicine
- Ambulatory Care Pharmacology (Indep Study)
- Continuing Ambulatory Care Clinic
- Patients, Physicians, and Society I and II

Arts & Sciences

- Courses for B.A. Degree*

Year 5

Medicine

- Psychiatry
- Prescribing for Special Populations (Indep Study)
- Obstetrics/Gynecology
- Pediatrics
- Family Medicine Preceptorship
- Surgery
- Elective
- Docent Rotation
- Emergency Medicine (may be taken in Year 6)

Arts and Sciences

- Medical Humanities (may be taken in Year 6)

Year 6

Medicine

- Docent Rotation
- Emergency Medicine (may be taken in Year 5)
- Rational & Safe Drug Prescribing (Indep Study)
- Electives
- Continuing Ambulatory Care Clinic

Arts & Sciences

- Medical Humanities (may be taken in Year 5)

All students are required to take three clinical electives as graduation requirement. Three individual clinical electives must be selected from designated nine required general categories. One of the three electives must be a Critical Care elective.

Conservatory of Music and Dance

Performing Arts Center (http://www.umkc.edu/virtualtour/performing-arts.asp)
4949 Cherry Street
(816) 235-2900
conservatory@umkc.edu
http://www.umkc.edu/conservatory/

Mailing Address
University of Missouri-Kansas City
Conservatory of Music and Dance
5100 Rockhill Road
Kansas City, MO 64110-2499

Dean:
Peter T. Witte

Associate Dean for Graduate Studies:
Diane Helfers Petrella

Associate Dean for Undergraduate Studies:
Sabrina Madison-Cannon

Associate Dean for Faculty Affairs:
Mary Pat Henry

Associate Dean for Special Projects:
Robert Weirich

Associate Dean for Performance/Operations and Enrollment Management:
James Snell

Accreditation

UMKC is an accredited institutional member of the National Association of Schools of Music (1933), the National Association of Schools of Dance (2008), the Council for the Accreditation of Educator Preperation (1961), and the North Central Association of Colleges and Schools.

Scholarships

Scholarships or Special Awards

Scholarships are available to Conservatory students and are awarded on the basis of ability (demonstrated at the audition) and academic standing. Scholarships are awarded for one year but can be renewed annually, provided students maintain the appropriate grade level, continue satisfactory performance in the major performance area, and participate in major ensembles as prescribed.

Applicants for Conservatory scholarships must complete all regular admissions procedures in order to be considered.

In accordance with the code of ethics of the National Association of Schools of Music, the acceptance of financial aid by a candidate is considered a declaration of intent to attend the institution, and each candidate will be so informed. The code further declares that such a student may not consider any other offer from an institutional member of the NASM except with the written consent of the music executive of the first institution. Similarly, a transfer applicant cannot be considered for financial aid without the written recommendation of the head of the music department from which the transfer is being made.

Faculty

Gary Abbott - Assistant Professor of Dance (modern)

Marita Abner (http://conservatory.umkc.edu/faculty.cfm?r=%22%27B%5C%20%0A) **-** Assistant Teaching Professor of Music (bassoon)

Douglas Auwarter (http://conservatory.umkc.edu/faculty.cfm?r=%22%27BD%20%0A) - Adjunct Instructor of Jazz (percussion)

Terry J. Barham (http://conservatory.umkc.edu/faculty.cfm?r=%22%27BH%20%0A) **-** Adjunct Professor of Music (music education, choral)

Robert Beck - Director of Conservatory Recording

Melita J. Belgrave - Assistant Professor of Music (music therapy)

Valerie Bell - Adjunct Instructor of Music (strings)

Keith Benjamin (http://conservatory.umkc.edu/faculty.cfm?r=%22%262X%20%0A) **-** Professor of Music (trumpet)

Barbara Bishop (http://conservatory.umkc.edu/faculty.cfm?r=%22%262%5C%20%0A) **-** Assistant Teaching Professor of Music (oboe)

Robert Bode (http://conservatory.umkc.edu/faculty.cfm?r=%22%262%40%20%0A) **-** Professor of Music (choral conducting)

Johnathan Borja (http://conservatory.umkc.edu/faculty.cfm?r=%22%262D%20%0A) - Assistant Teaching Professor (musicology)

Bob Bowman - Adjunct Instructor of Jazz (string bass)

Jane M. Carl (http://conservatory.umkc.edu/faculty.cfm?r=%22%2620%20%0A) **-** Professor of Music (clarinet)

Un Chong Christopher (http://conservatory.umkc.edu/faculty.cfm?r=%22%26%22P%20%0A) - Adjunct Assistant Professor of Music (voice)

Vinson Cole (http://conservatory.umkc.edu/faculty.cfm?r=%22%26%22X%20%0A) **-** Professor of Music (voice)

JoDee Davis - Associate Professor of Music (trombone)

Steven D. Davis - Professor of Music (conducting, director of bands)

Anne B. DeLaunay - Associate Professor of Music (voice, music/opera literature)

Beth Loeber Elswick - Assistant Teaching Professor of Music (music theory)

Danny Embrey (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22CK%0A) - Adjunct Instructor of Jazz (guitar)

Carter Enyeart - Rose Ann Carr Millsap/Missouri Endowed Professor in Cello

William Everett - Professor of Music (musicology)

Raymond Feener - Associate Professor of Music (voice)

Hali Fieldman - Associate Professor of Music (music theory)

Debra Fillingim (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22CE%0A) - Adjunct Instructor (music education)

Rod Fleeman - Adjunct Instructor of Jazz (guitar)

Noah Geller - Adjunct Professor of Music (violin)

Mara Gibson (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22KE%0A) **-** Program Director and Adjunct Assistant Professor (composition)

Joseph Genualdi - Professor of Music (violin)

Jan Gippo - Adjunct Professor of Music (chamber music)

Andrew Granade - Associate Professor of Music (musicology)

Robert W. Groene II - Associate Professor of Music (music therapy) and Director of Music Therapy

Martin Hackleman (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22CA%0A) - Artist in Residence and Associate Teaching Professor of Horn

Mary Pat Henry - Professor of Dance (ballet)

DeeAnna Hiett (http://conservatory.umkc.edu/faculty.cfm?r=%22%2520%20%0A) **-** Assistant Professor of Dance (modern)

Patricia Higdon - Teaching Assistant, Collaborative Pianist (piano sight reading)

Erika Honisch (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22CC%0A) - Assistant Professor of Music (musicology)

Jeffrey Kail (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22%5BK%0A) **-** Adjunct Professor of Music (string bass)

Stan Kessler - Adjunct Instructor of Jazz Trumpet

Benny Kim - Associate Professor of Music (violin)

Karen Kushner - Adjunct Associate Professor of Music (piano)

Scott Lee - Associate Professor of Music (viola)

Kenneth Lidge - Assistant Teaching Professor of Music (music theory)

Zhou Long (http://conservatory.umkc.edu/faculty.cfm?r=%22%252P%20%0A) **-** Distinguished Professor of Music (composition)

Sabrina Madison-Cannon - Associate Professor of Dance (modern)

Christopher McLaurin - Adjunct Professor of Music (percussion)

James Mobberley (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22SK%0A) **-** Curators' Professor of Music (composition)

Dale Morehouse (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22SJ%0A) **-** Associate Professor of Music (voice, opera)

Laura New - Assistant Teaching Professor of Music (music theory)

Nara Newcomer - (music/media library)

Douglas Niedt - Associate Professor of Music (guitar)

Ryan Oldham - Adjunct Assistant Professor of Music (music appreciation)

Robert Olson - Professor of Music (conducting, orchestra)

Joseph Parisi - Professor of Music (music education, associate director of bands)

Diane Helfers Petrella (http://conservatory.umkc.edu/faculty.cfm?r=%22%26B0%20%0A) **-** Associate Professor of Music (piano, piano pedagogy)

Nick Petrella (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22%5BC%0A) **-** Adjunct Assistant Professor of Music (percussion)

Timothy Place (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22CJ%0A) - Adjunct Instructor of Music (composition)

Mary Posses - Associate Professor of Music (flute)

Natalia Rivera - Assistant Teaching Professor of Music, vocal coach/accompanist, (foreign language for singing)

Charles R. Robinson (http://conservatory.umkc.edu/faculty.cfm?r=%22%25%22P%20%0A) **-** Professor of Music (music education, choral music)

Paul Rudy - Professor of Music (composition)

Zach Shemon - Assistant Professor of Music (saxophone)

Rebecca Sherburn (http://conservatory.umkc.edu/faculty.cfm?r=%22%25%22L%20%0A) **-** Associate Professor of Music (voice)

Reynold Simpson (http://conservatory.umkc.edu/faculty.cfm?r=%22%25%22H%20%0A) **-** Associate Professor of Music (music theory)

James Snell - Associate Professor of Music (percussion)

Aidan Soder (http://conservatory.umkc.edu/faculty.cfm?r=%22%25%22D%20%0A) **-** Associate Professor of Music (voice)

Jane Solose (http://conservatory.umkc.edu/faculty.cfm?r=%22%25%22%40%20%0A) **-** Professor of Music (piano/harpsichord)

Thomas Stein (http://conservatory.umkc.edu/faculty.cfm?r=%22%25%220%20%0A) **-** Associate Professor of Music (tuba, euphonium)

Kent Swafford - Teaching Assistant (piano technician)

Lee D. Thompson - Adjunct Professor of Music (coach/accompanist)

David Thurmaier (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22KC%0A) - Associate Professor of Music (theory)

Ronald Tice Assistant Professor of Dance

Sarah Tyrrell (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22WE%0A) **-** Assistant Teaching Professor of Music (musicology)

Robert Watson (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22SC%0A) **-** William and Mary Grant/Missouri Endowed Professor in Jazz Studies

Paula B. Weber - Professor of Dance (ballet)

Robert Weirich (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22SA%0A) **-** Jack Strandberg/Missouri Endowed Chair in Piano, Professor of Music (piano)

Bram Wijnands (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22%5FB%0A) **-** Adjunct Instructor of Music (jazz studies)

Lindsey R. Williams (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22S%40%0A) **-** Associate Professor of Music (music education)

Richard Lee Williams (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22SG%0A) **-** Assistant Professor of Music (coach-accompanist, foreign language for singing)

Peter T. Witte (http://conservatory.umkc.edu/faculty.cfm?r=%23%27%22SF%0A)**,** Dean **-** Professor of Music (instrumental conducting)

Chen Yi - Lorena Searcy Cravens/Millsap/Missouri Endowed Professor in Composition

Emeritus Faculty

Olga Ackerly - Associate Professor Emeritus of Music (musicology)

Inci Bashar - Professor Emeritus of Music (voice)

Shirley Bean Associate Professor Emeritus of Music (music theory)

Hugh Brown Associate Professor Emeritus of Music (viola)

Eph Ehly professor emeritus of music (choral music, conducting)

Gustavo R. Halley associate professor emeritus of music (voice)

Alexander W. Hamilton; associate professor emeritus of music (music education)

Linda Ross Happy associate professor emeritus of music (class piano)

Milton G. Hehr associate professor emeritus of music (music theory, music history and literature)

Tiberius Klausner professor emeritus of music (violin)

Richard C. Knoll; professor emeritus of music (voice)

Wanda Lathom-Radocy professor emeritus of music (music therapy)

John R. Leisenring professor emeritus of music (trombone/jazz studies)

Marian F. Petersen professor emeritus of music (theory)

Ruth Anne Rich professor emeritus of music (piano)

Merton Shatzkin professor emeritus of music (music theory)

Joan Sommers professor emeritus of music (accordion)

Paul Sommers; professor emeritus of music (voice)

Undergraduate

The Conservatory of Music and Dance offers the bachelor of fine arts in dance, bachelor of arts, bachelor of music and bachelor of music education degrees. The specific degrees and their requirements are listed on the following pages.

Bachelor of Arts in Music (p. 654)

- Bachelor of Arts in Music Therapy (p. 655)

Bachelor of Music (p. 660)

- Bachelor of Music in Jazz Studies (p. 660)
- Bachelor of Music in Music Composition (p. 661)
- Bachelor of Music in Music Theory (p. 663)
- Bachelor of Music in Performance (p. 665)
  - Guitar Emphasis Area (p. 665)
  - Organ Emphasis Area (p. 666)
  - Piano Emphasis Area (p. 667)
  - Voice Emphasis Area (p. 669)
  - Wind, Strings and Percussion Emphasis Area (p. 671)

Bachelor of Music Education (p. 672)

- Choral Emphasis Area (p. 674)
- Instrumental Emphasis Area (p. 677)

Bachelor of Fine Arts in Dance (p. 658)

Graduate

Doctor of Musical Arts (p. 682)

- Artist’s Certificate (p. 684)
- Doctor of Musical Arts in Conducting (p. 685)
- Doctor of Musical Arts in Music Composition (p. 687)

- Doctor of Musical Arts in Performance (p. 688)

Interdisciplinary Ph.D. study in Music Education (p. 689)

Master's Degrees (p. 689)

- Master of Arts in Music (p. 690)
- Master of Arts in Music: Music Therapy Emphasis (p. 691)
- Master of Music Education (p. 692)
- Master of Music in Conducting (p. 692)
- Master of Music in Music Composition (p. 694)
- Master of Music in Music Theory (p. 694)
- Master of Music in Musicology (p. 695)
- Master of Music in Performance: Keyboard Emphasis (p. 695)
- Master of Music in Performance: Orchestral Instruments and Guitar Emphasis Areas (p. 696)
- Master of Music in Performance: Voice Emphasis (p. 697)
- Master of Music in Performance: Woodwind Emphasis (p. 698)
- Performer's Certificate (p. 699)

Undergraduate Programs

The Conservatory of Music and Dance offers the bachelor of fine arts in dance, bachelor of arts, bachelor of music and bachelor of music education degrees. The specific degrees and their requirements are listed on the following pages.

- Admissions (p. 653)
- Conservatory Minimum Grade Requirements (p. 654)

Admissions

New Students

New students must meet the general requirements for admission to the University. Additionally, a 10-minute audition is required for music students in the applicant's major performance field to determine proficiency and placement in the appropriate applied level. Dance auditions consist of participation in a 90-minute ballet class and a 90-minute modern class. Women, be prepared to do pointe work after ballet class.

Auditions serve as criteria for admission and for scholarships and are held during the late fall and early winter. Auditions are advisory in nature regarding performance level. It is preferred that auditions take place at the Conservatory. In cases of extreme distance or scheduling problems, a recorded audition may be submitted by the applicant.

Music Education

Music Education majors are expected to display those personal characteristics and professional qualities possessed by effective teachers. Applicants audition in their applied performance area (http://www.ccm.uc.edu/academics/majors.aspx) and are interviewed by the music education faculty (http://www.ccm.uc.edu/music_education/NEW%20WEBSITE/Faculty/faculty.htm) to determine their admission to this program.

Applications for admission to the UMKC Conservatory of Music and Dance are reviewed by both the Applied and the Music Education faculties. Applicants must demonstrate facility in their applied performance area and a strong academic record in addition to well-defined attitudes and goals toward music in elementary and secondary education (see fitness-to-teach).

1. Students must have an ACT score of 21 or higher, or be at the 50 percentile or higher in the high school class rank, or have a high school grade-point average of 2.5 or better
2. Applicants should complete an interview with a music education faculty member prior to admission.
3. Students who do not achieve these standards (listed above) may be considered for admission, but must meet the standards listed below to progress through the degree.

Transfer Students

All undergraduate transfer music students must:

1. Be admitted to the University and the Conservatory.
2. Present complete official transcripts.

3. Audition for applied placement.
4. Take a theory examination for validation of theory level (Music majors only).

All undergraduate transfer dance students must:

1. Be admitted to the University and the Conservatory.
2. Present complete official transcripts.*
3. Audition for placement in ballet and modern.

* Transfer students who are admitted into the dance program are expected to fulfill all requirements of the BFA degree. The Dance Division will recognize as many transferable credits as possible, but the curriculum and curricular standards must be fulfilled, possibly resulting in additional semesters of study.

Conservatory Minimum Grade Requirements

Minimum Grade Requirements

1. Music majors enrolled in Conservatory classes must receive a grade of C or better to progress to the next appropriate class level.
2. Dance Division students must receive a grade of B or better in all technique classes to progress to the next appropriate class level.

Note: Some programs may require a higher minimum course grade.

Bachelor of Arts in Music

Student Learning Outcomes

1. Students will write effectively about music in a cultural and historical context.
2. Students will obtain competency in written theory, aural skills and singing to attain fluency in western music.
3. Students will develop intermediate keyboarding skills in sight reading, transposition, and harmonization.

Required Music Courses

Year I

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 101[1]	2	Applied Lessons 102[1]	2
Studio Class[2]	0	Studio Class[2]	0
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 141	4	CONSVTY 142	4
CONSVTY 110	1	CONSVTY 123	1
Anchor I[4]	3	DISC 200[4]	3
DISC 100[4]	3	Anchor II[4]	3
	14-15		**14-15**

Year II

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 201[1]	2	Applied Lessons 202[1]	2
Studio Class[2]	0	Studio Class[2]	0
Ensemble[3]	1-2	CONSVTY 242	4
CONSVTY 241	4	Ensemble[3]	1-2
CONSVTY 223	1	CONSVTY 310	1
Music Elective	1	BIOLOGY 102	3
Anchor III[4]	3	BIOLOGY 102L	1

DISC 300[4]	3	Electives	3
	15-16		**15-16**
Year III			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
Applied Lessons 301[1]	2	Ensemble[3]	1-2
Studio Class[2]	0	CONSVTY 352	3
Ensemble[3]	1-2	Electives	9
CONSVTY 351	3	Focus B[4]	3
CONSVTY 323	2		
CONSVTY 424 (or Physical Science)	3		
Music Elective	3		
Focus A[4]	3		
	17-18		**16-17**
Year IV			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 325 (keyboard majors)	0-2	CONSVTY 490	3
Electives	9	MATH 206, 210, STAT 235, PSYCH 316, or SOCIOL 306	3
Focus C[4]	3	Electives	6
		Focus Elective[4]	3
	13-16		**16-17**

Total Credits: 120-130

1 List of instrument specific courses for applied lessons (p.)

2 List of instrument specific courses for studio class. (p.)

3 Or one of the following: CONSVTY 301C, CONSVTY 302, CONSVTY 306A, CONSVTY 306C, CONSVTY 307B, CONSVTY 307C, CONSVTY 308A

4 UMKC General Education Curriculum (http://www.umkc.edu/core), CONSVTY 151 recommended for Anchor I.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Arts in Music Therapy

Additional Admission Criteria

1. Students should be able to qualify for Applied Lessons, for two hours of credit in their major performance area.
2. Emotional stability and good physical stamina are also essential for a music therapist.
3. Applicants are required to complete an interview with a music therapy faculty member prior to admission.

Student Learning Outcomes

1. Undergraduate students will be able to play and accompany self, using multiple keys and accompaniment patterns on the guitar and piano while singing in a pleasing tone quality.
2. Undergraduate students will be able to lead and interact with others in a manner that engages them in the music-based experience as demonstrated by the ability to accompany self while singing, providing clear direction and/or expectation, direct eye contact, and appropriate affect.
3. Undergraduate students will be able to sight read simple songs using voice, guitar and piano.
4. Undergraduate students will be able to transcribe a simple, yet complimentary harmonic accompaniment pattern to an unfamiliar musical recording of contemporary music based on a listening experience.
5. Undergraduate students will demonstrate a strong understanding of the scope of practice for music therapy as defined by the Certification Board for Music Therapists.

Music Therapy Emphasis Area Required Music Courses

Year I

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 101[1]	2	Applied Lessons 102[1]	2
Studio Class[2]	0	Studio class[2]	0
Ensemble[3]	1-2	CONSVTY 101C	2
CONSVTY 373G	1	Ensemble[3]	1-2
CONSVTY 141	4	CONSVTY 142	4
CONSVTY 110	1	CONSVTY 123	1
CONSVTY 151[4]	3	Anchor II[4]	3
DISC 100[4]	3	DISC 200[4]	3
Music Therapy Colloquium[5]		Music Therapy Colloquium[5]	
	15-16		**16-17**

Year II

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 201[1]	2	Applied Lessons 202[1]	2
Studio Class[2]	0	Studio Class[2]	0
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 241	4	CONSVTY 242	4
CONSVTY 223	1	CONSVTY 310	1
CONSVTY 128	2	CONSVTY 317	3
CONSVTY 316	2	CONSVTY 315	2
Anchor III[3]	3	PSYCH 210 (Focus Elective)[4]	3
DISC 300[4]	3		
	18-19		**16-17**

Year III

Fall Semester	Credits	Spring Semester	Credits
CONSVTY 180	3	CONSVTY 352	3
CONSVTY 260	3	CONSVTY 406	3
CONSVTY 351	3	CONSVTY 210B	1
CONSVTY 210A	1	CONSVTY 437	3
CONSVTY 363	3	CONSVTY 435	3

LS-PHYS 117 (Focus B)[4]	3	CONSVTY 366	3		
	16		**16**		
Year IV					
Fall Semester	**Credits**	**Spring Semester**	**Credits**	**Summer Semester**	**Credits**
CONSVTY 210E	1	CONSVTY 210F	1	CONSVTY 410	1-6
CONSVTY 408	3	CONSVTY 409	3		
CONSVTY 373E	1	CONSVTY 497SI	1		
CONSVTY 425A or 425B	2	CONSVTY 367	1		
CONSVTY 380 or 381	2	Elective	3		
Elective	3	Focus C[4]	3		
Focus A[4]	3				
	15		**12**		**1-6**

Total Credits: 125-134

1 List of instrument specific course numbers for applied lessons (p.)

2 List of instrument specific course numbers for studio class (p.)

3 or, CONSVTY 301C, CONSVTY 306A, CONSVTY 306C, CONSVTY 307B, CONSVTY 307C, CONSVTY 308A

4 UMKC General Education Curriculum (http://www.umkc.edu/core), CONSVTY 151 strongly recommended for Anchor I.

5 Music Therapy students are required to have colloquium 1st and 2nd semester of the freshman year.

Music Therapy Emphasis Area Required Courses

LS-ANATO 118	Introductory Anatomy	3
LS-ANATO 118L	Introductory Anatomy Laboratory	2
CONSVTY 130	Music Therapy Techniques: Adults	3
CONSVTY 180	Music in Special Education	3
CONSVTY 210A	Clinical Experience: I [1]	1
CONSVTY 210B	Clinical Experience: II	1
CONSVTY 210C	Clinical Experience: III	1
CONSVTY 210D	Clinical Experience: Iv	1
CONSVTY 210E	Clinical Experience: V [2]	1
CONSVTY 210F	Clinical Experience VI [3]	1
CONSVTY 260	Clinical Foundations of Music Therapy	3
CONSVTY 406	Influence of Music on Behavior	3
CONSVTY 408	Music in Therapy:Adults	3
CONSVTY 409	Music in Therapy: Children	3
CONSVTY 410	Internship	1-4
CONSVTY 435	Psychological Foundations of Music	3
CONSVTY 497SI	Seminar-Workshop In Music	1-4
PSYCH 322	Child Psychology	3
PSYCH 433	Abnormal Psychology	3

1 Must be taken concurrently with CONSVTY 260.

2 Must be taken concurrently with CONSVTY 408.

3 Must be taken concurrently with CONSVTY 409.

Licensure

Graduates may apply for membership by contacting the American Music Therapy Association (AMTA). For Board Certification, graduates may contact the Certification Board for Music Therapy (CBMT). All coursework must be completed before beginning CONSVTY 410. Therapy students are required to enroll in a professional liability insurance program.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Fine Arts in Dance

BFA in Performance and Choreography

Program Prerequisites

1. Students applying for the dance program must have previous training in ballet and/or modern dance.
2. Applicants will be admitted, upon approval of the dance faculty, following mandatory auditions by the prospective student.
3. All applicants who are accepted to the Dance Division will be admitted on a provisional basis and officially enter the dance program after the completion of the first two semesters. If evidence shows that the BFA dance major is not a good fit for the program, dancers will be counseled to pursue another degree or a more suitable dance program at the time of end of year conferences.

Transfer students

Transfer who are admitted into the dance program are expected to fulfill all requirements of the BFA degree. The Dance Division will recognize as many transferable credits as possible, but curriculum and curricular standards must be fulfilled, possibly resulting in additional semesters of study.

Student Learning Outcomes

1. Achieve and exhibit the fine technical skills of a professional performing dance artist.
2. Achieve and exhibit strong choreographic skills.
3. Achieve and exhibit the expressive skills of a professional performing dance artist.
4. Achieve and exhibit strong creative theatrical content and original choreography.

Required Courses

UMKC General Education Curriculum (http://www.umkc.edu/core)

Year I			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
DANCE 141B	3	DANCE 142B, 242B, 342B, or 442B	3
DANCE 141M	3	DANCE 142M	3
DANCE 107	1	DANCE 108	1
DANCE 140A	1	DANCE 140B	1
DANCE 217A	1	DANCE 217B	2
Anchor I	3	Anchor II	3
DISC 100	3	DISC 200	3
	15		**16**

Year II			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
DANCE 241B, 341B, or 441B	3	DANCE 242B, 342B, or 442B	3
DANCE 241M	3	DANCE 242M	3

DANCE 218A	2	DANCE 218B	2
DANCE 305	3	DANCE 261	1
Anchor III	3	DANCE 306	3
DISC 300	3	DANCE 416A	1
		Focus A - Art 110 Required for Dance Majors	3
	17		**16**

Year III

Fall Semester	**Credits**	**Spring Semester**	**Credits**
DANCE 341B or 441B	3	DANCE 342B or 442B	3
DANCE 341M	3	DANCE 342M	3
DANCE 319A	2	DANCE 319B	2
DANCE 260	1	DANCE 416B	1
DANCE 301	3	DANCE 405B, 213D, or 415B	1
DANCE 405A, 213C, or 415A	1	DANCE 313B or 413B	1
DANCE 313A or 413A	1	DANCE 302	1
Focus B	3	Focus C	3
	17		**15**

Year IV

Fall Semester	**Credits**	**Spring Semester**	**Credits**
DANCE 341B or 441B	3	DANCE 342B or 442B	3
DANCE 341M or 441M	3	DANCE 342M or 442M	3
DANCE 303	1	DANCE 313B or 413B	1
DANCE 313A or 413A	1	DANCE 405D, 415B, or 415A	1
DANCE 405C, 414A, or 415A	1	DANCE 494	1
DANCE 493	1	THEATRE 101	3
Applied Music	2	Elective	1
Focus Elective - Music Appreciation Strongly Recommended	3		
	15		**13**

Total Credits: 124

All Undergraduate Dance courses (p. 940)

Dance Division Website (http://conservatory.umkc.edu/content.cfm?cont=%22%27%22X%20%0A)

[1] A senior recital is required. The recital must consist of two different dance forms studied in the four years of coursework, including one solo and one group work choreographed by the student. Further senior recital requirements are contained in the CONSVTY dance student handbook.

Throughout their programs of study, all dancers are expected to maintain general physical fitness and dance aesthetic as prescribed by the dance faculty. Health and dance aesthetic requirements, and many other details, are contained in the Conservatory Dance Student Handbook that is furnished to all dance students.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Music - Core Requirements

BM Core Requirements

CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III [1]	4
CONSVTY 242	Musicianship IV [1]	4
CONSVTY 110	Keyboard Skills I [1,2]	1
CONSVTY 123	Keyboard Skills II [1,2]	1
CONSVTY 223	Keyboard Skills III [1,2]	1
CONSVTY 310	Keyboard Skills IV [1,2]	1
CONSVTY 323	Form and Analysis I [1]	2
CONSVTY 351	History of Music in Western Civilization I [1]	3
CONSVTY 352	History of Music in Western Civilization II [1]	3
CONSVTY 380	Basic Conducting - Choral [1,2]	2
or CONSVTY 381	Basic Conducting - Instrumental	

1 Not required for BM Jazz Studies

2 Not required for Piano Performance Majors

Bachelor of Music in Jazz Studies

Required Courses

Year I

Fall Semester	**Credits**	**Spring Semester**	**Credits**
Applied Lessons 101J[1]	4	Applied Lessons 102J[1]	4
CONSVTY 303B, 303G, or 303J	2	CONSVTY 303B, 303G, or 303J	2
CONSVTY 303E	1	CONSVTY 303E	1
CONSVTY 311	2	CONSVTY 318	2
CONSVTY 497JKI	1-4	CONSVTY 441	2
Anchor I[2]	3	Anchor II[2]	3
DISC 100[2]	3	DISC 200[2]	3
	16-19		**17**

Year II

Fall Semester	**Credits**	**Spring Semester**	**Credits**
Applied Lessons 201J[1]	4	Applied Lessons 202J[1]	4
CONSVTY 303B, 303G, or 303J	2	CONSVTY 303B, 303G, or 303J	2
CONSVTY 303E	1	CONSVTY 303E	1
CONSVTY 104	2	CONSVTY 204	2
Anchor III[2]	3	Focus A[2]	3
DISC 300[2]	3	Focus B[2]	3
	15		**15**

Year III

Fall Semester	**Credits**	**Spring Semester**	**Credits**
Applied Lessons 301J[1]	4	Applied Lessons 302J[1]	4

CONSVTY 303B, 303G, or 303J	2	CONSVTY 303B, 303G, or 303J	2
CONSVTY 303E	1	CONSVTY 303E	1
CONSVTY 304	2	CONSVTY 404	2
CONSVTY 353A	3	CONSVTY 353WI	3
Focus C[2]	3	Focus Elective[2]	3
	15		**15**

Year IV

Fall Semester	**Credits**	**Spring Semester**	**Credits**
Applied Lessons 401J[1]	4	Applied Lessons 402J[1]	4
CONSVTY 303B, 303G, or 303J	2	CONSVTY 303B, 303G, or 303J	2
CONSVTY 303E	1	CONSVTY 303E	1
CONSVTY 426B	2	CONSVTY 423	3
CONSVTY 471	2	CONSVTY 426B	2
Electives	3	Electives	3
	14		**15**

Total Credits: 122-125

1 List of instrument specific course numbers for applied lessons (p.)

2 UMKC General Education Curriculum (p. 758); CONSVTY 151 recommended for Anchor I.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Music in Music Composition

Major Status

Major status for the B.M. Music Composition degree is determined for new students (freshmen and transfer students) by the faculty through the standard Conservatory admissions process. Prospective Composition majors may enroll in up to four semesters of composition (CONSVTY 133, CONSVTY 134, CONSVTY 233 and CONSVTY 234). CONSVTY 234 is the final semester that a student can petition for major status.

Student Learning Outcomes

1. Students will demonstrate their musical voice as creative artists, and consistently produce works.
2. Students will master analytical and technical skills in music in a variety of media and genres.
3. Students will demonstrate their skills as collaborators with performers and generative artists and promote their work.

See Minimum Core Requirements (p. 660)

Required courses

Year I

Fall Semester	**Credits**	**Spring Semester**	**Credits**
CONSVTY 133	3	CONSVTY 134	3
Applied Track: A, B or C[1]	2	Applied Track: A, B or C[1]	2
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 141	4	CONSVTY 142	4

CONSVTY 110	1	CONSVTY 123	1
Anchor I[2]	3	Anchor II[2]	3
DISC 100[2]	3	DISC 200[2]	3
	17-18		**17-18**

Year II

Fall Semester	**Credits**	**Spring Semester**	**Credits**
CONSVTY 233	3	CONSVTY 234	3
Applied Track: A, B or C[1]	2	Applied Track: A, B or C[1]	2
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 241	4	CONSVTY 242	4
CONSVTY 223	1	CONSVTY 310	1
Anchor III[2]	3	CONSVTY 236 or 235	3
DISC 300[2]	3		
	17-18		**14-15**

Year III

Fall Semester	**Credits**	**Spring Semester**	**Credits**
CONSVTY 333	3	CONSVTY 333	3
Applied Track: A, B or C[1]	2	CONSVTY 331A	3
CONSVTY 301G[4]	1	CONSVTY 301G[4]	1
CONSVTY 329	2	CONSVTY 352	3
CONSVTY 351	3	CONSVTY 427	2
CONSVTY 381 or 380	2	Focus B[2]	3
Focus A[2]	3		
	16		**15**

Year IV

Fall Semester	**Credits**	**Spring Semester**	**Credits**
CONSVTY 333	3	CONSVTY 433	3
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 431	2	Focus Elective[2]	3
CONSVTY 323	2	Electives	6
CONSVTY 428	3		
Focus C[2]	3		
	14-15		**13-14**

Total Credits: 123-129

1 **Applied Music Requirement**

Students majoring in Composition must complete a minimum of 10 credit hours of performance-related study in one of the following tracks:

1. Complete level CONSVTY 301 secondary in any single applied area offered by the Conservatory (recommended for students who audition well on their pre-college instrument or voice and who wish to continue to fine tune their performance skills along with their composition skills). Each semester of enrollment in applied music may require concurrent enrollment in Studio Class (p.).
2. Complete ten hours of secondary applied music courses and/or technique classes (recommended for students who have skills in performance on an instrument that is not in the Conservatory catalog, such as ethnic and electric instruments, and who wish to supplement this knowledge with a broad-based understanding on multiple Western instruments and voice).
3. Complete six hours of CONSVTY 335, plus four hours of secondary applied music courses and/or techniques classes (recommended for students whose primary pre-college performance experience is with computers/electronic music devices and instruments, and who wish to both focus their development as performers on high-level musical production of sound and to broaden their basic understanding of standard Western instruments and voice).

2 UMKC General Education Curriculum, CONSVTY 151 recommended for Anchor I.

[3] CONSVTY 301C, CONSVTY 302, CONSVTY 306A, CONSVTY 306C, CONSVTY 307B, CONSVTY 307C, or CONSVTY 308A

[4] May chose to take for up to an additional two semesters in place of "Ensemble"

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Music in Music Theory

Student Learning Outcomes

1. Demonstrate music-theoretical knowledge as a major factor in their effective writing about music.
2. Use music-theoretical knowledge in effective verbal communication about music in both academic and practical settings.
3. Use music-theoretical knowledge and ideas to create self-driven research and analytical works

Required Courses

See Minimum Core Requirements (p. 660)

Year I

Fall Semester	Credits	Spring Semester	Credits
Applied Lesson 101[1]	2	Applied Lessons 102[1]	2
Studio Class[2]	0	Studio Class[2]	0
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 141	4	CONSVTY 142	4
CONSVTY 110	1	CONSVTY 123	1
Anchor I[4]	3	Anchor II[4]	3
DISC 100[4]	3	DISC 200[4]	3
	14-15		**14-15**

Year II

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 201[1]	2	Applied Lessons 202[1]	2
Studio Class[2]	0	Studio[2]	0
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 241	4	CONSVTY 242	4
CONSVTY 223	1	CONSVTY 310	1
CONSVTY 133	3	CONSVTY 134	3
Anchor III[4]	3	CONSVTY 424 (or a Physical Science)	3
DISC 300[4]	3	Focus A[4]	3
	17-18		**17-18**

Year III

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 301[1]	2	Applied Lessons 302[1]	2
Studio Class[2]	0	Studio Class[2]	0

Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 351	3	CONSVTY 352	3
CONSVTY 323	2	CONSVTY 382 or 383	2
CONSVTY 491K	3	CONSVTY 428	3
CONSVTY 329	2	CONSVTY 331A	3
CONSVTY 380 or 381	2	Electives	2
CONSVTY 427	2		
	17-18		**16-17**

Year IV

Fall Semester	**Credits**	**Spring Semester**	**Credits**
Applied Lessons 401[1]	2	Applied Lessons 402[1]	2
Studio[2]	0	Studio[2]	0
Ensemble[3]	1-2	Ensemble[3]	1-2
CONSVTY 373C, 373D, 373E, 373F, 373G, or 373H	1	CONSVTY 373D, 373C, 373E, 373F, 373G, or 373H	1
CONSVTY 235 or 236	3	CONSVTY 498	2
Elective - Non Music	3	CONSVTY 497 (Theory Seminar)	3
Focus B[4]	3	Focus Elective[4]	3
Focus C[4]	3		
	16-17		**12-13**

Total Credits: 123-131

1 List of instrument specific course numbers for applied lessons (p.)

2 List of instrument specific course numbers for s (p.)tudio classes

3 CONSVTY 301C, CONSVTY 302, CONSVTY 306A, CONSVTY 306C, CONSVTY 307B, CONSVTY 307C, or CONSVTY 308A

4 UMKC General Education Curriculum (http://www.umkc.edu/core), CONSVTY 151 recommended for Anchor I.

Degree Program Requirements

Formal approval of the music theory program must be acted upon after the student completes CONSVTY 242 or its equivalent. Students in this degree plan must maintain a minimum GPA of B- in the undergraduate musicianship sequence:

CONSVTY 141	Musicianship I	4
CONSVTY 142	Musicianship II	4
CONSVTY 241	Musicianship III	4
CONSVTY 242	Musicianship IV	4

Students not maintaining this minimum average may not graduate until an appropriate class or classes are retaken and the minimum average achieved. Students must demonstrate functional piano facility, aural skills and satisfactory part-writing and analysis proficiency.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Music in Performance

Emphasis Areas

Students seeking degrees in this program select an emphasis area in:

- Guitar
- Organ
- Piano
- String instruments (cello, string bass, viola, and violin)
- Voice
- Wind and percussion instruments (bassoon, clarinet, euphonium, flute, horn, oboe, percussion, saxophone, trombone, trumpet, and tuba)

Guitar Emphasis Area

Student Learning Outcomes

1. To present a solo recital that is correct technically and artistically convincing.
2. To understand the historical and analytical components of music.
3. To perform at a level enabling them to enter a graduate school at a respected institution or a professional performance/teaching career as appropriate.

Required Courses

See Minimum Core Requirements (p. 660)

Year I

Fall Semester	Credits	Spring Semester	Credits
GUITAR 101	4	GUITAR 102	4
GUITAR 300	0	GUITAR 300	0
Ensemble[1]	1-2	Ensemble[1]	1-2
CONSVTY 141	4	CONSVTY 142	4
CONSVTY 110	1	CONSVTY 123	1
Anchor I[2]	3	Anchor II[2]	3
DISC 100[2]	3	DISC 200[2]	3
	16-17		**16-17**

Year II

Fall Semester	Credits	Spring Semester	Credits
GUITAR 201	4	GUITAR 202	4
GUITAR 300	0	GUITAR 300	0
Ensemble[1]	1-2	Ensemble[1]	1-2
CONSVTY 305J	1	CONSVTY 242	4
CONSVTY 241	4	CONSVTY 310	1
CONSVTY 223	1	CONSVTY 305J	1
Anchor III[2]	3	Focus A[2]	3
DISC 300[2]	3	Focus B[2]	3
	17-18		**17-18**

Year III

Fall Semester	Credits	Spring Semester	Credits
GUITAR 301	4	GUITAR 302	4
GUITAR 300	0	Ensemble[1]	1-2

Ensemble[1]	1-2	GUITAR 300	0
CONSVTY 305J	1	CONSVTY 305J	1
CONSVTY 351	3	CONSVTY 352	3
CONSVTY 381	2	CONSVTY 427	2
Electives	3		
Focus C[2]	3	Focus Elective[2]	3
	17-18		**15-16**
Year IV			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
GUITAR 401	4	GUITAR 402	4
GUITAR 300	0	GUITAR 300	0
Ensemble[1]	1-2	Ensemble[1]	1-2
CONSVTY 305J	1	CONSVTY 305J	1
CONSVTY 323	2	CONSVTY 331	2
		CONSVTY 492D	1
CONSVTY 491D	2	CONSVTY 494 3	2
Electives		Electives	3
	16-17		**14-15**

Total Credits: 128-136

1 CONSVTY 301C, CONSVTY 302, CONSVTY 306A, CONSVTY 307C, CONSVTY 308A

2 UMKC General Education Curriculum (http://www.umkc.edu/core), CONSVTY 151 recommended for Anchor I.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Organ Emphasis Area

Student Learning Outcomes

1. To present a solo recital that is correct technically and artistically convincing.
2. To demonstrate an understanding of (and be able to communicate about) the historical and analytical components of music.
3. To develop the diverse skills required for successful careers or continued education as performing and teaching musicians.

Required Courses

Bachelor of Music - Core Requirements (p. 660)

ORGAN 101	Freshman Organ I [1]	2-4
ORGAN 102	Freshman Organ II [1]	2-4
ORGAN 201	Sophomore Organ I [1]	2-4
ORGAN 202	Sophomore Organ II [1]	2-4
ORGAN 301	Junior Organ I [1]	2-4
ORGAN 302	Junior Organ II [1]	2-4
ORGAN 401	Senior Organ I [1]	2-4

ORGAN 402	Senior Organ II [1]	2-4
Take the following course 8 times: [1]		
Studio Class		
Ensemble (8 semesters) [2]		
CONSVTY 382	Choral Conducting	2
CONSVTY 427	18th Century Counterpoint I	2
CONSVTY 437	Computer Literacy for Musicians	3
CONSVTY 460	Organ Literature I	2
CONSVTY 469	Organ Literature II	2
CONSVTY 491C	Pedagogical Practices I Organ	2
HRPCHD 100B	Applied Study of a Second Instrument	2
Applied Piano [3]		4
Electives		17

UMKC General Education Curriculum (http://www.umkc.edu/core) - 30 Credit Hours

1 Must be enrolled in concurrently.

2 Organ performance majors have the option of using a maximum of four semesters of CONSVTY 305G in lieu of their major ensemble.

3 Two semesters of applied piano are required. PIANO 202 and the piano proficiency examination must be passed prior to graduation; therefore, additional piano may be required.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Piano Emphasis Area

Student Learning Outcomes

1. To present a solo recital that is correct technically and artistically convincing.
2. To demonstrate an understanding of (and be able to communicate about) the historical and analytical components of music.
3. To develop the diverse skills required for successful careers or continued education as performing and teaching musicians.

See Minimum Core Requirements (p. 660)

Required Courses

Year I

Fall Semester	Credits	Spring Semester	Credits
PIANO 101	4	PIANO 102	4
PIANO 300	0	PIANO 300	0
CONSVTY 308A, 302, 301C, 306A, 306C, or 307C	1-2	CONSVTY 308A, 302, 301C, 306A, 306C, or 307C	1-2
CONSVTY 141	4	CONSVTY 142	4
CONSVTY 114	1	CONSVTY 115	1
Anchor I[1]	3	Anchor II[1]	3
DISC 100[1]	3	DISC 200[1]	3
	16-17		**16-17**

Year II

Fall Semester	Credits	Spring Semester	Credits
PIANO 201	4	PIANO 202	4
PIANO 300	0	PIANO 300	0
CONSVTY 241	4	CONSVTY 242	4
CONSVTY 308A, 302, 301C, 306A, 306C, or 307C	1-2	CONSVTY 308A, 302, 301C, 306A, 306C, or 307C	1-2
Anchor III[1]	3	Focus A[1]	3
DISC 300[1]	3	Focus B[1]	3
	15-16		**15-16**

Year III

Fall Semester	Credits	Spring Semester	Credits
PIANO 301	4	PIANO 302	4
PIANO 300	0	PIANO 300	0
CONSVTY 376	2	CONSVTY 377	2
CONSVTY 351	3	CONSVTY 352	3
CONSVTY 323	2	CONSVTY 362	2
CONSVTY 361	2	CONSVTY 427	2
Focus C[1]	3	Focus Elective[1]	3
	16		**16**

Year IV

Fall Semester	Credits	Spring Semester	Credits
PIANO 401	4	PIANO 402	4
PIANO 300	0	PIANO 300	0
CONSVTY 305G[2]	1-2	CONSVTY 305G[2]	1-2
CONSVTY 325	2	CONSVTY 326	2
CONSVTY 325A	1	CONSVTY 326A	1
Electives	5	Electives	5
	13-14		**13-14**

Total Credits: 120-126

1 UMKC General Education Curriculum (http://www.umkc.edu/core) - 30 Credit Hours, CONSVTY 151 recommended for Anchor I.

2 Can be substituted with: CONSVTY 302, CONSVTY 301C, CONSVTY 306A, CONSVTY 306C, CONSVTY 307C or CONSVTY 308A

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

String Instrument Emphasis Area

Voice Emphasis Area

Student Learning Outcomes

1. A graduating senior in vocal performance should be able to present a recital which demonstrates 1) solid vocal technique; 2) an understanding of style and languages; and 3) a high level of musicianship and artistry such that the student could be admitted to a graduate program in vocal performance.
2. A graduating senior should have a firm grasp on all historical and theoretical components of music so that they may have a better understanding of and context for their own solo vocal/operatic study. Students will have been introduced to all genres, time periods, key composers, forms, and the analytical tools necessary to provide the student with a more holistic view of their repertoire.
3. The completion of a BM-Voice Performance degree should enable a student to continue his/her education at the graduate level (ideally at a peer or aspirational institution), or in a very small percentage of graduates, enter the professional singing world at the emerging Young Artist level.

Required Courses

See Minimum Core Requirements (p. 660)

Year I

Fall Semester	Credits	Spring Semester	Credits
VOICE 101	2	VOICE 102	2
VOICE 300	0	VOICE 300	0
CONSVTY 308A, 301C, or 307C	1	CONSVTY 308A, 301C, or 307C	1
CONSVTY 141	4	CONSVTY 142	4
CONSVTY 110	1	CONSVTY 123	1
CONSVTY 417	1	CONSVTY 417	1
Anchor I[1]	3	CONSVTY 185B	2
DISC 100[1]	3	Anchor II[1]	3
		DISC 200[1]	3
	15		**17**

Year II

Fall Semester	Credits	Spring Semester	Credits
VOICE 201	3	VOICE 202	3
VOICE 300	0	VOICE 300	0
CONSVTY 308A, 301C, or 307C	1	CONSVTY 308A, 301C, or 307C	1
CONSVTY 241	4	CONSVTY 242	4
CONSVTY 223	1	CONSVTY 310	1
CONSVTY 185C	2	CONSVTY 417	1
CONSVTY 417	1	CONSVTY 185D	2
Anchor III[1]	3	Focus A[1]	3
DISC 300[1]	3		
	18		**15**

Year III

Fall Semester	Credits	Spring Semester	Credits
VOICE 301	4	VOICE 302	4
VOICE 300	0	VOICE 300	0
CONSVTY 308A, 301C, or 307C	1	CONSVTY 308A, 301C, or 307C	1
CONSVTY 351	3	CONSVTY 352	3
CONSVTY 323	2	CONSVTY 492B	2
CONSVTY 491B	2	CONSVTY 380	2

FRENCH 110, GERMAN 110, or ITALIAN 110	3	FRENCH 120, GERMAN 110, or ITALIAN 110	3
Focus B[1]	3		
	18		**15**
Year IV			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
VOICE 401	4	VOICE 402	4
VOICE 300	0	VOICE 300	0
CONSVTY 308A, 301C, or 307C	1	CONSVTY 308A, 301C, or 307C	1
CONSVTY 457	2	CONSVTY 458	2
CONSVTY 301E or 319	0	CONSVTY 301E	0
FRENCH 211	3	FRENCH 221, GERMAN 221, or ITALIAN 221	3
Focus C[1]	3	Focus Elective[1]	3
Elective	3		
	16		**13**

Total Credits: 127

Foreign Language Requirement:

Select one of the following foreign languages:		16
French		
FRENCH 110	Elementary French I	
FRENCH 120	Elementary French II	
FRENCH 211	Second Year French I	
FRENCH 221	Second Year French II	
German		
GERMAN 110	Elementary German I	
GERMAN 120	Elementary German II	
GERMAN 211	Second-Year German I	
GERMAN 221	Second-Year German II	
Italian		
ITALIAN 110	Elementary Italian I	
ITALIAN 120	Elementary Italian II	
ITALIAN 211	Second Year Italian I	
ITALIAN 221	Second Year Italian II	

Two years of one foreign language (French, German or Italian) is required. If two years of one of the required languages have been completed at the high-school level, then the language selected will be one of the other two languages.

1 UMKC General Education Requirements (http://www.umkc.edu/core), CONSVTY 151 recommended for Anchor I.

2 Ensemble: In addition to the required enrollment in a major choral ensemble each semester, students must also participate satisfactorily in two opera productions as assigned by the choral faculty in consultation with voice and opera faculty.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Wind, Strings and Percussion Emphasis Area

Student Learning Outcomes

1. To present a solo recital that is correct technically and artistically convincing.
2. To understand the historical and analytical components of music.
3. To perform at a level enabling them to enter a graduate school at a respected institution or a professional performance/teaching career as appropriate.

Required Courses

See Core Music Requirements (p. 660)

Year I

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 101[1]	4	Applied Lessons 102	4
Studio Class [2]	0	Studio Class[2]	0
CONSVTY 302, 306A, or 306C	2	CONSVTY 302, 306A, or 306C	2
CONSVTY 141	4	CONSVTY 142	4
CONSVTY 110	1	CONSVTY 123	1
Anchor I[3]	3	Anchor II[3]	3
DISC 100[3]	3	DISC 200[3]	3
	17		**17**

Year II

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 201[1]	4	Applied Lessons 202[1]	4
Studio Class[2]	0	Studio Class[2]	0
CONSVTY 302, 306A, or 306C	2	CONSVTY 302, 306A, or 306C	2
CONSVTY 241	4	CONSVTY 242	4
CONSVTY 223	1	CONSVTY 310	1
CONSVTY 305A	1	CONSVTY 305B	1
Anchor III[3]	3	Focus A[3]	3
DISC 300[3]	3	Focus B[3]	3
	18		**18**

Year III

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 301[1]	4	Applied Lessons 302[1]	4
Studio Class[2]	0	Studio Class[2]	0
CONSVTY 302, 306A, or 306C	2	CONSVTY 302, 306A, or 306C	2
CONSVTY 351	3	CONSVTY 352	3
CONSVTY 381	2	CONSVTY 305E	1
CONSVTY 305C	1	Focus Elective[3]	3
Focus C[3]	3		
	15		**13**

Year IV			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
Applied Lessons 401[1]	4	Applied Lessons 402[1]	4
Studio Class[2]	0	Studio Class[2]	0
CONSVTY 302, 306A, or 306C	2	CONSVTY 302, 306A, or 306C	2
CONSVTY 323	2	CONSVTY 331	2
CONSVTY 305G	1	CONSVTY 305H	1
Electives	3	Electives	3
	12		**12**

Total Credits: 122

1 List of instrument specific course numbers for applied lessons (p.)

2 List of instrument specific course numbers for studio classes (p.)

3 UMKC General Education Curriculum; (http://www.umkc.edu/core) CONSVTY 151 recommended for Anchor I.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Music Education

Application and Audition Requirements

Music Education majors are expected to display those personal characteristics and professional qualities possessed by effective teachers. Applicants audition in their applied performance area and are interviewed by the music education faculty (http://www.ccm.uc.edu/music_education/NEW %20WEBSITE/Faculty/faculty.htm) to determine their admission to this program.

Applications for admission to the UMKC Conservatory of Music and Dance are reviewed by both the Applied and the Music Education faculties. Applicants must demonstrate facility in their applied performance area and a strong academic record in addition to well-defined attitudes and goals toward music in elementary and secondary education (see fitness-to-teach).

1. Students must have an ACT score of 21 or higher, or be at the 50 percentile or higher in the high school class rank, or have a high school grade-point average of 2.50 or better
2. Applicants may be asked to complete an interview or an online questionnaire related to their interest in the music education program.
3. Students who do not achieve these standards (listed above) may be considered for admission, but must meet the standards listed below to progress through the degree.

Specific Degree Requirements

Specific degree requirements regarding applied music

1. #Bachelor of Music. All bachelor of music students, except composition majors, must complete Applied Music Studies 402. A graded public recital is required. Music Theory majors must complete Applied Studies 402 (2 credit hours), with participation in CONSVTY 498 required in lieu of the graded public recital.
2. #Bachelor of Music in Music Composition. All freshman and transfer students who are applying for admission as composition majors must take an applied audition as part of the application and admissions process. Results of the audition will be communicated to the composition coordinator, and will be used as part of the overall decision-making process, together with the student's portfolio, transcripts and supporting documents. In cases where the audition is not acceptable or where there is no room for that student in a given applied studio, the composition faculty may elect, if the other portions of the application are sufficiently strong, to recommend admission for the student on a provisional basis. The student must re-audition after a maximum of two semesters of study; if the situation is not resolved by the end of the first year, the student may then be denied composition major status and/or music major status.
3. #All bachelor of music education students must complete Applied Music Studies 401 (secondary). A studio recital is required.

4. # #All bachelor of arts music students must complete Applied Music Studies 301 (secondary).

Expectations for Degree Progression and Retention

Complete 201 and be admitted into 202 in the applied area of study.

Compile a GPA of at least 2.8 overall and/or 3.0 GPA in music.

Must maintain a combined GPA of at least 2.75 in music theory and ear training classes.

Before the student teaching semester the student:
Must complete a 30-minute public recital and 401.
Must maintain an overall GPA of at least 2.8 with a 3.0 in music and a 3.0 in music methods (128, 385 and 386/387).

The Music Education faculty expects music education students to exhibit those characteristics appropriate for effective teaching throughout the program and to make satisfactory progress toward the degree.

Other specific retention criteria are as follows:

1. Be in good standing, free from academic, disciplinary, or music probation;
2. Maintain the following grade point averages:
    a. Minimum cumulative GPA for all coursework is 2.80.
    b. Minimum cumulative GPA for all music coursework is 3.00.
    c. All required music courses must be completed with C or better.

Evaluation of student progress occurs each semester through an audit and advising system in the Music Education Division. In addition, the progress of all students is reviewed at the completion of the sophomore year by the entire Music Education faculty in order to determine admission to the teacher education track.

Recital Requirements

1. Bachelor of music education majors with choral emphasis or instrumental emphasis are required to perform a studio recital at least 30 minutes long. Students may petition their division if they want to give a public recital. The public recital may be graded at the option of students and the division. This grade will be in lieu of the jury at the option of the division.

Fitness to Teach

Upon being admitted to the teacher education track, the Conservatory and the School of Education have a process in place to assure that all teacher candidates will be assessed throughout their program according to “Fitness to Teach” criteria (the Fitness to Teach Checklist/Referral Form is available from the Music Education Faculty). Additional criteria include:

1. Competed criminal background history review.
2. Meeting academic requirements, including scholastic integrity and good communication skills.
3. Exhibiting personal and professional behaviors, such as appropriate social and interpersonal skills and appropriate dress for professional contexts.
4. Demonstrating appropriate cultural and social attitudes and behavior, including respect for diversity and acceptance of and accommodations for exceptional learners
5. Demonstrating appropriate emotional and cognitive dispositions, such as sound judgment and reflective and analytical thinking.

All teacher candidates will be reviewed semi-annually in the form of aggregated Fitness to Teach Checklist/Referral Form data. Patterns of concern identified in the review may result in a formal review process. Additionally, faculty may choose to refer a teacher education candidate for review at any time by completing the Fitness to Teach Checklist/Referral Form. The review process may result in remediation or removal from the Teacher Education program.

Candidates referred for review are expected to participate in the process. Refusal to participate will not terminate the process and may result in removal form the program.

Any teacher candidate referred for review is afforded due process throughout the review proceedings. After all stages of review, a letter of appeal may be submitted to the dean for consideration. The dean’s decision is final

Field Experience and Student Teaching

Undergraduates begin their final field placement during the fall semester of their final year. Students are assigned to an elementary and secondary school with a cooperating teacher who supervises and mentors them. Students continue in these placements for student teaching during their final

semester of the degree. Students are assigned to a school with a master teacher who supervises and mentors them throughout a complete quarter of teaching.

Student teaching, under the guidance of a cooperating teacher and a university supervisor, is the culmination of this program. To be eligible for a student teaching assignment, students must meet the following requirements:

1. Satisfy the retention criteria described above.
2. Have removed all unsatisfactory grades from their records (I, F, etc.).
3. Have successfully passed the Piano Proficiency Examination.
4. Have completed all required course work except student teaching.
5. Have passing scores for Praxis examinations (as specified by Missouri and Kansas).

A student will not be recommended for graduation who has, in the opinion of the Music Education faculty, failed to demonstrate acceptable characteristics and competencies. Upon successful completion of the Music Education program, students are eligible for preK-12 music certification in Missouri and Kansas.

Double Majors

A student who is approved by the faculty for the major in Performance will complete the requirements in both Music Education and Performance. This program is a composite of both programs of study, and may require an additional year of study.

Certification Procedures

Upon completion of the bachelor of music education degree, students must initiate the application for Missouri and Kansas certification in the Student Services Office of the School of Education. Applications should be filed during the student teaching semester. Certification is not automatic.

Elementary and secondary student teaching are required for the K-12 certificate.

All prospective teachers must take and receive a satisfactory score on the following tests for state certification:

- For Missouri certification, students must receive a satisfactory score on the Praxis II professional knowledge.
- For Kansas certification, students must receive satisfactory scores on the Pre-Professional Skills Test (PPST) in reading, writing and mathematics, and the Praxis II core test.

Bachelor of Music Education - Choral Emphasis Area

The UMKC Teacher Preparation program seeks to prepare teachers who:

- Have a strong liberal arts education and who are well-grounded in their content field(s).
- Demonstrate the development of pedagogic skills.
- Possess a professional and caring commitment to education.

Program goals are based on a set of key principles and express knowledge, skills and dispositions. These goals reflect the current knowledge base of teacher education as well as a commitment to the preparation of teachers who will be able to practice in schools as they are, and schools as they might be.

Program Goals

1. The beginning teacher understands the discipline(s) he or she will teach and can create learning experiences that make these aspects of the subject matter meaningful to students.
2. The beginning teacher is able to engage in long range planning and curriculum development and evaluation based upon district, state and national performance standards.
3. The beginning teacher understands how children learn and develop, and can provide opportunities that support their intellectual, social and personal development.
4. The beginning teacher understands and respects students' differences and creates instructional opportunities that are adapted to diverse learners.
5. The beginning teacher is able to use a variety of instructional strategies to encourage learners' development of critical thinking, problem solving and process skills.
6. The beginning teacher creates a productive learning environment through the use of individual and group motivation that encourages positive social interaction, active engagement in learning, and self-motivation.
7. The beginning teacher models effective communication techniques (verbal, non-verbal, media, etc.) and facilitates student communication, collaboration and supportive interaction in the classroom.
8. The beginning teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, emotional and physical development of the learner

9. The beginning teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others and actively seeks opportunities to grow professionally.
10. The beginning teacher fosters relationships with school colleagues, parents and educational partners in the larger community to support student learning and well being.
11. The beginning teacher understands theories and applications of technology in educational settings and has adequate technological skills to create meaningful learning opportunities for all students.

Student Learning Outcomes

1. Undergraduate students will be able to lead and interact with others in a manner that engages them in the music learning experience as demonstrated by the ability to model appropriate vocal skills.
2. Undergraduate students will be able to lead and interact with others in a manner that engages them in the music learning experience by providing clear verbal and nonverbal instruction, and exhibit appropriate affect demonstrated consistently throughout the professional sequence.
3. Undergraduate students will exhibit appropriate professional behaviors throughout professional sequence and within all field experience activities.
4. Undergraduate students will successfully complete 4 semesters of field experience culminating in the completion of the student teaching experience.
5. Undergraduate students will acquire teacher certification in both Missouri and Kansas.

Year I

Fall Semester	Credits	Spring Semester	Credits
VOICE 101	2	VOICE 102	2
VOICE 300	0	VOICE 300	0
CONSVTY 307C, 308A, 307B, or 301C	1	CONSVTY 307C, 308A, 307B, or 301C	1
CONSVTY 141	4	CONSVTY 142	4
CONSVTY 110	1	CONSVTY 123	1
CONSVTY 185A	2	CONSVTY 185B	2
Anchor I[1]	3	Anchor II[1]	3
DISC 100[1]	3	DISC 200[1]	3
	16		**16**

Year II

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
VOICE 201	2	VOICE 202	2	BIOLOGY 102	3
VOICE 300	0	VOICE 300	0	BIOLOGY 102L	1
CONSVTY 307C, 308A, 307B, or 301C	1	CONSVTY 307C, 308A, 307B, or 301C	1	PSYCH 210	3
CONSVTY 241	4	CONSVTY 242	4		
CONSVTY 223	1	CONSVTY 310	1		
CONSVTY 128	1	CONSVTY 373N	1		
CONSVTY 373P	1	CONSVTY 352	3		
CONSVTY 351	3	CONSVTY 373G	1		
Anchor III[1]	3	TCH-ED 403	3		
DISC 300[1]	3	MATH 110 or 116	3		
	19		**19**		**7**

Year III

Fall Semester	Credits	Spring Semester	Credits
VOICE 301	2	VOICE 302	2
VOICE 300	0	VOICE 300	0
CONSVTY 307C, 308A, 307B, or 301C	1	CONSVTY 307C, 308A, 307B, or 301C	1

CONSVTY 405	3	CONSVTY 382	2
CONSVTY 380	2	CONSVTY 357	2
CONSVTY 370	2	CONSVTY 387	2
CONSVTY 411A	1	CONSVTY 411B	1
CONSVTY 437	3	TCH-ED 420	3
Physical Science (Focus B)[1]	3	HISTORY 101 or 102 (Focus A)[1]	3
	17		**16**
Year IV			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
VOICE 401[2]	2	CONSVTY 412A	4
VOICE 300	0	CONSVTY 412B	4
CONSVTY 307C, 308A, 307B, or 301C	1	TCH-ED 419	3
CONSVTY 385	3	TCH-ED 437	3
CONSVTY 425A	2		
CONSVTY 411C	1		
TCH-ED 427	3		
TCH-ED 404	3		
POL-SCI 210 (Focus C)[1]	3		
	18		**14**

Total Credits: 142

Required Courses

1 UMKC General Education Curriculum (http://www.umkc.edu/core) - 30 Credit Hours, CONSVTY 151 recommended as Anchor I.

2 A 30-minute recital is required. Applied study requirement (choose one): 1. Voice, 14 hours; 2. Piano, 14 hours; voice (must complete at least 202), eight hours. 3. Organ or guitar, 14 hours; voice (must complete at least 202) eight hours.

3 All students whose applied area is voice are required to participate satisfactorily in two opera productions as assigned by the choral faculty in consultation with voice and opera faculty.

4 Two seven-credit-hour experiences divided between the CONSVTY and School of Education provide certification in Music K-12.

Professional Education Courses

TCH-ED 427	Reading in the Secondary School	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 419 & TCH-ED 437	Student Teaching in Elementary School and Student Teaching in Secondary School [1]	6-24

1 Two seven-credit-hour experiences divided between the CONSVTY and School of Education provide certification in Music K-12.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Music Education - Instrumental Emphasis Area

The Conservatory's Music Teacher Preparation program seeks to prepare teachers who:

- Have a strong liberal arts education and who are well-grounded in their content field(s).
- Demonstrate the development of pedagogic skills.
- Possess a professional and caring commitment to education.

Program goals are based on a set of key principles and express knowledge, skills and dispositions. These goals reflect the current knowledge base of teacher education as well as a commitment to the preparation of teachers who will be able to practice in schools as they are, and schools as they might be.

Program Goals

1. The beginning teacher understands the discipline(s) he or she will teach and can create learning experiences that make these aspects of the subject matter meaningful to students.
2. The beginning teacher is able to engage in long range planning and curriculum development and evaluation based upon district, state and national performance standards.
3. The beginning teacher understands how children learn and develop, and can provide opportunities that support their intellectual, social and personal development.
4. The beginning teacher understands and respects students' differences and creates instructional opportunities that are adapted to diverse learners.
5. The beginning teacher is able to use a variety of instructional strategies to encourage learners' development of critical thinking, problem solving and process skills.
6. The beginning teacher creates a productive learning environment through the use of individual and group motivation that encourages positive social interaction, active engagement in learning, and self-motivation.
7. The beginning teacher models effective communication techniques (verbal, non-verbal, media, etc.) and facilitates student communication, collaboration and supportive interaction in the classroom.
8. The beginning teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, emotional and physical development of the learner
9. The beginning teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others and actively seeks opportunities to grow professionally.
10. The beginning teacher fosters relationships with school colleagues, parents and educational partners in the larger community to support student learning and well-being.
11. The beginning teacher understands theories and applications of technology in educational settings and has adequate technological skills to create meaningful learning opportunities for all students.

Student Learning Outcomes

1. Students will complete a Teacher Work Sample project in conjunction with the final four semesters of their professional sequence including field experience. This project requires students to identify salient aspects of the teaching setting(s), design and execute a teaching unit, show student learning, and provide both formative and summative reflection of the process. (State mandated for certification)
2. Undergraduate students will be able to lead and interact with others in a manner that engages them in the music learning experience by providing clear verbal and nonverbal instruction, and exhibit appropriate affect demonstrated consistently throughout the professional sequence.
3. Undergraduate students will exhibit appropriate professional behaviors throughout the professional sequence and within all field experience activities.
4. Undergraduate students will successfully complete 4 semesters of field experience culminating in the completion of the student teaching experience.
5. Undergraduate students will acquire teacher certification in both Missouri and Kansas.

Required Courses

Required Music Courses

Year I

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
Applied Lessons 101[1]	2	Applied Lessons 102[1]	2	BIOLOGY 102[4]	3
Studio Class[2]	0	Studio Class[2]	0	BIOLOGY 102L[4]	1

CONSVTY 141	4	CONSVTY 306A, 306C, or 302	2		
CONSVTY 306A, 306C, or 302	2	CONSVTY 142	4		
CONSVTY 110	1	CONSVTY 123	1		
Instrument Techniques - TBD	1	Instrument Techniques - TBD	1		
Anchor I[3]	3	Anchor II[3]	3		
DISC 100[3]	3	DISC 200[3]	3		
	16		**16**		**4**

Year II

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
Applied Lessons 201[1]	2	Applied Lessons 202[1]	2	PSYCH 210[4]	3
CONSVTY 300[2]	0	Studio Class[2]	0		
CONSVTY 306A, 306C, or 302	2	CONSVTY 306A, 306C, or 302	2		
CONSVTY 241	4	CONSVTY 242	4		
CONSVTY 223	1	CONSVTY 310	1		
CONSVTY 128 (Ensemble - TBD)	1	CONSVTY 437	3		
Instrument Techniques - TBD	1	Instrument Techniques - TBD	1		
CONSVTY 101C	2	TCH-ED 403	3		
Anchor III[3]	3	MATH 110 or 116 (Focus B)[3]	3		
DISC 300[3]	3				
	19		**19**		**3**

Year III

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
Applied Lessons 301[1]	2	Applied Lessons 302[1]	2	HISTORY 101 or 102 (Focus Elective)[3]	3
Studio Class[2]	0	Studio Class[2]	0	Focus A[3, 4]	3
CONSVTY 306A, 306C, or 302	2	CONSVTY 306A, 306C, or 302	2		
CONSVTY 351	3	CONSVTY 352	3		
CONSVTY 405	3	CONSVTY 383	2		
CONSVTY 381	2	CONSVTY 386	2		
CONSVTY 270	2	CONSVTY 411B	1		
CONSVTY 358	3	CONSVTY 378	2		
CONSVTY 411A	1	CONSVTY 378L	1		
		TCH-ED 420	3		
		CONSVTY 424	3		
	18		**21**		**6**

Year IV

Fall Semester	Credits	Spring Semester	Credits
Applied Lessons 401[1]	2	CONSVTY 412A	4
Studio Class[2]	0	CONSVTY 412B	4
CONSVTY 306A, 306C, or 302	2	TCH-ED 419	3
CONSVTY 385	3	TCH-ED 437	3
CONSVTY 425B or 331	2		
CONSVTY 411C	1		

TCH-ED 427[5]	3	
TCH-ED 404[5]	3	
POL-SCI 210 (Focus C)[3]	3	
	19	**14**

Total Credits: 155

1 List of instrument specific course numbers for applied lessons (p.)

2 List of instrument specific course numbers for studio class (p.)

3 UMKC General Education Curriculum (http://www.umkc.edu/core), CONSVTY 151 recommended for Anchor I.

4 These courses may be able to be satisfied with AP credit.

5 Two seven-credit-hour experiences divided between the Conservatory and School of Education provide certification in Music K-12.

Professional Education Courses

These courses can be taken in the summer.

TCH-ED 427	Reading in the Secondary School	3
TCH-ED 403	Educational Psychology	3
TCH-ED 404	Education of the Exceptional Child and Youth	3
TCH-ED 420	Adolescent Development	3
TCH-ED 419 & TCH-ED 437	Student Teaching in Elementary School and Student Teaching in Secondary School [1]	6-24

General Education Courses

UMKC General Education Curriculum (http://www.umkc.edu/core) - 30 Credit Hours

Additional Teacher Education Studies

Studies in other areas of human achievement are important in the education of musicians. As a result, students are required to develop an awareness of basic ideas and concepts in:

- Natural and physical sciences
- Social sciences and communication
- Other areas of the arts and humanities

Students are encouraged to view the combination of musicianship and general studies as a means of developing a broad foundation for future artistic and intellectual development.

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Graduate Programs

General Information

The Conservatory of Music and Dance offers graduate programs leading to the following degrees: master of arts in music; master of arts in music (music therapy emphasis); master of music in music composition, conducting, musicology, music theory and performance; master of music education; and doctorate of musical arts in music composition, conducting and performance. The Conservatory participates in the Interdisciplinary Ph.D program (http://sgs.umkc.edu/iphd) for students who desire music education as their coordinating discipline and education as a co-discipline. Graduate students in the Conservatory are also subject to the regulations, listed in the General Graduate Academic Regulations and Information (p. 774) section of this catalog.

Admission Requirements

Admission to the Conservatory of Music and Dance does not constitute an approval of major. Graduate students attending the Conservatory of Music and Dance do not have a major until divisional requirements are met and an approved planned program of study is filed.

Requirements for Admission

All students applying for admission must:

- Complete an application for admission.
- Submit transcripts of all prior work.
- Possess a minimum overall grade-point average of 3.0 for all prior coursework.
- Perform an applied audition, the purpose of which is diagnostic only, except as indicated in certain divisional standards.

Meet admission standards listed below:

- Choral Conducting
  - Master's and doctoral degrees: live interview/choral conducting students are required to audition before enrolling in applied lessons, but may be admitted without an applied audition.
- Orchestral/Wind Conducting
  - Master's and doctoral degrees: live interview/applied audition.
- Master of Arts
  - Achieve the level of (APPLIED INSTRUMENT) 302 at the audition or submit area of concentration approval form.
- Music Composition
  - Master's and doctoral degrees: submit portfolio of compositions for evaluation.
- Music Education
  - Master's degree: document completion of a bachelor's degree in music education or the equivalent/have an acceptable interview with faculty from this discipline/provide evidence of musical proficiencies applicable to music education settings.
- Musicology
  - Master's degree:
    - i Possess a bachelor's degree in music.
    - ii Possess a minimum grade-point average of 3.0 in undergraduate music history courses.
    - iii Submit examples of writing. (The writing sample should be either 1) a research paper on some aspect of the major field - can be an earlier term paper from the baccalaureate degree or 2) a senior project from the baccalaureate degree.)
    - iv Possess reading knowledge in at least one language other than English.
- Music Theory
  - Master's degree:
    - i Possess a bachelor's degree in music theory or the equivalent.
    - ii Possess a minimum grade-point average of 3.0 in undergraduate music theory courses.
    - iii Perform a keyboard proficiency examination.
    - iv Submit examples of writing.
    - v Translate a selection into English from either French or German using a dictionary.
- Music Therapy
  - Master's degree:
    - i (a) Possess a bachelor's degree in music therapy from an NASM-accredited institution or the equivalent. (b) Possess a bachelor's degree in music or music education from an NASM-accredited institution or the equivalent. Students who do not have the appropriate music therapy professional status must pursue a music therapy equivalency program of study that is inclusive of all undergraduate music therapy requirements before being admitted to the master's program. Provisional admission to the master of arts in music-music therapy degree may be granted by the music therapy faculty.
    - ii Have an acceptable interview with one or more members of the music therapy faculty.
    - iii Demonstrate leadership ability and music skills through a successful music therapy clinical presentation in a music therapy setting. This demonstration may consist of a live presentation observed by UMKC music therapy faculty, or a videotape of a session submitted to the music therapy faculty.
- Performance

- Master's degree: achieve (APPLIED INSTRUMENT) 5501level on the major instrument at the audition.
- M.M. in Performance: Voice Emphasis, Opera Track: achieve VOICE 5501 at the audition; audition must include four arias in four different languages and styles.
- Doctoral degree: achieve (APPLIED INSTRUMENT) 5601 on the major instrument at the audition.

- Performer's Certificate
  a. Possess a bachelor's degree in music.
  b. Achieve (APPLIED INSTRUMENT) 5501 at the audition.
  c. Interview with faculty/coaches in the applied area.
  d. Submit a standard resume including performance experiences.
- Artist's Certificate
  a. Possess a master's degree in music or the appropriate equivalent as determined by applied faculty in the area.
  b. Achieve (APPLIED INSTRUMENT) 5601 at the audition.
  c. Interview with faculty/coaches in the applied area.
  d. Submit a standard resume including performance experiences.

Matriculation Examination

The matriculation exam applies to all students whose degree program requires a 5500-level music history and/or music theory class. The matriculation examination in dictation, music theory and music history must be completed by students before enrolling for the term of admission. Students must pass all sections of the exam *or* complete review courses (421A/B, 422A/B/C with a grade of B- or higher) before enrolling in 5500-level theory and history courses.

Students in the MM in Performance: Vocal Emphasis (including Opera Track) must demonstrate proficiency in Italian, German, and French lyric diction.

Graduate Assistantships, Fellowships and Scholarships

Graduate assistantships are available with stipends varying for the academic year depending upon assignment. Assistantships are available in accompanying, assessment, conducting, instrumental ensembles, jazz and studio music, keyboard skills, music appreciation, music composition, music education, musicology, music theory, percussion, pep band, piano, saxophone, recording/lighting, stage management and voice. Recipients are expected to devote 10 hours a week in assigned duties. Applicants for assistantships should have and maintain a minimum 3.0 (B) grade-point average.

Students who wish to apply for assistantships or fellowships should visit Conservatory Admissions (http://conservatory.umkc.edu/content.cfm?cont=%22%27RX%20%0A) for application materials and a list of current positions. Applications must be submitted by March 1. Awards will be made by April 1, and a letter of acceptance or rejection sent to the applicant by April 15. Awarding a graduate assistantship is contingent upon admission.

For information concerning assistantships, fellowships and other forms of student financial aid and scholarships, contact the

Conservatory Admissions Office
(816) 235-**2932**
cadmissions@umkc.edu

and the

Financial Aid and Scholarships Office
University of Missouri-Kansas City
5115 Oak St.
Kansas City, MO 64110-2499
http://www.sfa.umkc.edu

Degree Requirements

Retention and Minimum Grades

Conservatory graduate students must maintain a 3.0 graduate grade-point average in order to remain in good standing. A maximum of two courses not exceeding three hours of credit in each course at the 5500 or 5600 level in which C's are received shall be acceptable for the planned program of any advanced degree. No grade lower than a 3.0 (B) is acceptable in the major field.

Ensemble Requirements

All graduate students in the master of music and doctor of musical arts performance degree programs must enroll in Conservatory Wind Ensemble, Conservatory Wind Symphony or Conservatory Orchestra for a minimum of two semesters if their major instrument is an orchestral instrument. Master of music students in vocal performance must participate in Bella Voice, Conservatory Concert Choir or Conservatory Singers for a minimum of two semesters.

All graduate students in the doctor of musical arts conducting degree program are required to participate in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student.

Foreign Language Proficiency Requirements

Master's students in musicology and theory, as well as doctoral students in conducting and performance must satisfy language requirements for the degree.

For all M.M. students in Musicology, a grade of B- (2.7) or better in a first-semester, sophomore-level foreign language course is required. Students must study French, German or Italian unless the substitution of another language is approved by the supervisory committee. A language proficiency test may be substituted for course requirements, provided it documents language capabilities equivalent to the completion of a first-semester, sophomore-level, course. This must be approved in advance by the supervisory committee. In such cases, a letter describing the process and results must be forwarded to the chair of the supervisory committee, the musicology area coordinator, and the Conservatory Associate Dean for Graduate Studies.

For master's students in theory as well as doctoral students in conducting and performance *who speak English as their first language*, a grade of B- (2.7) or better in a first-semester, sophomore-level foreign language course or C (2.0) work or better in each of two junior-level courses or in one senior-level literature or civilization course is viewed as an adequate demonstration of foreign language skills. Students must study French, German or Italian unless the substitution of another language is approved by a minimum of two-thirds of the supervisory committee. A language proficiency test, if provided by language instructors or departments, may be substituted for course requirements provided it documents language capabilities equivalent to the previously described courses. In such cases, a letter from the university language professor, describing the process and results, must be forwarded to the Conservatory Associate Dean for Graduate Studies. Doctoral students in conducting or performance *who speak English as a second language* must achieve a score of 600 on the TOEFL exam. If students have not completed a TOEFL exam with a score greater than 600 before arriving at UMKC, they must complete a language test in English provided by UMKC's Applied Language Institute. All courses recommended by ALI must be successfully completed and a score of 600 on the TOEFL, or the equivalent as determined by ALI must be achieved. This policy applies to all ESL students regardless of the number of years they have studied in the United States.

The DMA in Music Composition program does not have a foreign language requirement.

Doctor of Musical Arts

Program Requirements

Ordinarily, doctor of musical arts candidates will be expected to show from 75 to 90 hours of approved coursework beyond the bachelor's degree (including the master's degree) on their planned programs. Approximately 80 percent of the coursework on the planned program must be at the graduate level (5500-5600).

If it is of acceptable quality and appropriate to the student's program, graduate credit not to exceed more than one-half the total credit earned beyond the bachelor's degree may be transferred from another institution to a doctoral program. Except for courses included in the earned master's degree, work done at institutions other than UMKC must have been completed within nine years of the awarding of the degree. A D.M.A. or Ph.D. student must take and pass the doctoral comprehensive examination and advance to candidacy within five years from the beginning of doctoral coursework (within four years if entering with a master's degree in the same or closely related field). After the establishment of degree candidacy, a maximum of five years will be allowed for completion of degree requirements. D.M.A. students in conducting and performance must demonstrate proficiency in one foreign language. All D.M.A. students must satisfy the residency requirement. Residency for the D.M.A. cannot begin until the first term of enrollment as a D.M.A. student at the Conservatory. The residency requirement for the D.M.A. may be satisfied in any one of the following ways: 1) two adjacent semesters with a minimum of nine hours each, or 2) one semester with a minimum of nine hours and two summer sessions with a minimum of five hours each, provided that the full-time semester is adjacent to one of the summer sessions [it is expected that the summer sessions will be consecutive], or 3) completion of 24 hours within 18 consecutive months.

The Supervisory Committee

The supervisory committee for students seeking the doctor of musical arts shall consist of three faculty members who will approve the planned program of study and the doctoral research plan, and agree to serve as the three faculty responsible for writing and grading the major portion of the doctoral comprehensive examination.

Comprehensive Examinations

The Comprehensive Examinations consist of three separate exams.

First Exam Procedures

The First Exam focuses on Music History and Theory and is designed to assess students' foundational knowledge for advanced study. The exams will be given the seventh Saturday of the spring semester and students will take the exam in their second full year of coursework. The exams will consist of two three-hour exams that cover an integrated application of ideas from music history and music theory and will be designed, proctored, and graded by all fulltime faculty members in those two areas. Based on the collective recommendation of the faculty, students will be assigned a grade of high pass, pass, or fail for each section of the exam. Students who fail to pass any portion of the exam will be given feedback as to the recommended courses

needed to make up any deficiencies in their third year of coursework and will be allowed to retake those portions the following year. Students must fully pass the First Exam to be eligible to take the Second Exam and continue to candidacy.

Second Exam Procedures

The Second Exam tests students' understanding of their chosen field of study and are required for advancement to candidacy. These exams are held the fifth week of both the Fall and Winter/Spring semesters and must be taken after the end of coursework and before work begins on doctoral projects. Students wishing to take the exams should notify their committee chair of their intentions and submit a complete Comprehensive Exam Request Form to the graduate advising office by at least the last week of classes the semester before they take the exam. Testing is proctored from 9:00 until 5:00 each day of that week, and students are responsible for arranging their schedules and signing up for the times in which they plan to take the test.

The Second Exam is administered by a D.M.A Committee made up of a faculty chair and two other faculty members. Students are responsible for selecting their chairs, who normally will be the principle instructor or director of research, and then the remainder of their committee in consultation with the chair. The committee members are communicated to the advising office through signatures on the Comprehensive Exam Request Form.

Each D.M.A. student is given eight hours in which to answer questions submitted by the three members of his or her committee. Each member of the committee must contribute to the Second Exam, and while the number of hours for questions given to each member is at the chair's discretion, typical practice is four hours for the chair and two hours for each member (Each "hour" of questions should take approximately one hour to complete). Committee members must submit their questions to the chair by the Wednesday of the third week of the semester. The chair then submits the entire exam to the Comprehensive Exam Coordinator by the end of the third week of the semester. It is the chair's responsibility in consultation with the committee to ensure that there are no overlaps in questions and that the exam adequately examines the field of study. Content of the examination questions should reflect the content of study specific to each student's degree. Members of the D.M.A. Committee are responsible for determining the appropriate focus for questions. Those questions should not function as a retesting of course information, but as an assessment of a student's understanding and ability to connect and apply course content more broadly.

Grading for the Second Exam

Once a student has completed the exam, the Comprehensive Exam Coordinator distributes written responses to the faculty responsible for each question. That faculty member grades the responses and relays their recommendation of high pass, pass, or fail to the committee chair and the Comprehensive Exam Coordinator. Students must receive a grade of pass or high pass on each question to pass the Second Exam and advance to candidacy. Students are allowed to retake portions of the exam they failed one time, and the format of that retest is at the discretion of the committee member responsible for the question.

Third Exam Procedures

At the conclusion of all doctoral points needed for the D.M.A. degree and contingent upon successful completion of the Second Exam, members of the student's D.M.A. Committee will reconvene for a two-hour oral defense of the work done during candidacy for the degree. In the case of areas that require dissertations, the dissertation defense acts as the Third Exam. For all other areas, the Third Exam is expected to consist of questions synthesizing the student's work in all areas of study in their doctoral documents and/or performances. The Committee Chair will schedule the Third Exam, which may be postponed at the Chair's discretion. The Third Exam is the last step in the conferral of D.M.A degrees.

DMA Research / Artistic Applications

4 points required
DMA Research

Dissertation (4 hrs/4 points)

CONS 5699 – Supervised by five committee members, graded by major professor, reviewed by university, paper filed in library.

All students in the DMA program in Composition must complete a dissertation to satisfy degree requirements. This usually takes the form of an extended composition in a format approved by the composition faculty. Students in the DMA Conducting and DMA Performance programs may choose to satisfy degree requirements pertaining to doctoral research by writing a dissertation (other options for Conducting and Performance majors are described in the next section).

Other Doctoral Research Options

DMA students in Conducting and Performance may choose to satisfy doctoral research requirements through projects other than the dissertation. Five (5) options are currently offered. They include support papers for recitals, extended research papers, additional courses in research methodology, music products that might include compositions, arrangements, or performance editions, and, finally, an additional recital. Students must complete four "points" of research credit to fulfill the doctoral research requirement. These points can come from almost any combination of the five categories or, in some cases, can come from a single category. Projects can be initiated at any point during the program of study but at least one project reflecting the student's ability to work independently must be completed after comprehensive exams are passed. Students must complete a DMA Research Applications Proposal (available from the Graduate Advising Office) and gather the signatures of the appropriate project supervisors as well as the supervisory committee. This document should be submitted to the Graduate Advising Office before in-depth research is begun.

Specifics for each doctoral research option are outlined hereafter:

Doctoral Recital Support Paper

(worth 1 point apiece; maximum of two points from this category for conducting majors and three for performance majors) [CONS 5697P for Performance majors; CONS 5697BP for Conducting majors]

The Recital support paper should be approximately 25-50 pages in length. It should address some aspect of the recital such as unusual pedaling specifications in a piece, biographical information about the composers, unusual aspects of performance practice, aspects pertaining to the form of the pieces, etc. The paper is supervised and graded by the student's applied teacher, assuming that the faculty member holds some type of graduate faculty status. A copy of the final paper should be submitted for the student file.

Doctoral Research Problems

(worth 2 points apiece; students may do one or two projects from this category) [CONS 5698]

The Doctoral research paper should be approximately 50-75 pages in length. It may address any aspect of interest to the student and supervisor. Examples might include an extensive analysis of compositions by a single composer, literature dealing with performance anxiety, an analysis of a particular genre in a designated time period, etc. The doctoral research paper can be an extensive review of literature. The paper can be supervised and graded by any willing faculty member holding some type of graduate faculty status. A copy of the final paper should be submitted for the student file.

Additional Research Courses

(worth 1 point for each 3 credit hour course; students may take a maximum of two courses for doctoral research credit) [e.g., CONS 5594A and B]

The Conservatory requires CONS 5593 Introduction to Research and Bibliography for the DMA degree. Any course beyond CONS 5593 that specifically addresses research methodology as its primary focus may be considered for credit in this category. The Conservatory offers three courses, which may be taken for credit including Advanced Research and Bibliography (CONS 5693), Introduction to Descriptive and Experimental Research in Music (CONS 5594A) and Advanced Descriptive and Experimental Research in Music (CONS 5594B). Courses from other UMKC departments could also be considered. Courses that include research but do not specifically focus on methodology can not be included in this category. Students completing 2 points from this category must combine the additional research courses with a Doctoral Research Problems project (CONS 5698).

Doctoral Music Product

(credit is variable from 1-4 points depending on the length and complexity of the product; students may do 1-4 projects from this category) [CONS 5698B]

While the dissertation, doctoral recital paper, doctoral research problem, and to some extent the additional research course, will deal with "traditional" research expressed in standard writing formats, the doctoral music product allows a student to create through the medium of music. Products can take the form of original compositions, arrangements or transcriptions of music, or the creation of performance editions of existing works. The pieces should include a bibliography of sources consulted while developing the product and an analysis of the work recognizing specific performance or rehearsal challenges. The scope of the product, including the amount of credit to be awarded for the project, is developed in consultation with the supervisory committee. The project is supervised and graded by an appropriate, willing faculty member with some type of graduate faculty status. If composition faculty are to serve as supervisors for a project, certain prerequisite skills or classes may be required. A copy of the final music product with documentation should be submitted for the student file.

Additional Recital

(maximum of 1 point from this category) [CONS 5697C]

The extra recital is supervised by the applied or conducting teacher. The recital is graded in the same manner as other recitals for the Conducting and Performance degrees.

Artist's Certificate Required Courses

Student Learning Outcomes

Instrumental

1. To present three public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To gain broad experience in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career.

Keyboard

1. To present three public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To demonstrate proficiency in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career, and demonstrate an understanding of the principles of effective professional networking.

Voice

1. To present three public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To gain broad experience in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career.

Lessons and Recitals (Solo Experiences) [1]	16
Electives [2]	13
Total Credits: 29 (minimum)	

1 Instrumental Students - Lessons = 4 hours, recitals = 12 hours; Piano Students - Lessons = 4 hours, recitals = 12 hours. One recital must include a complete concerto accompanied by second piano, and one recital must include at least one major chamber work. In addition to the three recitals, two collaborative recitals are required. The collaborative recital requirement is part of the applied piano lesson - no extra credit is received; Voice Students - Lessons = four hours, recitals, opera roles, and/or oratorio roles =12 hours.

2 Instrumental Students - Students must participate or enroll in four large ensembles and two chamber ensembles; Keyboard Students - Chamber music, literature and pedagogy courses are recommended; Voice Students - Opera workshop, vocal literature, history of opera, vocal pedagogy, related arts courses in theater and art, as well as independent study experiences in language and performance are recommended.

Note: Voice students must pass the diction proficiency test in French, German and Italian.

Doctor of Musical Arts in Conducting Required Courses

Student Learning Outcomes

1. To conduct public concerts or recitals that demonstrate a superior level of artistry and technique.
2. To understand and be able to communicate the historical and analytical components of music.
3. To reflect on broader dimensions of their own musical experience.
4. To be familiar with advanced research resources in music.
5. To demonstrate a strong command of repertory.

Choral Track

Required Courses

CONSVTY 5500-5600	Music History (three courses required) [1]	9
CONSVTY 5500-5600	Music Theory (three courses required)	9
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
Take the following course 6 times:		12
CONSVTY 5582 Advanced Choral Conducting		
Take the following course 4 times:		8
CONSVTY 5587	Seminar In Choral Literature	
CONSVTY 5697B	Doctoral Conducting Performance [2]	6
Select four "research points" from the following:		4
CONSVTY 5697	Doctoral Recital	
CONSVTY 5698	Research Problems	
CONSVTY 5699	Dissertation Research [3]	
Total Credits: 51 (minimum)		

1 All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5555-CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.

2 Conducting recitals may be done with the approval of the major faculty advisor at any time after successful completion of the Graduate Approval of Major. Two public performances with supporting documents are required for the degree.

3 A minimum of one doctoral research project, exhibiting the highest level of independence, must be finished after comprehensive examinations are successfully completed. Two rehearsal/lecture demonstrations must be completed. Participation in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student is required.

Language Requirement

A proficiency in one foreign language is required. See this section (p. 679) of the catalog for options.

Orchestral Track

Required Courses

CONSVTY 5500-5600	Music History (three courses required) [2]	9
CONSVTY 5500-5600	Music Theory (three courses required)	9
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
Take 3 semesters of either of the following courses:		6
CONSVTY 5583A	Advanced Instrumental Conducting	
or CONSVTY 5583B	Advanced Instrumental Conducting - Orchestra	
Take the following course 3 times:		6
CONSVTY 5586A	Seminar In Orchestral Literature	
CONSVTY 5582 Advanced Choral Conducting		2
Applied Music (APPLIED INSTRUMENT) 5500A [1]		3
CONSVTY 5697B	Doctoral Conducting Performance [3]	8
Select four " research points" from the following: [4]		4
CONSVTY 5697	Doctoral Recital	
CONSVTY 5698	Research Problems	
CONSVTY 5699	Dissertation Research	
Total Credits: 50 (minimum)		

1 Each Doctor of Musical Arts Conducting student in the Orchestral and Wind tracks must enroll in applied music the first term of registration as a full-time, degree-seeking student. If the applicant qualifies for applied music at the 5500A level, a minimum of two credit hours is required. If the applicant does not qualify for applied music at the 5500A level, then the student must enroll in applied music until completion of the 5500A level or until graduation. Orchestral and wind majors will be further required to enroll in two additional semesters of two different instruments at the 5500B level as advised by the conducting faculty.

2 All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5555 - CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.

3 Conducting recitals may be done with the approval of the major faculty advisor at any time after successful completion of the Graduate Approval of Major. Two public performances with supporting documents are required for the degree.

4 A minimum of one doctoral research project, exhibiting the highest level of independence, must be finished after comprehensive examinations are successfully completed. Two rehearsal/lecture demonstrations must be completed. Participation in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student is required.

Language Requirement

A proficiency in one foreign language is required. See this section (p. 679) of the catalog for options.

Wind Track

Required Courses

CONSVTY 5500-5600	Music History (three required) [2]	9
CONSVTY 5500-5600	Music Theory (three required)	9
CONSVTY 5593	Introduction To Research And Bibliography In Music	3

Take three semesters of either of the following courses:		6
CONSVTY 5583A	Advanced Instrumental Conducting	
or CONSVTY 5583C	Advanced Instrumental Conducting - Band	
Take the following course 4 times:		8
CONSVTY 5586B	Seminar In Wind/Band Literature	
Applied Music (APPLIED INSTRUMENT) 5500A [1]		2
CONSVTY 5697B	Doctoral Conducting Performance [3]	8
Select four "research points" from the following: [4]		4
CONSVTY 5697	Doctoral Recital	
CONSVTY 5698	Research Problems	
CONSVTY 5699	Dissertation Research	
Total Credits: 49 (minimum)		

1. Each Doctor of Musical Arts Conducting student in the Orchestral and Wind tracks must enroll in applied music the first term of registration as a full-time, degree-seeking student. If the applicant qualifies for applied music at the 5500A level, a minimum of two credit hours is required. If the applicant does not qualify for applied music at the 5500A level, then the student must enroll in applied music until completion of the 5500A level or until graduation. Orchestral and wind majors will be further required to enroll in two additional semesters of two different instruments at the 5500B level as advised by the conducting faculty.
2. All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5555 - CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.
3. Conducting recitals may be done with the approval of the major faculty advisor at any time after successful completion of the Graduate Approval of Major. Two public performances with supporting documents are required for the degree.
4. A minimum of one doctoral research project, exhibiting the highest level of independence, must be finished after comprehensive examinations are successfully completed. Two rehearsal/lecture demonstrations must be completed. Participation in at least one major ensemble, as advised by the conducting faculty, during each term of enrollment as a full-time student is required.

Language Requirement

A proficiency in one foreign language is required. See this section (p. 679) of the catalog for options.

Doctor of Musical Arts in Music Composition Required Courses

Student Learning Outcomes

1. Students will refine their musical voice as creative artists, and their skills as collaborators with performers and generative artists.
2. Students will demonstrate their mastery of technical skills in music composition, analysis, and of style, genre and media.
3. Students will demonstrate active participation in the global community of composition with performances, commissions, presentations and prizes illustrated by submission to "calls for scores".
4. Students will master their ability to speak and write about their music and the music of their time.

Required Courses

Conservatory 5500-5600	Music Theory (three courses)	9
Conservatory 5500-5600	Music History (three courses) [1]	9
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
Take the following course 3 times:		9
CONSVTY 5533	Advanced Composition	
CONSVTY 5533	Advanced Composition	3
or CONSVTY 5534	Advanced Electronic Music Composition	
CONSVTY 5699	Dissertation Research [2]	6
Area of Concentration [3]		11
Electives		3
Total Credits		53

1 All doctoral students are required to complete three graduate music history courses. One must be a period course (CONSVTY 5555 - CONSVTY 5559B), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the music history faculty.

2 An extended work in a format approved by the composition faculty. Two copies of the full score must be placed in the Conservatory Library.

3 The area of concentration is developed by the student with guidance and approval of the supervisory committee as part of the planned program. Examples include Applied Music/Ensemble Performance, Music Scholarship, Conducting (Choral and/or Instrumental), Music Technology and interdisciplinary courses.

Doctor of Musical Arts in Performance Required Courses

Student Learning Outcomes

Instrumental

1. To present three superior level public solo recitals and a lecture recital that are artistically convincing, and historically and theoretically accurate.
2. To understand and be able to communicate the historical and analytical components of music.
3. To reflect on broader dimensions of their own musical experience.
4. To be familiar with advanced research resources in music.

Keyboard

1. To present three superior level public solo recitals and a lecture recital that are artistically convincing, and historically and theoretically accurate.
2. To demonstrate an understanding of (and be able to communicate about) the historical and analytical components of music.
3. To reflect on and apply the broader dimensions of their own musical experience.
4. To demonstrate familiarity with advanced research resources in music.

Voice

1. To present three superior level public solo recitals and a lecture recital which are artistically mature, historically and theoretically informed, and stylistically and linguistically accurate.
2. To understand and be able to communicate the historical and analytical components of music, not only in coursework but also in other situations relevant to the degree: lecture recitals, doctoral projects, dissertation, teaching (as a GTA or private teacher elsewhere).
3. To reflect on and apply the broader dimensions of their own musical experiences.
4. To demonstrate a familiarity and practical knowledge with advanced research resources in music.

Required Courses

CONSVTY 5500-5600	Music History (three required) [4]	9
CONSVTY 5500-5600	Music Theory (three required)	9
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
(APPLIED INSTRUMENT) 5601 [1,2]		4
Take the following course 3 times:		12
CONSVTY 5697	Doctoral Recital [2,3]	
CONSVTY 5591 Advanced Pedagogy (instrument specific)		2-3
CONSVTY 5697A	Doctoral Lecture Recital	4
Select four "research points" from the following: [5]		4
CONSVTY 5697	Doctoral Recital	
CONSVTY 5698	Research Problems	
CONSVTY 5699	Dissertation Research	
Total Credits		47-48

1 A minimum of one semester of (APPLIED INSTRUMENT) 5601 is required before the first solo recital. Voice performance majors, with the approval of the Vocal Studies Division, may enroll in CONSVTY 5697 any semester to receive credit for a major UMKC opera role (one time only).

2 Concurrent enrollment in (APPLIED INSTRUMENT) 300 is required for each semester of enrollment in (APPLIED INSTRUMENT) 5601 and CONSVTY 5697.

3 Performance majors must enroll in (APPLIED INSTRUMENT) 5601; CONSVTY 5697; or CONSVTY 5697A, each semester of registration until the recital requirement has been fulfilled.

4 All doctoral students are required to complete three graduate music history courses. One must be a period course (Conservatory 5555-5559), one must be a seminar course, and the remaining course may be either. Any substitutions must be approved by the musicology faculty.

5 A minimum of one doctoral research project, exhibiting the highest level of independence, must be finished after comprehensive examinations are successfully completed.

Language Requirement

A proficiency in one foreign language is required. See this section (p. 679) of the catalog for options.

Notes

Voice Majors

Must enroll in:

CONSVTY 5547	Opera History	3
Select one of the following:		2
CONSVTY 5566A	Advanced Vocal Literature: French Melodies	
CONSVTY 5566B	Advanced Vocal Literature: German Lieder	
CONSVTY 5566C	Advanced Vocal Literature: Nationalistic Art Songs	
CONSVTY 5566D	Advanced Vocal Literature: 20Th Century Amer & Engl Art Songs	
CONSVTY 5548	Opera Literature	
Total Credits		5

Voice majors must pass the diction proficiency test in French, German and Italian.

Instrumental Majors

All students whose major is an orchestral instrument must be enrolled in Conservatory Wind Symphony, Wind Ensemble or Conservatory Orchestra for a minimum of two semesters.

A maximum of three semesters of an ensemble can be counted on any D.M.A. planned program of study.

Must include three major works of chamber music in the recital component of the degree as determined in consultation with students' applied professor. These works may be performed on one program, or spread among the three recitals.

Keyboard Majors

Piano majors must enroll for a total of two credits in chamber music. One of the three recitals (CONSVTY 5697) must include at least one major chamber work. In addition to the three recitals, three collaborative recitals must be completed. The collaborative recital requirement is part of the applied piano lesson-no extra credit is received.

Interdisciplinary Ph.D. study in Music Education

Program Requirements

The Conservatory participates in the Interdisciplinary Ph.D. Program (http://sgs.umkc.edu/iphd) for students who desire music education as their coordinating discipline and curriculum and instruction as a co-discipline. Students with a background in music therapy can elect music education as their coordinating discipline and choose from possible co-discipline options in consultation with the music therapy faculty.

Application is made through the School of Graduate Studies (http://sgs.umkc.edu).

Master's Degrees

General Information

The master of arts, master of music and master of music education degree programs require a minimum of 30 semester hours; at least 18 hours must be numbered 5500 or above. No 300- or 400-level courses may be included in a master's program if required in the comparable baccalaureate degree at the Conservatory of Music and Dance. CONSVTY 5599, CONSVTY 5598 or CONSVTY 5589 is required on all degree programs except performance. With the approval of the supervisory committee and the principal graduate adviser, students can transfer hours equal to 20 percent of the planned program from an accredited institution other than UMKC, but any such transfer credit must be less than seven years old at the time the degree is awarded. The official time limit for the completion of the master's degree is seven years.

Comprehensive Examination

The comprehensive examination must be taken during or after the last term of coursework. It is designed to last a total of eight hours and the content is at the discretion of the supervisory committee. The examination is offered during the fifth week of fall and spring semesters and may be scheduled during a summer session with the approval of the supervisory committee. If taken in the summer, the questions may not be graded until the Fall Semester. Students must be enrolled during the term the comprehensive examination is administered.

Project Option for Comprehensive Examination

Students wishing to opt for a Project in lieu of exam questions must inform the adviser during these sessions, and obtain a Comprehensive Examination Project Form (three copies).

Procedures:

1. As soon as possible after the advising session has taken place:
    a. Student secures the agreement of a faculty member to be their Comps Project Chair
    b. Student secures the agreement of two additional faculty to be committee members
    c. Student creates a half-page Project Description and secures all three signatures on the form, one copy of which remains with the Chair, another to the advisor; the third copy is retained by the student
    d. The advisor notifies the chair when the form has been received
2. Before the end of the Masters' Comps week (week five) in the semester when the project is to be completed:
    a. The student completes the project and provides appropriate documentation to the committee members. For events, students must provide video documentation for any committee members who were unable to attend.
3. Before the deadline provided by the Comprehensive Exam Coordinator each semester:
    a. Each committee member prepares and submits a report on the project, together with a grade of high pass, pass or fail, to the Chair.
    b. The Chair submits all reports and grades to the Comprehensive Exam Coordinator. Students must receive a grade of pass or high pass from each committee member to pass the Master's Comprehensive Project. Students are allowed to do further work on the project at the discretion of the Master's Committee.

Master of Arts in Music Required Courses

Student Learning Outcomes

1. Write at a publishable level about music in a way that demonstrates a high level of musical comprehension.
2. Be able to explore music within a variety of contexts, in order to provide insight and demonstrate comprehension of advancing musical concepts.
3. Create original music-based works, using the vehicle that serves as an appropriate academic focus.

Required Courses

Area of Concentration [1]		9
CONSVTY 5500-5600	Music Theory [2]	3
CONSVTY 5500-5600	Music History [3]	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
or CONSVTY 5594A	Introduction To Descriptive And Experimental Research In Music	
CONSVTY 5598	Research Problems	2
Applied Music Study [4]		2
Electives		8
Total Credits		30

1 The area of concentration is developed by the student with guidance and approval of the supervisory committee as part of the planned program. Nine hours of work in one discipline must be completed. Examples of concentration areas include (but are not limited to): Arts Administration, Composition, Conducting, Education, Musicology, Jazz and Studio Music, Performance, Theory and Therapy (equivalency).
All students applying for the Master of Arts in Music with an area of concentration in Jazz and Studio Music must audition on their applied instrument for the jazz studies faculty. No other audition is required. Applied lesson requirements will be fulfilled within the Jazz Division during the student's course of study.

2 Elective credit may be substituted for students pursuing an area of concentration in music theory.

3 Elective credit may be substituted for students pursuing an area of concentration in music history.

[4] If the applicant qualifies for applied lessons at the 302 level, a minimum of two credit hours is required. If the applicant does not qualify for applied lessons at the 302 level, the student must enroll in applied lessons for three terms or until completion of the 302 level. Students who chose a performance area of concentration must complete a minimum of one semester of 5500A. A total of nine hours of lessons/ensembles is required for an applied area of concentration.

Master of Arts in Music: Music Therapy Emphasis

Student Learning Outcomes

1. Graduate students will initiate the skills of community contact, planning, and collaboration in order to complete an advanced clinical experience within the community for 1-2 semesters prior to finishing their degree.
2. Graduate students will demonstrate advanced knowledge of a selected population and/or clinical area of practice as evidenced by treatment plan and implementation that are informed by a theoretical framework and the therapeutic function of music by the end of their advanced clinical rotation(s).
3. Graduate students will use advanced clinical musicianship in practice as demonstrated by the use of bar chords and advanced strumming and fingerpicking techniques on guitar, and advanced accompaniment patterns on piano, as well as composition for therapeutic effectiveness by the end of their advanced clinical rotation(s).
4. Graduate students will demonstrate an understanding of a theoretical framework to inform practice and research in an area of specialty before completing their degree.
5. Graduate students will develop a project that supports translational research before completing their degree.

Required Courses

Required:		
CONSVTY 5544	Advanced Clinical Experience	2
CONSVTY 5544	Advanced Clinical Experience	2
CONSVTY 5542	Clinical Supervision in Music Therapy	3
Select a minimum of 8 hours from the following:		
CONSVTY 5536	Improvisation in Music Therapy	3
CONSVTY 5537	Administration of Music Therapy	3
CONSVTY 5541	Theories and Practice of Music Therapy	3
CONSVTY 5545	Seminar In Music Therapy	2
Total hours this section: 15		
Specialization in Clinical or Research Emphasis:		
Clinical Emphasis Required		
CONSVTY 5594A	Introduction To Descriptive And Experimental Research In Music	3
CONSVTY 5589	Academic Portfolio	3
Clinical Emphasis: select a minimum of 5 hours from:		
CONSVTY 5544	Advanced Clinical Experience	2
CONSVTY 5545	Seminar In Music Therapy	2
VOICE, PIANO or GUITAR 5500C (applied lesson)		
CONSVTY 5500-5600 Music History or Music Theory		3
Research Emphasis Required:		
CONSVTY 5594A	Introduction To Descriptive And Experimental Research In Music	3
CONSVTY 5599	Thesis	3
Research Emphasis: Select a minimum of 5 hours from:		
CONSVTY 5584	Systematic and Integrated Reviews in Music	2
CONSVTY 5585	Practical Applications in Experimental Statistics and Research	3
CONSVTY 5545	Seminar In Music Therapy	2
Total hours this section: 11		
Electives in Area of Special Interest (suggested options):		
Gerontology Certificate program		
Health Services Administration		
Gerontology Administration		
Counseling Psychology and Counselor Education		

Education	
Sociology	
Total Electives: 11	
Total Credits: 37	

Notes: Students seeking this degree are not required to take the matriculation exams unless coursework in musicology and theory is required.

Master of Music Education Required Courses

Student Learning Outcomes

1. Graduate students will demonstrate scholarly competence in the organization, interpretation and evaluation of knowledge.
2. Graduate students will demonstrate professional competence in the communication and dissemination of knowledge.

Required Courses

CONSVTY 5500-5600	Music History or Theory	3
CONSVTY 5574	History And Philosophy Of Music Education	3
CONSVTY 5589	Academic Portfolio	3
or CONSVTY 5599	Thesis	
CONSVTY 5594A	Introduction To Descriptive And Experimental Research In Music	3
Applied Musicianship [1]		2
Methods/Materials Advanced Courses [2]		6
Electives		10
Total Credits		30

1 MME students wishing to satisfy the applied musicianship requirement by taking lessons in their undergraduate applied area will be required to perform an applied audition prior to enrolling in the first term. Typically, these lessons will occur on a TBA arrangement with applied faculty during the fall or spring semesters. These students must complete a semester of applied lessons at no lower than the 402-2 level. Other students who wish to refine applied skills through pedagogy study (e.g., CONSVTY 491x / CONSVTY 5591x or summer workshops) or through applied study on other instruments (e.g., APPLIED INSTRUMENT 5500C) will not be required to audition.

2 Methods/Materials Advanced Courses (e.g., Conservatory 5540x, 5582x, 5583x, 5586x, 5587x, Summer Workshops)

Master of Music in Conducting Required Courses

Student Learning Outcomes

1. To conduct public concerts or recitals that demonstrate a high level of artistry and technique.
2. To understand and be able to communicate the historical and analytical components of music.
3. To reflect on broader dimensions of their own musical experience.
4. To demonstrate familiarity with advanced research resources in music.
5. To demonstrate a knowledge of core repertory.

Choral Track

Required Courses

CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
Take 4 semesters of the following:		4
CONSVTY 5580	Advanced Choral Conducting-Masters Level	
Take 4 semesters of the following:		8
CONSVTY 5587	Seminar In Choral Literature	
CONSVTY 5597A	Master’s Conducting Performance [1]	4
CONSVTY 5598	Research Problems	2

Electives [2]		3
Total Credits: 30 (minimum)		

1 One public performance is required, as is one rehearsal or lecture demonstration.

2 Recommended electives for the Choral track include applied voice and vocal pedagogy.

Orchestral Track

Required Courses

CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
CONS 5583 Advanced Instrumental Conducting (any two from 5583A or 5583B)		4
CONSVTY 5582 Advanced Choral Conducting		2
Take 2 semesters of the following:		4
CONSVTY 5586A	Seminar In Orchestral Literature	
Applied Music [1]		2-6
CONSVTY 5597A	Master's Conducting Performance [2]	4
CONSVTY 5598	Research Problems	2
Electives		1-5
Total Credits: 30 (minimum)		

1 Orchestral and Wind tracks Applied Requirement The applicant must enroll in applied music the first term of registration as a full-time, degree-seeking student. Progress will be measured by the following:

1. If the applicant qualifies for applied music at the 401 level, a minimum of two credit hours is required.
2. If the applicant does not qualify for applied music at the 401 level, the student must enroll in applied music for a minimum of two terms, until completion of the 401 level, or until graduation.
3. In addition, instrumental conducting majors will be required to enroll in two terms of applied music on other appropriate instruments, as advised by the conducting faculty.

2 One public performance is required, as is one rehearsal or lecture demonstration.

Wind Track

Required Courses

CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
CONSVTY 5583 Advanced Instrumental Conducting (any two from 5583A or 5583C)		4
Take 2 semesters of the following:		4
CONSVTY 5586B	Seminar In Wind/Band Literature	
Applied Music [1]		2-6
CONSVTY 5597A	Master's Conducting Performance [2]	4
CONSVTY 5598	Research Problems	2
Electives		1-5
Total Credits: 30 (minimum)		

1 Orchestral and Wind tracks Applied Requirement The applicant must enroll in applied music the first term of registration as a full-time, degree-seeking student. Progress will be measured by the following:

1. If the applicant qualifies for applied music at the 401 level, a minimum of two credit hours is required.
2. If the applicant does not qualify for applied music at the 401 level, the student must enroll in applied music for a minimum of two terms, until completion of the 401 level, or until graduation.
3. In addition, instrumental conducting majors will be required to enroll in two terms of applied music on other appropriate instruments, as advised by the conducting faculty.

2 One public performance is required, as is one rehearsal or lecture demonstration.

Master of Music in Music Composition Required Courses

Student Learning Outcomes

1. Students will refine their musical voice as creative artists, and their skills as collaborators with performers and generative artists.
2. Students will demonstrate mastery of technical knowledge of writing for instruments, and large scale forms.
3. Students will further develop understanding of a variety of historical and current musical styles, genres, and media.
4. Students will refine their ability to speak and write about their music and the music of their time.
5. Students demonstrate activity in the field of composition through actively pursuing commissions, prizes, and performances.

Required Courses

CONSVTY 5500- CONSVTY 5600	Music History	3
CONSVTY 5500- CONSVTY 5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
Take the following course 3 times:		9
CONSVTY 5533	Advanced Composition	
CONSVTY 5531	Advanced Orchestration	3
CONSVTY 5599	Thesis [1]	4
Electives		5
Total Credits		30

[1] An appropriate composition. A score must be filed in the Conservatory Library.

Master of Music in Music Theory Required Courses

Student Learning Outcomes

1. Demonstrate insight into musical works of moderate complexity through grasp of theoretical concepts.
2. Convey familiarity and moderate fluency with standard theoretical and analytical concepts.
3. Utilize theoretical knowledge and insight to initiate substantial scholarly work in analysis, theory, and/or pedagogy.

Required Courses

CONSVTY 5593	Introduction To Research And Bibliography In Music	3
Music History (Graduate Level)		3
CONSVTY 5524B	Advanced Analysis II - Common Practice Period	3
CONSVTY 5524C	Advanced Analysis III - Contemporary Period	3
CONSVTY 5526A	Introduction to Schenkerian Theory and Analysis	3
CONSVTY 5526B	Schenkerian Analysis	3
CONSVTY 5591G	Pedagogy of Music Theory I	3
CONSVTY 5598	Research Problems	2
CONSVTY 5599	Thesis	6
Electives		6
Total Credits		35

Piano Proficiency Requirement

The Conservatory’s undergraduate piano proficiency requirement must be met.

Applied Music Requirement

Successful completion of one of the following is required:

- If the student qualifies for applied music at the 302 level, then no applied study is required.
- If the student does not qualify through audition for applied music at the 302 level, then the student must enroll for applied study for three semesters or until the 301 jury is passed.

Foreign Language Requirement

For all masters students in Music Theory, a grade of B- (2.7) or better in a first-semester, sophomore-level foreign language course or C (2.0) work or better in each of two junior-level courses or in one senior-level literature or civilization course is viewed as an adequate demonstration of foreign language skills. Students must study French, German, Italian or Latin unless the substitution of another language is approved by a minimum of two-thirds of the supervisory committee. A language proficiency test, if provided by language instructors or departments, may be substituted for course requirements provided it documents language capabilities equivalent to the previously described courses. In such cases, a letter from the university language professor, describing the process and results, must be forwarded to the Conservatory Associate Dean for Graduate Studies.

Master of Music in Musicology Required Courses

Student Learning Outcomes

1. To express original and substantive ideas about music in writing.
2. To speak intelligently about music in a variety of forums.
3. To be familiar with basic research resources in music and use them effectively
4. To apply various historical and critical perspectives to their own study of music.

Required Courses

CONSVTY 5500-5600	Music History (four courses, two periods and two of choice)	12
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
Applied Music 5500A (or three terms in the same performing medium at any level) [1]		2
CONSVTY 5591K	Pedagogy of Music History	3
CONSVTY 5693	Advanced Research and Bibliography In Music	3
CONSVTY 5598	Research Problems	2
CONSVTY 5599	Thesis	6
Electives		1-3
Total Credits: 35 (minimum)		

[1] Elective credit may be substituted if the 5500A level of an applied instrument is achieved at the audition.

Language Requirements

For all M.M. students in Musicology, a grade of B- (2.7) or better in a first-semester, sophomore-level foreign language course. Students must study French, German or Italian unless the substitution of another language is approved by the supervisory committee. A language proficiency test may be substituted for course requirements, provided it documents language capabilities equivalent to the completion of a first-semester, sophomore-level course. This must be approved in advance by the supervisory committee. In such cases, a letter describing the process and results must be forwarded to the chair of the supervisory committee, the musicology area coordinator and the Conservatory Associate Dean for Graduate Studies.

Supervisory Committee

The Supervisory Committee, which consists of at least two musicology faculty plus one other member, is assigned to approve the planned program and prepare and grade the comprehensive examination. The committee must be selected before the student completes two terms of enrollment.

Graduate Approval of Major

Complete CONSVTY 5593 with a grade of A; complete one graduate-level music theory course and one graduate-level music history course with a grade of A in each course; and present a scholarly paper before a public forum on a topic agreed to in advance by the musicology faculty (the duration of the presentation is to be at least 20 minutes).

Master of Music in Performance: Keyboard Emphasis

Student Learning Outcomes

1. To present two high-level public solo recitals that are correct technically and artistically convincing.
2. To demonstrate an understanding of (and be able to communicate about) the historical and analytical components of music.
3. To reflect on and apply the broader dimensions of their own musical experience.
4. To demonstrate familiarity with basic research resources in music.

Required Courses

CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
PIANO 5501	Graduate Piano - Masters Performance [1,2]	4
Choose one of the following courses:		
CONSVTY 5591E	Group Piano Pedagogy	3
or		
CONSVTY 5592E	Advanced Piano Pedagogy	3
Take two semesters of the following course:		8
CONSVTY 5597	Master's Recital [2,3]	
Take two semesters of the following course:		2
CONSVTY 305G	Principles Of Chamber Music	
Electives [4]		10
Total Credits: 36		

1 A minimum of one semester of applied music (5501) is required before the first recital. PIANO 5501 or CONSVTY 5597 is required each semester of enrollment until the recital requirement is met.

2 Concurrent enrollment in PIANO 300 is required for each semester of enrollment in PIANO 5501 and CONSVTY 5597 (http://catalog.umkc.edu/Catalog/ViewCatalog.aspx?htmllink=true&pageid=viewcatalog&topicgroupid=57937&entitytype=CID&entitycode=CONSVTY%205597).

3 Piano students are required to present two public recitals and two collaborative recitals. The collaborative recital requirement is part of the applied piano lesson - no extra credit is received. maximum of four elective credits may be in the performance area.

4 A maximum of four elective credits may be in the performance area.

Master of Music in Performance: Orchestral Instruments and Guitar Emphasis Areas

Student Learning Outcomes

1. To present two high-level public solo recitals that are correct technically and artistically convincing.
2. To understand the historical and analytical components of music.
3. To reflect on broader dimensions of their own musical experience.
4. To be familiar with basic research resources in music.

Required Courses

CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
(APPLIED INSTRUMENT) 5501 [1,2]		4
Take the following course 2 times:		8
CONSVTY 5597	Master's Recital	
Take the following course 4 times:		4
CONSVTY 305 Principles of Chamber Music		
Electives (Non-applied music courses)		3
Electives		8
Total Credits		36

1 A minimum of one semester of applied music (5501) is required before the first recital. (APPLIED INSTRUMENT) 5501 or CONSVTY 5597 is required each semester of enrollment until the recital requirement is met.

2 Concurrent enrollment in (APPLIED INSTRUMENT) 300 is required for each semester of enrollment in (APPLIED INSTRUMENT) 5501 and CONSVTY 5597 (http://catalog.umkc.edu/Catalog/ViewCatalog.aspx?htmllink=true&pageid=viewcatalog&topicgroupid=57937&entitytype=CID&entitycode=CONSVTY%205597).

Notes: All students whose major is an orchestral instrument must be enrolled in Conservatory Wind Symphony, Wind Ensemble or Conservatory Orchestra for a minimum of two semesters. Not more than one half the total hours counted toward the planned program may be in applied music and recitals. A maximum of two semesters of an ensemble can be counted on any master's planned program of study.

Master of Music in Performance: Voice Emphasis

Student Learning Outcomes

1. To present two high-level public solo recitals that are correct technically and artistically convincing.
2. To understand the historical and analytical components of music.
3. To reflect on and apply the broader dimensions of their own musical experiences through public performance and continued vocal study.
4. To demonstrate familiarity with basic research resources in music.

Voice Emphasis

Required Courses

CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
VOICE 5501	Graduate Voice - Masters Performance [1,2]	4
CONSVTY 5547	Opera History	3
CONSVTY 5548	Opera Literature	2
Select one of the following:		2
CONSVTY 5566A	Advanced Vocal Literature: French Melodies	
CONSVTY 5566B	Advanced Vocal Literature: German Lieder	
CONSVTY 5566C	Advanced Vocal Literature: Nationalistic Art Songs	
CONSVTY 5566D	Advanced Vocal Literature: 20Th Century Amer & Engl Art Songs	
Take the following course 2 times:		8
CONSVTY 5597	Master's Recital	
Electives		6
Total Credits		34

1 A minimum of one semester of applied music (5501) is usually required before the first solo recital. However, Voice Performance majors, with the approval of the Vocal Studies Division, may enroll in 5597 (Master's Recital) any semester to receive credit for a major UMKC opera role.

2 Concurrent enrollment in VOICE 300 is required for each semester of enrollment in VOICE 5501 and CONSVTY 5597.

Notes: Not more than one-half the total hours counted toward the planned program may be in applied music and recitals.
Participation for two semesters in a major choral ensemble is required.
The diction proficiency test for French, German and Italian must be passed.

Ensemble Requirement

Students must satisfactorily participate in one major choral/orchestral work during their two years of study, either as soloists or members of the chorus. Assignment for participation is at the discretion of the Director of Choral Activities.

Opera Track

Required Courses

CONSVTY 5593	Introduction To Research And Bibliography In Music	3
Take the following course 4 times:		8
VOICE 5500A	Graduate Voice-Secondary	
CONSVTY 5517	Advanced Opera Workshop	2
CONSVTY 5547	Opera History	3
CONSVTY 5548	Opera Literature	2
CONSVTY 5590	Special Topics (Adv. Opera Scene Study)	2
Take the following course 2 times:		8
CONSVTY 5597	Master's Recital (Opera Role Performance)	

DANCE 403A	Modern Technique For Non-Majors [1]	1
or DANCE 404A	Ballet Technique Non-Majors I	
THEATRE 300	Acting I	3
Non-vocal performance electives [2]		2
Total Credits		34

1 A movement class may be substituted.

2 Recommended courses include vocal literature, music history, music theory, applied piano, and vocal pedagogy.

Language Requirement

Must attain a grade of B- (2.7) or better in a second semester, freshmen-level, foreign language course in all three languages - French, German and Italian.

Ensemble Requirement

Students must satisfactorily participate in one major choral/orchestral work during their two years of study, either as soloists or members of the chorus. Assignment for participation is at the discretion of the Director of Choral Activities.

Master of Music in Performance: Woodwind Emphasis

Student Learning Outcomes

1. To present two high-level public solo recitals that are correct technically and artistically convincing.
2. To understand the historical and analytical components of music.
3. To reflect on broader dimensions of their own musical experience.
4. To be familiar with basic research resources in music.

Required Courses

CONSVTY 5500-5600	Music History	3
CONSVTY 5500-5600	Music Theory	3
CONSVTY 5593	Introduction To Research And Bibliography In Music	3
(APPLIED INSTRUMENT #1) 5501 [1,2]		4
(APPLIED INSTRUMENT #2) 5500A [3]		2
(APPLIED INSTRUMENT #3) 5500A [3]		2
CONSVTY 5591 and 5592, Advanced Pedagogy		4
Take the following course 2 times:		8
CONSVTY 5597	Master’s Recital	
Electives/Ensemble [4]		5
Total Credits: 34 (minimum)		

1 A minimum of one semester of applied music is required before the recital. Not more than one-half of the total hours counted toward the planned program may be in applied music and recitals.

2 Concurrent enrollment in (APPLIED INSTRUMENT) 300 is required for each semester of enrollment in (APPLIED INSTRUMENT) 5501 and CONSVTY 5597.

3 A graded half recital during the second semester of study on instruments #2 and #3 is required.

4 Two semesters of participation in a major ensemble are required on instrument #1. One semester of ensemble participation each is required on instruments #2 and #3.

Note: Jury approval of the 101(2) applied level on instruments #4 and #5 is required before graduation.

Performer's Certificate Required Courses

Student Learning Outcomes

Instrumental

1. To present two public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To gain broad experience in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career.

Keyboard

1. To present two public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To demonstrate proficiency in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career, and demonstrate an understanding of the principles of effective professional networking.

Voice

1. To present two public performances that exhibit the highest degree of instrumental/vocal competence and artistry.
2. To gain broad experience in a significant amount of repertoire.
3. To present a business plan that assists their career plan.
4. To make contacts with people in the music world who can help them in their career.

Lessons and Recitals (Solo Experiences) [1]	16
Chamber and Ensemble Work (Collaborative Experiences) and/or Prescribed Electives	8
Music Literature/Pedagogy [2]	3-5
Total Credits: (minimum)	27-29

1 Instrumental and keyboard students: four hours of lessons and 12 hours of recitals. Piano students are required to present three public recitals and two collaborative recitals. The collaborative recital requirement is part of the applied piano lesson - no extra credit is received. Voice students: eight hours of lessons and eight hours of recitals.

2 Instrumental students, three hours; keyboard students, five hours; voice students, four hours.

Note: Voice students must pass the diction proficiency test in French, German and Italian.

School of Nursing & Health Studies

Health Sciences Building (http://www.umkc.edu/virtualtour/hsb.asp)
Hospital Hill Campus
2464 Charlotte Street
(816) 235-**1700**
Fax: (816) 235-**1701**
nurses@umkc.edu
http://sonhs.umkc.edu

Mailing Address
University of Missouri-Kansas City
School of Nursing and Health Studies
2464 Charlotte Street
Kansas City, MO 64108

Dean:
Ann H. Cary

Interim Associate Dean for Academic Programs:
M. Joy Roberts

Associate Dean for Research and Scholarship:

Patricia Kelly

Faculty

Eduardo Abreu[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=abreu); assistant professor of nursing; B.S., M.S. (Federal University Rio de Janerio); M.D. (State University Rio de Janerio); D.Eng. (Cleveland State University).

Marti Anselmo Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=anselmo); clinical instructor of nursing; B.S.N. (Central Missouri State University); M.S.N. (University of Missouri-Kansas City).

Obie Austin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=austin); clinical instructor of nursing; B.S.N. (Missouri Western State University); M.S.N. (University of Missouri-Kansas City).

Cheri Barber Contact information (http://www.umkc.edu/lookup/search.cfm?LastName=barber); clinical assistant professor of nursing; B.S.N. (Immaculata University); M.S.M. (Drexel University); D.N.P. (University of Missouri-Kansas City).

Susan E. Bennett Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bennett); clinical assistant professor of nursing; B.S.N. (University of Missouri-Columbia); M.S.N. (Texas A&M).

Margaret Brommelsiek Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brommelsiek); instructor; B.A. (Eckerd College); M.S., Ph.D. (Florida State University).

Marco Brotto[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brotto); thompson missouri endowed professor of nursing research, professor of nursing and medicine, and director of muscle biology research group; B.S.N. (Federal University, Brazil); M.S. Pharmacology (Federal University, Brazil); PhD. (Trinity college, Oxford, UK), Post-Doctoral (Case Western Reserve University).

Ann H. Cary contact information (http://www.umkc.edu/lookup/search.cfm?LastName=cary); dean and professor of nursing; B.S.N. (Louisiana State University Health Sciences Center); M.P.H. (Tulane University); Ph.D. (The Catholic University of America).

Vance Crain contact information (http://www.umkc.edu/lookup/search.cfm?LastName=crain); clinical assistant professor of nursing; B.S.N., M.S. (University of Kansas); D.N.P. (University of Missouri-Kansas City).

Amber Davies, contact information (http://www.umkc.edu/lookup/search.cfm?LastName=davies); C.R.N.A. program director and clinical assistant professor of nursing; B.S.N. (Research College of Nursing); M.A., D.N.P. (University of Missouri-Kansas City).

Davis, Nadine contact information (http://www.umkc.edu/lookup/search.cfm?LastName=davis);clinical assistant professor of nursing; B.S.N. (Research College of Nursing); M.A., D.N.P. (University of Missouri-Kansas City).

An-Lin Cheng[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cheng); associate professor of nursing; M.S., Ph.D. (University of Georgia).

Janis Ellis-Claypool Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ellis); B.H.S. program director and teaching assistant professor of health sciences; B.S.Ed. (University of Kansas); M.S. (York University).

Tammie M. Conley Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=conley); clinical instructor of nursing; B.S.N., M.S.N. (University of Missouri-Kansas City).

Erin Ellington Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ellington); clinical assistant professor; B.A. (Western Kentucky University); M.S.N. (Vanderbilt University; D.N.P. (University of Missouri-Kansas City).

Renee D. Endicott Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=endicott) ; clinical instructor of nursing; B.S.N. (William Jewell College); M.S.N., D.N.P. (University of Missouri-Kansas City).

Kara Flowers Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=flowers); clinical assistant professor of nursing; B.S.N., M.S.N. (Graceland University).

Martha Goodwin Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=goodwin); clinical instructor of nursing; B.S.N. (University of Kansas); M.S.N. (University of Colorado).

Amanda Grimes Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schmer); teaching assistant professor of health sciences; B.S. (Southeast Missouri State University); M.S., Ph.D. (University of Arkansas).

Brandi Gutterman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gutterman); clinical assistant professor of nursing; B.S.N. (University of Kansas); M.A., D.N.P. (University of Missouri-Kansas City).

Judy Willis Hileman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hileman); clinical assistant professor of nursing; B.S.N., M.S.N., Ph.D. (University of Kansas).

Jamie Hunt Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hileman); teaching assistant professor of health sciences; B.S. (University of Arkansas), M.S.Ed., Ph.D. (University of Kansas).

Jennifer Hunter[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hunter); associate professor of nursing; B.S.N. (University of Tulsa); M.S.N., Ph.D. (University of Kansas).

Patricia Kelly[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kelly); Ph.D. program director and professor of nursing; B.A. (SUNY-Albany); M.S.N. (Pace University); M.P.H. (Columbia University); Ph.D. (University of Illinois)).

Susan J. Kimble Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kimble); M.S.N. and D.N.P. program director and clinical associate professor of nursing; B.S.W. (University of Nebraska); B.S.N., M.S.N., D.N.P. (University of Missouri-Kansas City).

JoAnn G. Klaassen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=klaassen); clinical associate professor of nursing; B.A. (Tabor College); B.S.N., M.N. (Wichita State University); J.D. (University of Missouri-Kansas City).

Wm. David LaFevers Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lafevers); clinical assistant professor of nursing; B.S.N. (Southwest Baptist University); M.S.N., D.N.P. (University of Missouri-Kansas City).

Sarah Landram Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=landram); clinical instructor of nursing; B.S.N. (William Jewell College); M.S.N.(University of Missouri-Kansas City).

Kristin C. Lee Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lee); clinical assistant professor of nursing; B.S.N. (Purdue University); M.S.N. (University of Missouri-Kansas City).

Lyla Lindholm Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lindholm); clinical assistant professor of nursing; B.S.N. (Washburn University); M.N. (University of Kansas); D.N.P. (University of Missouri-Kansas City).

Lipari, Mark Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lipari); clinical assistant professor of nursing; B.S.N. (Avila College); M.A., D.N.P. (University of Missouri-Kansas City).

Martha Lofgreen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lofgreen); clinical assistant professor of nursing; B.S.N. (University of Kansas); M.S.N. (University of Missouri-Kansas City).

Jolene Lynn Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lynn); pre-licensure and accelerated B.S.N. program director and clinical assistant professor of nursing; B.S.N. (Pittsburg State University); M.A. (Webster University); M.S.N. (University of Missouri-Kansas City).

Ronalda V. Manney Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=manney); clinical assistant professor of nursing; B.S.N. (Central Missouri State University); M.S.N. (University of Missouri-Kansas City).

Tho Kim Nguyen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=nguyen); clinical assistant professor of nursing; B.S.N. (University of Kansas); M.S.N. (University of Missouri-Kansas City).

Ginny Nyberg Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=nyberg); clinical assistant professor of nursing; B.S.N. (Avila University); M.S.N. (Webster University).

Jane Anthony Peterson[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=peterson); clinical associate professor of nursing; B.S. (Kearney State College); M.S.N. (Texas Woman's University); Ph.D. (University of Nebraska Medical Center).

Cheryl Pilsl Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pilsl); clinical assistant professor of nursing; B.S.N. (University of Kansas); M.A., D.N.P. (University of Missouri-Kansas City).

Kelli Pryor Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pryor); clinical assistant professor of nursing; B.S.N. (Northwest Missouri State University); M.A., D.N.P. (University of Missouri-Kansas City).

Mary A. O'Connor[2] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=o%27connor); assistant professor of nursing; B.S.N. (St. Louis University); M.S. (Webster University); Ph.D. (University of Kansas).

Lynn M. Rasmussen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rasmussen); assistant clinical professor of nursing; B.S.N., M.S.N. (University of Kansas); Ph.D. (University of Missouri-Kansas City).

Daphne A. Reavey; clinical instructor of nursing; B.S.N. (University of Kansas); M.S.N., Ph.D. (University of Missouri-Kansas City).

Cristine A. Roberts Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=roberts); assistant professor; B.S.N. (University of Kansas); M.S.N. (University of Utah); Ph.D. (University of Missouri-Kansas City).

Melissa Joy Roberts Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=roberts); interim associate academic dean and assistant professor of nursing; B.S.N., M.S.N. (University of Missouri-Columbia); J.D. (University of Missouri-Kansas City).

Jana E. Rudigier Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rudigier); clinical instructor of nursing; B.S.N. (University of Kansas); M.S.N. (University of Missouri-Kansas City).

Cynthia L. Russell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=russell); professor of nursing; B.S.N., M.S.N. (Rush University); Ph.D. (Saint Louis University).

Carol E. Schmer Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schmer); clinical assistant professor of nursing; B.S.N., M.S.N., Ph.D. (University of Missouri-Kansas City).

Jennifer Schwarz Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schwarz); clinical assistant professor of nursing; B.S.N. (University of Kansas); M.A., D.N.P. (University of Missouri-Kansas City).

Anita J. Skarbek Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=skarbek); R.N.-B.S.N. program director and clinical assistant professor of nursing; B.S.N., M.S.N. (University of Missouri-Kansas City); Ph.D. (Walden University).

Janice Marcy Smith Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); clinical instructor of nursing; B.S.N. (University of the State of New York); M.S.N. (University of Kansas).

Katharine (Kit) V. Smith2 Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); associate professor and assistant dean for program evaluation, school of nursing; B.A. (University of Missouri-Columbia); B.S.N. (Graceland College); M.N., Ph.D. (University of Kansas).

Melissa Smith Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); clinical assistant professor of nursing; B.S.N. (East Carolina University); M.S.N. (University of Tennessee-Memphis); D.N.P. (University of Missouri-Kansas City).

Ellen Tappero Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=tappero); clinical instructor of nursing; B.S.N. (University of South Carolina); M.N. (University of California-Los Angeles); D.N.P. (Arizona State University).

Carol W. Trotter Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=trotter); clinical assistant professor of nursing; B.S.N., M.P.H. (University of Minnesota); Ph.D. (University of Missouri-St. Louis).

Lyn E. Vargo Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=vargo); clinical assistant professor of nursing; B.S. (Purdue University); B.S.N., M.S.N. (St. Louis University); PhdD. (University of Missouri-St. Louis).

Brenda G. Walker-Williams Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Walker); clinical instructor in nursing; B.S.N., M.S.N. (Webster University).

Peggy Ward-Smith[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ward); associate professor of nursing; B.S.N. (Rush University); M.S.N. (St. Xavier University); M.S. (Avila University); Ph.D. (University of Missouri-Kansas City).

Nancy Willis-Smith Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=willis); clinical assistant professor of nursing; B.S.N. (Pittsburg State University); M.S.N. (University of Kansas); D.N.P. (University of Missouri-Kansas City).

Jacquelyn S. Witt Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=witt); clinical associate professor of nursing; B.S.N. (Central Missouri State University); M.S.N., J.D. (University of Missouri-Kansas City).

Pamela S. Young Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=young); clinical instructor of nursing; B.S.N. and M.S.N. (Allen College, Iowa).

Shawn L. Zembles Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=zembles); clinical assistant professor of nursing; B.S.N. (Graceland University); M.S.N., D.N.P. (University of Missouri-Kansas City).

Christine M. Zimmerman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=zimmerman); clinical instructor of nursing; B.S.N. (Creighton University); M.S.N., Ph.D. (University of Missouri-Kansas City).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Academic Regulations in the School of Nursing & Health Studies

Students in the School of Nursing and Health Studies are expected to be familiar with policies and procedures specific to their level of study and to review these each semester for updates and changes. These can be found in the UMKC General Catalog and in the School of Nursing and Health Studies Policies and Procedures manual, which can be found at http://nursing.umkc.edu/documents/our-school/policy-procedure.pdf. Students must also be familiar with the Nursing Honor Code found at http://nursing.umkc.edu/documents/our-school/honor-code.pdf.

Academic and Professional Behavior

Students in the School of Nursing and Health Studies abide by the University of Missouri Student Conduct Code (http://www.umkc.edu/catalog/Student_Conduct.html) (listed in the appendices of this catalog) and by the School of Nursing and Health Studies Honor Code (http://nursing.umkc.edu/documents/our-school/honor-code.pdf). The Standards of Professional and Ethical Behavior detailed in the honor code have been developed to guide students who are enrolled at all levels with the UMKC-SON, including undergraduate and graduate students, and are designed to assure accountability for the professional and ethical standards of the nursing profession.

Accreditation

The baccalaureate, master's, and DNP programs at the UMKC School of Nursing and Health Studies are accredited by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, DC 20036, (202) 887-6791.

Academic Programs Offered

Please visit the School of Nursing's website at http://sonhs.umkc.edu for more specific program information and plans of study for the following programs.

Bachelor of Science in Nursing

- Accelerated Track (for students with a previous bachelor's degree) (72 credit hours)
- Pre-licensure Track (128 credit hours)
- RN-BSN Track (120 credit hours)

Master of Science in Nursing

- Psychiatric Mental Health Nurse Practitioner (43 credit hours)
- Neonatal Nurse Practitioner (45 credit hours)
- Nurse Educator (41 credit hours)

Bachelor of Science in Nursing to Doctor of Nursing Practice

- Adult Gerontology Nurse Practitioner (74 credit hours)
- Certified Registered Nurse Anesthetist (73 credit hours)
- Family Nurse Practitioner (74 credit hours)
- Pediatric Nurse Practitioner (74 credit hours)
- Women's Health Nurse Practitioner (74 credit hours)

Nurse Educator Post Master's Certificate Program (12 credit hours)

Post Master's APRN to Doctor of Nursing Practice (31 credit hours)

PhD in Nursing (61 credit hours)

Admissions

The Office of Admissions is located in room 120, Administrative Center, 5115 Oak St. All applicants should complete the UMKC application for admission. Applications and transcripts should be mailed to the UMKC Office of Admissions, 120 Administrative Center, 5100 Rockhill Road, Kansas City, MO 64110-2499. Go to http://www.umkc.edu/admissions/

The School of Nursing recommends that applicants check the School of Nursing website, specifically undergraduate and graduate degree programs, to access supplemental materials requested for application and to look at application deadline dates. Deadlines mean that all application materials should have been received. Applications received after these dates may or may not be reviewed depending on available space.

Once admitted, all official University communication is conducted via UMKC e-mail.

Bachelor of Health Sciences

Health Sciences Building (http://www.umkc.edu/virtualtour/hsb.asp)
Hospital Hill Campus
2464 Charlotte Street
(816) 235-**1700**
Fax: (816) 235-**1701**
http://www.umkc.edu/bhs/

BHS Mission

Supporting the SoNHS' mission to prepare the health professional workforce in improving health outcomes, the purpose of the Bachelor of Health Sciences program is to prepare graduates for a wide variety of careers in health or to pursue post-graduate education. Through an innovative combination of coursework, service learning, volunteerism, and a senior year internship, students will apply theoretical concepts in evidence-based health programming and health policy development into diverse community settings.

History

In 1973-74, a graduate nursing program was started under the aegis of the School of Graduate Studies. On Nov. 16, 1979, the Board of Curators approved a proposal to establish a school of nursing at the University of Missouri-Kansas City. In 1981, following a developmental period, two new curricula were implemented. These were an upper-division baccalaureate degree for registered nurses and a revised master's degree program for clinical nurse specialists. In 1992, the Board of Curators approved the offering of an inter-campus, cooperative doctoral program in nursing (Ph.D. N.D.). The doctoral curricula was implemented on the Kansas City campus in the Fall Semester of 1995. In 2000, the Board of Curators approved the offering of a pre-licensure baccalaureate degree program beginning in the Fall Semester of 2001. The Board of Curators approved Doctoral of Nursing Practice (DNP) program began in 2007 and graduated its first post-masters class in December 2008. The newest program in the School of Nursing is the Bachelor of Health Sciences (BHS), which received final approval and began enrolling students in the fall of 2011. A name change to the School of Nursing and Health Studies was approved in February 2013.

Facilities

The University of Missouri-Kansas City has extensive educational facilities on the Volker campus combined with the health care educational facilities and the School of Nursing and Health Studies offices on Hospital Hill campus. Facilities include libraries, resource centers, audiovisual resources, data processing and science information specialists.

What is a Bachelor of Health Sciences?

With a comprehensive science-based curriculum, the Bachelor of Health Sciences degree combines urban-focused coursework in health policy, health program development, health and wellness, and population health outcomes. With a combination of coursework, service learning, volunteerism, and a senior year internship, students will apply theoretical concepts in evidence-based health programming and policy development in community settings.
The UMKC BHS Degree Program offers a comprehensive curriculum designed to prepare students for a wide variety of careers in health or to pursue post-graduate education.
The UMKC BHS Degree Program is offered through the UMKC School of Nursing & Health Studies and includes coursework in the physical, biological, behavioral, business and social aspects of health

What can I do with a Bachelor of Health Sciences?

The UMKC BHS Degree Program is the perfect choice for students who are interested in a career in health focusing on health prevention, health promotion, population health, and health behavior change. UMKC is offering the BHS Degree in response to the growing workforce demand for health professionals in a variety of areas including, personal health and wellness, social determinants of health, occupational health and safety, community health, and environmental health. Graduates may find career options in government settings, non-for profit organizations, community health centers, workplace health and wellness companies, and health promotion organizations.

Student Organization

BHS Society is a student organization centered around the health sciences field of study. The goals of this organization are to promote philanthropy within the community, advocate health education, and cultivate leadership among members.

Student Learning Outcomes

Upon graduation, the BHS student will be able to:

1. Apply knowledge from physical, biological, behavioral, business, and social aspects of health into inter-professional practice.
2. Create (plan, implement, and evaluate) evidence-based health programs relevant to targeted populations and desired health outcomes.
3. Demonstrate professional conduct, and strong interpersonal skills in their chosen career path.

4. Identify the specific challenges, and opportunities of improving health outcomes and reducing health disparities in diverse and urban environments.

Program Requirements

A sample course of study for a full-time BHS student is listed below. Students must earn a minimum grade of C in all HLSC and science coursework and a minimum grade of D in all other courses. To remain academically eligible, a minimum semester GPA of 2.00 must be maintained.

Year I			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
DISC 100[GE]	3	MATH 110 (or higher for Focus B)	3
HLSC 101	3	DISC 200[GE]	3
Anchor I[GE]	3	HLSC 160	4
HLSC 120	4	Anchor II[GE]	3
Focus A[GE]	3	HLSC 230	2
	16		**15**
Year II			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
PSYCH 210 (Focus C)	3	HLSC 252	3
HLSC 110	3	HLSC 125	1
Elective	3	HLSC 356 (if passed 110) or Foreign Language II	3
Elective	3	POL-SCI 210 (or HISTORY 1100 or History 1101 for Focus Elective)	3
Foreign Language I	5	HLSC 200	1
		Elective	1
		CHEM 206	3
	17		**15**
Year III			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
DISC 300[GE]	3	HLSC 430	3
HLSC 345	3	Elective	3
HLSC 310	3	HLSC 476	3
HLSC 300	3	HLSC 440	3
Anchor III[GE]	3	HLSC 410	3
	15		**15**
Year IV			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
HLSC 480	3	HLSC 492	3
HLSC 450	3	HLSC 494	6
HLSC 470	3	Elective	3
HLSC 460	3		
Elective	3		
	15		**12**

Total Credits: 120

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Bachelor of Science in Nursing

Baccalaureate Nursing Education

Undergraduate baccalaureate nursing education is designed to prepare a nurse generalist who demonstrates responsibility, accountability and critical thinking. The nurse generalist uses a comprehensive approach to health care and can meet diversified health concerns of individuals, families and communities at all stages of development. The University of Missouri-Kansas City offers an innovative program in the management of health.

There are three tracks available to complete a Bachelor of Science in Nursing:

- Pre-licensure track
- Accelerated track (for students who already have a bachelor's degree)
- RN-BSN track (for students who are already RN's and want to get their B.S.N.)

Pre-licensure Track

Student Learning Outcomes

Upon graduation the B.S.N. student will:

1. incorporate knowledge from arts, humanities and sciences in the planning and provision of professional nursing care;
2. demonstrate Personal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Critical Thinking, Professional Valuing/Caring, and Professional Role Development;
3. demonstrate Interpersonal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Communication, Teaching/Learning, and Technology Utilization;
4. demonstrate Effectiveness in Human Health Outcomes as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Health Promotion and Disease Prevention and Evidence-Based Care; and
5. demonstrate Effectiveness Within Complex Health Systems as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Leadership/Management, Global Perspectives, and Health Care Systems and Policy.

Program Requirements

A sample course of study for a full-time pre-licensure track B.S.N. student is listed below. Students must maintain a minimum grade of C in all nursing coursework as well as carry a minimum semester GPA of 2.75. See specific course requirements at the School of Nursing website.

Year I			
Fall Semester	**Credits**	**Spring Semester**	**Credits**
Anchor I[GE]	3	Anchor II[GE]	3
LS-MCRB 112	3	CHEM 115	4
NURSE 120	4	MATH 110 (Focus B)	3
HLSC 101	3	CHEM 115L	1
NURSE 101	2	Apply to Clinical Major	
DISC 100[GE]	3	NURSE 160	4
		Complete RooWriter (or complete Summer Year 1)	
		DISC 200[GE]	3
	18		**18**

Year II

Fall Semester	Credits	Spring Semester	Credits
NURSE 127	1	Focus A[GE]	3
NURSE 220	6	CHEM 206 (for Focus Elective)	3
NURSE 230	2	NURSE 252	3
NURSE 250	3	NURSE 256	3
NURSE 395	3	NURSE 262	5
	15		**17**

Year III

Fall Semester	Credits	Spring Semester	Credits
Anchor III[GE]	3	NURSE 360	4
DISC 300[GE]	3	NURSE 362	5
NURSE 345	3	POL-SCI 210, HISTORY 101, or HISTORY 102 (Focus C)[GE]	3
NURSE 364 (eight weeks)	4	NURSE 356 (for Foreign Language course)	3
NURSE 366 (eight weeks)	4		
	17		**15**

Year IV

Fall Semester	Credits	Spring Semester	Credits
NURSE 342	2	NURSE 462	2
NURSE 465	4	NURSE 468	5
NURSE 467	5	NURSE 472	5
NURSE 476	3		
Nursing Elective	2		
	16		**12**

Total Credits: 128

Accelerated Track

Student Learning Outcomes

Upon graduation the B.S.N. student will:

1. incorporate knowledge from arts, humanities and sciences in the planning and provision of professional nursing care.
2. demonstrate Personal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Critical Thinking, Professional Valuing/Caring, and Professional Role Development.
3. demonstrate Interpersonal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Communication, Teaching/Learning, and Technology Utilization.
4. demonstrate Effectiveness in Human Health Outcomes as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Health Promotion and Disease Prevention and Evidence-Based Care.
5. demonstrate Effectiveness Within Complex Health Systems as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Leadership/Management, Global Perspectives, and Health Care Systems and Policy.

Program Requirements

Students in this track must already have a bachelor’s degree. A sample course of study for a full-time accelerated B.S.N. student is listed below. Students must maintain a minimum grade of C in all nursing coursework as well as carry a minimum semester GPA of 2.75. See specific course requirements at the School of Nursing website.

Pre-requisite Coursework [1]

NURSE 120	Anatomy & Physiology I	4
NURSE 160	Anatomy and Physiology II	4
LS-MCRB 112	Microbiology and Living	3
CHEM 206	Human Nutrition	3
CHEM 115	Elements Of Chemistry I	4
CHEM 115L	Elements Of Chemistry, Laboratory I	1
NURSE 252	Human Growth and Development	3
Total Credits		22

[1] **Sciences must be no more than five years old at program start in a fall semester.**

Year I

Fall Semester	Credits	Spring Semester	Credits	Summer Semester	Credits
NURSE 127	1	NURSE 262	5	NURSE 360	4
NURSE 220	6	NURSE 256	3	NURSE 362	5
NURSE 250	3	NURSE 364 (eight weeks)	4	NURSE 476	3
NURSE 345	3	NURSE 366 (eight weeks)	4		
NURSE 395	3				
	16		**16**		**12**

Year II

Fall Semester	Credits	Spring Semester	Credits
NURSE 230	2	NURSE 462	2
NURSE 342	2	NURSE 468	5
NURSE 465	4	NURSE 472	5
NURSE 467	5		
	13		**12**

Total Credits: 69

RN-BSN Track

Student Learning Outcomes

Upon graduation the B.S.N. student will:

1. incorporate knowledge from arts, humanities and sciences in the planning and provision of professional nursing care.
2. demonstrate Personal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Critical Thinking, Professional Valuing/Caring, and Professional Role Development.
3. demonstrate Interpersonal Effectiveness as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Communication, Teaching/Learning, and Technology Utilization.
4. demonstrate Effectiveness in Human Health Outcomes as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Health Promotion and Disease Prevention and Evidence-Based Care.
5. demonstrate Effectiveness Within Complex Health Systems as evidenced by progressing from awareness to knowledge to proficiency in the following competencies: Leadership/Management, Global Perspectives, and Health Care Systems and Policy.

Program Requirements

Students in the online RN-BSN track must already be registered nurses seeking their B.S.N. Students must also reside in the United States and all fees are assessed at the in-state rate. Students must maintain a minimum grade of C in all nursing coursework as well as carry a minimum semester GPA of 2.75. See specific course requirements at the School of Nursing website.

Nursing Education Requirements

Twenty-eight hours of lower-division nursing credits may be obtained by:

- Direct transfer from a National League for Nursing Accrediting Commission (NLNAC) associate degree program.
- Completion of specific coursework for graduates of diploma programs and non-NLNAC associate degree programs.

Thirty-six hours of upper-division nursing credits are required. The UMKC School of Nursing has developed an innovative program where students, as a cohort group, progress through four "blocks" of coursework. Rather than traditional, individual courses, the curriculum is integrated and based on concepts integral to successful nursing in the changing health care system. Both full- and part-time plans are available.

The nursing curriculum consists of:

NURSE 326	Applied Physiology	3
NURSE 395	Pathophysiology	3
NURSE 401	Health Assessment for Clinical Practice	3
NURSE 481	Block I: Tools for Personal Effectiveness	6

- Historical Roots of the Profession
  - Meaning of Professionalism, Identity, Image & Power Bases
  - Professional Role Development—Responsibility & Accountability
  - Political Role: Socialization, Development & Professional/Social Advocacy
  - Critical Thinking, Clinical Reasoning, Critical Reflection and Decision Making
  - ANA Documents: Scope & Standards, Social Policy Statement, Code of Ethics
  - Time and Stress Management
  - Education and Career Mapping
  - Introduction to Nursing & Non-Nursing Theories
  - Introduction to Nursing Informatics & Technology in the Workplace
  - Introduction to Research & Evidence-based Practice
  - Diversity in the Work Force
  - Introduction to Ethics, Bioethics & Ethics in Nursing Practice
  - Legal Issues in Nursing
  - Disruptive Behavior & Violence in Nursing
  - Professional Nursing Associations
  - Philosophy of Nursing/Nursing Metaparadigm
  - Institute of Medicine (IOM) Future of Nursing Initiative
  - Introduction to Scholarly Writing, APA Formatting
  - How to Conduct a Literature Search
  - Introduction to Student/Professional Competency-based Portfolios
  - Resume Construction

NURSE 482	Block II: Tools for Interpersonal Effectiveness	3

- Professional Valuing & Caring
  - Intra/Inter-Professional Communication Skills and Theories
  - Leading & Managing Change
  - Conflict Resolution & Negotiation
  - Groups & Teams – Building Partnerships & Coalitions
  - Team Dynamics, Socialization, Mentoring, Decision-making Processes
  - Legalities of Health Care
  - Personal & Professional Marketing
  - Political & Regulatory Processes & Health Policy Issues
  - Nursing & Public Policy
  - Diversity Issues in Health Care
  - Introduction Greene & Kreuter’s Precede-Proceed Health Planning Model
  - Social Media
  - Email Etiquette
  - Socialization & Mentoring

NURSE 483	Block III: Effectiveness in Human Health Outcomes	6

- Theories Applicable to Aggregate Populations
  - Cultural Competence
  - Health Care Literacy
  - Community Based Care/Public Health
  - Epidemiology
  - Health Promotion and Restoration
  - Health Care Policy
  - Community Assessment Models including Precede – Proceed Model
  - Disaster Nursing including Bioterrorism
  - Human Patient Simulation
  - Information Technology
  - Economics in Health Care
  - Health & Inequality
  - Vulnerable Populations
  - Environmental Health
  - Global Health Issues
  - Nurse as Advocate

NURSE 484	Block IV: Effectiveness in Complex Health Systems	6

- Managing Quality & Risk
  - Systems Theory
  - Health Care Delivery Models & Organization Structure
  - Organizational Theories, Culture, Behavior, Emotional Intelligence
  - Politics, use of Legislative System
  - Leadership Styles and Theories
  - Managing Costs & Budgets
  - ANCC Magnet Recognition Program & ANCC Pathway to Excellence
  - Health Care Policy Issues
  - Staffing, Scheduling & Evaluating Staff
  - Practice Issues Related to Technology
  - Conducting Nursing Research
  - Delegation & Managing Personal/Personnel Problems
  - Health Care Finance
  - Workplace Environment – Promoting a Safe Environment of
  - Content & Process Theories of Motivation
  - Leading Through Professional Organizations
  - Managing Quality & Risks
  - Delegation
  - Nursing at an International Level

NURSE 485	Application to Practice I	3

- Precede-Proceed Model
  - Virtual Team Management
  - Leadership Best Practices
  - Population-based Health Promotion
  - Development of SMART Goals
  - Development of GANTT Chart

NURSE 486	Application to Practice II	3

- Precede-Proceed Model
  - Virtual Team Management
  - Leadership Best Practices
  - Population-based Health Promotion
  - Evaluation of Health Interventions
  - Cost/Benefit Analysis

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Doctor of Nursing Practice Program

BSN-DNP

Student Learning Outcomes

Graduates of the DNP program will be prepared to:

1. Synthesize research-based evidence to create, implement, evaluate, and translate into practice
2. Serve as leaders in nursing and health care by effecting organizational and/or public policy development
3. Demonstrate expert knowledge, values, and skills to improve health outcomes in a specialized area and/or population foci of nursing
4. Demonstrate expertise in increasingly complex practice, leadership, and/or faculty roles.

Program Options

On-site Emphasis Areas

- Adult-Gerontology Primary Care Nurse Practitioner (AGNP) (74 credit hours)
- Family Nurse Practitioner (FNP) (74 credit hours)
  - Distant, on-site track is available in St. Joseph, MO (MWSU)
- Certified Registered Nurse Anesthetist (CRNA) (73 credit hours)

Online Emphasis Areas

- Family Nurse Practitioner (FNP) (74 credit hours)
- Pediatric Nurse Practitioner (PNP) (74 credit hours)
- Women's Health Nurse Practitioner (WHNP) (74 credit hours)

Core Coursework for the Nurse Practitioners

NURSE 5526	Health Promotion Across the Lifespan	3
NURSE 5527	Cultural Diversity & Values	3
NURSE 5528	Healthcare Policy & Advocacy	3
Ethics in Practice and Research		3
Advanced Health Assessment Skills		3
NURSE 5549R	Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses	1
NURSE 5547A	Diagnostic Reasoning/Advanced Assessment	4
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549	Pharmacology for Advanced Nursing Practice	3
NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3
NURSE 5564A	Primary Care of Adults I [Where "A' is used, substitute your emphasis area, e.g. "F"]	5
NURSE 5566A	Primary Care of Adults II	4
NURSE 5601	Clinical Institute I	1

NURSE 5602	Healthcare Systems & Leadership	3
NURSE 5608	Theory Development I	3
NURSE 5609	Clinical Institute II	1
NURSE 5611	Healthcare Economics & Quality	3
NURSE 5611	Healthcare Economics & Quality	3
NURSE 5613	Application of Evidence-based Practice	3
NURSE 5637	Healthcare Outcomes and Epidemiology	3
Clinical Institute III Project Data & Presentation		2
Clinical III		6
Practicum Residency		5
Total Credits		74

Core Coursework for the Certified Registered Nurse Anesthetists

Year I

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
BIOLOGY 5510	3	BIOLOGY 5539	4	NURSE 5650NAO	0
LS-MBB 5510	1	NURSE 5612	3	PHARM 5520	5
BIOLOGY 5510L	1	NURSE 5619NAO	2	NURSE 5555	3
NURSE 5615NA	2	PHARM 5519	4	NURSE 5619NAB	2
				BIOLOGY 5540	4
	7		**13**		**14**

Year II

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
NURSE 5650NA1	0	NURSE 5628NA2	2	Comprehensive Review	1
NURSE 5627NA	1	NURSE 5619NA2	3	NURSE 5650NA3	0
NURSE 5609	1	NURSE 5636NA	1	NURSE 5641NA	1
NURSE 5628NA1	1	NURSE 5637	2-3	NURSE 5640NA	1
NURSE 5619NA1	2	NURSE 5650NA2	0	NURSE 5674NA1	2
		NURSE 5607NA	2	NURSE 5619NA3	3
				NURSE 5638NA1	1
	5		**10-11**		**9**

Year III

Summer Semester	Credits	Fall Semester	Credits	Spring Semester	Credits
NURSE 5674NA2	2	NURSE 5650NA5	0	NURSE 5661NA2	1
NURSE 5638NA2	2	NURSE 5661NA1	2	NURSE 5650NA6	0
NURSE 5659NA	2	NURSE 5643NA	2	NURSE 5674NA4	2
NURSE 5650NA4	0	NURSE 5674NA3	2		
	6		**6**		**3**

Total Credits: 73-74

APRN MSN-DNP

Student Learning Outcomes

Graduates of the DNP program will be prepared to:

1. Synthesize research-based evidence to create, implement, evaluate, and translate into practice
2. Serve as leaders in nursing and health care by effecting organizational and/or public policy development
3. Demonstrate expert knowledge, values, and skills to improve health outcomes in a specialized area and/or population foci of nursing

4. Demonstrate expertise in increasingly complex practice, leadership, and/or faculty roles.

Program Course Requirements

Pre-Requisite Coursework

NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3
NURSE 5612	Statistics I	3
Total Credits		9

Core Coursework

NURSE 5528	Healthcare Policy & Advocacy	3
NURSE 5602	Healthcare Systems & Leadership (and four days on-site)	3
NURSE 5608	Theory Development I	3
NURSE 5664	Concepts & Approaches of Epidemiology & Statistics in Research	3
NURSE 5611	Healthcare Economics & Quality	3
NURSE 5613	Application of Evidence-based Practice	3
NURSE 5617	Application of Evidence-based Practice II (DNP Clinical and a 2-4 day site visit)	3
NURSE 5620	Advanced Practice V - DNP Clinical	5
NURSE 5624	Advanced Practice VI-DNP Capstone	5
Total Credits		31

Facilities

The University of Missouri-Kansas City has extensive educational facilities on the Volker campus combined with the health care educational facilities and the School of Nursing and Health Studies offices on Hospital Hill campus. Facilities include libraries, resource centers, audiovisual resources, data processing and science information specialists. The affiliated clinical facilities include Truman Medical Center, Children’s Mercy Hospital and nearly 100 community-wide facilities in the Kansas City metro area.

Financial Assistance

The School of Nursing and Health Studies offers a range of scholarships, traineeships and other funds for both full- and part-time graduate and undergraduate nursing students. Students who complete the Free Application for Federal Student Aid (FAFSA) are eligible for the following:

- Brisley Phillips Scholarship
- Chuck and Glo Curtis Scholarship
- Claudene L. Iwig Scholarship
- General Hospital Memorial Scholarship
- Goppert Scholarship
- Helen Blond Scholarship
- John S. Waggoner Memorial Nursing Scholarship
- Laura Larkin Dexter Scholarship
- RN - BSN Scholarship
- Susie Sinton Scholarship

Other funds may be available for students demonstrating financial need. Applications for nursing scholarships are considered after submission of the FAFSA. Priority deadline for that submission is March 1. Further information about applications and qualifications for any of these funds may be obtained from the School of Nursing and Health Studies Student Services Office, room 1410, 2464 Charlotte Street, Kansas City, MO 64108-2718.

History

In 1973-74, a graduate nursing program was started under the aegis of the School of Graduate Studies. On Nov. 16, 1979, the Board of Curators approved a proposal to establish a school of nursing at the University of Missouri-Kansas City. In 1981, following a developmental period, two new curricula were implemented. These were an upper-division baccalaureate degree for registered nurses and a revised master’s degree program for clinical nurse specialists. In 1992, the Board of Curators approved the offering of an inter-campus, cooperative doctoral program in nursing (Ph.D. N.D.). The doctoral curricula was implemented on the Kansas City campus in the Fall Semester of 1995. In 2000, the Board of Curators approved the offering of a pre-licensure baccalaureate degree program beginning in the Fall Semester of 2001. The Board of Curators approved the Doctor of

Nursing Practice (DNP) program which began in 2007 and graduated its first post-master's class in December 2008. The newest program in the School of Nursing is the Bachelor of Health Sciences (BHS), which received final approval and began enrolling students in the fall of 2011. A name change to the School of Nursing and Health Studies was approved in February 2013.

International Students

The School of Nursing and Health Studies coordinates recruitment, retention and continuing advisement for nursing students from abroad in cooperation with the University's Office of International Student Affairs. In addition to the English proficiency examination (TOEFL), all graduates of foreign schools of nursing must complete the Commission on Graduates of Foreign Nursing Schools (CGFNS) qualifying examinations. This will enable registered nurses applying to the School of Nursing and Health Studies to take the National Council Licensure Examinations (NCLEX) for licensure as a registered nurse in Missouri. Students who are registered nurses must also send official transcripts to the CGFNS to determine degree equivalencies. Information about specific requirements for admission and progression may be obtained from the School of Nursing and Health Studies Student Services Office. The School of Nursing and Health Studies retains the right to assess the level of current clinical skills prior to enrollment in clinical coursework.

Master of Science in Nursing (M.S.N.)

Student Learning Outcomes

Graduates of the M.S.N. Program will be prepared to:

1. Implement skills and strategies to advance professional nursing and health across populations and settings.
2. Integrate theory and research in evidence-based nursing and teaching practice.
3. Serve as a leader in unit and oganizational based change.

Degree Requirements

Students have the option to attend full-time or part-time. Nurse practitioner students choosing to attend full-time must begin in a summer semester.

Core Courses Required of all Students

NURSE 5526	Health Promotion Across the Lifespan	3
NURSE 5527	Cultural Diversity & Values	3
NURSE 5528	Healthcare Policy & Advocacy	3
NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3
NURSE 5598	Directed Research	3

Psychiatric Mental Health Nurse Practitioner Track

Student Learning Outcomes

Graduates of the M.S.N. Program will be prepared to:

1. Implement skills and strategies to advance professional nursing and health across populations and settings.
2. Integrate theory and research in evidence-based nursing and teaching practice.
3. Serve as a leader in unit and oganizational based change.

Additional Required Courses

NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5549	Pharmacology for Advanced Nursing Practice	3
NURSE 5546	Foundations of Family Psychiatric Nursing Advanced Practice	2
NURSE 5547M	Diagnostic Reasoning/Health Assessment	3
NURSE 5564M	Family Psychiatric Nursing Advanced Practice I	5
NURSE 5566M	Family Psychiatric Nursing Advanced Practice II	4
NURSE 5572M	Advanced Nursing Practice: Synthesis Practicum	5

Neonatal Nurse Practitioner Track

Student Learning Outcomes

Graduates of the M.S.N. Program will be prepared to:

1. Implement skills and strategies to advance professional nursing and health across populations and settings.
2. Integrate theory and research in evidence-based nursing and teaching practice.
3. Serve as a leader in unit and oganizational based change.

Additional Required Courses

NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5548N	Physiology/Pathophysiology Of The Neonate	2
NURSE 5549N	Pharmacology for the Neonate	3
NURSE 5547N	Advanced Assessment of the Neonate	3
NURSE 5564N	Neonatal Nursing I	3
NURSE 5566N	Neonatal Nursing II	3
NURSE 5572NI	Preceptorship I	5
NURSE 5572II	Preceptorship II	5

Nurse Educator Track

Student Learning Outcomes

Graduates of the M.S.N. Program will be prepared to:

1. Implement skills and strategies to advance professional nursing and health across populations and settings.
2. Integrate theory and research in evidence-based nursing and teaching practice.
3. Serve as a leader in unit and oganizational based change.

Additional Required Courses

NURSE 5515NE	Role of the Nurse Educator	2
NURSE 5516	Curriculum Development in Nursing	3
NURSE 5517	Teaching Strategies in Nursing	3
NURSE 5547NE	Health Assessment & Clinical Reasoning for Nurse Educators	4
NURSE 5548	Advanced Pathophysiology Across the Lifespan	3
NURSE 5564NE	Clinical for Nurse Educators	5
NURSE 5572NE	Synthesis Practicum for Nurse Educators	3

Nurse Educator Certificate

Student Learning Outcomes

This post-master's professional certificate program will prepare nurse educators to:

- employ cutting-edge teaching strategies in the didactic and clinical setting,
- synthesize teaching/learning theories, and
- acquire skills in curriculum development.

Clinical Practicum objectives include the student's ability to provide didactic and clinical instruction within the academic setting.

Program Description

Hands-on experience in objective writing, teaching, clinical instructing, test writing and student management are offered through educational experiences provided by master educators.

Completion of the program meets the educational requirements to be eligible for the NLN CNE Certification Exam. There are four courses required for the program with a total of 12 credit hours. All courses must be completed within three years.

Note: Students are responsible for arranging their clinical preceptor (http://nursing.umkc.edu/documents/academic-programs/preceptor-agreement.pdf) and site for the Practicum course. It is the student's responsibility to maintain clinical eligibility to practice during the program. It is recommended that the student become comfortable in the clinical setting in preparation for Practicum.

Program Admission Requirements

In addition to the admission requirements for UMKC, the requirements for admission into the NEC program are:

- MSN from an accredited nursing program
- Submission of current resume or curricula vitae
- Copy of current licensure as a registered nurse with licensure in the jurisdiction where clinical study is to be conducted

The Post-Master's NE Certificate Program Courses

NURSE 5515NE	Role of the Nurse Educator	3
NURSE 5516	Curriculum Development in Nursing	3
NURSE 5517	Teaching Strategies in Nursing	3
NURSE 5572NE	Synthesis Practicum for Nurse Educators (Preceptorship Course)	3

Organizations

Student Nurses Association

Membership in the Student Nurses Association (SNA) is automatic for all students admitted to and enrolled in the School of Nursing and Health Studies nursing degree programs. Students admitted into pre-nursing are encouraged to attend all meetings. Officers and representatives to the school's standing committees are elected annually. Council meetings and special events are held periodically throughout the academic year.

Sigma Theta Tau International, Lambda Phi Chapter

This international nursing honor organization is designed to recognize and encourage superior scholarship and leadership achievements in nursing. Students are eligible for consideration as junior and senior undergraduate students and as continuing graduate students. Membership, based on integrity and scholarship, is by invitation only. The induction of new members is held each spring.

Nursing Alumni Association

All students at the School of Nursing and Health Studies qualify for membership in the Nursing Alumni Association. Objectives of the alumni association are to provide mentoring to the student body and garner support for the school. Meetings are held periodically and officers are elected each spring by the Nursing Alumni Board.

Ph.D. in Nursing

Student Learning Outcomes

Upon graduation, PhD students in nursing will:

1. Develop the science of nursing through rigorous, original research
2. Steward the discipline through dissemination of scholarly work
3. Educate the next generation of nurses and add to the global community of scholars.

Program Requirements

BSN-PhD/Pre-requisite Coursework

NURSE 5527	Cultural Diversity & Values	3
NURSE 5528	Healthcare Policy & Advocacy	3
NURSE 5550	Theoretical Foundations in Nursing	3
NURSE 5555	Nursing Research	3

PhD Core Coursework

NURSE 5603	Research Institute I	2
NURSE 5604	Research Institute II	2
NURSE 5608	Theory Development I	3
NURSE 5610	Theory Development in Nursing II	3
NURSE 5612	Statistics I	3
NURSE 5622	Statistics II	3
NURSE 5631	State of the Science	3
NURSE 5668	Quantitative Research	3
NURSE 5670	Qualitative Research Methods	3

NURSE 5666	Designing Nursing Research	3
MEDB 5561	Responsible Conduct of Research	3
Collateral Coursework in Research Project Area:		18
NURSE 5662	Psychometrics	
NURSE 5664	Concepts & Approaches of Epidemiology & Statistics in Research	
NURSE 5699	Dissertation Research	12

Program Changes

The School of Nursing and Health Studies reserves the right to make changes in courses, degree requirements and course schedules without notice.

Pharmacy Home Page

Health Sciences Building (http://www.umkc.edu/virtualtour/hsb.asp)
Hospital Hill Campus
2464 Charlotte Street
(816) 235-1609
Fax: (816) 235-5190
(816) 235-1613 (Student Affairs)
Fax: (816) 235-5562 (Student Affairs)
pharmacy@umkc.edu
pharmacy.umkc.edu (http://pharmacy.umkc.edu)

Mailing Address
University of Missouri-Kansas City
School of Pharmacy
2464 Charlotte Street
Kansas City, MO 64108

Dean:
Russell B. Melchert

Associate Dean for Academic Affairs:
Linda S. Garavalia

Associate Dean for Student Affairs:
Patricia A. Marken

Associate Dean for UMKC School of Pharmacy at MU:
Roger W. Sommi

Associate Dean for UMKC School of Pharmacy at MSU:

Paul Gubbins

History

Originally organized in 1885 as the Pharmaceutical Department of the University of Kansas City, the school was reorganized and reincorporated in 1898 as the Kansas City College of Pharmacy and Natural Science. In 1943, this forerunner of the present school joined the University of Kansas City as its third professional school.

When the University of Kansas City was incorporated into the University of Missouri System in 1963, the School of Pharmacy became the only state-supported pharmacy school in Missouri. In October 2010, the school commemorated 125 years of excellence in pharmaceutical education, research and service.

The School of Pharmacy is a member of the American Association of Colleges of Pharmacy (AACP). The doctor of pharmacy program is accredited by the Accreditation Council for Pharmacy Education (ACPE). Information about ACPE can be found at https://www.acpe-accredit.org/.

Degrees Offered

The School of Pharmacy offers the advanced professional degree of doctor of pharmacy. In addition, the School of Pharmacy participates in the School of Graduate Studies Interdisciplinary Ph.D. program with emphasis areas in pharmaceutical sciences and pharmacology and toxicology.

The UMKC School of Pharmacy currently has two Pharm.D. program sites: the UMKC campus site (Kansas City) and the UMKC School of Pharmacy at the University of Missouri (MU-Columbia) site. Planning is underway for a third program site - the UMKC School of Pharmacy at Missouri State University (MSU-Springfield) with the first class of students projected to enroll in Fall 2014. The Pharm.D. program is a single program with multiple locations. All students at each site are enrolled through UMKC and graduate from UMKC. The required curriculum is the same for all students enrolled in the UMKC Pharm.D. program. Students located at distant sites are enrolled in the same required classes as students on the Kansas City campus. The same program policies and procedures apply to all students in the Pharm.D. program, regardless of program site.

Students interested in or that are currently pursuing Interdisciplinary Ph.D. programs of study should consult the School of Graduate Studies section of this catalog for degree requirements and other academic regulations applicable to the degree program.

Advising Systems

Student Support - Academic and Faculty Professional Advising

Upon entry into the doctor of pharmacy program, each student is assigned a faculty advisor who serves as a mentor throughout the program. If students are experiencing difficulties, whether academic or personal, or if seeking more in-depth information about the curriculum or career paths, they should seek counsel from their faculty advisor. It is important that students keep in contact with their faculty advisor throughout the program as they will monitor their progress and success.

Academic advisors in the Pharmacy Office of Student Affairs also work closely with pre-pharmacy and current pharmacy students to provide assistance during the application and admission process, ensuring proper admission requirements and matriculation procedures are met. After entry, academic advisors assist students through subsequent enrollment and progression requirements and through final graduation completion. Academic advisors act as liaisons to various campus services and departments of the campus community and can link students with resources to address any academic or personal issues. Professional staff in the Office of Student Affairs also serve as advisors to individual classes and to the Pre-pharmacy Society in addition to assiting pharmacy student organization officers.

Both the academic and faculty advisors are familiar with sources of assistance and will help students seek the best solutions to their issues and concerns. Building a strong relationship with both advisors is strongly encouraged. Students that encounter academic difficulty during the program should meet with their advisors for guidance and for help in smooth transitions.

The School of Pharmacy offers a variety of services to assist students in support of the academic experience. For more information visit: http://pharmacy.umkc.edu/student-affairs/ and http://pharmacy.umkc.edu/current-students.

Libraries

The University Libraries provide the full spectrum of information services to support study and research in pharmacy. For additional information, consult the University Libraries section of this catalog.

Student Affairs

The School of Pharmacy offers a variety of services to assist students in support of their academic experience. For more information: http://pharmacy.umkc.edu/student-affairs/ and http://pharmacy.umkc.edu/current-students

Student services, which are available not only through the School of Pharmacy but throughout the University, are outlined in the Division of Student Affairs section of this catalog.

Student Involvement

Student Government

The student body annually elects an Executive Council for student pharmacists from each campus. This body also serves to represent the student chapter of the American Pharmacists Association, the Academy of Student Pharmacists (APhA-ASP). This council consists of the presidential officers; multiple vice-presidential offices focusing on logistics, programming, membership, finances, communications, international affairs, and policy; and a secretary. Two representatives from each class are elected annually to serve as voices for the classes' interests. Lastly, two Student Government Association Senators and a Student Activities Fee Committee representative are elected across the campuses to represent the interests of student pharmacists at the campus level. This group supervises the annual student activities budget process and recommends students to represent the student body on various campus committees.

The Script

The Script, a pharmacy student-administered newsletter, is published several times each semester by the UMKC American Pharmacists Association Academy of Student Pharmacists (APhA-ASP). Its purpose is to inform the student body, as well as the faculty and staff of student activities and achievements, announce available opportunities and report on developments affecting student life. It is a primary vehicle of communication within the school. Articles and calendar items are welcomed from any pharmacy student, student organization, faculty or staff member.

Student Organizations

The UMKC School of Pharmacy hosts a number of very active pharmacy student organizations. The following organizations are recognized by the UMKC Office of Student Involvement. UMKC students routinely win local, regional and national awards for their outstanding community service activities, leadership efforts, and commitment to patient care. General descriptions of each organization can be found under the Pharmacy Student Organizations section of the Pharmacy School website at: http://pharmacy.umkc.edu/current-students/.

- Academy of Managed Care Pharmacy (AMCP)
- American Association of Pharmaceutical Scientists (AAPS)
- American Pharmacists Association Academy of Student Pharmacists (APhA-ASP)
- Kappa Epsilon (KE)
- Kappa Psi (KY)
- National Community Pharmacists Association (NCPA)
- Pharmaceutical Sciences Graduate Student Association (PSGSA)
- Phi Lambda Sigma Leadership Society (PLS)
- Pre-Pharmacy Society
- Public Health Organization (PHO)
- Rho Chi Society (RH)
- Student College of Clinical Pharmacy (SCCP)
- Student Society of Health-System Pharmacists (SSHP)

State Licensure Requirements

Students planning to practice the profession of pharmacy are required to satisfy the licensure requirements of the state in which they intend to practice. Licensure requirements vary, therefore, information concerning these requirements should be obtained by contacting the board of pharmacy of the state concerned.

Students accepted and enrolled in the doctor of pharmacy curriculum are required to obtain a valid Intern Pharmacist License issued by the Missouri Board of Pharmacy in order to fully participate/continue in the curriculum. In addition, enrolled students must also obtain intern pharmacist professional liability insurance. The Missouri Intern Pharmacist License and professional liability insurance must remain current and valid through the last Advanced Pharmacy Practice Experience. Successful completion of all portions of the curriculum, both credit and non-credit requirements, are necessary for a student to meet graduation requirements and accrue sufficient internship hours toward pharmacist licensure eligibility.

All UMKC Pharm.D. students must read and adhere to the UMKC School of Pharmacy Student Intern Pharmacist License and Intern Liability Policy as posted on the School of Pharmacy Current Students website.

The state of Missouri requires that an applicant for pharmacist licensure be 21 years of age, a graduate of an ACPE accredited school of pharmacy approved by the state's board of pharmacy and have on file with the board proof of obtaining a minumum number of internship hours in a retail/community or hospital pharmacy practice setting under the supervision of a registered pharmacist/preceptor. Refer to the Missouri Board of Pharmacy and the National Association of Boards of Pharmacy websites for the most up-to-date information as requirements can change at any time.

Career Applications

Doctor of Pharmacy Careers

A number of graduates choose to practice in community and hospital pharmacy practice settings, but a wide variety of career possibilities in the pharmacy profession are available. Pharmacists have a great spectrum of practice environments to chose from in which their professional skills can be applied. Career information can be found through any of the national pharmacy professional associations. For information about these opportunities, see http://pharmacy.umkc.edu/admissions/pharmd/faq/

The doctor of pharmacy program also provides an appropriate academic base for students wishing to enter graduate study in the pharmaceutical sciences, pharmacology, toxicology, chemistry, biology, business, and/or public health. Others have gone on to pursue degrees in medicine, dentistry, or law.

Postgraduate training in the form of a residency and optional fellowship is recommended for all doctor of pharmacy graduates seeking advanced career opportunities in industry or academia.

- Academic Regulations and Requirements
- Doctor of Pharmacy (p. 733)
- Pharmacy (PHARM 7000) Courses (p. 1268)
- Doctor of Philosophy
  - Interdisciplinary Ph.D. in Pharmaceutical Sciences and Pharmacology (p. 738) and Toxicology

- Graduate Pharmacy (PHARM 5000) Courses (p. 1268)

Faculty

Daniel Aistrope Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=aistrope); clinical assistant professor of pharmacy practice and administration; Pharm.D. (Creighton University School of Pharmacy and Health Professions).

Lynn E. Anliker Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=anliker); clinical assistant professor of pharmacy practice and administration; Pharm.D. (Drake University).

Mostafa Z. Badr[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=badr); professor of pharmacology and toxicology; B.S., M.S. (Cairo University, Egypt); Ph.D. (University of Louisville).

Kylie Barnes; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=barnes); assistant professor of pharmacy practice and administration; PharmD (St. Louis College of Pharmacy).

Hari Bhat[2,3]; associate professor of pharmacology and toxicology; B.S., M.S. (University of Kashmir, India); Ph.D. (University of Texas Medical Branch-Galveston).

Wayne M. Brown Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brown); associate professor of pharmacy practice and administration; B.S. (Medical College of South Carolina); M.S., Ph.D. (University of Mississippi).

Angela Brownfield; Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=brownfield); clinical assistant professor of pharmacy practice and administration and assistant director, experiential programs; Pharm.D. (St. Louis College of Pharmacy).

Patrick J. Bryant Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bryant); clinical professor of pharmacy practice and administration and director, UMKC Drug Information Center; Pharm.D. (University of Nebraska Medical Center).

Andrew S. Bzowyckyi Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bzowyckyi); clinical assistant professor of pharmacy practice and administration; B.S., Pharm.D. (University of Connecticut).

Lester Chafetz; professor emeritus of pharmaceutical science; B.S. (University of Rhode Island); M.S., Ph.D. (University of Wisconsin).

Kun Cheng[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cheng); associate professor of pharmaceutical science; B.S., M.S. (China Pharmaceutical University, China); M.S. (National University of Singapore, Singapore); Ph.D. (University of Tennessee).

Kelly Cochran Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cochran); clinical assistant professor of pharmacy practice and administration; Pharm.D. (Butler University).

Kristen DiDonato Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=didonato); clinical assistant professor of pharmacy practice and administration; B.A. (Wittenberg University); Pharm.D. (The Oho State University).

Glenn H. Eberhart; professor emeritus of pharmacology and toxicology; B.S. (University of Denver); M.S., Ph.D. (University of California).

Jack E. Fincham Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=fincham); professor of pharmacy practice and administration; B.S. (University of Nebraska); Ph.D. (University of Minnesota).

Simon H. Friedman[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=friedman); professor of pharmaceutical science; B.S. (Massachusetts Institute of Technology); Ph.D. (University of California, San Francisco).

Linda S. Garavalia[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=garavalia); associate dean academic affairs, school of pharmacy, and professor of pharmacy practice and administration; B.A. (Clemson University); M.A., Ph.D. (University of South Carolina).

Maqual Graham Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=graham); associate professor of pharmacy practice and administration and director, applied therapeutics and professionals skills; Pharm.D. (University of Missouri-Kansas City).

Paul Gubbins Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gubbins); associate dean, school of pharmacy, professor of pharmacy practice and administration; PharmD (University of Illinois at Chicago College of Pharmacy).

William G. Gutheil[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gutheil); associate professor of pharmaceutical science; B.S. (California Polytechnic State University); Ph.D. (University of Southern California).

Jeremy P. Hampton Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hampton); clinical assistant professor of pharmacy practice and administration; B.S. (Rockhurst University); Pharm.D. (University of Missouri-Kansas City).

Karen L. Hardinger Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hardinger); clinical professor of pharmacy practice and administration; Pharm.D. (University of Kansas).

Orisa J. Igwe[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=igwe); associate professor of pharmacology and toxicology; B.S. (Northeast Louisiana University); M.S. (University of Kentucky); Ph.D. (University of Cincinnati).

Thomas P. Johnston[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=johnston); professor of pharmaceutical sciences; B.S., Ph.D. (University of Minnesota).

Maureen E. Knell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=knell); clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Peggy G. Kuehl Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kuehl); clinical associate professor of pharmacy practice and administration; B.S. (South Dakota State University); Pharm.D. (University of Minnesota).

Anil Kumar[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=kumar); professor of pharmacology and toxicology and chair, Division of Pharmacology and Toxicology; B.S., M.S. (Lucknow University, India); Ph.D. (Kanpur University, India).

Robert C. Lanman; professor emeritus of pharmacology and toxicology, School of Pharmacy; B.S., Ph.D. (University of Minnesota).

Chi H. Lee[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lee); professor of pharmaceutical science; B.S. (Seoul National University, South Korea); M.S. (University of Washington); Ph.D. (Rutgers University).

Cameron C. Lindsey Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lindsey); professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Yifei Liu Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=liu); assistant professor of pharmacy practice and administration; B.S. (West China University of Medical Sciences, China); M.S., Ph.D. (University of Iowa).

Patricia A. Marken Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=marken); associate dean student affairs, school of pharmacy, and professor of pharmacy practice and administration; B.S. (Dalhousie University, Canada); Pharm.D. (Medical University of South Carolina).

William D. Mason; professor emeritus of pharmaceutical science, School of Pharmacy and School of Medicine; B.S., M.S., Ph.D. (Ohio State University).

Cydney McQueen Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mcqueen); clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Tatum Mead Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mead); clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Iowa); B.A. (University of Northern Iowa).

Russell B. Melchert Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=melchert); dean, school of pharmacy, and professor of pharmacology and toxicology; B.S., Ph.D. (The University of Oklahoma Health Sciences Center).

Srikumaran K. Melethil Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=melethil); professor emeritus of pharmaceutical science; B.Pharm., M.Pharm. (Andhra University, India); Ph.D. (State University of New York at Buffalo).

Ashim K. Mitra[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mitra); vice provost for interdisciplinary research, co-director of Vision Research Center, curators professor of pharmaceutical science and chair, Division of Pharmaceutical Science; B.S., M.S. (Jadavpur University, India); M.S., Ph.D. (University of Kansas).

Mridul Mukherji[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mukherji); assistant professor of pharmaceutical science; B.S. (University of Allahabad, India); M.S. (University of Calicut, India); Ph.D. (University of Oxford, United Kingdom).

Leigh Anne Nelson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=nelson); associate professor of pharmacy practice and administration; B.S., Pharm.D.(University of Missouri-Kansas City).

Lauren Odum Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=odum); clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Erica Ottis Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ottis); clinical assistant professor of pharmacy practice and administration; Pharm.D. (St. Louis College of Pharmacy).

Heather A. Pace Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pace); clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Mark Patterson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=patterson); assistant professor of pharmacy practice and administration; B.A. (Bowdoin College); M.P.H. (Yale University); Ph.D. (University of North Carolina-Chapel Hill School of Pharmacy).

Robert W. Piepho Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=piepho); dean emeritus and professor emeritus of pharmacology and toxicology; B.S. (University of Illinois); Ph.D. (Loyola University).

Rafia S. Rasu[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rasu); associate professor of pharmacy practice and administration; B.S., M.S., M.B.A. (Dhaka University, Dhaka, Bangladesh); Ph.D. (University of Texas).

William J. Rost; professor emeritus of pharmaceutical science; B.S., Ph.D. (University of Minnesota).

Valerie L. Ruehter Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ruehter); clinical assistant professor of pharmacy practice and administration and director, experiential programs; B.S., Pharm.D. (University of Missouri-Kansas City).

Jennifer A. Santee Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=santee); clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Iowa).

Mark T. Sawkin; clinical assistant professor of pharmacy practice and administration; B.S., Pharm.D. (Wayne State University).

Stephanie Schauner Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schauner); clinical associate professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Peter S. Silverstein; associate research professor of pharmacology and toxicology; B.A. (Duke University); MA (Lehman College of City University of New York); Ph.D. (Auburn University).

Andrew Smith Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Roger W. Sommi, Jr. Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sommi); associate dean, school of pharmacy, professor of pharmacy practice and administration and vice chair, division of pharmacy practice and administration; B.S. (University of Wisconsin-Madison); Pharm.D. (University of Utah).

Morgan Sperry Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sperry); clinical assistant professor of pharmacy practice and administration; Pharm.D. (Creighton University).

Amanda M. Stahnke; clinical assistant professor of pharmacy practice and administration; BA (Westminster College); Pharm.D. (Southern Illinois University).

Steven Stoner Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stoner); clinical professor of pharmacy practice and administration and chair, Division of Pharmacy Practice and Administration; Pharm.D. (University of Nebraska).

Jianping Wang[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wang); associate professor of pharmacology and toxicology; M.D., M.S. (Second Military Medical University); Ph.D. (Louisiana State University of Health Sciences Center).

Elizabeth Winans Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=winans); clinical associate professor of pharmacy practice and administration; B.S. (Kansas State University); B.S., Pharm.D. (University of Oklahoma College of Pharmacy).

Eric Wombwell Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wombwell); clinical assistant professor of pharmacy practice and administration; Pharm.D. (University of Missouri-Kansas City).

Bi-Botti C. Youan[2,3] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=youan); professor of pharmaceutical science; Pharm.D. (University of Cote, Abidjan); MBA (United Business Institutes, Belgium); M.Sc., Ph.D. (Catholic University of Louvain, Belgium).

David M. Yourtee Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=yourtee); professor emeritus of pharmacology and toxicology, School of Pharmacy and School of Medicine; B.S. (University of Missouri-Columbia); Ph.D. (University of Missouri-Kansas City).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Academic Regulations and Requirements

Class Attendance

Students should refer to the UMKC Attendance Policy (http://cat-edit.umkc.edu/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=98&chapterid=8328&topicgroupid=55804&loaduseredits=False) under the Academic Regulations section of this catalog.

Absences from Scheduled Examinations

Students must refer to the individual course policies within the syllabus.

Policy for Examination Process

Students must refer to the individual course policies within the syllabus.

Inclement Weather Policy

Please refer to the School of Pharmacy inclement weather policy related to campus closures becuse of weather related issues - http://pharmacy.umkc.edu/docs/stuser/course_Policy-Inclement_Weather.pdf.

Academic Loads

All coursework in the pharmacy curriculum is sequential and success depends upon the instruction and content from the previous semester and builds upon knowledge needed for subsequent semesters. Pharmacy students must enroll for the total program as outlined for each semester in the most current version of the curriculum. Therefore, all coursework and related requirements must be successfully completed in sequence, as outlined, before matriculating to the next professional year.

Grading System

Refer to the grade-point system listed in the General Undergraduate Academic Regulations and Information section of this catalog and to the individual course syllabi. Note: Letter grade changes must be made no later than four weeks from the beginning of the next semester, to include summers, unless a shorter time frame be affixed by a course coordinator. This policy applies to School of Pharmacy departmental courses only and does not apply to incomplete grades.

Doctor of Pharmacy students are not eligible for GPA Adjustment through the UMKC repeated courses policy.

Plus (+) / minus (-) grades are given at the option of the course instructor/coordinator.

Academic Standing for Doctor of Pharmacy Students

A student's academic standing is determined by their academic performance while progressing through the University of Missouri-Kansas City School of Pharmacy (UMKC SOP) Doctor of Pharmacy curriculum.

Reasons for the Policy

The UMKC SOP recognizes that students admitted to professional studies may encounter academic difficulty or need a leave to attend to personal issues. The SOP has established policies designed to give students an opportunity to be reinstated following a leave of absence, withdrawal or poor academic performance.

Academic Standing Defined

Good Academic Standing: The student is currently enrolled in the UMKC SOP.

Academic Concern: Less than a C grade on a test or major assignment. Students meeting criteria for Academic Concern will be monitored through the Student Success Program.

Academic Probation: Less than a 2.00 term grade point average (GPA), with no grades of D, F, WF, or NC, **or** less than a 2.00 cumulative GPA in any **one** semester.

Academic Dismissal:

- Receipt of a D, F, WF, or a NC grade in any coursework in a single semester
  - Receipt of less than a 2.00 term GPA while on academic probation
  - Placement on Academic Probation **two** consecutive semesters
  - Placement on Academic Probation **more than two** non-consecutive semesters

NOTES:

- Any student who is placed on academic probation or is dismissed from the Doctor of Pharmacy program the first time is notified in writing by the Associate Dean for Student Affairs (ADSA).

A student **is not eligible for readmission** if he/she is academically dismissed a second time. The second dismissal causes the student to be irrevocably dismissed from the UMKC SOP. A student who is academically dismissed for a second time will be notified by the Dean of the School of Pharmacy.

A student who is irrevocably dismissed from the UMKC SOP may consult with the ADSA or the Director of Student Affairs regarding options for their academic career beyond pharmacy and logistics of transferring to another major. A Faculty Advisor (FA) cannot advise students who are irrevocably dismissed from the UMKC SOP and should refer them to the ADSA or the Director of Student Affairs.

Leave of Absence:

Pharmacy students can petition the Academic Progression Committee for a leave of absence under the following stipulations:

- Student is eligible for reentry into the UMKC SOP.
- *P1-P3 year*: Petition must be initiated during the current term no later than the 12th week of class.
- *P4 year*: Petition must be initiated no later than one week before the start of the next rotation.
- Petition includes a personal statement detailing reason for leave.
- Documentation from a health care professional is provided to support reasons for a medical leave.
- Documentation from Department of Defense is provided to support reasons for a military leave.
- NOTE: Petitions for leaves resulting from catastrophic events will be given an exception to the timelines stated above.

Requesting a Leave of Absence

Students requesting a Leave of Absence must submit a completed SOP petition form , the UMKC Request for Leave of Absence form and required supporting documentation. The forms are submitted to the Office of Student Affairs (OSA) for the School of Pharmacy who forwards them to the Academic Progression Committee Chair. The Chair calls a meeting of the Academic Progression Committee who hears the petition.

Pharmacy students approved for Leave of Absence:

- Will be withdrawn from all courses as per University policy.
- Are approved for up to one year leave only. An extension may be requested if needed and well documented. The extension cannot extend more than two years beyond the original date that the leave started. Students who do not return by the date noted on their approved leave and who are not granted an approved extension will be required to reapply for admission.
- Will not be enrolled for pharmacy coursework in the subsequent semester(s).

A student on a leave of absence will **not**:

- Be eligible for any financial aid disbursements during the semester(s) while on a leave of absence. A student on a leave of absence will be reported to lenders and loan service agencies as “non-attending” and will need to contact his/her lenders for information on possible repayment requirements, deferments and forbearances.
- Have access to campus computing labs, Student Health and Wellness Services, or any campus or university services available only to currently enrolled students. Students on a leave will be able to maintain their UMKC exchange email account.

NOTE – Any student dismissed from the Doctor of Pharmacy program or approved for a leave of absence must notify the Missouri Board of Pharmacy and their current pharmacy employer of their change in status immediately as they are ineligible to maintain any current pharmacy intern license.

Procedures After a Change in Academic Standing

Academic Probation:

All cases of probation are reviewed by the Academic Progression Committee to discuss reasons for the unsatisfactory progress. Following review, the ADSA will notify the student of their academic probation status by letter. In order to be removed from Academic Probation status, the student must:

- Receive no less than a 2.00 term GPA in the next academic semester;
- Raise their cumulative GPA above 2.00 in the next academic semester.

Readmission After a Leave of Absence:

Petitions for readmission after a leave of absence will be reviewed by the Academic Progression Committee. Re-entry is contingent on their eligibility to continue, results of a new Criminal Background Check, and space available in the class the student seeks to re-enter. Pharmacy students returning from a leave of absence must:

- *P1-P3 year*: Submit the petition form at least two months prior to the beginning of the **term** applying for re-entry. Upon re-entry will continue under the student's same academic standing status that was in place at the time the leave of absence began.
- *P4 year*: Submit the petition form at least one month prior to the desired re-entry date. Note that students are rescheduled to rotations on a space available basis. Attempts will be made to restart the student on their desired date, but there are no guarantees of availability.
- Be held under the policies and procedures in place at the time of their re-entry.
- Complete a new Criminal Background Check.
- If applicable, supply a letter from a health professional and/or other entity verifying that the student can return to full-time, collegiate work.
- Provide any additional documentation from other entities as required by the SOP to support readiness for readmission.
- Incorporate any curricular or policy changes into modified plan of study.

NOTE: Program and graduation requirements may change during a student's leave of absence. It is at the discretion of the SOP to define the program and graduation requirements once the student has been approved to return from a leave of absence.

Readmission of Eligible Students After Academic Dismissal:

- A student is eligible for readmission to the Doctor of Pharmacy program after their first academic dismissal. The student must request reentry within one year from notice of their academic dismissal. Readmission is determined on a case by case basis.
- If readmitted, the student is placed on an academic contract and must meet the conditions of their contract throughout their remaining time as a UMKC SOP student. A student cannot continue in the program until the Dean or designee has approved the students' academic contract.
- An academic contract includes a modified plan of study to complete the curriculum and other programmatic requirements and additional expectations needed to maintain enrollment in the program.
- A student **is not eligible for readmission** if they are dismissed after failing to meet the terms of their academic contract. A second dismissal causes the student to be irrevocably dismissed from the UMKC SOP.

The following steps must be completed for an eligible student to request reentry:

- Meet with their FA and the ADSA to discuss factors contributing to their dismissal and their proposed readmission plans (timing, coursework, additional improvement strategies)
- A written contract is developed by the FA, ADSA and other individuals as deemed necessary by the ADSA. Readmission contracts consider, but are not limited to the following factors:
- Performance in previous course work completed by the student and other circumstances surrounding their dismissal.
- Corrective measures taken by the student to address academic readiness, financial problems, personal matters, course work deficiencies, and/or ongoing support needed to address any relevant issues.
- Availability of space in the professional class the student seeks to enter. The student may be assigned to their original campus location **or** to an alternative campus location based upon space availability.
- Conditions of readmission include, but are not limited to:
  - The student remains on contract and meets all terms in their contract for the duration of their tenure in the Doctor of Pharmacy program.
  - The student meets with their FA and other individuals as set forth in the contract.
  - The student does not receive any grades of NC, D, F or WF in any course during the remainder of their tenure in the Doctor of Pharmacy program.
  - The student does not receive less than a 2.00 term GPA.
  - The student cannot withdraw from any required course unless they have a Leave of Absence approval from the Academic Progression Committee
  - Completion of new Criminal Background Check, when necessary.
- The student, FA and the ADSA discuss the contract. If the student agrees to the stipulations in the contract, he/she signs it and provide a signed copy to ADSA. If the student disagrees, he/she submits a written appeal using the **petition form** within 10 working days of receipt of the contract. The appeal is submitted to the ADSA who forwards it to the Academic Progression Committee. The Chair calls a meeting of the Academic Progression Committee who hears the appeal. The student is required to present their appeal in person to the Academic Progression Committee. The ADSA and FA will answer any questions about the original contract at that meeting. The Academic Progression Committee determines the student's final contract.

Request for Modified Plan of Study for Students Not on Academic Contract

In exceptional circumstances, a student can request a modification to their original curricular plan of study if they are not on an academic contract. Circumstances can include but are not limited to:

- Health or personal reasons not resolved by a Leave of Absence.
- Receipt of course withdrawal without assessment or course withdrawal passing.
- NOTE:
  - The SOP follows the UMKC Undergraduate Course Withdrawals policy
  - **Students should not withdraw from any coursework without first communicating in writing with their FA or the ADSA.**
  - Students who withdraw from required coursework are **ineligible** to continue in the regular curriculum, must be approved for a modified plan of study to continue in the program. They may have a **delayed graduation completion date.**

Students who seek a Modified Plan of Study must meet with their FA and ADSA and other individuals as deemed appropriate to develop the plan and submit that plan for approval by the Academic Progression Committee prior to continuing in the program. All modified plans of study are approved on a case by case basis, must meet all UMKC and UMKC SOP prerequisites and policies and procedures and be approved by the Academic Progression Committee.

Appeal of Disputed Grades

The School of Pharmacy affirms the principle that students are responsible for meeting the standards of academic performance established for each course. Further, the course coordinator is responsible for setting the criteria for grades, evaluation of student performance, and assignment of grades.

Students have the right to appeal for change of the grade they received in a course. Grade appeal is only available for reviewing allegedly capricious grading, and not to review the instructor's evaluation of the student's academic performance. **Capricious grading, as that term is used here, consists only of any of the following**:

1. the assignment of a grade to a particular student on some basis other than the performance in the course;
2. the assignment of a grade to a particular student by resorting to more exacting or demanding standards than were applied to other students in the course; (Note: Additional and/or different grading criteria may be applied to graduate students enrolled for graduate credit in 300 and 400 level courses.)
3. the assignment of a grade by a substantial departure from the instructor's previously announced standards.

Procedures for Appeal of a Disputed Grade

Informal Disposition

Students are encouraged to meet with the course coordinator to discuss the disputed grade prior to formally initiating a grade appeal. If the student is still not satisfied with the grade, they can then initiate the formal grade appeal process as outlined below. The student can also discuss their case with their faculty advisor* as they seek informal resolution.

Pre Appeal Meetings

The student and their faculty advisor may meet with Associate Dean for Student Affairs before entering Step 1a or 1b or at any other time throughout the process to ensure all parties understand the processes involved in a grade appeal. The Associate Dean for Student Affairs is also available to meet with the course coordinator and the relevant division chair to discuss procedural issues.

Appeal Step 1 – Appeal to Course Coordinator

Step 1a - Appeals involving didactic courses

The student will first discuss any disputed grade with the course coordinator. **The student must clearly state in writing that they are enacting Step 1 of the grade appeal process and provide a written petition stating how the disputed grade meets one or more definition(s) of capricious grading.** This must be done within six weeks after the beginning of the succeeding regular academic semester.

Step 1b – Appeals involving Experiential Education

The student will first discuss any disputed grade with the instructor responsible of the assignment of an experiential rotation grade. In the case of a grade being assigned by an *adjunct* faculty preceptor, the Director of Experiential Rotations will serve as arbitrator on behalf of the adjunct member **The student must clearly state in writing that they are enacting Step 1 of the grade appeal process and provide a written petition stating how the disputed grade meets one or more definition(s) of capricious grading.** This must be done within six weeks after the beginning of the succeeding regular academic semester.

Appeal Step 2 – Appeal to Division Chair **

If the matter cannot be resolved during Step 1, the student will describe their case in a written petition. The petition must be given to the Division Chair within 10 consecutive calendar days following the meeting with the course coordinator. An airing of the petition with the appropriate Division Chair and the student's faculty advisor* provides the student an opportunity to present the matter in dispute and to assist all parties to comprehend the issue germane to the situation. The Division Chair will report the outcome in writing to the student within 10 consecutive calendar days.

Appeal Step 3 – Appeal to School of Pharmacy Executive Committee

If the grade appeal is not resolved to the satisfaction of the student in Step 2, the student requests in writing that that the Division Chair refer the matter, with all pertinent records, to the Dean** of the School of Pharmacy. The request must be made within 10 consecutive calendar days of the Chair's notification to the student. The Dean will refer the entire case to the School of Pharmacy Executive Committee (members holding academic appointments) as soon as possible, but no later than 21 consecutive calendar days.

The Executive Committee will:

- Review the Chair's decision and all documents reviewed during Step 2.
- Hear from the student.
- Hear from the course coordinator.
- Find and consider other pertinent data as indicated. The student has the right to submit additional evidence during Step 3.

By formal motion and vote, the Executive Committee will arrive at a recommendation to the Dean to either sustain the grade as assigned or to alter the grade in favor of the student. (NOTE - In this deliberation, the Dean, as Chair, may enter into the deliberation but will not vote on the recommendation, except as necessary to break a tie.) The outcome of this hearing will be reported in writing to the student within 10 consecutive calendar days.

Appeal Step 4 – Appeal to Provost

In the event that the student is not satisfied with the outcome of Step 3, the student can appeal to the Provost 10 consecutive calendar days after notification of the Dean's decision.

Additional Procedural Considerations:

- Students can request permission to take next semester courses while appealing their grade from the previous semester. The student makes their request in writing to each course coordinator who teaches in the upcoming semester. The coordinator grants or denies permission to the student, in writing, on a case by case basis. The student must have permission from all course coordinators to attend their class while a grade is under appeal in order to progress. The student provides all written permissions to the Associate Dean for Student Affairs who will facilitate registration for that semester.
  - No student will be allowed to continue into APPE's until all coursework through the P3 year is complete and all grade appeals are completed.
  - If a student exhausts all steps in the appeal process and the grade is upheld, permission to attend the classes is immediately rescinded. Depending upon the timing the grade appeal decision – fees for that semester may or may not be able to be recouped.
- *The student's has the right to use someone other than their assigned faculty advisor to assist him/her through the appeal process.
- **The Dean, Associate Dean or Department Chair can name a designee if they are unable to fulfill their role in the appeal process.
- Witnesses or statements of support are not allowed as part of any School of Pharmacy grade appeal hearing. Students can bring their faculty advisor or another individual of their choosing to the hearing. That individual cannot directly address the school representative hearing the case at that step. The student and the individual can speak to each other during the hearing step(s).

Step 4 procedures are determined by the Provost's office.

Noncredit Requirements

All doctor of pharmacy students are expected to actively participate in professional activities offered or required by the School of Pharmacy. These activities mirror those expected in professional practice and are intended to better prepare the student for professional life. The following are requirements for all Pharm.D. students. Students will be notified if additional certifications or requirements apply.

The following requirements apply to Doctor of Pharmacy students (as defined for each item), unless a waiver is obtained from the appropriate school official.

Career Fair

All students must attend and participate at the Pharmacy Career Enhancement and Professional Preparation Day during their final year of the program unless previously excused, in writing, in advance of the event by the Dean or designee.

Certifications in Basic Cardiac Life Support/Cardio Pulmonary Resuscitation (BCLS/CPR) for Health Professionals and First Aid Training

All students must complete BCLS/CPR and First Aid through the American Heart Association or the American Heart Cross. Certification must be uploaded in E-Value prior to enrollment in summer Introductory Pharmacy Practice Experiences [IPPE] or in Academic Service Learning. The certification must be valid through the last Advanced Pharmacy Practice Experiential [APPE] rotation.

Health Insurance Coverage

All Pharm.D. students must obtain and provide proof of health insurance coverage no later than the end of the first week of every fall semester and the coverage must remain current throughout enrollment in the program.

Criminal Background Checks (CBCs)

The University, on behalf of the School of Pharmacy, agrees to inform students that as a condition of full admission to the Doctor of Pharmacy program and for participating in any affiliated institution or site [academic service learning and/or introductory and advanced pharmacy practice experiential rotations], they must obtain and provide verification of a current, criminal background check prior to that student's assignment at an affiliated hospital/institution/practice site. The affiliated hospital/institution/practice site hereby understands and agrees that the decision to permit a student to participate at that affiliated hospital/institution/practice site on the basis of the result of any criminal background check remains solely with the affiliated hospital/institution and not the University. Failure on the student's part to submit to criminal background checks will delay progression or render a student unable to complete the professional degree program.

Drug Screens

Pharmacy students may be subject to random drug screens as a condition of participation in experiential education and patient care activities. The drug screen will be collected as per the policy and procedures of the site requesting the information. If the school is made aware of the results of any positive findings, they will be shared with the Associate Dean for Student Affairs for further evaluation.

Students may be required to complete random drug screens as part of compliance with the UMKC School of Pharmacy Alcohol and Drug Use Policy.

Procedures for Alcohol and Drug Use Related Issue

1. **Procedure for Reporting Alcohol and Drug Related Offenses**
   Any student arrested or charged with a drug or alcohol related legal offense **at any time during their enrollment in the UMKC School of Pharmacy** (e.g. minor in possession, driving under the influence, driving while intoxicated, public intoxication, open container, etc.) must notify, in writing, the Associate Dean for Student Affairs at the UMKC School of Pharmacy within 7 days of the arrest or issue of a citation. The Associate Dean for Student Affairs will assume responsibility for the notification of additional UMKC School of Pharmacy Offices as necessary. The Associate Dean for Student Affairs reserves the right to determine if the situation warrants a hearing with the UMKC School of Pharmacy Honor Council. In addition, this information shall be placed in the academic and behavioral files of that student and utilized in any cases submitted to and reviewed by the Honor Council.
   The student is required to notify, in writing, the UMKC School of Pharmacy Student Services Office and Office of Experiential Learning, when applicable, within 7 days of any change in status of the alcohol or drug related charge (e.g. conviction, removal from record, change in charge classification).
   Any student convicted upon a plea or a verdict of guilty or following a plea of nolo contendre to a drug or alcohol related misdemeanor shall be placed on probation for the duration of his/her enrollment in the UMKC School of Pharmacy. This requirement also includes any case in which there is suspended imposition of sentence.
   Any student convicted upon a plea or verdict of guilty or following a plea of a second drug or alcohol related misdemeanor offense will be expelled from the School with the subsequent forfeiture of all educational fees.
   If a student's record is legally cleared of a conviction that led to either probation or expulsion from the School of Pharmacy, the School of Pharmacy will defer to the ruling of the court and the student's enrollment status will be restored to what it was prior to the most recent conviction. In addition, if the student is exonerated of all charges the information related to the case may be removed from the student's academic and behavioral file.
   Any student convicted upon a plea or verdict of guilty or following a plea of nolo contendere to adrug or alcohol related felony shall be immediately expelled from the UMKC School of Pharmacy and shall be denied further opportunity to enroll in the School.
2. **Procedure for reporting ANY HISTORY of ALCOHOL or DRUG RELATED CONVICTIONS**
   Any student with a history of a drug or alcohol related conviction ever in their lifetime must inform, in writing, the Associate Dean for Student Affairs within 7 days of classes starting in their first professional year.
   The presence of two or more drug or alcohol related convictions will result in a full file review by the admissions committee and may result in withdrawal of the applicant's application for entry. Failure to report prior drug or alcohol convictions that are discovered following entry into the Pharm.D. program will result in the case being submitted to the Honor Council for review.

HIPAA

Students must successfully complete the University of Missouri online HIPAA tutorial (http://www.muhealth.org/compliance) **annually** starting prior to summer IPPE's.

- Note: completing the online HIPAA course does not relieve students from having to complete additional training as required by any individual practice site.

Intern Pharmacist Licensure and Liability Insurance

Students enrolled in the Doctor of Pharmacy curriculum at UMKC are required to obtain a valid Intern Pharmacist License issued by the Missouri Board of Pharmacy during the first semester of enrollment in order to fully participate in the curriculum. In addition students must provide proof of current

professional intern pharmacist liability insurance during the first semester of enrollment. The Intern Pharmacist License and Liability Insurance must remain valid through the last Advanced Pharmacy Practice Experience (APPE).

In order to apply for and maintain a valid Missouri Intern Pharmacist License and proper liability insurance, the following rules apply - Student Intern Pharmacist License and Intern Liability Policy (http://pharmacy.umkc.edu/docs/stuser/Pharmacy_Internship_Information.pdf)

Laptop/Tablet Requirements

All School of Pharmacy students are **required** to have a wireless capable mobile device (i.e., laptop computer, netbook, tablet device) as equipment to perform assignments and class activities. The MU **Tiger Tech** program through the MU Bookstore and the UMKC **RooTech** program through the UMKC Bookstore offer a selection of hardware and software, financing options and services at educational prices. **There is no required brand or model.** The mobile device must meet the following minimum capabilities and software requirements - Laptop/Tablet Minimum Functions and Capabilities (http://pharmacy.umkc.edu/admissions/interviews/technology)

Missouri Family Care Registry List

All students must register prior to enrollment in their summer IPPE. See E-Value for instructions.

Immunization Requirements

Health care providers (HCP) are at risk for contracting and transmitting infectious diseases as a result of contact with their patients. All doctor of pharmacy students must provide proof of vaccination or evidence of immunity for their own protection and the protection of their patients for these diseases and conditions - Measles, Mumps, and Rubella (MMR), Varicella (Chickenpox), Hepatitis B, Tdap (Tetanus-Diphtheria-Pertussis), Tuberculosis (TB) and optional influenza. Students living in university sponsored residence halls must abide by the immunization requirements of their respective facilities as well as those listed below. For more information regarding the procedures for submitting documentation proofs, students must refer to the School of Pharmacy Immunization Requirements policy as follows:

- School of Pharmacy Immunization Requirements (http://pharmacy.umkc.edu/docs/stuser/Pharm.D._Student_Immun_Policy_12-16-13.pdf)

Pharm.D. Orientation

All entering students must attend and participate in all sessions of the Doctor of Pharmacy orientation prior to full matriculation into the First Professional Year unless they are excused, in writing, in advance of the event by the Dean or designee.

Professionalism Policies

Students must adhere to the all Professionalism Standards

Standards of Professional and Ethical Conduct and Honor Council Procedures

All students entering the Doctor of Pharmacy program receive a copy of the school's Honor Council Procedures and Standards of Professional and Ethical Behavior. These policies and procedures provide peer and faculty review to ensure these standards are upheld by each pharmacy student. In all cases of academic dishonesty, the instructor shall make an academic assessment about the student's grade on that work and in that course.

- http://pharmacy.umkc.edu/docs/stuser/Honor_Council_%20Procedures.pdf
- http://pharmacy.umkc.edu/docs/stuser/Course_Policy-Professional_Ethical_Behavior.pdf

Standards of Professional Attire and Classroom Behavior

Upon acceptance and entry into the School of Pharmacy, students begin a process of developing the knowledge, skills and attitudes that creates the fundamental core of the profession of pharmacy. The development of these competencies to a practitioner's level takes several years, but early initiation of these professional behaviors promotes the development of professionalism. In order to provide students direction to this end, upon entering the Doctor of Pharmacy program all students receive a copy of the school's Standards of Professional Attire and Classroom Etiquette and must abide by these standards.

- http://pharmacy.umkc.edu/docs/stuser/Course_Policy-Professional_Attire-Classroom_Etiquette.pdf

Safety Training

All pharmacy students are required to attend and complete required safety training and receive certification beginning with the First Professional Year and maintain certifications on an annual basis to include, but not limited to, Blood Borne Pathogens, Fire Hazard, Chemical Management, and Hazard Communication.

University of Missouri Code of Conduct Online Tutorial

The tutorial is completed by all Pharm.D. students completing a rotation within the University Healthcare System prior to enrollment in their summer IPPE and then retaken annually.

- http://muhealth.org/body.cfm?id=475

White Coat Ceremony

All students are expected to attend and participate in the School of Pharmacy Professional Dedication Ceremony during the appropriate semester, unless previously excused, in writing, in advance of the event by the Dean or designee.

Note: The School of Pharmacy reserves the right to add other noncredit requirements as deemed necessary to protect the health and safety of the students or to further their education.

Directed Individual Study

The opportunity to undertake independent study is offered through PHARM 7497E courses. These courses may satisfy part of the professional elective requirement. Generally, the student receives the individual attention of a professor in the chosen field of study, and the project may involve any topic considered appropriate to the academic needs of the student. Once the student and instructor have agreed on a project, a permission-to-enroll form that includes an outline of the proposed course of study signed by the instructor must be reviewed and approved for credit by the school's curriculum committee chair. This must be done at least one month prior to the start of the term in which the coursework is to commence. PHARM 7497E requests that are part of a national, regional, or local competitive proposal or any part of a student organizational initiative may not be used for Directed Individual Study proposals.

No more than five credit hours of PHARM 7497E courses may be counted toward the degree requirements. PHARM 7497E courses are offered on a credit/no credit grading basis.

Off-campus Learning Experiences

All Pharm.D. students are required to participate in experiential learning rotations. All of the experiential learning courses--Introductory Pharmacy Practice Experiences and Advanced Pharmacy Practice Experiences--are conducted in actual practice settings (e.g., community, hospitals, nursing homes, etc.) under the supervision of licensed pharmacy practitioners—instructors who serve as exemplary role models in their particular types of pharmacy practice. Students are expected to provide their own transportation to sites assigned for the experiential learning.

Students may be assigned to an experiential learning experience at a different location than where they completed their didactic coursework. During the Introductory and Advanced Pharmacy Practice Experiential rotations, living, travel, and health expenses are the responsibility of the student. Other expenses may apply.

Outside Employment

Because of the intensity of the professional curriculum, students are strongly urged to limit outside employment to no more than 10 hours per week while enrolled in the school. Students experiencing academic difficulties as a result of commitments to outside employment may be asked by the school's academic progression committee to stop outside work until their academic difficulties are resolved.

Campus/Site Transfer

In the event that a Pharm.D. student wishes to transfer from one program site to another, the following policies and procedures are in effect:

1. A student will be allowed only one transfer between program location during their enrollment in the School of Pharmacy.
2. Students will be allowed to transfer only at the end of an academic year; there will be no mid-year transfers.
3. Students wanting to transfer between program sites must submit a petition to the Associate Dean for Student Affairs by July 1. The Associate Dean will discuss the petition with relevant parties in order to render a final decision. Petitions will be granted on a first-come, first-served basis.
4. Petitions will be granted only if space in the class is available at the program site to which the student wishes to transfer. Transfers resulting in a class size that differs from the initial intended class size require special permission from the Dean.

Additional Policies and Stipulations

Students should refer to the UMKC School of Pharmacy website and individual course syllabi for additional policies and required forms.

Note: Program requirements and course descriptions are subject to change without notice after publication of this catalog. Pharmacy students are encouraged to remain in contact with their professional development advisor and professional staff in the Pharmacy Office of Student Affairs to stay apprised of current program requirements in effect.

Scholarships, Special Awards and Financial Assistance

The Dean's List

At the end of each semester, the names of full-time doctor of pharmacy students whose term GPA is 3.5 or higher are placed on the dean's list. These students receive a letter of congratulations and a notation is placed on their permanent records. Students must complete a minimum full-time semester of 12 graded hours to qualify for the dean's list. The credit/no credit option may not be used as part of the 12 hours.

Degrees With Honors

Students who meet the academic standards prescribed by the faculty will be graduated "with honors." The criteria for Latin honors eligibility is as follows:

Doctor of Pharmacy (Pharm.D.) Students

Honors

Summa Cum Laude

- Pharmacy GPA[1] greater than or equal to 3.750.
- No periods of probation.
- No incidents of unprofessional behavior.

No more than 5% of the graduating class will be awarded Summa Cum Laude honors. If more than 5% of the class qualifies under the criteria above, the GPA criteria will be raised and students below the revised GPA will be awarded their degrees with Magna Cum Laude honors.

Magna Cum Laude

- Pharmacy GPA[1] greater than or equal to 3.600.
- No periods of probation.
- No incidents of unprofessional behavior.

No more than 5% of the graduating class will be awarded Magna Cum Laude honors. If more than 5% of the class qualifies under the criteria above, the GPA criteria will be raised and students below the revised GPA will be awarded their degrees with Cum Laude honors.

Cum Laude

- Pharmacy GPA[1] greater than or equal to 3.500.
- No periods of probation.
- No incidents of unprofessional behavior.

No more than 10% of the graduating class will be awarded Cum Laude honors. If more than 10% of the class qualifies under the criteria above, the GPA criteria will be raised and students below the revised GPA will be awarded their degrees without Latin honors.

1 GPA for Latin honors is the Doctor of Pharmacy GPA on all courses completed at UMKC through the end of the fall semester of the last year of the program.

Graduation Awards

At the annual spring pharmacy commencement ceremony, seniors receiving graduation awards are recognized. At that time, recognition is given to graduating students for superior academic achievement, leadership, and service. Selection of the recipients, except where noted otherwise, is made by vote of the pharmacy faculty in conjunction with the scholarship and awards committee.

Achievers of Excellence Scholarship and Awards Ceremony

Each fall an awards ceremony is held to recognize those students in the School of Pharmacy who receive scholarships or awards from the school, the university or the school's constituent groups. Most of these awards are competitive and are confirmed by the School of Pharmacy scholarship and awards committee.

Student Leadership Recognition

Annually, student leaders are recognized for their efforts on behalf of the school and the university.

Doctor of Pharmacy Graduation Awards

Douglas Adcock Memorial Award

An annual cash award established in memory of Douglas Adcock, a 1977 graduate of the School of Pharmacy, is presented to a student who plans a career in the public health service or who exhibits the ability to overcome adversity with professionalism.

Pharmacy Alumni Association Award

The Alumni Association of the School of Pharmacy gives an engraved plaque to the graduate who has exhibited outstanding leadership in school affairs. Selection is made by the board of directors of the Pharmacy Alumni Association in conjunction with the scholarship and financial aid committee.

The American College of Apothecaries Award

The graduating student who intends to practice in an independent community pharmacy after graduation and who has shown outstanding scholastic achievement and participation in school activities receives an engraved silver bowl from the American College of Apothecaries.

American Pharmacists Association Service Award

A certificate is presented by the American Pharmacists Association-Academy of Student Pharmacists (APhA-ASP) to the graduating student who has done the most for the student branch of the association. Selection is made by the APhA-ASP Executive Board.

First DataBank Medical Writing Award

An *Evaluations of Drug Interactions* loose leaf edition is presented to a graduating doctor of pharmacy student who has demonstrated excellence in medical writing.

Merck Awards

Merck & Company Inc. of Rahway, N.J., presents a Merck Manual and Merck Index to graduating students for noteworthy academic achievement in the area of pharmaceutical chemistry.

Mylan Pharmaceutical Excellence in Pharmacy Award

Mylan Pharmaceuticals Inc. of Birmingham, Ala., presents a plaque and a limited edition lithograph to a graduate in the top 20 percent of the class who exhibits exceptional skills in the area of drug information dissemination.

The Natural Medicines Comprehensive Database Award

Recognition is presented to the senior student who has shown an interest in the use of natural medicines. The recipient also must have proven academic and extracurricular activities demonstrating outstanding promise in the assessment, evaluation and delivery of patient care related to the use of natural medicines. The recipient receives a copy of the natural medicines comprehensive database, a subscription to the Natural Medicines Continuing Education series and a certificate.

Pharmacists Mutual Award

One year of pharmacists liability insurance is presented by the Pharmacists Mutual Insurance Co. of Algona, Iowa, to a graduate, based on academic achievement and professional pharmacy outlook.

Pharmacy Student Organization Awards

Honors are presented to graduating students based on a combination of scholastic achievement, strength of character, dedication and leadership evidenced during residency in the School of Pharmacy as a member of a university recognized pharmacy student organization. Selection is made by the respective pharmacy student organization officers.

TEVA Outstanding Student Award

A personalized plaque and cash award are presented by TEVA Pharmaceuticals of Sellersville, Pa., to a graduate. The criteria are scholastic achievement, professional pharmacy outlook and participation in school activities.

United States Public Health Service Excellence in Public Health Pharmacy Practice Award

A framed certificate and book award is presented to a graduate whose public and community service efforts are recognized.

Fall Scholarships and Awards

A listing of the over 85 UMKC School of Pharmacy scholarships and awards sponsored through pharmacy donors, alumni and friends of the school and their award descriptions can be found on the School's Current Students website (http://pharmacy.umkc.edu/pharmacy-foundation/scholarships) under the *Scholarships* section.

Other Financial Assistance and Awards

Gracia Bremer Loan Fund

An endowment through the unitrust of Gracia Bremer and Mercantile Bank was established in 1996 for pharmacy students enrolled in years one through five of the first professional program who need additional financial support while pursuing a pharmacy degree.

George H. Hargrave Pharmacy Student Loan Fund

An endowment through the unitrust of George H. and Edith L. Hargrave was established in 1994 for pharmacy students enrolled in years one through five of the first professional program who need additional financial support while pursuing a pharmacy degree.

Doctor of Pharmacy

Doctor of Pharmacy Competencies

A pharmacist is a medication expert whose obligation is to deliver pharmaceutical care. Pharmaceutical care is "the responsible provision of drug therapy for the purpose of achieving a definite outcome that improves a patient's quality of life" (Hepler and Strand). A pharmacist's functions include, but are not limited to:

- Identifying, preventing and/or resolving drug-related problems.
- Preventing disease and promoting good health practices through rational drug therapy.
- Providing drug information to the public.
- Educating other health care professionals about appropriate drug therapies.
- Collaborating with other health care professionals to improve health outcomes, especially as they relate to the appropriate use of medications.
- Ensuring that medications are delivered to the patient in a safe manner.

Many practice areas are covered by these responsibilities. The curriculum is designed to develop the competencies of graduates, allowing them to assume these responsibilities as well as the all of the current curricular outcomes expected of Doctor of Pharmacy graduates detailed on the School of Pharmacy Current Students website under the *Curriculum and Related Forms* section at: http://pharmacy.umkc.edu/current-students.

Admission Requirements

The doctor of pharmacy (Pharm.D.) degree provides minimum and advanced level competencies necessary for the graduate to assume a pharmacist's professional responsibilities and qualify for national and state pharmacist licensure examinations. The program of study emphasizes clinical sciences and training experiences. The training of doctor of pharmacy students concentrates on rational drug therapy decision-making within the inter-professional health care team.

Doctor of Pharmacy Minimum Course Requirements

A minimum of 54 credit hours of pre-professional, college level coursework, including the specified requirements listed below, must be successfully completed, with a grade of C or higher, prior to the fall of the entering class year of the professional pharmacy program of study. In addition, an overall cumulative grade-point average of no less than 2.75, on a 4.0 scale and a science/math grade-point average of no less than 2.5 on a 4.0 scale must be achieved on all college-level work completed through the end of the fall term preceding the year of entry to meet minimum eligibility requirements. Repeated course grades are averaged together in applicants overall cumulative and science/math grade point average calculations. Applicants should note that admission is competitive and that meeting the minimum requirements is not a guarantee of admission.

Equivalent, pre-pharmacy courses must be completed at UMKC or any regionally accredited college or university. Applicants should contact the UMKC Pharmacy Office of Student Affairs to insure proper course equivalents have been met. Second year college pre-pharmacy courses, listed below, must be successfully completed within five years prior to admission entry date. Applicants with elective space during their pre-pharamcy preparation should consider courses that shape their understanding of the human condition. Couses in psychology, sociology, ethics, and anthropology, will assist a student in assuming their role in caring for people. Completion of additional communication studies courses is also encouraged.

Pre-Pharmacy Courses / Minimum Semester Hours

Year I	Credits
General Chemistry I & II with Labs	8
Calculus with Analytical Geometry[1]	4
General Biology I & II [2]	6
Physics with Lab[3]	4
English Composition I & II	6
Public Speaking	3
American History I or II or Introduction to Political Science course covering U.S. Constitution	3
	34

Year II	Credits
Organic Chemistry I & II with Labs[4]	8
Cell Biology[4]	3
Human Anatomy with Lab[4,5]	4

Microbiology with Lab[4]	4
Medical Terminology[4]	1
	20

Total Credits: 54

1 Calculus courses that are less than 4.0 credit hours or that do not include analytical geometry will not meet the minimum requirement.

2 Preparatory or introductory biology courses will not meet the minimum requirement.

3 Physics courses must be at least algebra and trigonometry based.

4 NOTE: Second year college pre-pharmacy courses must be successfully completed within five years prior to admission entry date.

5 Successful completion of two semesters of Human Anatomy and Physiology with labs will meet the Human Anatomy requirement. Comparative or Vertebrate Anatomy courses will not meet the Human Anatomy requirement.
NOTE: Successful completion of a Human Biochemistry I & II course sequence [6.0 credit hours] within five years prior to admission entry date is encouraged, but not required.

General CLEP credits will not be accepted to fulfill the mathematics, biology, physics, or chemistry requirements. Advanced Placement Program scores through the College Board are accepted for some pre-pharmacy courses. Check acceptable scores and courses at http://www.umkc.edu/registrar/transfer-credit/default.asp. Contact an academic advisor in the School of Pharmacy regarding minimum score requirements and course transferability. Official scores from the College Board must be sent to UMKC for evaluation.

Additional information regarding degree program and admission requirements is located on the UMKC School of Pharmacy Prospective Students webpage located at http://pharmacy.umkc.edu/admissions/. Applicants with questions regarding admission should contact the

UMKC School of Pharmacy
Office of Student Affairs
2464 Charlotte Street, Suite 1219 / Kansas City, MO / 64108
(816) 235-1613/ Fax (816) 235-5562
pharmacy@umkc.edu

Application Procedures

Applications for the doctor of pharmacy program are accepted between June 15 through March 1 for consideration for admission to the class entering the following fall. Note that applicants applying for PharmCAS Early Decision have an earlier deadline date of September 1st. Admission to the Doctor of Pharmacy program is competitive and meeting minimum requirements for admission does not guarantee admission. New students are admitted to the doctor of pharmacy program only in the fall of each year.

As part of the process for application to the Doctor of Pharmacy program, all of the application steps and instructions located within the applications must be adhered to carefully and all required documents must be submitted no later than the March 1st deadline, unless otherwise stated. Applicants must:

1. Complete and submit the PharmCAS application with all supporting and required documentation and fee. The PharmCAS application is located at http://www.pharmcas.org/. Official transcripts(s) from each college and/or university attended showing all coursework attempted and completed through the Fall term prior to admission entry date must be submitted to PharmCAS;
2. Submit recent, official scores from the Pharmacy College Admission Test (PCAT) to PharmCAS;
3. Submit an electronic PharmCAS reference from specified categories only as noted on the UMKC Doctor of Pharmacy application; references from relatives, friends, or co-workers will not be accepted.
4. Complete and submit a UMKC Doctor of Pharmacy Application for Admission, to include supplemental materials and application fee. The UMKC Pharm.D. Application for Admission is located at http://pharmacy.umkc.edu/admissions/ under *Application Instructions*;
5. Meet and adhere to the *UMKC School of Pharmacy Minimal Technical Standards for Admission, Matriculation and Graduation* as part of the Pharm.D. Application. The Standards are listed on the application, as well as at http://pharmacy.umkc.edu/current-students under the *Policies and Procedures* section. Students admitted to the Pharm.D. program must continue to meet and adhere to these standards throughout their tenure in the Pharm.D. program;
6. International applicants must complete the UMKC International Application for Admission (http://www.umkc.edu/isao/) in addition to the PharmCAS Application and the UMKC Doctor of Pharmacy Application. Copies of all materials submitted to the International Student Affairs Office must be sent to the Pharmacy Office of Student Affairs. The minimum TOEFL [Test of English as a Foreign Language] score required for Pharm.D. applicants is 560 [paper-based]; 220 [computer-based]; 83 [internet-based]. International applicants whose native language is not English or who received their education in a country where the first language is not English must
    a. Meet the UMKC English Proficiency requirements
    b. Complete the English Evaluation Examination prior to the first semester of enrollment
    c. Follow recommendations from the UMKC Applied Language Institute.

7. Complete a formal, structured interview, if selected, at the School of Pharmacy on the UMKC campus as a factor for admission. Applicants are notified by e-mail before their scheduled interview. Applicants should note that meeting minimum eligibility requirements does not automatically qualify an applicant for an interview. Based on the academic and application credentials of the applicant and the applicant pool, the school will select candidates for an interview. Students who do not qualify for the interview will also receive written notice.

Notification of Acceptance

Admission to the Pharm.D. program is competitive. Applicants will receive written notification of the school's decision concerning their applications.

Official supplementary college transcripts must be submitted to the Pharmacy Office of Student Affairs upon completion of winter/spring and summer coursework. Final acceptance is contingent on submission and clearance of a criminal background check, good academic and behavioral standing, successful completion (grade of C or higher) of the specified minimum hours of required pre-pharmacy courses and any other coursework completed during the winter/spring and/or summer term prior to admission. Those applicants approved for admission will be required to confirm their acceptance and submit an advance deposit to guarantee their place in the entering class. This deposit is applied to the first term's educational fees and is not refundable.

Curricular Requirements

The doctor of pharmacy degree program provides broad and general preparation in professional areas of practice with the intent that, on completion, graduates will be able to practice at a level sufficient to perform the established functions of a pharmacist. In addition, the Pharm.D. program prepares the student for advanced levels of professional practice. The major emphasis is on the clinical sciences and drug-related patient care.

This program is designed to provide advanced education and training in clinical pharmacy and drug information with particular emphasis on interprofessional team participation in the delivery of health care. To enable students to concentrate solely on this advanced professional coursework, those entering the doctor of pharmacy program are strongly encouraged to limit their work and/or intern hours during the academic year.

Because pharmacy is a profession undergoing rapid change, the curriculum is subject to continual review and modification. As society's needs for specific types of pharmaceutical service change, the curriculum will change as well. To assure the best pharmacy education for its students, the School of Pharmacy reserves the right of making judicious changes and improvements in course sequence, course content, or other program requirements at any time that must be completed and adhered to in order to meet graduation degree requirements.

Pharm.D. Graduation Requirements

To graduate, Pharm.D. candidates must successfully, grade of C or higher, complete the 4 year curricular course requirements as listed in addition to the 54 credit hour prerequisite course requirements.

To graduate, students must successfully complete all credit and non-credit requirements as listed and in effect at the time of completion. Within these hours, the following credit hour minimums must be met:

Pharm.D. Admission Prerequisites

Semester 1 Prerequisites		
CHEM 211 & 211L	General Chemistry I and Experimental General Chemistry I	5
MATH 210	Calculus I	4
BIOLOGY 108	General Biology I	3
DISC 100	Discourse I: Reasoning and Values (Speech and Writing)	3
Total Credits		15

Semester 2 Prerequisites		
CHEM 212R & CHEM 212LR	General Chemistry II and Experimental General Chemistry II	5
PHYSICS 210	General Physics I	4
BIOLOGY 109	General Biology II	3
DISC 200	Discourse II: Culture and Diversity (Writing and Speech)	3
Total Credits		15

Semester 3 Prerequisites		
LS-ANATO 118 & 118L	Introductory Anatomy and Introductory Anatomy Laboratory [1]	5
CHEM 321 & 321L	Organic Chemistry I and Organic Chemistry Laboratory I [1]	4

BIOLOGY 202	Cell Biology [1]	3
COMM-ST 110	Fundamentals Of Effective Speaking And Listening	3
Total Credits		15

Semester 4 Prerequisites

PHARM 7125	Medical Terminology [1]	1
CHEM 322R	Organic Chemistry II [1]	3
CHEM 322L	Organic Chemistry Laboratory II [1]	1
LS-MCRB 121 & 121L	Human Biology III (Microbiology) and Human Biology III (Microbiology) Lab [1]	4
Select any one of the following courses:		3
HISTORY 101	U.S. History to 1877	
HISTORY 102	U.S. History Since 1877	
POL-SCI 210	American Government	
Total Credits		12

[1] **Marked Science courses must be completed within five years of admission entry date into the Pharm.D. program.**

Student Learning Outcomes

Curricular Outcomes Expected of Doctor of Pharmacy Graduates

Doctor of Pharmacy graduates must possess the basic knowledge, skills, attitudes, and values to independently practice pharmacy at the time of graduation. These Curricular Outcomes expectations are outlined in full on the UMKC School of Pharmacy website under the *Curriculum and Related Forms* section at: http://pharmacy.umkc.edu/current-students/.

First Year

Fall	Credits	Spring	Credits
PHARM 7341	3	PHARM 7344	3
LS-PHYS 399	3	LS-PHYS 400	3
LS-BIOC 370	4	PHARM 7414	2.0
PHARM 7101	1	PHARM 7414L	0.5
PHARM 7101L	1	PHARM 7202	3.5
PHARM 7110	2	PHARM 7233	3
PHARM 7151	1	PHARM 7279	0.5
PHARM 7245	0.5	PHARM 7361 (PHARM 7361 was previously a 4-credit hour course, but was changed to a 2-credit hour course effective Spring 2015.)	2
Professional Electives 1.0 - 8.0[1]		Professional Electives 1.0 - 8.0[1]	
	15.5		**17.5**

Second Year

Fall	Credits	Spring	Credits	Summer	Credits
PHARM 7307	4	PHARM 7303	3	PHARM 7378	2
PHARM 7362	4	PHARM 7363	4	PHARM 7379	2
PHARM 7465	3	PHARM 7405	3		
PHARM 7325	2	PHARM 7405L	1		
PHARM 7325L	0.5	PHARM 7463	2		
PHARM 7203	3	PHARM 7334	1		
PHARM 7345	0.5	PHARM 7331L	0.5		
PHARM 7280	0.5	Professional Electives 1.0 - 8.0[1]			

PHARM 7434	1				
PHARM 7434L	0.5				
Professional Electives 1.0 - 8.0[1]					
	19		**14.5**		**4**
Third Year					
Fall	**Credits**	**Spring**	**Credits**	**Summer**	**Credits**
PHARM 7420	7	PHARM 7485P	7	Advanced Pharmacy Practice Experiences (APPE hours vary)[3]	
PHARM 7420L	0.5	PHARM 7485L	0.5		
PHARM 7326	5	PHARM 7451	2		
PHARM 7406P[2]	3	PHARM 7466	3		
Professional Electives 1.0 - 8.0[1]		PHARM 7389	2		
		Professional Electives 1.0 - 8.0[1]			
	15.5		**14.5**		**0**
Fourth Year					
Fall	**Credits**	**Spring**	**Credits**		
Advanced Pharmacy Practice Experiences (hours vary)[3]		Advanced Pharmacy Practice Experiences (hours vary)[3]			
	0		**0**		

Total Credits: 100.5

1 A minimum of eight credit hours of professional elective course work must be successfully completed prior to enrollment in Advanced Pharmacy Practice Experiences (APPE). Visit http://pharmacy.umkc.edu/current-students/ under the *Curriculum and Related Forms* section and review the Guidelines for Electives and the list of potential professional elective offerings. Students should choose electives and semester placement after consultation with a pharmacy academic advisor in the Office of Student Affairs and/or their faculty advisor.

2 PHARM 7406P IPPE: General Medicine I is a continuous introductory pharmacy practice experience completed over both fall and spring semesters.

3 Students must complete 36 credit hours of Advanced Pharmacy Practice Experiences [APPE] over Semesters 6a-8. APPE prerequisites include satisfactory completion of all credit and non-credit degree and course requirements prior to Semester 6a of the professional curriculum.

Because pharmacy is a profession undergoing rapid change, the curriculum is subject to continual review and modification. As society's needs for specific types of pharmaceutical service change, the curriculum will change as well. To assure the best pharmacy education for its students, the School of Pharmacy reserve the right of making judicious changes and improvement in course sequence, course content, or other program requirements at any time that must be completed and adhered to in order to meet graduation requirements.

Prospective Applicants are encouraged to:

- Visit http://pharmacy.umkc.edu to see equivalencies for schools in Missouri and Kansas to see how prerequisites will transfer to UMKC.
- Visit http://www.umkc.edu/registrar/transfer-credit/default.asp to see how UMKC views AP & IB course work.

Doctor of Pharmacy Professional Program

A pharmacist is a medication expert whose obligation is to deliver pharmaceutical care. Pharmaceutical care is "the responsible provision of drug therapy for the purpose of achieving a definite outcome that improves a patient's quality of life" (Hepler and Strand). A pharmacist's functions include but are not limited to:

- Identifying, preventing and/or resolving drug-related problems.
- Preventing disease and promoting good health practices through rational drug therapy.
- Providing drug information to the public.
- Educating other health care professionals about appropriate drug therapies.
- Collaborating with other health care professionals to improve health outcomes, especially as they relate to the appropriate use of medications.
- Ensuring that medications are delivered to the patient in a safe manner.

Many practice areas are covered by these responsibilities. The curriculum is designed to develop the competencies of graduates, allowing them to assume these responsibilities as well as the all of the current curricular outcomes expected of Doctor of Pharmacy graduates detailed on the School of Pharmacy Current Students website http://pharmacy.umkc.edu/current-students under the *Curriculum* section.

Interdisciplinary Ph.D. Degree Requirements in Pharmaceutical Sciences and Pharmacology

Interdisciplinary Ph.D. Program Requirements

See discipline-specific requirements for the Interdisciplinary Ph.D. program in Pharmaceutical Sciences and Pharmacology and Toxicology in the School of Graduate Studies section of this catalog.

University College

Located in the UMKC Student Success Center
UMKCUCollege@umkc.edu

Mailing Address
University of Missouri-Kansas City
5100 Rockhill Road
Kansas City, MO 64110-2499

Associate Vice Provost-University College:
Kim McNeley, Ph.D.

Retention Coordinator/Academic Advisors:
Jennifer Coldiron, LCSW
Joanna Davis, MS

General Information

What is a University College?

University College is an administrative structure that coordinates the overall academic experience of incoming undeclared/exploratory students and continuing students in transition between majors. University College is a portal to the ultimate academic unit in which the student will be granted a degree.

Exploratory or Transitioning Student

Exploratory students are students that are simply not ready to select a major, whether at the time that they enter UMKC or after realizing their initial decisions regarding a major are not what they want. Nationally, a large percentage of students entering colleges and universities are unsure of their academic plans. Estimates indicate that as high as 70% of students change their major at least one time during their academic careers.

Mission

Our mission is to offer every exploratory or transitioning student the opportunity for success through the engagement with faculty and staff, the development of educational plans, the clarification of career and life goals, and the appreciation of the value of the core skills developed through UMKC's general education.

The University College will contribute to the University's mission of providing a "vibrant learning and campus life experience" through the development of a focused community of faculty, students, and staff with a shared responsibility for each student's achievement of advising goals and progress toward degree completion.

Explore, Network, and Decide

Exploratory students are expected to take an active role in their education through systematic exploration, networking, and active decision making. UC student success teams will provide a supportive environment for this approach. UCollege student success teams will be made up of: the Associate Vice Provost for University College and Undergraduate Advising, University College Retention Coordinators/Academic Advisors, seminar series faculty, librarians, peer mentors, and Student Success Center staff.

Cross-Campus Collaboration

The mission of University College is impossible without a multidisciplinary participation and collaboration among all undergraduate academic units. Students in University College explore academic options across the University. Faculty selected to mentor students through the UCollege seminar series

are purposely drawn from a breadth of disciplines. Close collaboration between UCollege and all academic units is critical to the successful exploration and ultimate transition of students to their most appropriate academic homes in the College of Arts and Sciences or one of UMKC's schools.

Academic Advising

University College Retention Coordinators will partner with each student in the development and completion of educational goals. Retention Coordinators will provide cross-college academic advising and connections with potential academic units, and facilitate ongoing support and evaluation of each student's progress.

University College Requirements and Regulations

Progress Toward Decision: Admission/Declaration

- Exposure to Academic Disciplines: Hours Completed During the term in which the completion of **45 hours** credit hours of acceptable college work occurs and admission requirements have been met, students will complete the administrative process of transitioning to the ultimate academic unit in which their degree will be granted.
  Students transferring into UMKC with greater than **45 hours** of acceptable college work will be required to meet all admission requirements during their initial Fall or Spring term at UMKC. Declaration of major and/or admission processing must be completed by 20th day of the following term.
  Students unable to make a decision regarding their major by the guidelines noted above must provide a plan for the upcoming academic semester and/or requirements and petition University College for permission to continue.
- Purposeful/Required Course Enrollment to Support Decision-making
  All University College students will enroll in the appropriate level UNIV seminar course during both Fall and Spring semesters. These courses are: UNIV 101, UNIV 102, UNIV 202.
  Early and continuous enrollment in the appropriate Discourse and Anchor course pair, as well as, mathematics and/or foreign languages courses are required depending upon the student's selected exploratory track.
  A grade of C- or higher is required in UNIV 100, UNIV 101, UNIV 102, UNIV 202, DISC 100, DISC 200, ENGLISH 110, ENGLISH 225, and/or Math (100 or 200 level) courses.
  Critical courses will be designated for each plan of study based on academic unit recommendations. Required courses for each enrollment term will be determined by the student's UCollege Retention Coordinator based on the student expressed academic interests.
- Part-time student academic planning: Individualized academic plans will be developed that meet the goals above.

Advising Expectations

- Fostering Academic Success
  University College Retention Coordinators will partner with each student in the development and completion of educational goals. Retention Coordinators will provide cross-college academic advising and connections with potential academic units, and facilitate ongoing support and evaluation of each student's progress. Students are required to meet with their UCollege Retention Coordinator for a minimum of Goal Setting, mid-term check, & enrollment planning sessions during each term.
- Registration Approvals
  All University College students are required to secure an UCollege Retention Coordinator's approval to register for classes. To gain this approval, students must fully participate in enrollment advising expectations set by their UCollege Retention Coordinator prior to enrollment. This advising may include contact with other academic units and/or the completion of additional assessment so that course selection may be optimized.
  Students' registration must include enrollment in a least one UNIV seminar each semester. The appropriate UNIV seminar and core curriculum may be administratively added to students' enrollment to ensure that students are making purposeful progress toward major selection.
- Declaration of Major
  All UCollege students are required to complete processes of Change of School and Declaration of Major with the appropriate academic unit and the University Registrar.
  All UCollege students will be advised of the advising process of the academic unit to which they are transitioning.

Enrollment

- Enrollment for Term
  Students must enroll in all required courses and make appropriate selections from optional courses as discussed and documented in their enrollment advising meeting.
  All UCollege students should complete enrollment, prior to the first day of classes. All changes to courses indicated as required by the UCollege Retention Coordinator during enrollment advising should be approved by the UCollege Retention Coordinator.
  All UCollege students on academic probation are required to complete enrollment prior to the first day of classes. After this day enrollment holds will not be lifted, and therefore no enrollment will be permitted for the term.
- Adding/Dropping a Class
  Additions of courses after the first week of classes are deemed unusual and typically negatively impact students' ability to succeed. Students wishing to add/drop after the published deadlines must petition UCollege for an exception to normal academic policy. Forms submitted after the published deadlines must be accompanied by an appropriate, approved petition.

All UCollege students on academic probation are required to complete all courses required by their UCollege Retention Coordinator and documented in their enrollment advising.

Academic Status Related To Grade Point Average

Undergraduate degree-seeking students' academic status is assessed at the end of every term, whether the student is full-time or part-time for that term. A summer session is considered the same as a semester for the purpose of the following regulations:

- In general, students will be placed on academic probation whenever their official UM grade-point average falls below 2.0 (C average). First time college freshman admitted to UMKC on the basis of high school records, who have grade-point averages between 1.50 and 1.99 at the end of the first semester of either full- or part-time study will be placed on academic warning. Students on academic warning must achieve an overall 2.0 average by the end of their second semester or be placed on regular probation.
- Students on academic probation will be restored to good standing whenever the UM grade-point average reaches 2.0 or the GPA level established by their academic units.
- Students on academic probation must remove themselves from probation within three successive semesters (including the semester in which they originally were placed on probation). Otherwise they are ineligible to re-enroll without the approval of the academic units.
- Students are responsible for knowing their academic status by referring to Pathway and their permanent transcript.
- UMKC students transitioning from an academic unit into University College will be reviewed under the above stipulations. Students on probation or dismissed (ineligible to re-enroll) from another UMKC academic unit may be admitted into University College under contracts. In order to be admitted into University College, the student must submit a Petition for Exception including an Academic Recovery plan. This petition must be approved prior to the first day of the term.

Dean's List – Term Performance

The Dean's List is a recognition of excellent academic performance. Students must complete a minimum full-time program of 12 graded hours to qualify for the dean's list with a minimum of a 3.5 grade.

Undergraduate Courses

University College Seminars
Career and Major Exploration Seminars

Pre-Medicine/Pre-Health

Among the fastest-growing career areas are the health-related professions and this trend is likely to continue in the 21st century, according to the U.S. Department of Labor. These employment opportunities require specialized training and one to four years of college-level studies in the appropriate pre-professional curricula. The pre-medicine/pre-health tracks are designed to help prepare students for future careers in the health arena and guide them through the process of applying to the various professional programs in health care.

The pre-medicine/pre-health tracks designed by the College of Arts and Sciences and the School of Biological Sciences assist students following a traditional path toward ultimately earning a professional degree in a medical or health care field. Most students first earn a bachelor's degree, followed by training in a professional program such as a four-year medical or dental school. These tracks are distinctly different from the unique six-year programs offered by UMKC in medicine and pharmacy described elsewhere in this catalog. For information about dentistry please see the UMKC Dental Program in the Graduate Catalog.

Some of the pre-professional programs in health care include:

- Pre-Dental Hygiene
- Pre-Dentistry
- Pre-Health, which includes advising for careers in:
  - Chiropractic
  - Clinical Perfusion
  - Health Administration
  - Health Information Management
  - Nutrition/Dietetics
  - Occupational Therapy
  - Optometry
  - Physical Therapy
  - Podiatry
  - Respiratory Therapy
  - Veterinary Medicine
- Pre-Medicine (allopathic and osteopathic)
- Pre-Nursing
- Pre-Pharmacy
- Medical Technology (see section under School of Biological Sciences)

Choosing an Undergraduate Major

Following the pre-medicine or pre-health track means taking specific courses that professional programs require for admission, but "pre-medicine" or "pre-health" **are not actual degrees**. Students need to choose a major field of study to combine with one of these tracks. Students can choose to follow these tracks through the College of Arts and Sciences or the School of Biological Sciences, depending on the major selected. Professional schools accept individuals from a variety of educational backgrounds and majors. When choosing a major, it is wise for students to consider their personal interests and strengths as well as possible alternative career goals.

The School of Biological Sciences offers degrees in biology, including a bachelor of science in biology with an emphasis in the cellular and molecular basis of health and disease for pre-medicine students, and a pre-dentistry concentration for pre-dentistry students. Undergraduate students in the biological sciences also have the opportunity to work with faculty mentors in life sciences research.

The College of Arts and Sciences offers degree choices and medically related undergraduate research in areas spanning the sciences, social sciences and humanities. Popular majors to combine with pre-medicine and pre-health include psychology, chemistry, communication studies, physics, English, Spanish, and philosophy. Many other combinations in the 18 academic departments are possible, and advisors in the tracks will help students apply their interests to design the right combination.

Pre-Medicine/Dentistry

The purpose of the pre-medicine/dentistry curriculum is to prepare the student for application to medical/dental schools. Students may complete the pre-medicine/dentistry curriculum within any major.

The courses recommended in the pre-medicine/dentistry curriculum do not constitute an academic major but are the courses required for entrance into the majority of medical/dental schools in the United States and Canada. They also provide students with the information needed to obtain top scores on the Medical College Admission Test (MCAT) and Dental Admissions Test (DAT), which are required for entrance into medical and dental schools.

In addition to gaining a strong foundation in the sciences, pre-medicine/dentistry students also will receive support services to help them best prepare for application to medical or dental school.

For students considering other health professions or seeking admission to specific programs with additional prerequisite courses, the curriculum may be tailored to meet these requirements.

Medical/Dental School Admission Requirements

1. *Two semesters of general biology with corresponding laboratories:*

BIOLOGY 108	General Biology I	3
BIOLOGY 108L	General Biology I Laboratory	1
BIOLOGY 109	General Biology II	3
BIOLOGY 109L	General Biology II Laboratory	1
Total Credits		8

2. *Two semesters of general chemistry with corresponding laboratories:*

CHEM 211	General Chemistry I	4
CHEM 211L	Experimental General Chemistry I	1
CHEM 212R	General Chemistry II	4
CHEM 212LR	Experimental General Chemistry II	1
Total Credits		10

3. *Two semesters of organic chemistry with corresponding laboratories:*

CHEM 321	Organic Chemistry I	3
CHEM 321L	Organic Chemistry Laboratory I	1
CHEM 322R	Organic Chemistry II	3
CHEM 322L	Organic Chemistry Laboratory II	1
Total Credits		8

4. *Two semesters of physics including laboratories:*

PHYSICS 210	General Physics I	4
PHYSICS 220	General Physics II	4
Total Credits		8

5. *Two semesters of English composition:*

ENGLISH 110	English I: Introduction To Academic Prose	3
ENGLISH 225	English II: Intermediate Academic Prose	3
Total Credits		6

In addition to the admission requirements listed above, most medical and dental schools recommend more advanced courses in biology, such as cell biology, genetics and biochemistry, and/or additional chemistry courses. Students should also take upper-level courses that demonstrate the requisite intellectual discipline and analytical and problem solving skills necessary to succeed in medical or dental school. Students are strongly encouraged to balance their work in the sciences with courses in communication studies, computer science, English literature, philosophy, psychology and sociology. A broad understanding of health care and medicine is also expected and work and/or volunteer experiences, including physician shadowing, in settings such as health care agencies, hospitals and physician offices is recommended.

UMKC School of Medicine MD Completion Program

While the UMKC School of Medicine is primarily a combined-degree (BA/MD) program, it annually accepts a limited number of MD-only students who have completed their pre-medical studies and baccalaureate degrees. Students completing their pre-medical studies at UMKC and applying to the School of Medicine have the advantage of taking courses with medical students, interacting with faculty who also teach at the medical school and

securing recommendations from individuals familiar with the School of Medicine's curriculum and faculty. For more information about this program or to request an application, contact the Admissions Office at the School of Medicine.

UMKC School of Dentistry Reserved Admission Program

The Reserved Admission Program for the Doctor of Dental Surgery (DDS) degree at the UMKC School of Dentistry enables highly motivated, ambitious, talented students to pursue their dream of becoming a dentist. Because admission to the Reserved Admission Program is very competitive, qualified reserved admission program students will have a reserved seat in a future UMKC School of Dentistry DDS Program class of their choosing, and they will not have to compete further for admission into the UMKC dental school. Entry into the program is available to students from Missouri and Kansas.

To be eligible to apply for Reserved Admission you must have completed a minimum of but not more than four semesters of college credit while being continuously enrolled in full-time course loads (a minimum of 15-18 credit hours per semester). Your science grade point average must be at least 3.60 in a degree-seeking program including prerequisite courses.

For more information about this program or to request an application, contact the Office of Student Programs at the School of Dentistry, (816) 235-2080.

Advising

Experienced advisors in the College of Arts and Sciences and the School of Biological Sciences are knowledgeable about the professional school admission processes.

Advisors guide students in:

- Choice of majors
- Choice of courses
- Volunteer and shadowing opportunities
- Undergraduate research options
- Other health care professions
- Career alternatives

Advisors also give students invaluable help with:

- The professional school application process
- Preparation for professional school admission tests (MCAT, DAT, OAT, VCAT, etc.)
- Letters of recommendation
- Writing the personal statement
- Successful interview strategies

College of Arts and Sciences Track

Dennise Todd
Director of Pre-Health Programs
Scofield Hall (http://www.umkc.edu/virtualtour/scofield.asp), Room 9
711 E. 51st Street
(816) 235-**6270**
todddn@umkc.edu

Students following the pre-medicine/pre-health track can enhance their preparation for health care careers through any major in the College of Arts and Sciences. While the relationship to majors such as chemistry or physics is clear, students may be surprised to discover how their interests in other majors within the College of Arts and Sciences (p. 31) will strengthen their abilities as future health care providers. For example:

- Students combining a major in psychology with the pre-medical/pre-health track will learn how psychology influences health and wellness, the prevention of disease and the healing process.
- Students majoring in communication studies will learn the critical importance of communication in health care, from the doctor-patient relationship to the interpersonal communication between members of a health care team to the power and politics of mass media.
- Philosophy majors will apply bioethical principles to "real world" dilemmas such as physician-assisted suicide.

Pre-medical and pre-health students can easily combine any major within the College of Arts and Sciences with the prerequisites for medical, dental or other health professions schools. First-year students in the College of Arts & Sciences pre-professional tracks who have not yet declared a major are required to enroll in the A&S Career Development sequence during their first three semesters. A&S 115, A&S 215 and A&S 315 are for one credit hour each and they are offered in a sequence starting in the fall semester. These courses are also highly recommended for all pre-professional freshman students with a declared major.

The College also offers:

- ***The pre-medical/pre-dental curriculum*** which may be combined with any major within the College of Arts and Sciences. This allows students the opportunity to complete the necessary prerequisite courses for admission to medical/dental schools in the United States and Canada.
- ***Interdisciplinary courses that examine the complicated nature of health care***. Topics include the doctor-patient relationship, other aspects of health communication, health promotion and prevention and controversial issues in bioethics.
- ***Medically related research projects*** in such areas as clinical health psychology, chemistry, and physics. Current topics include disease prevention, psychological and communication barriers to adherence, and factors linking obesity, smoking, alcohol abuse, diet and exercise with cancer, cardiovascular disease and HIV/AIDS. Research partners include the Mid-America Heart Institute, Saint Luke's Hospital, UMKC Schools of Dentistry and Medicine and the Kansas City Free Health Clinic.
- ***Dental-related research projects*** which investigate topics such as pain management, disease prevention, psychological barriers in the healing process and the use of chemistry and physics to identify and construct new polymers for use as posterior restorations.
- ***The Gerontology Certificate*** allows students to explore relevant medical and social issues of the new millennium as people live longer, our population ages, and "care" becomes as important as "cure."
- ***The Healing and Humanities Minor***. Faculty from the College of Arts and Sciences offer courses that enhance a student's ability to understand the complicated world of health care and the relationship of healthcare with the humanities and social sciences. Students can combine the healing and humanities minor with any major in the College of Arts and Sciences or the School of Biological Sciences. Through courses for the healing and humanities minor (p. 167), students may strengthen their preparation for health careers by improving their communication skills, their appreciation of diversity and the arts, their understanding of bioethical dilemmas and their knowledge of the values, economics, and politics of health care. See the Healing and Humanities Minor for more information.
- ***The Bioethics and Medical Humanities Minor.*** Students can combine a minor in Bioethics and Medical Humanities in conjunction with any other major or as part of the BLA degree. See the Bioethics and Medical Humanities Minor (p. 202) for more information.

College of Biological Sciences Track

Lynda S. Plamann (http://www.umkc.edu/lookup/search.asp?LastName=plamannl)
(816) 235-**1827**, plamann@umkc.edu

Tammy Welchert (http://www.umkc.edu/lookup/search.asp?LastName=cinkoskyt)
(816) 235-**1385**, welchert@umkc.edu

Chris Jordan (http://www.umkc.edu/lookup/search.asp?LastName=jordanc)
(816) 235-**2574**, jordan@umkc.edu

Students interested in the scientific aspects of medicine or dentistry may find the School of Biological Sciences to be the right place for them. A major in biology incorporates courses in biology, chemistry and physics with a broad foundation in the social sciences and humanities. By meeting the degree requirements for the bachelor of science in biology with the cellular and molecular basis of health and disease emphasis, students will automatically fulfill all of the prerequisites and the upper-level biology courses which are highly recommended by most medical schools. The bachelor of science in biology with the pre-dentistry concentration allows students to complete all of the prerequisites and upper-level biology courses strongly suggested by most dental schools. More information about this can be found in the School of Biological Sciences section of this catalog.

- ***Investigate the molecular basis of disease***. Courses such as genetics, cell biology, biochemistry and molecular biology examine the essential elements of modern biological sciences. Electives like neurobiology, endocrinology, immunology and virology emphasize experimental approaches that lay the foundation for the treatment and prevention of disease.
- ***Perform hands-on experiments*** with cells and tissues in facilities equipped with cutting-edge technology. Laboratory courses such as microbiology and histology bring textbook topics to life and allow students to learn the basics of research.
- ***Discover and create new knowledge***. In cooperation with faculty, students apply powerful techniques like automated DNA sequencing, robotic genomic analysis and electron and confocal microscopy, to current biomedical problems. Students electing to do their own research may open many doors for their future.
- ***Pursue personal interests in biology***. From the study of plants to the study of insects, students can explore practical applications like drug discovery and disease control by selecting from a variety of courses. Field trips and outings allow students to observe biological principles in action.

Honors Program

The College of Arts and Sciences and the School of Biological Sciences both offer Honors Programs for students with exemplary academic performance. The College of Arts and Sciences' program uses an interdisciplinary approach that encompasses studies in the sciences, humanities and social sciences, and engages students in a weekly Honors Colloquium and honors-designated courses.

The School of Biological Sciences' program combines a requirement for high levels of academic achievement with an undergraduate experimental research project and enrichment activities like study trips and seminar attendance.

Student Organizations

There are more than 200 active student organizations (including Greek) at UMKC that promote student leadership, volunteerism, community service and socialization. Some of the popular organizations among pre-health students include:

Pre-Medical Society

This is a university-wide student organization that provides various extracurricular opportunities for students to learn about the health care professions and to network with other like-minded students. Previous meetings have included discussions on Bioethics, HMOs, organ donation, complementary medicine, genetics and gene therapy, cloning, HIV/AIDS and taking patient histories. The society regularly hosts recruiters from medical schools as well as representatives from volunteer opportunities in the community.

Pre-Dental Society

This is a university-wide student organization that provides various extracurricular opportunities for students to learn about dental-related professions and to network with other like-minded students. Previous meetings have focused on the application process for dental schools, preparation for the DAT, and volunteer opportunities in the community. Guest speakers include current dental students, practicing dentists, and dental school admission representatives.

Pre-Dental Hygiene Society

This newly formed student organizations allows pre-dental hygiene students to network together and learn about the profession of dental hygiene. Meeting topics include tours of the UMKC School of Dentistry and how to prepare for entry into dental hygiene programs. Guest speakers include dental hygiene faculty, students, and current practitioners.

Biological Sciences Student Government (BSSG)

The BSSG plans informational and social activities for students. Past activities include guest speakers from the Kansas City Police Department Forensics Unit, Children’s Mercy Hospital and the Missouri Department of Natural Resources, picnics and group ice-skating. Pre-medical students can participate in the School of Biological Sciences’ annual hosting of distinguished biomedical scientists, including Nobel Prize winners and National Academy of Sciences members, addressing frontier issues in biomedicine.

Arts and Sciences Student Council

The council aims to provide an interdisciplinary body in which Arts and Sciences students can provide input on decisions and policies of the College. The council works to enhance student-faculty interaction and communication, allocate its authorized budget and insure that Arts and Sciences students’ needs, desires and attitudes are correctly represented to the administration.

Alpha Eta Chapter of Alpha Phi Omega

This organization carries out service programs aimed at serving the chapter, campus, communit and nation with emphasis on serving primarily the UMKC campus and the Kansas City area.

Institute for Leadership and Service

This university-wide organization focuses their mission on meeting community needs, improving participant’s lives, strengthening communities, and building partnerships. Through ILS activities, participants hone their leadership skills and community service experiences to complement their dedication to service in the health professions. Since health professional schools value these experiences, pre-health students can benefit from being involved with the ILS program.

Undergraduate Academic Regulations and Information

The Registration & Records Office (Web site http://www.umkc.edu/registrar) maintains all official academic student records. Additional responsibilities of this office include scheduling of classrooms, certifying student academic information, evaluating domestic transfer work, and reporting enrollment statistics to state and federal agencies. The Registration & Records Office, in cooperation with the academic units on campus, assumes the responsibility for monitoring and enforcing academic policies and regulations.

This section contains information on the general UMKC academic policies that apply to all undergraduate students. The faculties of the academic units may have more specific rules and requirements. Students are required to learn and abide by the policies of their academic unit in addition to the general policies.

Registration & Records Office
Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 115
5115 Oak Street
(816) 235-1125
Fax: (816) 235-5513
registrar@umkc.edu
http://www.umkc.edu/registrar/
http://pathway.umkc.edu/
http://www.umkc.edu/quickguide

Mailing Address

University of Missouri-Kansas City
Registration & Records Office
AC 115
5100 Rockhill Road
Kansas City, MO 64110-2499

Registrar:
Douglas E. Swink

Associate Registrar:
Amy Cole

Assistant Registrar:
Amy Chester

Assistant Registrar:
Kathy Hale

Academic Calendar

The University operates on the semester system with the academic year divided into fall, spring and summer semesters which are also called terms. Fall semesters are 16 weeks long and start in August and end in December. Spring semesters are 16 weeks long and begin in January and end in May. The 16 week semester is inclusive of the final exams week. Summer terms are 8 weeks long during the months of June and July.

Sessions are scheduled within a semester/term and may have durations other than 16 or 8 weeks. Courses are occasionally offered during the periods between semesters/terms in January, May, and August. These periods are called intersessions.

Professional and graduate programs may adhere to different academic calendars with the permission of the Provost.

Please refer to http://www.umkc.edu/registrar/acal.asp for the most up-to-date academic calendar.

Academic Loads, Full- and Part-Time Status

Normal Academic Load

A normal academic load for undergraduate students during the Fall and Spring semesters is 15 credit hours. For Summer sessions, the normal load is 8 semester hours.

Full-Time Load

Undergraduate students enrolled in 12 or more credit hours of coursework are considered full-time students. For Summer sessions, six or more hours constitute full-time enrollment. The designation of full-time is for academic purposes only and does not apply to assessment of fees.

Overloads

Undergraduate registration in more than 17 semester hours must be approved by the academic unit. For Summer sessions, approval is required for programs of 9 or more semester hours.

Restricted Loads

Limitations on the size of academic load for which students register may be imposed by the dean or faculty advisor. Students on probation generally are required to restrict their academic programs to a minimal full-time load until they have returned to good standing.

Financial Aid - Summer Term - Academic Load Requirements

Undergraduate degree seeking students who are enrolled in the summer term are required to be enrolled in a minimum of 6 hours in order to be considered half-time for loan eligibility in the Financial Aid & Scholarships Office and for loan deferment reporting to the National Student Clearinghouse.

Academic Credit Hour Equivalencies Policy

These equivalencies represent minimum requirements.

One academic credit hour delivered in the traditional didactic teaching/learning approach is equivalent to three hours of student work per week (1 hour of classroom or direct faculty instruction and a minimum of two hours out of class student homework – Carnegie Unit), typically delivered over a 15 week academic semester. One academic credit hour of classroom or direct faculty instruction is equivalent to 50 minutes of clock time, over 15 weeks of instruction (excluding the final examination period), for a total of 750 minutes of direct faculty instruction over the semester. A 1 credit didactic, lecture class must meet 750 minutes during the semester, excluding the final examination period. Therefore, a 3 credit hour didactic, lecture class must meet 2250 minutes during the 15 weeks of instruction in a typical semester, excluding the final examination period.

One academic credit hour for a laboratory class is equivalent to two scheduled hours of laboratory experience per week (total minimum of 100 minutes), typically delivered over a 15 week academic semester. One academic credit hour for a laboratory class shall consist of one thousand five hundred (1,500) minutes of learning experience in the laboratory. Where a course includes arranged hours, these generally take the place of the hours assigned to homework.

However, there are additional teaching/learning approaches that include, for example, clinical experiences, studio experiences, field studies, individual lessons, recitation/discussion that may follow a modification of the equivalencies for credit hour assignment. Those equivalency models are approved by each academic unit (school/college) dean. At least an equivalent amount of work in the traditional didactic teaching/learning approach is required for these additional types of academic learning activities.

For independent studies, practicum experiences, internships and directed readings academic credit is determined by standards and requirements established in each academic unit (school/college) that is dependent on the discipline/field of study, scope of the planned educational experience(s) and the academic experience and preparation of the student(s). Minimally, these learning experiences follow the model of requiring the student to work in the placement or devote focused study for 3 hours per week, for 15 weeks during the typical semester, to earn one academic credit hour. This translates to an estimated 45-60 hours of experience per semester for one academic credit hour. If a consistent academic equivalency is not established by the academic unit (school/college) for these types of teaching/learning experiences, an individual written agreement must be developed for each individual student experience. This written agreement will outline the scope of the work to be achieved, learning objectives/outcomes and the academic assessment standard to be applied. This written agreement must be approved by the respective chair/program director and dean. The respective dean's office will be responsible for retaining the appropriate documentation.

Any equivalencies below these minimum equivalencies must be submitted in writing for review and approval by the Provost.

Academic Standing

- Academic Amnesty (p. 747)
- Academic Probation and Ineligibility (p. 748)
- Deans List (p. 748)

Academic Amnesty

The University of Missouri-Kansas City has an amnesty policy to enable those students who did not perform adequately in their undergraduate enrollment at UMKC to be given a second chance to pursue their undergraduate academic goals. The policy is as follows:

A student may apply for amnesty if s/he meets the following two requirements:

- Has not been enrolled at UMKC at any time during the past two years
- Applies for amnesty at the time of the application for readmission or before the end of the first semester of readmission if already readmitted

NOTE: Amnesty for prior terms at UMKC will not be considered for students who are enrolled or are enrolling at schools other than UMKC. Amnesty only applies to UMKC undergraduate courses and is not applicable to transfer work or graduate work. Only students who are readmitted at the undergraduate level at UMKC are eligible to apply for amnesty.

Amnesty will be implemented as follows:

- Grades for **ALL** courses taken in the period of time for which amnesty is requested will be removed from the grade point average if the request is approved. The student may not choose specific courses.
- The original grade will remain on the student's transcript, but will be marked by an "X" preceding the grade. For plus/minus grades, the plus or minus will be dropped and the base grade will be used. For example, grades of A, B+, B, B-...F would be changed to XA, XB, ...XF. These hours and grades will remain on the transcript, but will not count toward cumulative hours nor GPA, nor can they be used to fulfill any degree requirements, regardless of the original grade.
- A statement "Grades granted amnesty by faculty committee action" (or similar) will follow the last course on terms granted amnesty.
- When amnesty is approved, changes to the transcript will be made after the fourth week of classes in the term in which the student re-enrolls. If the student withdraws before the end of that term, all course grades will be changed back to the grades that appeared prior to amnesty.
- Students can receive amnesty at UMKC only one time (for one or multiple terms) in their lifetime.

Academic Probation and Ineligibility

Undergraduate degree-seeking students' academic status is assessed at the end of every term, whether the student is full-time or part-time for that term. A summer session is considered the same as a semester for the purpose of the following regulations:

1. In general, students will be placed on academic probation whenever their official UM grade-point average falls below 2.0 (C average). Some academic units may have a higher grade-point average requirement. First time college freshman admitted to UMKC on the basis of high school records, who have grade-point averages between 1.50 and 1.99 at the end of the first semester of either full- or part-time study will be placed on academic warning. Students on academic warning must achieve an overall 2.0 average by the end of their second semester or be placed on regular probation. After that, they would be subject to the regular probation requirements.
2. Students on academic probation will be restored to good standing whenever the UM grade-point average reaches 2.0 or the GPA level established by their academic units.
3. Students on academic probation must maintain the grade-point average required by their academic units during each subsequent semester or summer session while they are on probation. Otherwise they are ineligible to re-enroll without the approval of the academic units.
4. Students on academic probation must remove themselves from probation within three successive semesters (including the semester in which they originally were placed on probation). Otherwise they are ineligible to re-enroll without the approval of the academic units.
5. Students are responsible for knowing their academic status by referring to Pathway and their permanent transcript.

Deans List

The Dean's List is a unit-based student-centric recognition of excellent academic performance. Students must complete a minimum full-time program of 12 graded hours to qualify for the dean's list. The credit/no credit option may not be used as part of the 12 graded hours. The permanent academic records for qualifying students are annotated to reflect this distinction. Official semester grades indicate students who are candidates for the Dean's List.

Criteria for determining the GPA required for a student to be included on their unit Dean's List will be determined by the unit Dean. The specific criteria will be published in the unit undergraduate catalog.

Dean's List criteria will be reviewed annually by each academic unit (College/School) and changes in requirements will be submitted in writing to the Registrar by February 1 each year for inclusion in the next academic catalog.

Undergraduate Admission Policy & Procedures

Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 120
5115 Oak Street
(816) 235-**1111** (Kansas City Metro)
(800) 775-8652 (Outside of Metro)

Fax: (816) 235-**5544**
admit@umkc.edu
http://www.umkc.edu/admissions

Mailing Address
University of Missouri-Kansas City
Office of Admissions
Room 120
5100 Rockhill Road
Kansas City, MO 64110-2499

Director of Admissions:
Tamara Cloutier Byland

Associate Director/Admissions:
Doretta Kidd

Associate Director/Recruitment:
Chris Parrish

Manager, Welcome Center:
Maya Mapp

Manager, Communications Center:
Ashley Rogers

Application Forms

Online Application Forms

Application forms and more information for

- Undergraduate Students
- Transfer Students
- Graduate and Professional Students
- International Students
- Visiting or Community Students
- Other special admissions information

can be accessed at http://www.umkc.edu/apply.

Application Forms

Paper application forms are available through the Admissions Office, International Student Affairs Office and the School of Graduate Studies.

Application for Admission

Qualified Students Seeking Admission

Qualified students seeking admission must submit:

1. Completed application form. Forms can be found online at http://www.umkc.edu/apply. Domestic students may contact the UMKC Admissions Office for a paper application. Domestic students include Permanent Residents and students who have been granted Assylee or Refugee status. International students apply through the International Student Affairs Office.
2. A nonrefundable application fee. The fee for domestic students submitting an online application is $35 (or $45 with a paper application); the international student application fee is $50.
3. High school transcripts with class rank (if applicant has fewer than 24 transfer college hours).
4. ACT or SAT score (if applicant has fewer than 24 transfer college hours).
5. Official transcripts from each previous institution where college coursework was attempted.

Appeal of Admission Decisions

Students who are denied admission as a freshman or transfer to the institution may write a letter of appeal to the Director of Admissions, 5100 Rockhill Rd., Kansas City, MO 64110. Students who are denied readmission must direct their appeal to the appropriate dean's office of the school or college to which they were denied readmission.

Former Student Readmission

General

Former students who have not attended another institution since leaving UMKC and who were in good academic standing at the time they left, may be eligible to return to UMKC by completing a Request to Re-Enroll Form. Students should contact the Office of Admissions at (816) 235-**1111** or admit@umkc.edu to determine if they may re-enter without reapplication.

Former students who have attempted college coursework at another institution since leaving UMKC and now wish to return must apply for readmission.

Academic Amnesty Policy and Procedures

See the Policies and Procedures section of this catalog.

Applicability of Previous Catalogs

Current admission requirements as outlined previously will apply to applicants for readmission. Fulfillment of the general degree requirements in effect at the time of original admission may be selected by readmitted undergraduate students instead of current requirements, provided not more than one calendar year plus one term has elapsed since the last enrollment at UMKC and that they have not interrupted UMKC work by completing 12 or more semester hours at another college or university.

Freshman Admission

Automatic Admission from High School

Admission to UMKC is designed to reflect a student's probable success at the University. Since fall 1997, UMKC has admitted students according to the Missouri Coordinating Board for Higher Education's (CBHE) category of "selective institution." Selective institutions admit first-time, full-time degree-seeking students and transfer students who have completed 24 or fewer credit hours, who attain a combined percentile score, resulting from the addition of their high school percentile rank and the percentile rank attained on a national normalized test, i.e. ACT or SAT, which equals or exceeds 120 points. Students achieving a score of 24 or better on the ACT College Entrance Examination, or its equivalent on the SAT, are automatically admitted to selective institutions.

The required ACT/class rank combinations are as follows:

High School Class Rank Percentile	ACT Composite Standard Score	SAT CR & M Standard Score
94 and above	17	820-850
86-93	18	860-890
78-85	19	900-930
69-77	20	940-970
62-68	21	980-1010
54-61	22	1020-1040
48-53	23	1050-1080
47 and below	24	1090 or higher

Admitted students are expected to have followed a college-preparatory curriculum that includes at least 17 units of credit (with each unit equaling one year in class), as follows:

- Four units of English, one of which may be in speech or debate (two units emphasizing composition or writing skills are required).
- Four units of mathematics (Algebra I or higher). This requirement may be satisfied by the completion of courses in middle school, junior high or senior high.
- Three units of science (not including General Science). The three units of science must include a laboratory course and must include units from at least two of the following areas: physical science, biology, physics, chemistry and earth sciences. This requirement may be satisfied by the completion of courses in middle school, junior high or senior high.
- Three units of social studies.
- One unit of fine arts, to be taken in visual arts, music (e.g., band, orchestra, music appreciation, music theory), dance or theater.

- Two units of a single foreign language or American sign language. This requirement may be satisfied by completion of courses in middle school, junior high or senior high.

Missouri Enhanced Admission

Any student attending a Missouri high school who ranks in the top 10 percent of his or her graduating class and completes the college preparatory curriculum which includes at least 17 units of credit (four units of English, four units of math, three units of social studies, three units of science, two units of foreign language and one unit of fine art), will be eligible for automatic admission to any of the University of Missouri campuses. An ACT/SAT score is required to be submitted by each student who applies to the University.

Further, any student who graduates from a school that does not rank its graduates, but who has taken a college preparatory curriculum which includes the 17 units of credit noted above and who achieves a 3.5 GPA on a 4.0 scale in these core courses will be eligible for automatic admission to any of the University of Missouri campuses. Again, an ACT/SAT score has to be submitted by each student who applies to the University.

Additional Freshmen Admission Considerations

The University seeks a heterogeneous body reflecting diversity of race, ethnicity, age, geography (national and international) and talent. Factors given prime consideration for admission to undergraduate study are an applicant's previous academic success and the quality of the record submitted. Additional factors may include:

- Extensive extracurricular activity involving school, church or community.
- Outstanding talent and/or ability.
- Number and scope of college preparatory courses.
- Evidence of marked improvement over time in the applicant's high school academic record.
- Significant work experience and/or family responsibilities.
- Supporting evidence attesting to one or more of the above, submitted by the student.

Additional Requirements

Applicants for the Conservatory of Music (p. 648), Engineering programs (p. 306), School of Pharmacy (p. 717), and baccalaureate/M.D combined programs should consult the appropriate sections of this catalog for additional requirements.

Freshmen not meeting the requirements for regular admission will be reviewed for Trial Admission (p. 754).

Metro Rate

The Metro Rate is a program benefiting undergraduate and graduate, non-professional students who are legal residents of Atchison, Douglas, Franklin, Jackson, Jefferson, Johnson, Leavenworth, Miami, Osage, Shawnee, or Wyandotte counties in Kansas. These students will be assessed educational fees equivalent to those of a Missouri resident (the "in-state" rate). Questions about the Metro Rate may be directed to the Office of Admissions.

Midwest Student Exchange Program

The Midwest Student Exchange Program (MSEP) is an interstate initiative established by the Midwestern Higher Education Compact to increase educational opportunities for students in its member states. This program enables residents of Wisconsin, Kansas, Michigan, Minnesota, Missouri, Nebraska, Indiana, and North Dakota to enroll in designated institutions and selected programs at reduced tuition levels outside of their home state.

Visit Midwestern Higher Education Compact for more details.

Policies on Admission of International Students

General Admission Policies

International students are expected to meet the requirements for admission from secondary schools or from other colleges and universities as outlined below. Permanent Residents and students who have been granted Refugee or Assylee status apply through the Office of Admissions.

International students from secondary schools are expected to have an above average secondary school record and proof of adequate English proficiency, as well as a written statement of purpose.

International transfer students from other accredited colleges or universities must have above-average grades in all previous college study. Only credit appropriate to the curricula at this institution will be accepted toward a degree. Students transferring from other institutions in the United States must submit the International Transfer Form or other evidence of release from the previous program by their former foreign-student advisors and the equivalent of one semester's work at those institutions before admission will be granted.

An official statement of finances indicating sufficient funds available to meet all educational and other fees and living expenses for the duration of the studies is required.

A $50 application fee for new/renewal applicants is required. Application fees are non-refundable.

Priority Deadline for Application for Admission - International

UMKC generally follows a "rolling admissions" policy: i.e., admission action is taken as soon as the application file is complete. All international students should apply for admission (this includes taking all necessary tests and filing all required application forms and academic records) by the following priority deadlines:

Fall Semester: March 1[1]
Spring Semester: Oct. 1[1]
Summer Session: January 1[1]

[1] For application for assistantships, scholarships, etc., the priority deadline is Feb. 1. Several academic units have different deadlines as outlined in the current admission application materials.

UMKC reserves the right to consider applicants for the most appropriate semester.

Required Academic Records - International

Students must provide complete and official certificates of all degrees, diplomas, mark sheets, grade reports and examination records. Secondary-school records must be submitted as well as college/university transcripts or credentials. All previous undergraduate work must include syllabi of courses taken with literal translations. If documents are in another language, applicants must also provide a literal English translation.

English Proficiency Requirement

International students are required to establish proof of adequate English proficiency as part of the admission process. However, some academic units allow conditional admission consideration (see "Conditional Admission" section below).

Applicants from countries in which English is not the native language (or if it is one of the official languages but is not necessarily the first language of the majority of the population) are required to present satisfactory *Test of English as Foreign Language* (TOEFL) scores or International English Language Testing System (IETLS) Scores to satisfy this requirement. The minimum score is 61iBT (internet Based Test) or a score of 5.5 on the IELTS. Exceptions to this policy:

1. Non-native speakers from post-secondary institutions in English-speaking countries [the full list of countries may be found here] provided they have spent a minimum of two years in successful full-time study and English was the medium of instruction.
2. UMKC accepts successful completion of ELS Language Centers Level 112 in lieu of TOEFL or IELTS.

For TOEFL information contact

TOEFL Services
The Educational Testing Service
PO Box 6151
Princeton, NJ 08541-6151 USA
http://www.ets.org/toefl

Request official TOEFL scores be sent to UMKC's institution code 6872.

For IELTS contact

The International English Language Testing System
http://www.ielts.org

Request official IELTS scores be sent to

UMKC International Student Affairs
Student Success Center, G-04
5100 Rockhill Road
Kansas City, MO 64110

Other Admission Policies - International

Credit by Examination/Transfer Credit

For information on UMKC credit by examination policy, the transfer credit policy and course equivalency tables, the student is referred to the International Student Affairs Web site (http://www.umkc.edu/isao).

Admission Deferral

An offer of admission, granted on a regular basis for a given term, may be deferred for up to one calendar year from the term first granted. However, if the applicant attends another college or university after the original offer of admission, a new application must be submitted and official transcripts of the additional work must be furnished.

Applicants must request such an deferral for a specific term by contacting International Student Affairs. This request should be submitted through ISA's online services at http://www.umkc.edu/isao/services. Individual financial support documentation must be renewed annually.

Provisional Admission - International

International Student Affairs is authorized by certain academic units to admit on a provisional admission basis when certain applicants have not been enrolled at UMKC before. This category of admission is designed for use just before a given term pending receipt of credentials and the determination of eligibility for regular admission.

Conditional Admission

Students with **no TOEFL** or **low TOEFL** may be considered for admission to certain academic programs. Contact International Student Affairs.

Post-Bachelor's Classification-International

If international students do not want to work toward an advanced degree or are ineligible for graduate-level credit, they may be considered for admission as bachelor's degree students if they file credentials with International Student Affairs that indicate an undergraduate degree has been earned from an accredited institution. Students may take undergraduate-level courses numbered 300 or 400 for undergraduate credit while in that status, but they may not enroll in courses numbered 500 or higher. In general, the previously outlined policies for admission of transfer students are applicable.

Exceptions - International

Exceptions to admission policies must be approved by the appropriate authority in the college or school to which the students are applying. International Student Affairs should be contacted regarding forms and procedures.

Registration with International Student Advisor

Admitted international students must first report to International Student Affairs **for a check-in session** prior to their first registration at UMKC. Once admitted, international students must show proper and regular progress toward their degrees.

Health Insurance

At each registration session, international students must present health insurance containing repatriation and medical evacuation. Effective fall 1998, international students are required to purchase exclusive, mandatory UMKC health insurance.

English Proficiency Evaluation

All international students subject to the TOEFL/IELTS requirement must be evaluated (unless they have scored 100iBT or higher on the TOEFL or 6.5 or higher on the IELTS) by the Applied Language Institute staff at UMKC regarding the level of their English proficiency. If any weakness in that level of proficiency is revealed, appropriate coursework will be required to assure that the student's success is not jeopardized.

More Information

International applicants to undergraduate programs who want more information and forms to apply for admission can go to http://www.umkc.edu/isao or write to

UMKC International Student Affairs
Student Success Center, G-04
5100 Rockhill Road
Kansas City, MO 64110 USA

Forms to apply for undergraduate admission can also be downloaded form the following website: http://www.umkc.edu/apply.

Policies on Regular Admission - Medicine

General

The School of Medicine's Council on Selection carefully reviews applicants to the six-year combined baccalaureate/M.D. program. Academic potential, as evidenced by the quality of high school courses, rank in class and admission test scores, and personal qualities such as leadership in school or community, stamina, reliability, motivation for medicine and range of interests, are considered. Applicants who appear to be well qualified are invited to the UMKC campus for interviews. If invited, the applicants are notified in writing and required to be present at the scheduled date and time of the interviews. Residency in Missouri will be considered before all other factors in selecting students for this program. (See the School of Medicine section of the catalog for complete details.)

Admissions Test - Medical Program

The American College Testing Program, called the ACT, examination is required for all in-state applicants. The Scholastic Aptitude Test, called the SAT, is accepted for out-of-state applicants in some instances.

Deadline for Application - Medical Program

The deadline for application for Year 1 is Nov. 1 of the year preceding the one for which the student is applying. By this date, a completed application form must be received, and all other required credentials, application supplements, test scores, references and six-semester high school transcript, should be in process and sent as soon as possible. The earliest date for applying is Aug. 1 of the year preceding entry.

Other Requirements - Medical Program

An advance deposit of $100 is required upon acceptance.

Special Admission Cases

Trial Admission

High school graduates who do not meet the standards for regular admission from high school may, in some cases, be admitted to the University on a conditional trial basis. If admitted, students may be required to participate in an academic support program as a condition of their admission. The student must earn a 2.0 grade-point average to be eligible to enroll the following semester.

Students can choose from several options during their senior year in high school or the summer before their freshman year to be considered for regular admission:

- Take coursework in the required area during the summer prior to the fall semester of their freshman year.
- Enroll in college-level coursework in the required area at an accredited community college or four-year institution.
- Complete the required coursework through correspondence or independent study.

Early Admission from High School

Superior high school students who have completed all of the requirements for graduation from high school but who will not receive a high school diploma until their class graduates will be considered for admission based on the criteria under Regular Admission from High School (p. 750). The applicant's high school principal or counselor must certify that graduation requirements have been met and written parental approval is required.

Dual High School-University Enrollment

High school students may be admitted in a special student category for the purpose of taking University courses concurrently with high school courses.

Students interested in enrolling in dual credit classes taken at their high school for both high school and college credit should contact the High School College Partnerships.

High school students wanting to take college courses on UMKC's campus must submit a special application (http://www.umkc.edu/admissions/docs/hscertification-final.pdf) that includes high school authorization.

GED High School

Any individual may apply for admission on the basis of passing the General Educational Development (GED) tests. Passing scores must be achieved in each area of the GED. The student also is required to present an ACT composite score of 24. Students not meeting this criteria may be considered for a trial admission.

Home Schooled

Graduates of home schooled programs are required to have a minimum ACT composite score of 24 and completion of the 17 units of college-preparatory curriculum. Students not meeting this criteria may be considered for a trial admission.

Mature Adults

Students who graduated high school five or more years ago and have not attempted college level course work may apply for admission without submitting ACT or SAT scores.

Timing of Applications

The Office of Admissions will begin accepting admission applications June 1 of the year preceding the Fall Semester for which the student is applying. High school seniors will be evaluated on the basis of six or more completed semesters of high school work as well as standardized test scores (ACT/SAT).

Dates of Application

The preferred dates for admission application from high school are as follows:

- Fall Semester: Feb 1
- Spring Semester: Nov. 1
- Summer Session: May 1

However, applicants are urged to apply well before the above dates. To be considered for scholarships, students should be admitted by **Feb 1**. Some academic units have earlier deadlines. Refer to those sections of the catalog.

Six-Year Medical Program

Students interested in applying to the Six-Year Medical Program should refer to the School of Medicine section of the catalog to get information on application deadlines.

PharmD. Program

Students interested in applying to the PharmD. program should refer to the School of Pharmacy section of the catalog to get information on application deadlines.

Transfer Admission

Students who have completed 24 or more semester hours of college-level work are eligible for admission if they have attained an overall grade-point average (GPA) of at least 2.0 (on a 4.0 scale) in all college-level courses attempted at previous institutions.

Note: Academic units may have more stringent requirements. Check the section of the catalog that describes the degree program and major you are seeking.

Regular Admission

Students transferring from other colleges or universities should submit the following to the Office of Admissions:

1. Completed UMKC application form at http://www.umkc.edu/admissions/apply. Domestic students, including Permanent Residents, Assylees, and Refugees, apply through the Office of Admissions; International students apply through International Student Affairs. Contact the appropriate office for paper application forms.
2. Nonrefundable application fee. The fee for a domestic online application is $35; paper application fee is $45. International student application fee is $50.
3. Official transcripts from all colleges and universities where coursework was attempted.

A transferring student who has completed fewer than 24 hours of college-level coursework must apply under the procedures for admission as a freshman and must have at least a 2.0 overall GPA in all college work attempted. These students must submit the following to the Office of Admissions:

1. High school transcript with class rank and ACT score (if less than 24 college credits).
2. Official transcript of all college courses completed and courses in which the student is currently enrolled.

Special Admission

Transfer students who do not have a 2.0 GPA are welcome to apply for admission; however, admission is not guaranteed and a student may be admitted on a probationary status.

Transfer Within the University of Missouri System

Students may transfer among campuses within the University of Missouri System. Any course that leads to an undergraduate degree on any campus of the University of Missouri System is accepted in transfer toward the same degree on each campus of the UM System offering that degree.

Students will have two cumulative grade-point averages. One is the campus GPA that will be calculated by procedures defined at the campus. The second is the University of Missouri GPA, which will include all grades and credits attempted at any University of Missouri campus, including all grades, credits and points for any courses that are repeated.

Any student attempting to transfer between University of Missouri campuses to UMKC should be aware that their cumulative University of Missouri GPA will be used to determine their admissibility.

Transfer of College Credit from Other Colleges and Universities

Refer to the Undergraduate Academic Regulations and Information section of the catalog.

Students who have completed an associates degree (AA or AS) from an accredited college or university and have a cumulative GPA of 2.0 (on a 4.0 scale) are admissible to the University, but not necessarily to specific programs. For the additional admission requirements of specific degree programs, refer to the appropriate sections of the catalog.

Articulation agreements and transfer equivalency tables can be found at http://www.umkc.edu/admissions/transfer.asp.

Visiting and Community Student Admission

Students from other institutions who wish to attend UMKC to transfer courses back to their home institutions may be admitted as Visiting Students for a term. Students are encouraged to check with officials at their home institution to guarantee that UMKC courses are transferable and fulfill their program's degree requirements.

Students who are members of the community and who do not wish to earn a degree at UMKC, but are not currently seeking a degree at another institution, may apply as Community Students.

Students may obtain a Visiting/Community Student Application form at http://www.umkc.edu/apply/visiting.asp or from the Office of Admissions. Not all academic programs are open to visiting/community students. Some academic units require that the non-degree seeking student be certified by the home institution as a student in good standing. Consult the application for specific program and course eligibility.

Students paricipating in the KCASE program are required to submit a visiting student application.

Policy on Admission Credentials

All credentials submitted in support of the application for admission become the property of UMKC.

Attendance Policy

General Principles

- Students are expected to attend and participate in classes.
- Advance notice of attendance policies of academic units and individual instructors should be given, and such notice should be in writing.
- Students should notify instructors of excused absences in advance, where possible.
- Students who have an excused absence are expected to make arrangements with instructors for alternative or make-up work. Such arrangements should be made in advance of the absence, where possible.
- Instructors should accommodate excused absences to the extent that an accommodation can be made that does not unreasonably interfere with the learning objectives of the course or unduly burden the instructor.
- Attendance policies shall be applied in a non-discriminatory manner.
- Enrollment as a student is required to attend any class unless otherwise pre-approved by the instructor.
- Instructors are responsible for verifying the class roster in Pathway throughout the term.

The Policy

Each academic unit and instructor may adopt an attendance policy appropriate to that unit, a particular field of study, or for a specific course. Such policy or policies must be consistent with the general principles, and must give students advance notice in writing. In the case of an academic unit, notice may be given in the appropriate section of the General Catalog, or in other materials provided to students for the purpose of informing them of the rules and regulations of the academic unit. In the case of an individual instructor, notice of an attendance policy should be given in the course syllabus.

If neither the academic unit nor the instructor has adopted an attendance policy, or if proper advance notice of the attendance policy was not given, the UMKC general attendance policy will govern. The general attendance policy is that students shall not be penalized for excused absences. "Excused absences" include absences due to illness of the student, illness of an immediate family member for whom the student must care, death of an immediate family member, religious observance (where the nature of the observance prevents the student from being present during class), representation of UMKC in an official capacity, and other compelling circumstances beyond the student's control. Students seeking an excused absence must provide documentation upon request to substantiate the excuse. Students with excused absences shall undertake appropriate make-up or alternative work to be provided by instructors of the courses in which excused absences were incurred.

Complaints concerning the application of an attendance policy or an instructor's attendance policy should be raised with the Department Chair of the instructor or with the Dean if there is no Department Chair or the instructor is the Department Chair. If the student or instructor is not satisfied with the resolution of the complaint, the matter may be appealed to the Dean and to the Division of Academic Affairs. Complaints concerning the adoption or modification of an attendance policy by an academic unit should be raised with the Division of Academic Affairs. Complaints are to be promptly addressed at each level of review.

This policy was approved July, 2002 and effective Fall, 2002; Revised Fall 2012

Classification of Students/Student Levels

Undergraduate students are classified by the number of semester hours completed at the beginning of each semester. A student with:

- Fewer than 30 credit hours completed is classified as a freshman.
- Fewer than 60 but at least 30 credit hours completed is classified as a sophomore.
- Fewer than 90 but at least 60 credit hours completed is classified as a junior.
- At least 90 credit hours completed is classified as a senior.

A student who has completed a bachelor's degree and enrolls only for undergraduate credit will be classified as a senior.

Course Numbering

Courses are numbered according to the following plan:

000-099	Remedial Courses (No college credit)
100-299	Lower Level Undergraduate Courses
300-499	Upper Level Undergraduate Courses (Some upper level courses may be taken for graduate credit)
500-2999	Currently Not Used
3000-4999	Dental Hygiene Undergraduate Courses
5000-5999	Graduate Level Courses
6000-6999	School of Dentistry Courses
7000-7999	School of Pharmacy Courses
8000-8999	School of Law Courses
9000-9999	School of Medicine Courses

Electronic Grade Change Policy

Electronic grade changes can be completed by the instructor of record or by the Chair of the Department or the Dean of the Academic Unit via the online student information system. The deadline to initiate an electronic grade change must occur within one calendar year after a term has ended.

The following dates are applicable to all calendar year semester grade changes:

- May 31 for the previous **Spring Semester**
- July 31 for the previous **Summer Semester**
- December 31 for the previous **Fall Semester**

Approved reason codes must be used for all electronic grade changes.

Electronic grade changes cannot be submitted for the following types of changes. These require the use of a hard copy Grade or Course Change form for Past Terms.

- Changing the credits associated with a course
- Changing the grading basis associated with a course
- Student has graduated
- Retroactively adding, deleting, or swapping a course

Electronic grade change reports will be available to run on demand by each Academic Unit to notify Deans and Department Chairs when grades have been changed on a student's record. The Registrar will send a grade change report at the end of every semester to capture all grade changes that have been submitted online.

Grade changes requested after one year will require a written appeal by the instructor and a signature from the Dean. The Registrar will review the grade change request and work with the Provost's office to determine the acceptance of the instructor grade appeal.

Final Exam Policy

It is expected that every faculty member meet their classes during the scheduled final exam period in the scheduled room(s) for the final examination or other approved instructional activity.

Whenever circumstances make necessary a deviation from the announced final exam schedule, approval for such deviation must be obtained by the appropriate department chair and unit academic dean as well as the Registrar.

Faculty should remain available to students throughout the entire semester (including finals week). If circumstances necessitate faculty unavailability at any time during the semester, students should be notified, in writing, with alternate contact information (i.e., department head).

The Provost reserves the right to alter the final exam schedule due to extenuating circumstances.

Students having more than three final exams scheduled on one day may submit a written request to their Academic Dean's Office to reschedule an exam. The Dean's Office will coordinate with faculty to reschedule the exam.

General Education Requirements

UMKC General Education Core

The UMKC General Education Core is the University's new core curriculum, designed to provide knowledge and skills that are important for all students, no matter their major or field of study. The UMKC Core provides an innovative learning experience for students, employing interdisciplinary courses that are team taught by faculty. These courses challenge students to think across boundaries in a way that more closely resembles real-world situations, helping them be better prepared for 21st century careers.

Starting in August 2013 with incoming first-time freshmen, UMKC undergraduates in every academic unit, in every major, will have the same set of core requirements.

The UMKC Core is a standard for all new students to meet, replacing any and all existing general education requirements previously instituted by individual academic units. The new requirements do not apply to students enrolled prior to August 2013 or to transfer students who enroll at UMKC prior to August 2014.

The UMKC Core is a more efficient means of guiding a student's educational journey and provides greater value because students can be confident that the courses they take will arm them with skills employers most value for careers after college and will constitute progress towards a degree, even if they change majors. It represents another facet of UMKC's commitment to student success.

UMKC General Education Core Website

Grading Options and Auditing Courses

Auditing a Course

A student must obtain the consent of the instructor in order to audit a course. Courses that ordinarily may not be audited are studio courses in art, performance courses in the Department of Communication Studies and laboratory courses in the sciences.

A student registered in a course for audit is expected to attend class. Therefore, an auditor may be administratively withdrawn from a course when, in the judgement of the instructor and upon approval by the dean, the attendance record justifies such action.

Change from Audit to Credit

Students may change status in a course from audit to credit during the first week of the term provided they have approval of the faculty and academic unit. This change must be initiated in the advising office of the appropriate academic unit and must be completed in the UMKC Registration & Records Office.

Change from Credit to Audit

Students may change their status in a course from credit to audit any time prior to the end of the fourth week of any Fall or Spring semester, or prior to the end of the second week of any summer session. This change must be initiated in the advising office and must be completed in the UMKC Registration & Records Office.

Credit/No Credit Option

Sophomores, juniors and seniors in good standing may elect to take one course per semester on a credit/no credit (CR/NC) basis. The credit/no credit option may not be used for courses in the major nor the minor, nor for courses taken to fulfill the general degree requirements. Students may not elect this option when they are repeating a course.

The credit/no credit option must be elected at the time of initial registration for a term and cannot be changed subsequently. A grade of C- or better must be earned to earn credit; D and F grades receive no credit. Grades of CR or NC do not earn grade points and they do not affect the grade-point average. Courses elected on this option are subject to regular academic regulations, including course load, withdrawal, etc.

The credit/no credit option is not available for students pursuing a bachelor of liberal arts degree.

Grading

The following is the grading and grade-point system at UMKC:

Letter Grade	Description	Points per Semester Hour
A	The highest grade	4.0
A-		3.7
B+		3.3
B	Work of distinction	3.0
B-		2.7
C+		2.3
C	Average work	2.0
C-		1.7
D+		1.3
D	Passing, but unsatisfactory	1.0
D-		.7
F	Failure without credit	0.0
NR	Not Reported	0.0
WF	Withdrew failing	-
W	Withdrew; no academic assessment	-
I	Incomplete	-
AT	Audit	-
CR	Credit only	-
NC	No Credit	-
P	Passing	-
S	Satisfactory	-

Beginning Fall 2012 a WF is not calculated in the GPA for undergraduate students.

In terms prior to and including 1985, any of the above grades might be preceded by an R indicating a repeated course. These grades are not included in either total hours or the grade-point average. (Examples: RC, RD, RF.) Since 1985, all grades, including those in repeated courses, are included in the GPA calculation. For the 1993 Fall Semester, UMKC began using the plus/minus grading system for grades A, B, C, and D. The grade of A+ is valid only for students in the School of Law.

Grade Appeals

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the instructor.

This grade appeal procedure is available only for the review of allegedly capricious grading and not for review of the instructor's evaluation of the student's academic performance. Capricious grading, as that term is used here, comprises any of the following:

The assignment of a grade to a particular student on some basis other than the performance in the course.

The assignment of a grade to a particular student according to more exacting or demanding standards than were applied to other students in the course; (**Note:** Additional or different grading criteria may be applied to graduate students enrolled for graduate credit in 300- and 400-level courses.)

The assignment of a grade by a substantial departure from the instructor's previously announced standards as stated in the course syllabus.

Appeal Procedures

1. The student should first discuss the course grade fully with the instructor of the course. This must be done within six weeks after the beginning of the succeeding regular academic semester.
2. If the matter cannot be resolved by consultation with the instructor, the student should use the departmental grade-appeal procedure. Every academic unit (school, College or department) must have a set of appeal procedures that are to be made available to students on request. These procedures will specify the manner in which the departmental review of the challenged grade will be conducted.
3. If the matter is not resolved at the departmental level, an appeal can be made to the academic dean, in accordance with the school's or College's appeals process. The decision of the dean will be communicated to the student, the instructor and the department.
4. If the matter is not resolved within the school or College, the student may appeal to the Provost (http://www.umkc.edu/provost/downloads/StudentGradeAppealtoProvost.docx). This appeal must be made within 10 consecutive calendar days after notification of the decision of the dean.
5. The Provost or designated representative shall review the full record of the case and appeal documents. At this level, the Provost may appoint an ad hoc academic appeals committee to review the record and provide advice on the matter. The decision of the Provost is final and will be communicated to the student, the instructor, the department and the dean of the school or College.

Grade-Point Average

The following minimum grade-point average policy applies to all undergraduate students:

- Students must maintain a 2.0 GPA in their coursework at the University of Missouri.
- Academic units may impose additional grade-point requirements.
- In general, the UM GPA is calculated by dividing the total grade points earned in courses on any UM campus by the total number of graded semester hours attempted. If a course attempted within UM is repeated, the previous hours and grade point remain in the student's GPA. Courses taken credit/no credit, courses earning grades of S, P, I or AT, and courses transferred from non-University of Missouri institutions are not included in the UM GPA calculations.

Incomplete Grades

An instructor may assign the grade of I (incomplete) to students who have been unable to complete the work of the course because of illness or serious reasons beyond their control. An incomplete grade is appropriate only when enough work in the course has been completed for students to finish the remaining work without re-enrolling in the course or attending additional classes. The work must be completed within one calendar year or the incomplete grade will automatically lapse to an F. Students should not re-enroll in a class for which they earned an incomplete. Students may not earn a degree or graduate with an incomplete on their transcript.

Repeated Courses

When undergraduate students repeat courses, they can request to have only the grade for the final attempt used in calculating their GPA. THE COURSE REPEAT POLICY WILL NOT AUTOMATICALLY BE APPLIED TO A STUDENT'S GPA. After completing a retaken course, a student must submit a REQUEST FOR GPA ADJUSTMENT FORM to his/her academic advisor. The recalculation of a student's GPA is reflected only in the calculation of that student's current cumulative GPA and will not retroactively affect calculations for dean's list, graduation and honors, eligibility for financial aid and veterans' benefits and scholarships, athletic eligibility, discounts for insurance, or any other area.

- The GPA recalculation policy is applicable only to undergraduate students who repeat a course in which they earned a D+ or less and in which academic dishonesty was not involved.
- Students can only replace grades if the original and the repeated course are taken at UMKC.
- Repeated courses must be taken Fall 2007 or later.

- Repeated courses may not be taken on a CR/NC basis.
- Original grades cannot be replaced with a 'W', 'WF', 'I', or 'T.'
- No more than 15 semester hours can be dropped from the calculation of a student's GPA by repeating course work.
- Requests approved for GPA recalculation will prefix the original grade with an "R." Transcripts will note that such grades are excluded from GPA calculations.
- Courses cannot be repeated for credit towards the degree unless specifically noted.

Refer to the appropriate School or College section of the undergraduate catalog for information on specific rules for course repeats. Some academic units may have more stringent requirements on course repeats.

Graduation

Students who anticipate graduating must file an application for graduation before the end of the fourth week of the semester in which they intend to graduate. Commencement is optional and participating in commencement does not mean that a student has graduated. The application for graduation triggers a degree check. The degree check is conducted following the recording of grades for the semester in which the student anticipates graduation. All degree requirements must be fulfilled, including documentation of all requirements in UMKC's Registration & Records Office before the next semester after anticipated graduation begins. Diplomas may be picked up in person in the Registration & Records Office beginning 40 days following the last day of the semester. Diplomas that are not picked up in person will be mailed two weeks after they are initially made available. Replacement and duplicate diplomas can be ordered for a small fee from UMKC Registration & Records Office.

Declaration of Major

Students may declare a plan of study (major and/or minor) and degree(s) at the time of admission. See the specific academic unit guidelines for admission requirements regarding declaration. If continuing students wish to change their plan of study or add additional plans, students must complete the Declaration of Major form from the UMKC's Registration & Records Office and obtain signatures from the Academic Advising unit of the school or college.

Students admitted as Exploratory (undeclared) students or admitted with only a Pre-Professional designation (i.e. Pre-medicine, Pre-law) have not declared a specific major and/or degree at the time of admissions and therefore must declare a major by the hours specifically designated by the academic unit housing the degree(s).

Multiple Major & Double Degree Policy

A multiple (double or triple) major may be earned when a student completes two or more full majors, generally within the 120 hours required for a single degree. The specific major requirements of each major must be fulfilled. The diploma will indicate all majors. If the two or more degree programs are administered by different academic units, the major requirements of each academic program must be fulfilled. The double or multiple major is only available in B.A./B.A. or B.S./B.S. combinations.

A *double degree* may be earned when a student completes a minimum of 150 hours, completing the general education and major requirements for each of two majors. Students who earn a double degree will receive two diplomas simultaneously. If the two degree programs are administered by different academic units, the general degree requirements and major requirements of both academic units must be completed.

The B.A./M.D. *dual degree* program has different requirements and is subject to separate regulations. See the School of Medicine section of the catalog.

All dual degree programs must follow the established guidelines in the UMKC catalog.

Changes in Degree Requirements

The University of Missouri reserves the right at all times to discontinue, modify or otherwise change its degree programs when it determines it is in the best interest of the University. Students have the following options:

- Students who enter as first-time freshmen or transfer students may fulfill the degree requirements in effect at the time of their original admission to their degree program, provided there has not been a lapse in attendance at UMKC of more than one consecutive calendar year plus one term.
- Students accepted into any two-plus-two program (between UMKC and a community college) may fulfill the degree requirements in effect at the time of their original admission to the community college, provided no more than two years have elapsed since that original admission and enrollment has been continuous.
- Students may fulfill degree requirements in effect at the start of their senior year, provided that they have not had a lapse in attendance during the senior year at UMKC of more than one consecutive calendar year plus one term.

Minimum Hours

The general minimum UMKC requirement in semester hours of acceptable college work for an undergraduate degree is 120 semester hours (150 for a double degree). However, a number of undergraduate and first professional degrees have higher minimum requirements as indicated in the specific school's section of this catalog. A minimum of 30 hours must be earned at UMKC, regardless of the number and level of hours earned at another institution.

Assessment Requirements

The University of Missouri Board of Curators, other state entities, and the national college accrediting agency require the University to assess the effectiveness of academic programs. All undergraduate students must take a test of general education and complete a major field assessment prior to being granted a baccalaureate degree. Graduation depends on completion of assessment requirements.

Awarding Posthumous Degrees

The University may grant undergraduate, graduate and professional degrees posthumously. If an Academic Unit determines that a deceased student was academically eligible at the time and had completed sufficient coursework to earn a degree the Unit may recommend the awarding of a posthumous degree.

Students who completed all Degree Requirements

The diploma for the degree that the student was pursuing will be prepared in the same manner as if the student had graduated. This diploma may be presented to the family of the deceased in a special ceremony, at Commencement or in whatever manner is deemed appropriate.[1]

Student Did Not Yet Complete Degree Requirements

If the student had not completed degree requirements but was making satisfactory progress at the time of death, a dean's certificate honoring the student may be provided by the appropriate academic unit(s). These certificates may be designed and presented in a manner that is fitting to the circumstances.[1]

1 In some instances, presentation of the degree or certificate to family members may be made at a remembrance ceremony.

RooWriter Assessment

Candidates for all baccalaureate degrees must take the UMKC RooWriter writing assessment before they have completed 90 credit hours. Students may take the RooWriter at any time while enrolled at UMKC as a personal diagnostic, but it will only satisfy the undergraduate graduation requirement after a student has completed Discourse II (or equivalent).

Certain Colleges, Schools, Departments, Majors, Writing Intensive courses, etc. may also require the RooWriter to be taken multiple times, and some might further require a certain minimal level of achievement be attained for advancement. The RooWriter supports and is supported by the University-wide General Education Core requirements.

The RooWriter is offered online. Students should visit the RooWriter website (https://www.umkc.edu/RooWriter/logon.aspx) for contact information, writing improvement resources, and other general information.

Junior-Senior Hours

Undergraduate degree-seeking students are required to earn credit in at least 36 credit hours of coursework numbered 300 and above at UMKC. In the case of transfer credit, the coursework must be numbered as junior-senior level work by the transferring institution.

Residence Requirements

The final 30 consecutive credit hours of coursework must be taken at UMKC. Students must be registered in the College or school in which the degree is awarded. In "Completion Programs" at another institution, the final 30 hours prior to enrollment at the completion program institution must be taken at UMKC.

General Course Requirements

The individual academic unit sections of the catalog are the official sources of details on the general course requirements pertinent to the different degrees.

Colleges and Schools (p. 31)

Time Limit on Degree Credit

Credit over 15 years old at the time of application for graduation may not be applicable to a degree. Such credit may be subject to validation, at the discretion of the school/ department involved, before it can be used to satisfy degree requirements.

Application for Graduation

Written application for graduation is required and should be filed before enrolling in the final 30 credit hours of coursework. Students should turn the graduation application form into their home School or College (Academic Unit). The academic unit will send the graduation application to the Registration & Records Office. The application must be submitted no later than the deadline date published each semester in the on-line UMKC Academic Calendar in order to graduate for that semester.

Graduation with Latin Honors

Students are eligible to be awarded their degrees with Latin Honors (Summa Cum Laude, Magna Cum Laude, Cum Laude) as determined by each of the academic units (College/School) using fixed overall GPA requirements. These fixed GPA requirements will be reviewed annually by each academic unit (College/School) and changes in requirements will be submitted in writing to the Registrar by February 1 each year for inclusion in the next academic catalog.

The calculation for Latin Honors will be made using the GPA of the last 60 hours earned. Students may be awarded one Latin Honors regardless of the number of degrees the student earns.

Latin Honors may be published for commencement but will be provisional until the degree is conferred.

Leave of Absence Policy

UMKC's Leave of Absence Policy provides a means for students to take an approved leave of absence from a degree program without being required to go through the re-admission process upon return to the University. Students who are approved for a leave of absence will be allowed to register for classes during the "priority registration time period" for the next semester they return from their approved leave of absence period. Students who are enrolled in the Interdisciplinary Ph.D. program in the School of Graduate Studies and the Schools of Dentistry, Law, Medicine, Nursing, Pharmacy, and the Conservatory of Music and Dance must adhere to their school's leave of absence policies and procedures as these schools may have more stringent requirements or additional procedures.

1. Students who want to take an approved leave of absence are required to fill out the "Request for Leave of Absence Form" and are required to fill out a "Return from Leave of Absence Form" in order to be allowed to enroll and return to their previous academic program.
2. The deadline for applying for a leave of absence if the student has not been attending classes and is enrolled is no later than the fourth week of the semester. Students who need to apply for a leave of absence during a semester for which they have been attending will have until the last week of classes for the current term in accordance with the academic calendar.

The deadline for applying for a return from a leave of absence is 30 days prior to the first class date of the semester in which the student plans to enroll. Students who request a leave of absence that is not planned in advance due to a medical emergency or other extenuating circumstance beyond the control of the student will be reviewed on a case-by-case basis.

Academic program and graduation requirements may change during a student's leave of absence. It is at the discretion of the college/school to define the program and graduation requirements once the student has been approved to return from a leave of absence. Some programs may approve students to return on a space available basis.

Eligibility requirements:

1. Be a degree seeking student
2. Be registered and enrolled in classes for the current term
3. Be eligible to enroll and be in academic good standing, on probation, or on continuing probation with his or her academic unit
4. Have submitted all outstanding high school or transfer transcripts if conditional admission was granted for the student to enroll for the previous semester
5. Provide a personal statement and official documentation for why a leave of absence is being requested

Please note: a student who returns from a leave of absence will continue on the same academic standing that was in place at the time that the leave of absence began.

Leave of Absence Duration

A leave of absence will be granted for a maximum of two semesters (e.g. Fall and Spring or Summer and Fall). A student can request an extension for his or her leave of absence; however, the request for an extension cannot extend more than one year beyond the original date requested. Students who

do not return by the date noted on their approved leave of absence form and who are not granted an approved extension will be required to reapply through the Office of Admissions.

Leave of Absence Duration for Military Personnel

A leave of absence will be granted for all uniformed service members called to duty (whether voluntary or involuntary) for the duration of their time served. The student must fill out a Request for Leave of Absence form and provide the Registration and Records office with a copy of their written orders. Service members will be re-admitted to the university upon their return under the same re-admittance policies as all students who have been on a leave of absence from the university. Service members will not experience any added penalties from the University for fulfilling their military obligations.

Student Status During the Leave of Absence

A student granted a leave of absence retains his/her admitted student status. However, he/she is not registered and, therefore, does not have all the rights and privileges of a registered student and should be aware of the following consequences:

1. Financial Aid & Scholarships Office - A student is not eligible for any financial aid disbursements during the semesters while on leave of absence. A student on a leave of absence can be reported to lenders and loan service agencies as "non-attending" and may need to contact his/her lenders for information on possible repayment requirements, deferments and forbearances.
2. Enrollment verification requests - Enrollment verifications for other entities, such as parents' health or auto insurance companies, will also be reported as "non-attending."
3. Campus health - A student on a leave of absence for a particular semester is not registered for any credit hours and, therefore, not eligible to use the Student Health and Wellness Service Office.
4. Computing resources - A student on a leave of absence will not have access to computing resources, including computing labs. Students will be able to maintain their UMKC exchange email accounts.
5. Other student services – A student on a leave of absence will not have access to any campus or university service that is usually available only for currently enrolled students.

Leave of Absence Appeal

A student who has been denied a leave of absence or a student who has been granted a leave of absence but believes that either the period of leave awarded or the conditions specified are unreasonable, shall have a right to appeal the decision. All leave of absences that originate in the academic units of Medicine, Law, Pharmacy, Nursing, and Dentistry must continue through that unit's administrative appeals process. The process for filing an appeal is defined below.

Process for Obtaining a Leave of Absence

1. Schedule an appointment with your college/school to meet with an academic advisor or other designated administrator to review the leave of absence application's impact on the following issues:
   - Impact on progress toward degree.
   - Catalog year and status after leave of absence.
   - Previous semester's academic standing at the time of the requested leave.
   - Transfer policies, incomplete grades, agency requirements (e.g., state licensing/certification) and other academic issues, if applicable.
     a. Requesting a change of major at the same time the leave of absence is being requested.
     b. Review the policy and complete the Request for Leave of Absence Request Form. Forms are available online by visiting http://www.umkc.edu/registrar/forms.asp. The deadline for applying for a leave of absence if the student has not been attending and is enrolled is no later than the fourth week of the semester. Students who need to apply for a leave of absence during a semester for which they have been attending will have until the last week of classes for the current term in accordance with the academic calendar.
     c. Obtain the signature of the designated administrator in your college/school to approve the leave of absence.
     d. Schedule a meeting with the Financial Aid & Scholarships Office to meet with a financial aid counselor if you are receiving financial aid and/or scholarships for the term in which you want to apply for a Leave of Absence.
     e. Contact other offices, if applicable:
        - International Student Affairs Office - International students must receive mandatory advisement, including signature, from the International Student Affairs Office (ISAO) to discuss the impact of the leave of absence on their immigration status. An international student on an approved leave of absence must contact the ISAO prior to his/her return to UMKC to clear visa status and request appropriate immigration documents.
        - Financial Aid & Scholarships Office - Students who have received financial aid and/or scholarships should request information from the office about the impact a leave of absence has on current aid and future eligibility. Students should specifically request information about possible deferments for scholarships and/or loans.
        - Cashier's Office – Students who have outstanding balances on their accounts should talk with the Cashier's Office about payment arrangements to ensure there will be no delinquencies, late charge or collections associated with their accounts during their extended

leave of absence period. Once a plan has been created, the Cashier's Office will provide sign-off on the leave of absence form which is returned to the next appropriate office for processing.

- Residential Life - Students living on campus must formally petition to be released from their Residential Life License Agreement. If future housing is needed, students must reapply for housing during the return from leave of absence if applicable.
- Campus Dining - Students with meal plans must formally apply for a release from their meal plan contract and should contact the Campus Dining sales office for further details.
- Veterans' Services - Students with veterans' educational benefits and/or students leaving the university due to a military activation should contact Veterans' Services in the Registration & Records Office for information and assistance.
- Parking Office - Students who purchased parking hangtags should notify the office in writing and return the decal and gate access card (if applicable) prior to leaving, so that the appropriate prorated refund can be issued.
- Campus Health & Counseling Services - Students on leave of absence are not eligible to purchase UMKC student health insurance. NOTE: A student covered under his/her parents' insurance policy most likely has to be a full-time student (enrolled in at least 12 credit hours) to qualify for coverage and should check with the appropriate company representative for further information.
- Residency Classification - Students with questions about maintaining his or her current status or applying for reclassification should contact the residency coordinator in the Office of Admissions.
- Fee Refunds Schedule – Students who request a Leave of Absence are subject to the established fee refund schedule. Students who wish to petition for an exception to the refund policy will need to attach the form to their Leave of Absence Request.

2. Submit the Request for Leave of Absence Form
   - Once all required signature(s) have been obtained, the application is returned to the Registration & Records Office for review/approval. The student may return the form in person or the form may be sent through campus mail by the student's advising office.
   - The student follows the established procedures for withdrawing if registered for the current term as well as the procedures for canceling any future term registrations during the requested leave of absence. Note: Students receiving financial aid must visit the Financial Aid & Scholarships Office for information on how withdrawal impacts their financial aid.
   - The student updates his or her mailing address on the Pathway system, if necessary.

UMKC's Registration & Records Office Procedures for Processing a Leave of Absence

1. Notify the student of the result of his or her leave of absence request in writing to their UMKC email address.
2. Process the leave of absence request and note the expected return date in the Pathway system.
3. Notify the Academic Unit of the student's approved leave of absence and the semester the student is expected to return.

Leave of Absence Appeal Process

1. All leave of absence appeals not originating from the Interdisciplinary Ph.D. program in the School of Graduate Studies , Schools of Medicine, Law, Pharmacy, Nursing, and Dentistry must be presented in writing to the Assistant Vice Chancellor of Student Affairs and Enrollment Management (AVCSAEM) within five (5) working days of receipt of the leave of absence denial and contain the following information:
   - The reason(s) for the appeal including any hardships the leave of absence denial poses to the student's future continued academic status.
   - Any additional evidence deemed necessary to reverse the original decision.
2. On receipt of a formal appeal, the AVCSAEM or designee will:
   - Acknowledge the receipt of the appeal within five (5) working days on receipt of the written leave of absence appeal.
   - Investigate the claims outlined in the appeal.
   - Notify the student, in writing, of the decision within five (5) working days of acknowledgement of the written appeal.
3. The decision of the AVCSAEM or designee is final.
4. If a student considers that they have been unfairly or improperly treated in the appeals process, they have the right to file a grievance with the appropriate officer as outlined in the University of Missouri Student Grievance policy, http://www.umsystem.edu/ums/rules/collected_rules/grievance/ch390/grievance_390.010.

Steps for Returning from a Leave of Absence

1. A student should be physically, mentally and emotionally ready to return to school.
2. At the time of return, a student must complete a Return from Leave of Absence Form and must be eligible to register for the term in which they want to register (e.g. no financial holds, no academic holds, no disciplinary holds, etc.).
3. A student returning from a leave of absence that is earlier than the date originally agreed upon should provide notice to all applicable offices as soon as possible as noted on the Return from Leave of Absence Form.
4. A student must meet all financial aid requirements as outlined by the Financial Aid & Scholarships Office for the upcoming academic year or term for which the student is returning from their leave of absence.
5. The Student Affairs Office in conjunction with the other offices that require signatures from a return from leave of absence will assist in identifying any outstanding issues associated with advising, registration, etc.

6. The Registration & Records Office will send notification to the student's UMKC email address that their Leave of Absence has been processed.

The Leave of Absence policy is effective as of Summer 2010 and applies to all students, regardless of the catalog year the student entered the University.

Privacy Rights

UMKC complies with the Family Educational Rights and Privacy Act (FERPA), which governs the release of student academic records. Student academic records are considered confidential between the student and the University, and will not be released to a third party without the written consent of the student except as provided within FERPA and UMKC policy.

Certain information about students is considered directory information and directory information may be released to anyone without a student's signed written consent unless the student submits a written request to restrict release of directory information. All students will be listed by name with address, e-mail and telephone number in a student directory which may be in electronic format. If release of information is restricted, a student's name and related information will be excluded from the student directory. Directory information restrictions may take up to 15 working days to process after the request is submitted by the student. All students' names will be printed in the commencement program regardless of the directory information restriction.

Registration

Eligible students may register during the registration period that is announced in Pathway and via UMKC e-mail. Students who are not registered will not receive academic credit and cannot attend classes. All registration and changes in registration must be processed by the UMKC Registration and Records Office either in person or using an approved electronic format such as Pathway.

A class schedule is published prior to each semester in Pathway and lists courses offered, meeting times and locations. The University reserves the right to cancel without notice any course listed in the schedule for any semester, or to withdraw any course that does not have adequate enrollment at the close of the registration period.

Additions

Eligible students may register during the registration period that is announced in Pathway and via UMKC e-mail.

Students who are not registered will not receive academic credit and cannot attend classes.

All registration and changes in registration must be processed by the UMKC Registration and Records Office either in person or by using an approved electronic format such as Pathway.

A class schedule is published in Pathway prior to each semester and lists courses offered, meeting times and locations. The University reserves the right to cancel any course listed in the schedule without notice.

Adding a Class

Students may add a class to their official records through the first week of classes for a regular session.

Students who are not enrolled at the time a semester begins are subject to an additional fee.

Additions of courses after the first week of classes are deemed unusual and therefore require the approval and signatures of advisors and the instructor of record.

Drops

Eligible students may register during the registration period that is announced in Pathway and via UMKC e-mail. Students who are not registered will not receive academic credit and cannot attend classes. All registration and changes in registration must be processed by the UMKC Registration and Records Office (http://www.umkc.edu/registrar) either in person or using an approved electronic format such as Pathway.

A class schedule is published prior to each semester in Pathway and lists courses offered, meeting times and locations. The University reserves the right to cancel without notice any course listed in the schedule for any semester, or to withdraw any course that does not have adequate enrollment at the close of the registration period.

Eligible students may drop during the drop schedule period that is provided in the Academic Calendar.

Eligible students may drop classes without academic assessment from the point of initial registration through the first 25% of a session, which is the first four weeks of a 16-week fall or spring semester.

If students drop all of their classes prior to the end of the first four weeks of the semester, a notation is placed on their transcript that indicates the date the classes were dropped. Students who drop all of their classes during the first four weeks of the semester are required to follow the Total Withdraw Policy.

Administrative Drop Policy

At the discretion of the instructor, a student may be administratively dropped from the class roster anytime between the end of the first class meeting to the end of the last meeting of the third week of classes (or equivalent) if the student does not attend any of the class periods without notifying the instructor.

A student is entitled to appeal the administrative drop decision to the Department Chair based on compelling reasons. The appeal must be in writing and occur within seven calendar days from the email notification of the drop.

All refunds will be based upon the date of the drop in accordance with the UMKC Academic Calendar.

Withdrawals

Eligible students may withdraw from their classes during the withdraw schedule period that is provided for each session of a semester/term in the Academic Calendar. (*Note: Students with the intent to withdraw from all of their classes must follow the Official/Total Withdraw Policy.)*

Students in a 16-week session follow the following schedule:

After the fourth week through the eighth week students will receive an automatic W on their transcript.

After the eighth week, students will be assessed academically and, if they are failing at the time of withdrawal, they will be given a grade of WF (withdrawn failing) at the discretion of the faculty member. A WF **is not** calculated in the grade-point average. *(Note: No retroactive WF changes will be made for any semester prior to Fall 2012.)*

After the twelfth week students must petition their home academic unit before being allowed to withdraw from a course.

Students in 8-week courses follow a similar schedule. See the academic calendar for specific dates.

Total Withdrawals

Official withdrawals may be done by mail when a student is unable to appear in person (for example, if you are out of town or suffering from an illness or accident) or if the Registration & Records Office is closed or Pathway is down (for example, during a power outage) and you wish to receive a refund. The postmark on the envelope is used as the refund date.

Transcript notations are determined based on the time of the semester the withdrawal occurs.

Students wishing to withdraw from all of their classes must complete an exit interview questionnaire available at https://www.umkc.edu/stu-aff/exit/login.cfm.

The following actions are **not** considered official notification of withdrawal.

- Assuming classes will be cancelled because of nonpayment of tuition and fees by the student.
- Failure to attend class.
- Giving notice to an instructor.
- Stopping payment on a check used to pay fees.
- Crossing out courses on a schedule.
- Returning only partial payment to the Cashier’s Office.
- Verbal notice to any University office or employee.

Retroactive Withdrawals

A student may petition for Retroactive Withdrawal from a course(s) or from the university (all courses taken during that semester), if circumstances of a serious and compelling nature prevented the completion of course work and extenuating circumstances prevented submission of a regular withdrawal petition by the deadline on the Academic Calendar. In filing a Petition for Retroactive Withdrawal, withdrawal from all courses taken during the term in question is normally expected since ’extenuating circumstances’ are not course-specific.

Petitions must be submitted to the School or College (academic unit) where the student’s current major is housed. Each academic unit will assemble a retroactive withdrawal committee that will make decisions on all retroactive withdrawal petitions. Approved retroactive withdrawal petitions which require a change of grade will follow standard change of grade procedures. A copy of the approved petition and supporting documentation should be attached to the grade change form when it is submitted to the Registration and Records office.

Petitions that are approved by the home academic unit for courses that reside outside of the home academic unit will be forwarded to the host academic unit retroactive withdrawal committee along with all supporting documentation. The host retroactive withdrawal committee will forward their decision back to the home academic unit.

If the petition for retroactive withdrawal is denied by either home or host retroactive withdrawal committee, the student has the right to appeal the decision to their home academic unit Dean. The decision of the home Dean is final.

If the home academic unit Dean approves a petition for coursework that is housed in a host academic unit, the paperwork will be forward to the host academic unit Dean for a decision. The host dean will forward their decision back to the home academic unit. The decision of the host Dean is final.

Students who submit a retroactive withdrawal are not typically candidates for fee refunds.

For courses taken while enrolled in the Interdisciplinary Ph.D. program in the School of Graduate Studies and the Schools of Dentistry, Law, Medicine, and Pharmacy, students should refer to the retroactive withdrawals policies and procedures of these schools as they may have more stringent requirements.

Students are not a candidate for retroactive withdrawal if any of the following conditions are true:

You are applying because you are not satisfied with the grade you earned.

You are applying because you neglected to formally withdraw from the course(s) in question.

You were not aware of the withdrawal deadlines.

You changed your major and are now working towards a major or degree which does not require this course.

You assumed non-academic activities which restricted your time for academic pursuit.

You were ill or you suffered stress as the result of an accident, death, family crisis, or other crisis early enough in the semester to have withdrawn during the semester.

You have already received a UMKC degree for which the course(s) in question were applied towards degree requirements and/or your UM GPA.

If any of the above are found to be true of your case, your request for retroactive withdrawal will be denied.

Students may be candidates for retroactive withdrawal if any of the following conditions are true:

There was a documented administrative error that affected your enrollment in one or more courses.

You have documentation of a serious illness that affected your ability to complete all of your coursework after the withdrawal date.

You encountered documented extreme and unusual circumstances which a) were beyond your control, b) occurred after the withdrawal date, and c) could not have been addressed during the term in which the course(s) was taken.

Process for submitting a Retroactive Withdrawal Petition:

1. To withdraw retroactively from the university or specific courses, the student must present official supporting documents which demonstrate serious and compelling reasons (usually due to serious accident or illness) justifying the withdrawal and extenuating circumstances justifying its 'retro' nature.
2. The student collects supporting documentation submits the entire package (Retroactive Withdrawal form and official supporting documentation) to the School or College where their major is housed.
3. All decisions will be made by each School or College Retroactive Withdrawal or Petition for Exception Committee.
4. Individual instructor's feedback should be considered with all petitions.
5. Once a decision is made the home School or College will send all documentation to the Registration & Records Office.

The retroactive withdrawal policy is effective as of Summer 2010 and applies to all students, regardless of the catalog year the student entered the University

Class Waitlist

A class waitlist provides an option for students to indicate they want to enroll in a class that has reached its authorized capacity and is closed. A student on a waitlist is not officially enrolled in that course and thus is not eligible to receive a grade in that course.

Each department determines which classes will be available for waitlist and the waitlist capacity. Each section with a waitlist may have a different maximum number of students who can be on the waitlist at the same time.

Waitlists will be available through the end of the third day of classes at the beginning of each term's open add/drop period.

A student gets on the waitlist at the time he/she attempts to enroll in a full class section by checking the "OK to Waitlist" checkbox that will be displayed when enrolling in a class. If there is no waitlist or the waitlist is full, the "OK to Waitlist" checkbox will not appear as an option when a student attempts to register for a class in Pathway's Self-Service Enrollment. A student can be moved from the waitlist to enrolled status by:

System intervention: An automated nightly process will automatically move eligible students from the waitlist to enrollment. After the last automated process is run at the end of the third day of classes, students will need to be signed in to the course on a registration form.

Students are ineligible to be automatically enrolled from the waitlist for the following reasons:

- They have a time conflict with another class;
- They are already enrolled in another section of the course;
- They would exceed their maximum term units;
- They do not meet requirements of the course (for example, reserved for majors only);
- They have a registration hold;
- The class is full.

Students who are enrolled via the waitlist are responsible for reviewing and making any other changes to their schedule. Instructors have the right to increase course capacity to allow specific students to enroll in their class. Students will only be enrolled from the waitlist provided the enrollment does not exceed the room capacity designated for the class.

Cancellation of Enrollment for Financial Delinquency

Classes are not automatically canceled for non-payment. It is the responsibility of all students to withdraw from classes if they will not be attending the semester. If a student withdraws from classes, he or she may still owe the University full or partial fees in accordance with the UMKC fee refund policy. A minimum payment is required by the first payment deadline regardless of when a student registers in courses for a given semester. Pending financial aid and scholarships do not constitute a minimum payment of fees if an outstanding balance remains. If anticipated financial aid is not received or is not sufficient to cover charges, the student remains responsible for all or remaining charges incurred for the semester.

Concurrent Enrollment

Students may not earn and apply degree credit from another college or university at the same time as earning degree credit at UMKC *except with the prior approval* of the UMKC academic unit involved. Notification of this exception when approved by the academic unit must be forwarded to the UMKC Registration & Records Office.

RooWriter

RooWriter Assessment

Candidates for all baccalaureate degrees must take the online UMKC RooWriter Writing Assessment before they have completed 90 credit hours. Incoming transfer students with more than 90 credit hours must take the RooWriter by the end of their first semester of enrollment.

Students may take the RooWriter at any time while enrolled at UMKC as a diagnostic assessment, but it will only satisfy the undergraduate graduation requirement after a student has completed Discourse II (or its equivalent). The RooWriter supports and is supported by the University-wide General Education Core (http://www.umkc.edu/core) requirements. Students should visit the RooWriter website for general information: https://www.umkc.edu/roowriter/

Tools for Planning and Fulfilling Academic Requirements

Tools for Planning and Fulfilling Academic Requirements

UMKC's Major Maps (http://www.umkc.edu/majormaps) are detailed, semester by semester plans that lead a student to complete all degree requirements within four years. Plans include benchmarks and critical courses by term that assist a student's evaluation of progress and major "fit". In order to ensure that the appropriate courses are taken, students are encouraged to consult with the undergraduate advisor for this major.

UMKC's Degree Audit System (http://www.umkc.edu/registrar/majors-degrees/dars.asp) provides an individual evaluation of all degree requirements (General Education Core, Degree Specific, Major Specific, etc.) for student's officially recorded (Office of Registration and Records) and "what if" plans of study. This evaluation is used to certify all graduation requirements.

Transcripts

Official transcripts are issued only to other educational institutions, employers, state departments of education and similar agencies. Transcripts are issued at the written request or authorization of students. Students may secure a transcript of their UMKC permanent academic records from the UMKC

Registration & Records Office. Transcripts stamped "Issued to Student" are not considered official by UMKC. Partial transcripts of permanent academic records which contain only a portion of the courses completed at UMKC are not issued. No transcript may be issued to or for students who are indebted to the University until the debt has been cleared.

Transfer and External Sources of Credit

Transfer students should refer to the policies and procedures outlined in the Undergraduate Admissions (p. 748) section of the catalog when seeking admission to the University. UMKC accepts credit in transfer from regionally accredited institutions of recognized standing, both public and private. It also awards credit through examination programs as described in the Credit by Examination section of the catalog.

The Registration & Records Office applies established guidelines and precedents in determining transfer course equivalencies and applicability, as listed below. A student's academic unit is responsible for all final decisions on the applicability of transfer coursework, and must review and approve any exceptions that may be made for an individual student.

Transfer credit is evaluated and posted according to the following general guidelines:

- *All undergraduate college coursework attempted* at accredited institutions will be recorded on the UMKC transcript of students seeking an undergraduate degree, regardless of whether or not it is applicable to a UMKC degree. Credit accepted from another institution may or may not be applicable to specific degree programs. The University reserves the right to make the decision regarding applicability.
- Courses that are *remedial, preparatory or non-college-level* will not be added to the total hours or used to satisfy degree requirements. The Registrar's Office will refer to the transcript key or catalog of the sending institution in making a determination as to the level or purpose of the course in question.
- Transferred courses will be considered upper-division (junior-senior level) and count toward the total number of *upper-division hours* required if they are earned at a four-year institution and designated by that institution's course numbering system as upper division courses.
- A transferred course will retain the *original number of credit hours* for which it was taken at the previous institution, even if the equivalent UMKC course is worth a different number of hours.
- Courses transferred from institutions which award *quarter hours* will be converted into semester hours at the rate of 1 quarter hour = 2/3 semester hour.
- In general, courses with a grade of *D or higher* will receive full credit in transfer. For some degree programs, a course with a grade of D may not be used to satisfy specific requirements. A transfer student would be required to repeat a specified course on the same basis as a "native" UMKC student who earned a D in the equivalent course.
- Coursework *of any age* will be accepted in transfer to satisfy general education requirements and electives. If transfer credit is more than 15 years old, or of a specific technical or scientific nature, students may be required to repeat courses that are part of a major or field concentration. Individual UMKC academic units may impose more restrictive coursework age requirements.
- Non-University of Missouri System *grades and grade points* do not transfer, although the grades earned in transfer courses are printed on the transcript. An admission grade-point average that considers all attempted coursework is computed at the time of application, and an overall GPA will be computed at any time a student applies for admission to a more selective program within the University. The UMKC transcript reflects the total number of accepted hours earned from all sources, but only calculates the UMKC/UM grade-point average. Students transferring into UMKC with a certified core should see the appropriate School or College section of this catalog for requirements beyond the core to complete a specific baccalaureate degree.

Correspondence and Extension Credit

A maximum of 12 semester hours of correspondence or extension work from an accredited institution will be accepted in transfer provided the work parallels UMKC's offerings. Up to 30 hours of distance learning credit may be used to satisfy degree requirements subject to approval by the undergraduate student's academic unit.

Credit by Examination

Credit by Examination - UMKC offers superior students options to enhance or accelerate their academic programs through credit by examination. Students may earn college credit by demonstrating sufficient knowledge or proficiency in a certain area. The Registration and Records Office provides detailed information regarding the specific exams accepted and scores required. Students may earn up to 30 semester hours of credit through the following options:

Advanced Placement (AP) examinations may count for UMKC degree credit if the exams and scores are acceptable. (Note: UMKC awards credit for specific scores on certain Advanced Placement exams that are administered by the College Board, not simply for enrollment in advanced placement courses at the high school level. In order to receive AP credit, students must have official AP score reports sent to UMKC directly from the College Board. Credit cannot be determined from high school or previous college transcripts.)

International Baccalaureate (IB) examinations are tests taken as the culmination of a special high school study program. Several of the Higher Level exams count for credit if the score earned is a 5 or higher.

College Level Examination Program (CLEP) exams are acceptable for credit in certain areas of study. UMKC accepts only the CLEP Subject Exams. Not all subjects are accepted. Credit is not given for any CLEP General examination. No CLEP Subject Exam may be taken in the final 30 hours of coursework leading to a degree.

Credit by Departmental Examination may be earned if a student has previous knowledge or proficiency in an area of study and arranges to take a departmentally administered examination. If a department chooses to offer credit by examination, the department must provide a test that measures the same level of proficiency as is required to earn credit for enrollment in the course. Frequently this is the final exam for the course. Before taking a departmental examination, students must register in the Registration and Records office and obtain a Credit by Departmental Examination form:

(http://www.umkc.edu/registrar/forms/credit_by_exam.pdf).
The charge for attempting credit by departmental exam is equal to one credit hour.

Eligibility for credit by departmental examination requires:

1. Enrollment at UMKC in the semester in which the examination is administered
2. No enrollment in the course that is subject of the examination during the last three terms.
3. Achieve a grade of C or above on the examination in order to receive credit.

Credit for Military Training

Students who have served in the armed forces may be eligible to receive college credit for courses completed through the military or occupational specialty training. The American Council of Education recommendations in *A Guide to the Evaluation of Educational Experiences in the Armed Services* generally serve as a basis for granting such credit. To count toward a degree, the credit recommended must be appropriate to the student's curriculum. UMKC does not grant credit for military science or for courses that are strictly military/vocational in content.

Missouri Higher Education Articulation Agreement

The Missouri Coordinating Board for Higher Education (CBHE) has adopted statewide general education goals to facilitate transfer among Missouri institutions of higher education. To that end, signatory schools have selected courses to meet these goals and to fit within the CBHE's 42-credit hour core of general education.

With completion of this "core" noted on their transcripts, students may transfer to participating Missouri colleges and universities, and this 42-credit core will be accepted as equivalent to the receiving institution's 42-credit hour core. Institutions may require transfer students to complete additional general education requirements beyond the 42-credit hour core when these requirements are also required of their native students.

A student who has completed the certified 42-credit hour core at a regionally accredited Missouri institution will have satisfied all UMKC General Education Core (http://www.umkc.edu/core) requirements, with the exception of Anchor III and Discourse 300. All transferable hours within the 42-credit hour core may be applied to the UMKC General Education Core (http://www.umkc.edu/core), degree-specific requirements, or free electives. It is in the student's best interest to consult the Transfer Major Map for their community college and meet with an advisor.

When UMKC students planning to transfer to another Missouri institution complete the 42-credit hour core, they may go to the advising and student services offices in their academic units to apply for certification of completion of the core. Once completion of the 42-credit hour core is verified, a statement will appear on the student's transcript. A student should apply for certification well in advance of requesting a transcript be sent to another Missouri institution.

Please note that the CBHE core may not be as specific as the general education requirements for baccalaureate degrees at any particular institution. Students transferring to UMKC whose transcripts do not certify their completion of the core at another institution must complete all the general education requirements of the UMKC degree they wish to earn.

Below are the UMKC courses students must take if they wish to complete the 42-credit core prior to transferring to another Missouri institution:

1. DISC 100
2. DISC 200
3. DISC 300
4. Anchor I
5. Anchor II
6. Anchor III
7. Focus A
8. Focus B
9. Focus C

10. Focus Elective
11. Additional credit hours to total 42

Transferring Within the University of Missouri System

University of Missouri Policy states that *"Any course that leads to an undergraduate degree on any campus of the University of Missouri shall be accepted in transfer toward the same degree on each campus of the University offering said degree."* Students transferring within the UM system are still required to satisfy the course and residency requirements of the campus from which they wish to graduate. Grades, including D and F grades, and grade points earned will also transfer and be included in the cumulative UM grade-point average.

For more information contact the following offices –

University of Missouri – Columbia Office of Admissions, 800-225-6075, mu4u@missouri.edu
University of Missouri – Kansas City – Registration & Records Office, 816-235-1125, registrar@umkc.edu
Missouri University of Science and Technology – Registrar's Office, 573-341-4181, registrar@mst.edu
University of Missouri – St. Louis - Office of the Registrar, 314-516-5545, registration@umsl.edu

Transferring from a Community or Junior College

The University of Missouri-Kansas City abides by the Coordinating Board of Higher Education articulation agreement between Missouri public institutions. The agreement with CBHE states that *students who have earned an associate of arts degree from a Missouri institution that requires, at minimum, the general education core outlined by the CBHE, and a 2.0 GPA, will be admitted with junior standing and considered to have completed the lower-division general education requirements.* This does not exempt the student from meeting the requirement for foreign language or any specialized lower-division degree requirements specified by the academic unit. Particular programs within the University require a higher GPA and/or specific prerequisite courses to be completed before admission.

A student who has completed an Associate of Arts degree at a regionally accredited Missouri or Kansas institution will have satisfied all UMKC General Education Core (http://www.umkc.edu/core) requirements excluding Anchor 300 and Discourse 300. All transferrable hours within the Associate of Arts degree may be applied to General Education Core, degree specific requirements, or free electives. It is in the student's best interest to consult the Transfer Major Map for their community college and meet with an advisor.

A student who has completed the certified 42 hour block at a regionally accredited Missouri institution will have satisfied all UMKC General Education Core (http://www.umkc.edu/core) requirements excluding Anchor 300 and Discourse 300. All transferrable hours within the 42 hour block may be applied to General Education Core, degree specific requirements, or free electives. It is in the student's best interest to consult the Transfer Major Map for their community college and meet with an advisor.

Courses taken at a community or junior college not culminating in an associate's degree, courses taken at a community or junior college beyond the associate's degree, and courses/degrees transferred from an institution outside the State of Missouri without an articulation agreement with UMKC will be evaluated for applicability to any particular degree program on a *course-by-course basis.* Regardless of the number of hours transferred from a community or junior college, at least the final 30 hours must be earned at UMKC.

Writing Intensive

Writing Intensive Requirement

The purposes of Writing Intensive classes, designated by WI, PW, or LW following the course number, are 1) to help students learn to think and write in the discourses of their disciplines, 2) to become familiar with how ideas are presented and interpreted in particular professions and fields of study, and 3) to further develop the analytical reading, critical thinking, and communication skills that they need to be competent citizens and workers.

At the end of a Writing Intensive Course at UMKC, students should be able to:

- Write in genres, participate in activities, and perform assignments that are appropriate to the respective discipline.
- Demonstrate their ability through writing to read closely and analyze critically the texts of their disciplines.
- Produce writing through the process of brainstorming, research, drafting, peer review, and revising.
- Articulate and support a coherent thesis or purpose in their writing and develop it according to the conventions of a given discipline or audience.
- Use research methods and documentation that meet the standards of the discipline.
- Articulate and discuss their work with peers or the instructor.

To achieve these student learning outcomes, students will produce a variety of assignments that differ in purpose and length. An essay or research paper of at least 2,000 words or eight pages expected in all Writing Intensive classes. Examinations may include essay questions.

Students must take the RooWriter (p. 769) Writing Assessment before they register for Writing Intensive classes. The RooWriter should be taken after successful completion of Discourse II or equivalent. For more information about the RooWriter, go to https://www.umkc.edu/roowriter/.

Graduate Academic Regulations and Information

School of Graduate Studies
300F Administrative Center
5115 Oak Street
(816) 235-**1161**
Fax: (816) 235-**1310**
graduate@umkc.edu
http://sgs.umkc.edu/

Mailing Address
University of Missouri-Kansas City
School of Graduate Studies
5100 Rockhill Road
Kansas City, MO 64110-2499

Dean:
Denis M. Medeiros

- Mission and Administrative Organization of Graduate Education
- Admission Policies and Procedures
- Graduate Academic Regulations
  - Academic Loads
  - Enrollment
    - Changes in Enrollment
    - Enrollment/Readmission Policy
    - Continuous Graduate Enrollment Requirement
    - Enrollment Classifications
- Exceptions to Academic Regulations
- Graduate Courses and Grading Policies
- Requirements for Retention
- Retroactive Withdrawals
- Requirements for Graduation
- Master’s Degrees Academic Regulations (p. 785)
  - Advisor/Supervisory Committee
  - Qualifying Examination
  - Master’s Degree Program of Study
  - Dual Degree Programs at the Master’s Level
  - Transfer Credit Policy for Master’s Degrees
  - Final Master’s Competency Examination
  - Thesis Definition
  - Thesis Preparation and Approval
  - Final Thesis Examination and Supervisory Committee Approval
  - Deposit of Approved Thesis with Libraries
- Doctoral Degree Programs (Ed.D., Ph.D., D.M.A.) (p. 787)
  - Supervisory Committee
  - Qualifying Examination
  - Doctoral Programs of Study
  - Transfer Credit
  - Residency Requirements
  - Comprehensive Examination
  - Program Time Constraints
  - Required Enrollment
  - Dissertation and Completion of Degree

- International Graduate Applicant and Student Information
  - General Graduate Admission Policies for International Applicants
    - Deadline for Application for Admission
    - International Applicant and Student Financial Statement
    - Additional Information and Forms
- Special Institutional Regulations for International Graduate Students
- Intercampus Graduate Study Opportunities
  - UM Traveling Scholar Program
  - Cooperative Doctoral Degrees
- Potential Sources of Financial Support for Graduate Study
  - Graduate Teaching and Research Assistantships
  - Federally Supported Sources of Financial Aid
  - Institutionally Supported Fellowship and Award Competitions

Mission and Administrative Organization of Graduate Education

UMKC currently offers more than 50 graduate degrees at the master's, educational specialist and doctoral levels, plus a number of graduate certificates. Graduate students represent about 26 percent of the total campus enrollment. The graduate student population is diverse in ethnicity, gender and racial background. As an urban university, our programs strive to accommodate adult working students. Nearly two-thirds of all graduate students are enrolled part time and the average age is 35.

The Graduate Council, representing a cross section of campus graduate faculty, sets policy, establishes minimum graduate education standards and monitors the quality of graduate education at UMKC. The graduate faculty in the various graduate degree programs may set standards more stringent than the minimums outlined in this catalog section, and in such cases, the program standards take precedence over the campuswide minimum regulations. The School of Graduate Studies is responsible for monitoring compliance to the campuswide minimum graduate academic regulations; providing leadership and coordination of all graduate programs; and serves as the academic home for students admitted to the Interdisciplinary Ph.D. program. Information on the Interdisciplinary Ph.D. program may be found in the School of Graduate Studies section of this catalog.

Graduate Admission Policies and Procedures

Graduate admission committees in each academic unit review applications and make recommendations for admission. Applicants must satisfy both the general campus requirements and the program-specific admission criteria for graduate study. The minimum general requirements follow.

Graduate Admission Requirements

The following are minimum requirements for admission to graduate study in all UMKC graduate programs:

1. A bachelor's or first-level professional degree from a regionally accredited institution.
2. A satisfactory academic record.

For program-specific requirements, applicants should consult the pertinent degree program listing in this catalog.

Many UMKC graduate degree programs require satisfactory scores from either the Graduate Record Examination (general and/or subject tests), the Miller Analogies Test or the Graduate Management Admissions Test. Other academic units may require other national examinations. Test applications and information can be obtained from the UMKC Counseling, Health and Testing Center, (816) 235-**1635**, or by contacting the Educational Testing Service http://www.ets.org.

Graduate Study Application Procedure

In general, applications for admission to graduate study should be obtained from and returned to the admissions office. Complete contact information for admissions can be found in the Application Forms (p. 749) section of undergraduate admissions in the undergraduate catalog or from the UMKC Web site home page.

Because some academic units have special application packets, applicants requesting application materials should be sure to specify the program to which they plan to apply. Admission to a degree program is subject to the recommendations of the graduate faculty in the degree program area and the dean of the academic unit in which the program is offered. Graduate admission decisions by the academic dean or designated representative are final.

Applicants must submit an official transcript from the school where their bachelor's degrees were obtained. Unless the transcript of the degree-granting institution includes the complete record of undergraduate work taken at all other schools, an official transcript from each of the other institutions also must be supplied. In addition, applicants must submit an official transcript from each school where other coursework has been taken or degrees have

been obtained after the bachelor's degree. All credentials submitted in support of the application for admission become UMKC property and will not be returned to students, nor will UMKC release copies of such credentials to a third party.

The graduate degree programs at UMKC have varying schedules for receiving, reviewing and acting on applications for admission. Before applying, applicants should contact the principal graduate advisor or graduate officer for the chosen degree to determine program-specific deadlines. Lists of the names of the current graduate officers and principal graduate advisors are available, on request, from the School of Graduate Studies.

International graduate applicants should refer to International Graduate Student Applicant and Student Information (p. 790) later in this section (p. 774).

General Graduate Academic Regulations

The minimum academic regulations and degree requirements for graduate study at UMKC, as outlined in the subsections that follow, have been determined by the UMKC graduate faculty through representation on the Graduate Council and the Committee of Graduate Officers, and apply to all graduate programs. Individual schools and departments may adopt additional and more stringent requirements for admission, retention and degrees that take priority over these minimum regulations. These additional requirements are detailed under the various fields of study in this catalog.

Academic Loads

Full-Time Academic Load Definition for Graduate Students

Graduate students enrolled in nine or more credits during a regular semester or five credits during a summer session are considered full-time students. All students registered for fewer than those specified totals are classified as part-time students, unless they hold a teaching or research appointment at UMKC.

Full-time enrollment for students holding graduate teaching assistant or graduate research assistant appointments (GTA/GRAs) is six hours in a regular semester or three hours in a summer session. GTAs/GRAs are expected to make normal progress toward their degrees and should enroll in a minimum of six hours per semester (three credits in the summer session). However, GTA/GRA appointees who have completed all required coursework for the degree and who are working full time on research need only enroll for the minimum of three credits.

These designations of full time are for academic purposes only and do not apply to assessment of fees or degree program residency requirements. Note that this policy in no way alters the residency requirements and criteria for doctoral degrees. Further, international students holding GTA/GRA appointments also must abide by requirements of the U.S. Immigration Service and should consult the international student advisor before reducing their course loads.

Special Cases: Requests for GTA/GRA Appointments Greater than Half Time and Requests for Exemption from Social Security Withholding for GTAs/GRAs

GTA/GRA appointments are normally restricted to no more than 20 hours per week (.5 full-time employee). Requests for GTA/GRA appointments greater than .5 FTE must be submitted to the School of Graduate Studies prior to the beginning of the appointment and must be accompanied by a statement from the student's major advisor that the additional work load will neither place the student at risk academically nor impede the student's academic progress.

Graduate students holding GTA/GRA appointments are automatically exempt from Social Security withholding tax as long as they are enrolled in at least six credit hours. If the student's enrollment falls below six credit hours, the student's academic unit may certify his or her eligibility for continued exemption for one of the following two reasons:

- The GRA is a doctoral student working in a research laboratory as a component of the educational requirement and is enrolled in the minimum number of research hours required for doctoral students who have passed comprehensive examinations.
- The GTA or GRA is a graduate student enrolled in fewer than six credit hours because it is the student's exit semester.

Certification forms are available in the School of Graduate Studies office. The form requires signatures from the student's major advisor and the principal graduate advisor of the student's academic unit. After these individuals have signed the form, it must be sent to the School of Graduate Studies for recommendation. The School of Graduate Studies forwards the completed request to the Payroll Office for final action on the request.

Restricted Academic Loads

Limitation on the size of the academic load for which graduate students can register might be imposed by the dean or faculty advisor. Generally, students on probation are required to restrict the academic program to a minimum full-time load until they have returned to good standing.

Interpretation of Full-Time and Half-Time Status of Graduate Students for Purposes of Certification to Lending/Funding Agencies

To be eligible for certification of *full-time status* as a graduate student, a student must meet at least one of the following conditions:

- Enrollment in nine credit hours.
- Ph.D., D.M.A. and Ed.D. candidates who have passed their doctoral comprehensive examinations and are enrolled in one hour (not to exceed 10 semesters of certification under this category).

To be eligible for certification of *half-time status* as a graduate student, a student must be enrolled in at least five credit hours.
Special Cases and Limitations on Registrar's Certification to Lending/Funding Agencies:

- Ph.D. Ed.D. or D.M.A. students who have not taken and passed their doctoral comprehensive examinations and who do not meet one of the other enrollment qualifications for certification and Master's/Educational-Specialist students not qualifying for certification under one of the categories listed above may petition the principal graduate advisor in their academic unit for special consideration. If, based on a review of the student's petition, the principal graduate advisor believes there is sufficient reason for certifying the student for full-time or half-time status, the principal graduate advisor may submit a request to the Registrar's Office.
- Work to satisfy an incomplete grade or grades from a previous term or terms does not count toward certification. Therefore, a class may be used only in status calculation for one term. Since the hours are used in status calculation during the original term of enrollment, that is the only term that the hours may be counted.
- Status may not be calculated nor certified for future terms.

Enrollment

Information given in this section reflects minimum campus standards for graduate students' changes of enrollment. Because each academic unit has the prerogative to set more stringent rules, students should consult the principal graduate advisor or graduate officer in their major area of study for unit or discipline-specific rules. All changes in enrollment by graduate students must be initiated in the office of the principal graduate advisor (Arts and Sciences) or graduate officer of the respective unit and completed in the Registration Office.

Additions

Students who want to enroll in an additional course may do so during the first week of the term provided they have the approval of the faculty advisor. Course additions or late enrollments after the first week of the term generally are not allowed.

Withdrawals

Graduate students may withdraw from a course at any time prior to the first day of the final examination period, provided the permission of the faculty advisor has been obtained and notification to the instructor has been made. However, after the mid-term, students will be academically assessed. If failing at the time of withdrawal, students will be graded "WF" (withdrawn failing). [*Note: Individual academic units may have earlier deadlines for withdrawal.*]

Change from Audit to Credit

Graduate students may change status in a course from audit to credit during the first week of the term, provided they have the approval of the faculty advisor and have notified the course instructor.

Change from Credit to Audit

Graduate students may change status in a course from credit to audit any time prior to the final examination period, provided they have the consent of the course instructor and the approval of the faculty advisor. [*Note: Individual academic units may have earlier deadlines and may have program-specific restrictions on retaking audited courses for credit.*]

Withdrawal for Financial Delinquency

If students fail to fulfill financial obligations with the University after adequate notice, withdrawal from all courses during that term will result.

Continuous Graduate Enrollment Requirement

After completing all courses included in the planned programs or plans of study for degrees, all degree-seeking graduate students must remain continuously enrolled in each regular semester up to and including the semester in which their degrees are awarded. This requirement applies also to the summer term for students whose degrees are being awarded at the end of a summer term. This continuous enrollment must be for a minimum of one-hour credit in research and thesis, research and dissertation, or other work designated by the department or school. When no suitable credit registration is available, or when students have previously enrolled in at least the minimum number of 5599 (thesis) or 5699 (dissertation) or equivalent credits required on their programs or plans of study, students may fulfill the continuous enrollment requirement by registration in continuous graduate enrollment (5899) for no academic credit. Interruption of continuous registration due to failure to comply with this requirement will result in the need for readmission under requirements then in effect. Academic units may require retroactive enrollment as a condition of readmission.

Continuous Graduate Enrollment (5899)

Courses designated as 5899, Continuous Graduate Enrollment, are charged at the rate established for one credit hour. Registration, by mail or in person, must be completed by the end of the first week of a regular semester or of a summer session. Students may obtain a reference number for 5899 from the Registration and Records office.

Graduate students in good standing who have not enrolled for only one semester may re-enroll without applying for readmission. Students who attend other schools in the interim must submit transcripts of such work from each institution attended. Graduate students are considered inactive after a lapse of two or more regular semesters of enrollment. Subsequently, inactive graduate students who want to continue must follow the same admission procedures as those required for new applicants. After a lapse of three or more terms, graduate students will re-enter under requirements in effect at the time of readmission.

Post-Baccalaureate, Non-Graduate Student Classification

Students who have earned a baccalaureate degree and who are seeking only additional undergraduate courses may be admitted under a post-baccalaureate (code 4-E) classification. Students in this classification are restricted to enrollment in courses numbered 499 and below and may not take any courses for graduate credit. Courses taken while classified as a code 4-E student may not be included for credit on a graduate degree program at a later date. Code 4-E students wanting to reclassify as graduate students for a future term must reapply and be regularly admitted to the graduate programs in which they want to seek advanced degrees.

Degree-Seeking and Non-Degree-Seeking Graduate Student Classifications

Students admitted to any of the graduate classifications (whether degree seeking or non-degree seeking) will be enrolled automatically for graduate credit in courses numbered 300 to 499 unless they indicate on their enrollment forms that they do not want graduate credit for the course or the instructor specifies the course may only be taken for undergraduate credit. Courses numbered 299 and below may not be taken for graduate credit, are not calculated in a student's graduate grade-point average and cannot be included as credit courses on a graduate student's program of study.

The following six admissions categories are used for degree-seeking graduate students at UMKC:

1. *Regular Master's Degree Seeking - (Full Admit)* Degree-seeking graduate students admitted to a master's degree program without reservation.
2. *Conditional Master's Degree Seeking - (Provisional Graduate).* Degree-seeking graduate students admitted to a master's-level degree program who have not yet fulfilled all admissions requirements specified by the academic unit responsible for the degree program.
3. *Regular Educational-Specialist Degree Seeking - (Full Admit).* Degree-seeking graduate students admitted to an Educational-Specialist degree program in the School of Education without reservation.
4. *Conditional Educational-Specialist Degree Seeking - (Provisional Graduate).* Degree-seeking graduate students admitted to an Educational-Specialist degree program who have not yet fulfilled all admissions requirements specified by the School of Education.
5. *Regular Doctoral Degree Seeking - (Full Admit).* Degree-seeking graduate students admitted to a doctoral degree program (Ph.D. or D.M.A.) without reservation.
6. *Conditional Doctoral Degree Seeking - (Provisional Graduate).* Degree-seeking graduate students admitted to a Ph.D. or D.M.A. program who have not yet fulfilled all admission requirements specified by the academic unit responsible for the degree program.

Full admission of provisional graduate students to a degree program and appropriate reclassification are subject to students' removal of deficiencies and approval of satisfactory performance.

Admission to graduate study and to a particular degree program is no guarantee that students will be advanced to candidacy or granted a higher degree. All candidates are expected to perform at a consistently high level and to satisfy all the requirements for the degree. The final determination, as to whether or not students will be recommended for a graduate degree, is made by the graduate faculty in the fields concerned. The graduate faculty reserves the right to deal with exceptional cases on individual merit.

Degree-seeking graduate students who plan to change their field of study must reapply for admission and be regularly admitted to the desired graduate program in the new department or school.

The following three admission categories are used for non-degree-seeking graduate students:

1. *Non-Regular Graduate - Continuing Education, Non-Degree-Seeking Student - (College Continuing Education).* Students taking courses for graduate credit through the Division of Continuing Education. It should be noted that admission to this category (generally through self-certification) does not constitute regular admission to a graduate program at UMKC. However, on the recommendation of the advisor and approval by the graduate officer, a limited number of graduate credit courses (normally no more than six credit hours) may be applied to individual degree programs after students have been regularly admitted to do graduate study (see Application for Graduate Study, above).
2. *Visiting Graduate Student - (Visiting).* This includes students who have been properly certified as graduate students at an accredited institution other than UMKC, and have permission to enroll in specific courses (including 5000-level courses) at UMKC. *Note: Students who have previously been enrolled in a UMKC graduate program must have been in good academic standing at the end of their last UMKC graduate enrollment to take graduate courses as a visiting graduate student.*
3. *Graduate Special Non-Degree Seeking - (Non-Degree Graduate Special).* This classification is used for three categories of students: (1) Community access, non-degree-seeking students wanting access to graduate level courses not available through continuing education; (2)

Potential graduate applicants, not meeting requirements for conditional admission and wanting to take graduate-level courses in order to qualify for admission; and (3) Community access students applying to graduate certificate programs. The following restrictions apply to Non-Degree Graduate Special Classification graduate students:

- Students apply to the academic unit, if declared. If undeclared, students are admitted as undeclared graduate students in the College of Arts and Sciences.
- All graduate academic regulations apply.
- Students must have a baccalaureate degree prior to admission.
- Students are subject to the campus graduate academic probation and ineligibility policies.
- Students with a Non-Degree Graduate Special classification are not eligible for financial aid unless they are enrolling at least half-time in a graduate certificate program.
- International students may not be issued I-20 forms for admission under a Non-Degree Graduate Special classification.
- International students considered under the Non-Degree Graduate Special classification must meet the University standards for evidence of English proficiency.
- Students admitted under this classification must reapply to the academic unit and be admitted to a graduate degree program in order to be changed to degree-seeking status.
- At the discretion of a department or area, the graduate-level courses completed with a grade of B (3.0) or better while classified as a Non-Degree Graduate Special student may be applied toward a graduate degree in that department or area. Of the courses listed on a degree, no more than 12 semester credit hours may have been completed while enrolled as a Non-Degree Graduate Special student.

All non-degree-seeking graduate students (College Continuing Education, Visiting, and Non-Degree Graduate Special) wishing to enter a degree program must reapply for and be regularly admitted to the department or school from which they want to receive an advanced degree.

Exceptions to Academic Regulations

Campuswide Exceptions

Petitions for an exception to a campuswide graduate academic regulation must originate with the student. It must be processed through the graduate officer and dean or program director in charge of the student's graduate degree program and forwarded to the dean of the School of Graduate Studies. Only the dean, or the designated representative, are authorized to grant an exception to the graduate academic regulations applying to all graduate students. Petitions must be in writing and include (1) the reason for requesting the exception and a detailed justification from the student; (2) recommendation for action by the appropriate graduate officer; (3) recommendation for action by the department or division chair (if applicable); and (4) recommendation for action by the appropriate dean or program director. The graduate dean or designated representative will review the petition and related documentation and render a decision which will be communicated in writing to the academic dean or director, the graduate officer, the student and the registrar.

Program-Specific Exceptions

Petitions for exception to a program-specific academic regulation are handled within the academic unit's degree program. A graduate student who has petitioned for an exception to a program-specific academic regulation and whose petition has been denied may appeal the decision to the dean of the School of Graduate Studies if all other remedies open to the appellant have been exhausted at the department and college, school or program level. Appeals to the dean of the School of Graduate Studies must be made in writing within 14 consecutive days from the date the student received the written notice of the petition decision. The dean of the School of Graduate Studies will investigate the case and take appropriate action in a timely manner. The decision of the graduate dean, as the chancellor's designated representative, is final and will be communicated in writing to the student, the graduate officer, the academic dean or director and the registrar.

Graduate Courses and Grading Policies

Course Designations

In general, courses numbered 5000 and above are open only to regularly admitted graduate and Ph.D. students.

Courses numbered 300 to 499 are upper division junior- and senior-level courses. Graduate students who enroll in such courses have the option of designating them, at the time of enrollment, as being "not for graduate credit." If the student chooses this option, the grade will not be included in the student's graduate grade-point average and the course may not be included on the graduate or Ph.D. program/plan of study and will not count toward a graduate degree. In order for a 300- or 400-level course to be accepted for graduate credit, students will be expected to do supplementary work (additional reading, projects, papers and contact hours with the instructor) and to demonstrate graduate-level competency and achievement in the subject. Also, students must take the course for graduate credit and complete it with a grade of B- (2.7) or better. The total number of acceptable 300- to 400-level courses to be applied to requirements for a graduate degree may not exceed 40 percent of the total number of courses applied to graduate or non-interdisciplinary doctoral-degree requirements, or one-third of the total number of courses on the approved Interdisciplinary Ph.D. plan of study.

Courses at the 100- and 200-level are not available for graduate credit and will not be applied toward the number of hours required for a graduate degree.

Courses numbered 5580 to 5589 generally are reserved for seminars, workshops and special topics. Consult individual degree programs for possible restrictions on such offerings. The course numbers 5590 to 5598 usually are reserved for non-thesis research, directed studies and readings. Courses numbered 5599 are restricted to research leading to a thesis. Considering this numbering system, no more than 40 percent of courses numbered 5590 to 5599, or other courses which fall in the categories listed above for that course number range, may be applied to a graduate degree program of study, with the exception of the Interdisciplinary Ph.D. study.

Courses numbered 5695 to 5699 are restricted to research leading to a dissertation. Continuous Graduate Enrollment is numbered 5899.
Note: The numbering of graduate courses in the School of Dentistry differs from the system described above.

Course Restrictions

Policy on Admission of Undergraduates to Graduate-Level Courses

In addition to regularly admitted graduate students, seniors who meet the requirements below, and who have obtained the necessary approvals and received permission from the School of Graduate Studies may enroll in a limited number of courses numbered in the 5000 series and above, or may enroll in appropriate 300- and 400-level courses for graduate credit.

Minimum requirements

- Seniors within 12 credits of graduation who have a 3.0 GPA or better in their college work; or
- Seniors within 30 credits of graduation who have a 3.5 GPA in their college work.

To request permission to take a graduate-level course, the senior must:

1. Obtain a request to take graduate-level course form and an advising transcript from the Registrar's Office. (Forms also are available on-line at http://sgs.umkc.edu/forms/index.asp.)
2. Fill out the request to take graduate-level course form, attach a copy of the advising transcript to the form and seek written approval on the form from the course instructor; the dean or director of the academic unit in which the requested course is offered; and the student's undergraduate advisor.
3. Once the above steps have been completed, submit the form to the School of Graduate Studies for final approval. This last step should occur no later than four weeks before regular registration.

This policy does not generally apply to 5000-level courses in the Bloch School of Business and Public Administration open exclusively to graduate students. However, Bloch School seniors may begin work on the M.B.A., M.P.A. or M.S. in accounting degree if pre-approved by the Bloch School based on their formal application and admission to the graduate degree program.

This procedure is intended to allow a degree of flexibility in planning the academic programs of degree-seeking seniors who clearly have shown academic merit and plan to pursue advanced study after graduation. This option is not available for post-baccalaureate students (code 4-E).

In all cases, eligible students may enroll in no more than six credits of graduate-level courses or courses for graduate credit through this procedure. In addition, first-semester seniors who enroll in graduate-level courses are limited to a total enrollment of no more than 15 hours for the semester. Graduate-level courses (5000 and above) are to be selected from those courses generally offered to first-semester or first-year graduate students. Courses such as special topics, individual studies and directed research designed for advanced graduate students are not eligible under these provisions.

Students may petition that the courses can be taken for graduate credit or undergraduate credit. Credit may be applied to requirements for a graduate or a bachelor's degree, but not both unless the course is par to fan approved Bachelor's-Master's Dual Degree program or Bachelor's-Graduate Certificate program to which the student has already been admitted.

Requests by students who meet all the requirements stated above will be approved by the dean of the School of Graduate Studies or designated representative. In exceptional cases, students who do not meet the requirements stated above may present a petition to the dean of the School of Graduate Studies. Such petitions must be presented to the school no later than four weeks before the beginning of the term for which enrollment is sought.

Students who do not meet the above criteria but who register for a graduate-level course will be withdrawn administratively from the course. Fees paid for the course will be refunded.

Graduate-Credit, Continuing Education Courses

Graduate-credit courses are offered on an irregular basis at both off-campus and on-campus locations through the Division of Continuing Education, in conjunction with various instructional divisions.

Students may enroll in such courses and earn graduate credit without being regularly admitted to a graduate program. However, application of such credits toward an advanced degree can be determined only after students have been regularly admitted to graduate study. Such application depends upon the acceptance of students and the course by the respective department or division offering the degree. Students are responsible for determining

whether these credits will satisfy the requirements of their particular educational goals and should make such determination before registering for the course.

Grading System

The following is the grading and grade-point system at UMKC:

Letter Grade	Description	Points per Semester Hour
A	The highest grade	4.0
A-		3.7
B+		3.3
B	Work of distinction	3.0
B-		2.7
C+		2.3
C	Average work	2.0
C-		1.7
D+		1.3
D	Passing, but unsatisfactory	1.0
D-		0.7
F	Failure without credit	0.0
NR	Not Reported	0.0
WF	Withdrew failing	0.0
W	Withdrew; no-academic assessment	-
I	Incomplete	-
AT	Audit	-
CR	Credit only	-
NC	No Credit	-
P	Passing	-
S	Satisfactory	-

In terms prior to and including 1985, any of the above grades might be preceded by an R indicating a repeated course. These grades are not included in either total hours or the grade-point average. (Examples: RC, RD, RF.) Since 1985, all grades, including those in repeated courses, are included in the GPA calculation. For the 1993 Fall Semester, UMKC began using the plus/minus grading system for grades A, B, C and D. The grade of A+ is valid only for students in the School of Law.

Incomplete Grades

An instructor may give a grade of incomplete (I) to students who have been unable to complete the work of the course because of illness or other valid reasons beyond their control. Students who receive an incomplete must complete the required work within one calendar year to avoid an F (failure without credit). The instructor may specify a shorter completion period. A grade of incomplete is only appropriate when enough work in the course has been completed that the student can finish the remaining work without re-enrolling in the course in question, or by attending additional classes. In other instances, students should withdraw. Students cannot re-enroll in a course for which an incomplete remains on the record. Furthermore, graduate students cannot graduate with an incomplete on their record.

This policy is exclusive of those courses which are considered directed individual studies; internships; special topics; practicums; research and thesis; and research and dissertation courses. Because completion of such courses will quite often span several terms, incomplete grades assigned in such courses will not automatically lapse to an "F" grade after one calendar year, but will adhere to the completion period specified by the instructor.

Policy on Repeated Graduate-Credit Courses

Whenever students repeat a graduate-credit course, they must submit a course repeat form to the Registration and Records Office no later than the fourth week of the term. Students seeking graduate degrees are limited to repeating no more than 20 percent of the credits applicable toward a graduate degree. If approved by the school or department or Interdisciplinary Ph.D. supervisory committee, students may repeat a course once to improve the grade-point average or satisfy the program requirements. The second grade received will be used to calculate the grade-point average that will be used in satisfying degree requirements.

Requirements for Retention

Graduate Probation Policy

Graduate students, regardless of classification, must maintain a 3.0 (B) grade-point average in all coursework taken for graduate credit at UMKC and must meet any additional academic requirements imposed by the school, department or Interdisciplinary Ph.D. discipline. Students are responsible for keeping apprised of their academic status by referring to term grades and their permanent academic record on file in the UMKC Registration and Records Office.

Whenever the cumulative GPA for UMKC courses taken for graduate credit by a graduate student of any classification falls below 3.0, the student's status for the next term becomes: "On Probation - See principal graduate advisor." (Interdisciplinary Ph.D. students will be directed to consult their interim advisor or research advisor.) The principal graduate advisor, interim advisor or research advisor will review the student's progress and provide counsel, and the following conditions apply:

- A graduate student on probation who is not restored to good academic standing by the end of two successive regular semesters following the term in which the cumulative GPA fell below 3.0 will be declared ineligible to re-enroll.
- While on probation, a graduate student must achieve a 3.0 term GPA in order to enroll for the following term.
- A graduate student on probation will not be restored to good standing until a cumulative graduate-credit GPA of at least 3.0 is achieved.

Retroactive Withdrawals

Ineligibility for Further Graduate Study

Ineligibility Following Academic Probation

In the case of ineligibility following academic probation, the graduate student may present a petition for re-enrollment to the principal graduate advisor of the student's academic program. Petitions will be reviewed by the graduate faculty member responsible for the student's degree program. That faculty member will make a written recommendation to the appropriate administrative levels within that academic unit approving or denying of the petition. The approval or denial action may include:

- Approval for further graduate study in the student's current field of study and in the same classification but on a restricted probation basis (as defined in written contract).
- Approval for further graduate study in the student's current field of study in a different student classification and on a restricted basis.
- Denial for further graduate study in the student's current field but approval for undergraduate study only.
- Denial for further study, either graduate or undergraduate, in the student's current field of study.

Ineligibility Due to Unsatisfactory Progress or Performance

When a department or school or Interdisciplinary Ph.D. supervisory committee, irrespective of a student's grade-point average, considers a graduate student's performance to be unsatisfactory, that department, school or committee may recommend to the dean or director of the academic unit in which the student's degree is housed that the student be reclassified or declared ineligible for further study. The dean or director reviews the recommendation and conveys a decision to the respective faculty group and the student.

Students in programs other than the Interdisciplinary Ph.D. program who have been declared ineligible due to unsatisfactory progress or performance may appeal such decisions to the dean of the School of Graduate Studies, as designee of the chancellor. Students in the Interdisciplinary Ph.D. program may appeal such decisions to the provost, as designee of the chancellor. Such appeals must be made in writing within 14 consecutive days after receipt of the notification to the student of the decision.

The decision of the graduate dean or provost, as the chancellor's designated representative in such cases, is final and will be communicated in writing to the following:

1. The student
2. The graduate faculty review group(s)
3. The academic dean or director
4. The registrar

A student may petition for Retroactive Withdrawal from a course(s)or from the university (all courses taken during that semester), if circumstances of a serious and compelling nature prevented the completion of course work and extenuating circumstances prevented submission of a regular withdrawal petition by the deadline on the Academic Calendar. In filing a Petition for Retroactive Withdrawal, withdrawal from all courses taken during the term in question is normally expected since 'extenuating circumstances' are not course-specific.

Petitions must be submitted to the School or College (academic unit) where the student's current major is housed. Each academic unit will assemble a retroactive withdrawal committee that will make decisions on all retroactive withdrawal petitions. Approved retroactive withdrawal petitions which require

a change of grade will follow standard change of grade procedures. A copy of the approved petition and supporting documentation should be attached to the grade change form when it is submitted to the Registration and Records office.

Petitions that are approved by the home academic unit for courses that reside outside of the home academic unit will be forwarded to the host academic unit retroactive withdrawal committee along with all supporting documentation. The host retroactive withdrawal committee will forward their decision back to the home academic unit.

If the petition for retroactive withdrawal is denied by either home or host retroactive withdrawal committee, the student has the right to appeal the decision to their home academic unit Dean. The decision of the home Dean is final.

If the home academic unit Dean approves a petition for coursework that is housed in a host academic unit, the paperwork will be forward to the host academic unit Dean for a decision. The host dean will forward their decision back to the home academic unit. The decision of the host Dean is final.

Students who submit a retroactive withdrawal are not typically candidates for fee refunds.

For courses taken while enrolled in the Interdisciplinary Ph.D. program in the School of Graduate Studies and the Schools of Dentistry, Law, Medicine, and Pharmacy, students should refer to the retroactive withdrawals policies and procedures of these schools as they may have more stringent requirements.

Students are not a candidate for retroactive withdrawal if any of the following conditions are true:

You are applying because you are not satisfied with the grade you earned.

You are applying because you neglected to formally withdraw from the course(s) in question.

You were not aware of the withdrawal deadlines.

You changed your major and are now working towards a major or degree which does not require this course.

You assumed non-academic activities which restricted your time for academic pursuit.

You were ill or you suffered stress as the result of an accident, death, family crisis, or other crisis early enough in the semester to have withdrawn during the semester.

You have already received a UMKC degree for which the course(s) in question were applied towards degree requirements and/or your UM GPA.

If any of the above are found to be true of your case, your request for retroactive withdrawal will be denied.

Students may be candidates for retroactive withdrawal if any of the following conditions are true:

There was a documented administrative error that affected your enrollment in one or more courses.

You have documentation of a serious illness that affected your ability to complete all of your coursework after the withdrawal date.

You encountered documented extreme and unusual circumstances which a) were beyond your control, b) occurred after the withdrawal date, and c) could not have been addressed during the term in which the course(s) was taken.

Process for submitting a Retroactive Withdrawal Petition:

1. To withdraw retroactively from the university or specific courses, the student must present official supporting documents which demonstrate serious and compelling reasons (usually due to serious accident or illness) justifying the withdrawal and extenuating circumstances justifying its 'retro' nature.
2. The student collects supporting documentation submits the entire package (Retroactive Withdrawal form and official supporting documentation) to the School or College where their major is housed.
3. All decisions will be made by each School or College Retroactive Withdrawal or Petition for Exception Committee.
4. Individual instructor's feedback should be considered with all petitions.
5. Once a decision is made the home School or College will send all documentation to the Registration & Records Office.

The retroactive withdrawal policy is effective as of Summer 2010 and applies to all students, regardless of the catalog year the student entered the University

Requirements for Graduation

Program of Study

Graduate education is intended to answer the personal needs of students and the special needs of society not satisfied through undergraduate training. Graduate degrees indicate that the holders have sufficiently mastered a program in a particular field to pursue creative projects in that specialty. The

degrees are awarded for completion of a coherent program -- formalized as the program or plan of study -- designed to assure the mastery of specified knowledge and skills. Forms for specifying individual programs or plans of study are available from the principal graduate advisor (Arts and Sciences) or graduate officer of the academic unit.

Students may elect to fulfill either the degree requirements in effect at the time of their original admission (provided there has not been a lapse in attendance at UMKC of more than two consecutive terms) or the degree requirements in effect at the time of advisement into a planned graduate program of study.

No course at the 300- or 400-level taken on a credit/no credit basis; no 300- or 400-level course with a grade below B- (2.7); and no 5000-level or higher course with a grade below C (2.0), will count toward any advanced degree program. Additionally, 80 percent of the credits for the degree must be passed with a grade of B (3.0) or better. Students admitted to the combined J.D./MBA program must receive grades of B or better in 80 percent of Bloch School courses. Because of different grading standards, the transferred law hours are not included in the 80 percent calculation. Degree programs may have requirements which are more stringent. If so, the program requirement takes precedence over the campus minimums.

Thesis and Dissertation Preparation and Approval Process

Formatting Regulations

Some master's degree programs have a thesis requirement and some have a thesis option. All Ph.D. degree programs at UMKC require a dissertation. The School of Graduate Studies, guided by the Graduate Officers Committee, establishes the format regulations for theses and dissertations (T/Ds) at UMKC. Degree candidates are responsible for familiarizing themselves with and adhering to the standards of the latest edition of the "Manual for Writers of Term Papers, Theses and Dissertations" edited by Kate Turabian. They also must become familiar with the special format regulations for title page; abstract format and length; approval page; order of manuscript sections; paper; page numbering; heading levels; margins; and type style and size; which are outlined in the "University of Missouri-Kansas City Guide to Formatting Theses and Dissertations" which is available online at sgs.umkc.edu/guidellin/index.asp (http://www.umkc.edu/sgs/theses.asp). Bibliographic references must follow Turabian guidelines unless the student's academic program has an alternate bibliographic reference format approved by, and on file with, the School of Graduate Studies. Candidates should check with the principal graduate advisor in their respective academic units to determine the approved bibliographic reference format standard for their degree programs. Any variances from the standards outlined in the "University of Missouri-Kansas City Guide to Formatting Theses and Dissertations", Turabian and discipline-approved bibliographic reference styles must be requested in writing and approved in advance by the dean of the School of Graduate Studies. A copy of the dean's official letter authorizing exceptions to formatting standards must be included as an appendix to the T/D.

The School of Graduate Studies provides formatting workshops at the beginning of each fall and spring semester. In addition, degree candidates may schedule individual conferences with the school's T/D Formatting Specialist during the first four weeks of the fall or spring semester and the first two weeks of the summer term to make sure they have interpreted the formatting guidelines correctly and to seek guidance on specialized formatting problems. Candidates should call the School of Graduate Studies office, (816) 235-**1161**, for time and place of workshops or to schedule a formatting conference.

Supervisory Committee Review and Approval of T/Ds

Approval of the T/D begins with the degree candidate's supervisory committee. Candidates work closely with their research advisors while writing the various sections of the manuscript. The candidate's supervisory committee shall ensure that the scholarly content and style of the T/D is in keeping with recognized standards of the chosen discipline(s). Graduate degree candidates should periodically provide all members of their supervisory committee with preliminary drafts of the T/D for review and comment. Final drafts of the T/D, which incorporate all substantive revisions supervisory committee members have previously requested, should be submitted to all members of the candidate's supervisory committee at least eight weeks before the expected date of graduation. For both master's and doctoral-level degree candidates, when the supervisory committee members feel the work is complete and ready for final defense by the candidate, the committee members notify the supervisory committee chair by completing a Master's Pre-Oral Defense form or Doctoral Dissertation Pre-Oral Defense form and forwarding it to the supervisory committee chair. The supervisory committee chair and student may then schedule a final defense of the work.

School of Graduate Studies Review and Certification of Acceptance of T/Ds

The deadline for submitting the T/D to the School of Graduate Studies for certification of acceptance is printed in the calendar section of the schedule of classes for each term. The actual date varies, but it is approximately six weeks before the end of the fall or spring semesters and four weeks before the end of the summer session. Prior to the published deadline for the term in which the degree candidates expect to graduate, they must present the following to the School of Graduate Studies office:

- One unbound copy of the T/D in final form, but not printed on archival quality, acid-free paper.
- The signed Preliminary Approval of T/D by Supervisory Committee form.

T/Ds normally will not be accepted for review for graduation during the current term unless they are received in the School of Graduate Studies by the published deadline. In the school, the T/D is reviewed by a Thesis/Dissertation Formatting Specialist for conformity to the campus formatting standards and by the graduate dean for quality of content. The school's review process generally takes from two to four weeks. The candidate will be notified to pick up the T/D and make all necessary formatting corrections before resubmitting the T/D to the School of Graduate Studies. Candidates who are out of the city must make arrangements to have the copy picked up locally or returned, collect, by messenger service.

After the T/D defense, the student should submit a corrected final draft on plain paper to the School of Graduate Studies. This draft should be accompanied by the Master's Thesis Final Evaluation forms or Doctoral Dissertation Final Evaluation forms completed by each committee member. The graduate dean will review the thesis or dissertation for certification of acceptance. If the T/D has significant formatting problems, it will be returned to the candidate without further review or certification. The candidate will be required to make all necessary formatting corrections and resubmit the T/D to the School of Graduate Studies. If this happens, the candidate's graduation may be delayed. Enrollment in an additional term of continuous-graduate enrollment may be required.

Preliminary approval forms, Master's Thesis Preliminary and Final evaluation forms and Doctoral Dissertation Preliminary and Final evaluation forms are available from the School of Graduate Studies office in the Administrative Center (5115 Oak St.) and online at sgs.umkc.edu/guidelin/index.asp (http://sgs.umkc.edu/guidelin).

When both components of the School of Graduate Studies review of the T/D are complete, the candidate is notified. If further format corrections are required, the School of Graduate Studies will hold the certificate of acceptance until appropriate revisions are made and rechecked by the formatting specialist. The candidate then picks up the certified copy of the T/D and the certificate of acceptance from the School of Graduate Studies office and may prepare their final copy to upload to ProQuest. (See Final Thesis Examination and Supervisory Committee Approval under **Master's Degrees Academic Regulations** and Final Dissertation Examination under **Doctoral Degree Programs (Ed.D., Ph.D., D.M.A.)** later in this section.) Candidates who are out of the city must make arrangements to have the certified copy picked up locally or returned, collect, by messenger service.

Deposit of T/Ds with the Library

The candidate makes any final revisions requested by committee members at the defense or the School of Graduate Studies and then uploads an electronic copy of the document in portable document format (PDF) to ProQuest. The PDF copy is then transmitted to the University of Missouri system institutional repository, MOSpace, where the document is made available via the world wide web. As an added optional service, ProQuest will handle the copyrighting process for theses and dissertations, if desired. Students will pay an archival copy fee when they upload the document, plus an additional fee if they choose to have ProQuest handle the copyright registration. **Submission to ProQuest must be accomplished no later than the Friday immediately preceding the first day of classes for the next term.**

Application for Graduation

Completing degree requirements does not automatically result in conferral of the degree. Students must request that the University review their academic record and certify that degree requirements have been met. To make this request, students must file applications for graduation with the registrar no later than the end of the fourth week of the semester in which the degrees will be completed. Students graduating at the end of the summer session must file an application for graduation no later than the end of the second week of the summer session. An approved program/plan of study must be on file with the registrar at the time the student makes application to graduate. Filing applications for graduation initiates degree checks in the Registrar's Office. The students and their advisors receive a degree checklist which indicates any deficiencies the students must clear. Students should contact their advisors if there are questions about the checklist. The application for graduation also places candidates' names in the commencement program. In addition, when completion of degree requirements have been certified by the registrar, the Registrar's Office authorizes the diploma order.

Specific term deadlines for all graduate requirements are announced in the schedule of classes for each term. Students are responsible for being aware of and meeting these deadlines.

The registrar will certify degree completion if students' academic records (transcripts) show that they have completed all of the requirements listed on the approved program/plan of study.

Commencement

Advanced degree candidates are urged to attend commencement. Students should arrange for rental or purchase of a cap and gown at the University Bookstore at least six weeks before the graduation date.

Time Limit on Degree Credit for Master's and Educational-Specialist Degrees

Credit over seven years old at the time of graduation, which is included on the master's or educational-specialist program of study and has not been applied to a previous degree, may not be counted toward the fulfillment of a graduate degree program unless validated to the satisfaction of the department or school and the School of Graduate Studies. Petitions and affidavits for this purpose may be obtained from the School of Graduate Studies. A maximum of 30 percent of the student's program of study may be validated under this procedure.

In connection with an authorized leave of absence, an exception to the time limitation may be approved in advance.

Master's Degrees Academic Regulations

The following general campus regulations pertain specifically to the master's degree. Master's students also should refer to Graduate Academic Regulations (p. 774) earlier in this catalog section for regulations common to all graduate degrees at UMKC and to specific degree program requirements in other sections of this catalog.

Advisor/Supervisory Committee

Upon admission to a graduate program, a student seeking a master's degree will contact the appropriate department chairman of the College of Arts and Sciences or the graduate officer of the professional school or program. This person will assign the student an advisor who is a member of the graduate faculty. When research and a thesis are degree requirements or the student has selected a thesis option, the Arts and Sciences department chair or the school's graduate officer will appoint two additional faculty members to serve on the graduate student's supervisory committee. The chair and a majority of the members of a master's student supervisory committee must be full members of the graduate faculty.

Qualifying Examination

If required, a qualifying examination must be passed before a master's program is filed with the graduate officer. The department or school will notify students of the time and date of the examination. The results of the qualifying examination will be reported to the registrar. With the approval of the advisor and the supervisory committee, if such exists, students may take the qualifying examination a second time.

Master's Degree Program of Study

In consultation with the advisor or the supervisory committee, the master's student plans a program of study in accordance with the minimum requirements listed here and the specific degree requirements listed elsewhere in this catalog. Forms for specifying individual programs of study are available from the principal graduate advisor or graduate officer of each academic unit. Students should file this program of study with the departmental principal graduate advisor (College of Arts and Sciences) or the graduate officer in their academic units before 60 percent of the coursework applicable to the degree is completed. In the College of Arts and Sciences, the principal graduate advisor secures required departmental approval and forwards the program of study to the graduate officer of the college.

After the proposed program has been approved, as required by the academic unit, the unit's graduate officer will distribute copies of the program of study to the registrar, the student's advisor or chair of the student's supervisory committee, the principal graduate advisor (Arts and Sciences) and the student.

The approved master's degree program of study must include a minimum of 30 graduate credits. No more than 40 percent of the credits on the program may be 300- and 400-level courses. At least 60 percent of the credits must be at the 5000 level or higher. Further, up to six credits may be allowed for Research and Thesis (5599). Other demonstrations of skills considered by the department or school as comparable to the thesis may be accepted. No more than 40 percent of the courses applied toward a master's degree program of study may be in the non-thesis research, directed studies, readings or research and thesis categories. Such courses normally fall in the 5500 to 5599 range, but the numerical designations may vary among academic units.

Program Changes

Subsequent changes in the program of study must be approved by the student's advisor, the supervisory committee and the appropriate dean or department chair. The graduate officer will inform the registrar of such changes. If cumulative changes in courses or degree requirements exceed four, a new program of study should be filed.

Dual Degree Programs at the Master's Level

Dual-degree programs allow students to simultaneously pursue degrees at the master's level in two fields of study. Students must complete at least 80 percent (rounded up) of the credit hours required for each degree separately. Students must satisfy admission, course and examination requirements of both degree programs.

Transfer Credit Policy for Master's Degrees

A maximum of 20 percent of the graduate credit hours appearing on the program of study (rounded up) may be transferred from a recognized graduate school for a master's degree at UMKC. Such transfer credits must meet with approval of the student's supervisory committee and appropriate principal graduate advisor (College of Arts and Sciences) or graduate officer and be in accordance with all of the following criteria:

1. The coursework must be:
   - Offered by an accredited school.
   - Applied toward a graduate degree at the host institution and taken for graduate credit.
   - Approved by the appropriate graduate faculty.
2. A grade of B (3.0) or higher for 300- and 400-level courses and C (2.0) or higher for 5000-level courses or other courses restricted to graduate students only must have been earned. (CR or P will be accepted on receipt of a statement from the institution where credit was received of letter grade equivalent meeting grade standards as stated above.)

Transfer credit may be allowed for correspondence courses, provided the credits meet the criteria outlined in 1 and 2 above. Transfer credit will not be accepted for research and thesis/dissertation hours (defined by UMKC), travel experience or work/life experience. Foreign university transfer credit must meet the above criteria as attested by the registrar.

A majority of the coursework applicable to any graduate degree at UMKC must be completed at UMKC. UM traveling scholar credits are not considered transfer credits. However, the sum total of credits from other UM campuses, and other transfer credits (not more than 20 percent of the total credits)

cannot exceed 14 credits on a 30-credit master's degree program, or a proportional equivalent (approximately 46 percent) on programs exceeding 30 credits; and must be within the limits stated above.

A student who has been awarded a master's degree at UMKC or another regionally accredited graduate school may petition the faculty to apply up to six hours of graduate credit earned on the first degree toward meeting the requirements of a second master's degree. Credit, so approved, not from UMKC will be subject to all preceding transfer credit criteria.

See the sections on specific degree programs for requirements pertaining to transfer credit for educational-specialist and doctoral degrees.

After approval of the program of study, graduate credit may be earned at another institution only with prior approval of the dean of the School of Graduate Studies. Forms to request such approval are available from the Registration and Records Office. A current catalog of the institution where the course is to be taken or an official catalog description of each course must be attached to the request form. The official transcript for such work must be forwarded to the Registration Office upon completion of the course.

Final Master's Competency Examination

The final master's competency examination, if required, will be written, oral or both at the discretion of the school or department, and will be passed no later than three weeks prior to the anticipated date of graduation. Students will submit a request for the examination to the advisor no less than two weeks before the examination is to be taken. The candidate's supervisory committee chair will report the results of the final competency examination in writing to the candidate and to the principal graduate advisor (Arts and Sciences) or graduate officer, who will then inform the registrar.

Thesis Definition

A thesis is a process that results in an original composition that involves quality work and creativity. This may include definition of goals or research questions, a review of the existing literature or background information, collection of data or information to present as results, and a discussion of results and findings, and citations. The research and final document should be of appropriate scholarly quality, as judged by the thesis committee.

Thesis Preparation and Approval

For regulations pertaining to thesis preparation and approval, the reader is directed to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations (p. 774) in this section.

Final Thesis Examination and Supervisory Committee Approval

The format and procedures of the final examination in defense of the thesis are determined by the supervisory committee and its chair. This examination may not be administered when UMKC is not officially in session. The defense of the thesis is approved when a majority of the supervisory committee members recommend approval and sign the Report of the Result of Final Master's Thesis Examination form and the committee approval page in the thesis.

Within 48 hours of the defense, the supervisory committee chair shall report the results of the final thesis examination in writing to the candidate and to the departmental principal graduate advisor (Arts and Sciences) or graduate officer, who then informs the registrar.

Deposit of Approved Thesis with Libraries

For regulations pertaining to deposit of approved thesis with libraries, refer to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations (p. 774) in this section.

Doctoral Degree Programs (Ed.D., Ph.D., D.M.A.)

The Ed.D., Ph.D. and D.M.A. degree programs at UMKC have the following elements in common:

- Appointment of supervisory committees.
- Approval of doctoral programs or plans of study.
- Satisfaction of a doctoral residency requirement.
- Satisfactory completion of a doctoral comprehensive examination in order to advance to candidacy.

In addition, all Ph.D. programs and the Ed.D. program have the following elements in common:

- A work of original research or scholarship reported in dissertation form.
- Formal defense of the candidate's dissertation.

The specific requirements for satisfying these common elements may vary from program to program. Doctoral students are also subject to most of the minimum general graduate academic regulations and degree requirements listed in previous portions of this catalog section.

The following general regulations are minimum requirements. Each degree program may have regulations that are more stringent and would take precedence over the minimums stated previously. Refer also to graduate regulations described in previous sections that are common to all graduate or doctoral students and to degree requirements listed under the academic unit sections of this catalog.

Supervisory Committee

At the request of the non-interdisciplinary Ph.D. student, the D.M.A. student or the Ed.D. student, and upon the recommendation of the student's advisor, the graduate officer for the degree program will appoint a supervisory committee consisting of at least three members of the graduate faculty, including the student's advisor. While the chair of the initial supervisory committee can be a member of the graduate faculty, once the student has reached the dissertation stage, the committee must be chaired by a member of the University of Missouri doctoral faculty. In some cases, following the procedures of the specific program, the dissertation director need not be the chair of the committee but must be, at a minimum, either a graduate faculty or adjunct graduate faculty member.

Non-interdisciplinary Ph.D. and D.M.A. student dissertation committees must have at least five members and Ed.D. student dissertation committees must have at least four members. The majority of the members of the non-interdisciplinary Ph.D., Ed.D. and D.M.A. dissertation committees must be doctoral faculty or regular graduate faculty members. Three of the five members of Interdisciplinary Ph.D. student supervisory and dissertation committees must hold doctoral faculty status. See the Interdisciplinary Ph.D. academic regulations section (p. 488) for additional specifications for Interdisciplinary Ph.D. supervisory committees.

Qualifying Examination

The qualifying examination, if required, will be given before the doctoral program of study is filed with the graduate officer. At the discretion of the school or department and the supervisory committee, a master's degree from UMKC in the area of intended specialization may be considered as a substitute for the qualifying examination. Students must submit a request to take the qualifying examination to the appropriate department chair in the College of Arts and Sciences or the dean of that professional school. The results of the qualifying examination will be reported to the graduate officer, who will inform the student and the registrar. With approval of the advisor and supervisory committee, students may take the qualifying examination a second time.

Doctoral Programs of Study

Students should plan their programs of study in consultation with their advisors and supervisory committees. Forms for specifying individual programs of study are available from the principal graduate advisor or graduate officer of each academic unit. It is recommended that students file this program of study with the graduate officer in their academic units before 60 percent of the coursework applicable to the degree is completed. *(Interdisciplinary Ph.D. students must file their proposed plans of study and form their supervisory committees within 24 months of being admitted.*) No more than 40 percent of the program may be 300- and 400-level courses. After the proposed program has been approved, as required by the academic unit, the unit's graduate officer will distribute copies of the program of study to the registrar, the advisor and the student.

Subsequent changes in the program of study must be approved by the student's advisor, supervisory committee, the dean or department chairperson of the school in whose area the specialization is offered and the graduate officer, who also will inform the registrar of such changes. If cumulative changes in courses and degree requirements exceed four, a revised program of study should be filed.

Transfer Credit

Graduate credit earned before entering a UMKC doctoral program may be applied to the doctoral degree if it is of acceptable quality and appropriate to the student's program of study as determined by the student's academic unit or supervisory committee. The total amount of graduate credit earned before admission to a UMKC doctoral program and applied to the doctoral degree cannot exceed half the number of credit hours, exclusive of dissertation research credits, required for the degree. All graduate coursework, completed prior to admission and not used to earn the master's degree or educational-specialist degree, must be no more than seven years old at the time the doctoral program of study is approved.

After admission to the doctoral program, if a student wishes to take graduate coursework at another institution and apply it to his or her doctoral program, the student must receive written approval from the doctoral program's graduate officer or from the student's supervisory committee chair, as appropriate, before the coursework is taken. Such coursework is not considered as transfer credit. Upon completion of the coursework, the student must have the official transcript forwarded to the UMKC registrar.

Residency Requirements

Interdisciplinary Ph.D. Students

Interdisciplinary Ph.D. students entering the program after the fall 2000 semester must satisfy the doctoral residency requirement by satisfactory completion of at least 21 credits, exclusive of dissertation research, in no more than 18 months. When satisfying the residency requirement, all Interdisciplinary Ph.D. students are subject to the following restrictions:

1. The doctoral residency requirement must be satisfied no later than the end of the semester in which the student completes his or her comprehensive examinations.

2. Students must achieve a cumulative graduate grade-point average of at least 3.0 in all courses counted toward satisfying the residency requirement.
3. Dissertation research credits (696 to 699) may not be counted toward satisfying the doctoral residency requirement

Non-Interdisciplinary Ph.D. and Ed.D. Students

The residency requirement for the Ed.D. student or non-interdisciplinary Ph.D. may be satisfied using the same guidelines stipulated for Interdisciplinary Ph.D. students, or in any one of the following alternate ways:

1. Two consecutive semesters of 12 credits each term of resident coursework at UMKC following the completion of at least 24 credits of graduate study.
2. Three terms of eight credits each term of resident coursework at UMKC, to be completed within 18 months and following the completion of at least 24 credits of graduate study.
3. Two consecutive semesters of nine credits each term of resident coursework at UMKC while employed at least half time for the University in teaching or research and following the completion of at least 24 credits of graduate study.

D.M.A. Students

The residency requirement for the D.M.A. may be satisfied in any one of the following ways:

1. Two consecutive semesters with a minimum of nine credits each.
2. One semester with a minimum of nine credits and two summer sessions with a minimum of five credits each, provided that the full-time semester is adjacent to one of the summer sessions. It is expected that the summer sessions be consecutive.
3. Completion of 24 credits within 18 consecutive months.

Comprehensive Examination

To advance to degree candidacy, doctoral students are required to pass a comprehensive examination. D.M.A. students selecting a non-dissertation option may satisfy the comprehensive examination requirement during their final semester. For all other doctoral students, the comprehensive examination must be successfully completed at least seven months before the date of graduation:

- For graduation in May: Nov. 1.
- For graduation in July: Dec. 1.
- For graduation in December: May 1.

The following requirements must have been met before students can take the comprehensive examination(s):

1. Assignment of a supervisory committee.
2. Successful completion of the qualifying examination, if required.
3. Filing and approval of the program of study and completion of essentially all coursework required for the degree.
4. If required by the academic unit, satisfactory demonstration of foreign language proficiency through accepted coursework or other evidence specified by the student’s supervisory committee.
5. Completion of residency in most cases.

The comprehensive examination may be written, oral or both. Through their advisors, students will apply to the graduate officer in their academic unit for an examining committee to be composed of a minimum of five members of the graduate faculty. This committee shall consist of members of students’ supervisory committees and such others as the graduate officer may select.

The examination will be arranged and supervised by the advisor. It will generally terminate within one month after it starts. Upon satisfactory completion of the examination, the student’s advisor sends a report of the results of the examination, with the signatures of all members of the examining committee, to the graduate officer, who, in turn, informs the student and the registrar.

A student is considered to have passed the comprehensive examination if all, or all but one member, of the examining committee vote that the candidate passes. If failure is reported, the examining committee will either recommend termination of status as a doctoral student or suggest additional work or other remedial measures. Furthermore, a student who has failed may not take a second examination for at least 12 weeks. Failure of a second comprehensive examination shall automatically preclude candidacy at this institution.

Program Time Constraints

The doctoral student must take and pass the doctoral comprehensive examination and advance to candidacy within five years from the beginning of doctoral coursework (within four years if entering with a master’s degree in the same or closely related field). After the establishment of degree candidacy, a maximum of five years will be allowed for completion of degree requirements. Failure to complete the work within the periods specified will necessitate re-evaluation of the entire program and may result in a notice of termination. In compelling circumstances and on the written

recommendation of a majority of the student's supervisory committee members, the dean of the School of Graduate Studies may grant a one-year extension. Some academic units may impose more stringent time requirements.

Required Enrollment

See Continuous Graduate Enrollment Requirement, included in the Graduate Academic Regulations part of this section.

Dissertation and Completion of Degree

Dissertation Definition

A dissertation is a written coherent treatise culminating from original in-depth research, that is of publishable quality for a peer refereed journal and deserving of the highest academic degree, a Doctor of Philosophy. The work should move the field forward by making significant contributions to the existing body of knowledge. It may include statement of goals, an in depth review and critical analysis of the existing literature and background information, a plan of research or methodology, collection and analysis of data to present as results, a discussion of the findings, and citations.

Doctoral Dissertation Requirement

All UMKC Ph.D. degrees and the Ed.D. degree require a dissertation as the final component of the program. The dissertation is also a requirement in some D.M.A. programs and an option in others. The doctoral faculty view the dissertation as one of the most important aspects of the student's experience because:

- It is a work of original research or scholarship that makes a contribution to existing knowledge.
- It is an educational experience that demonstrates the candidate's mastery of research methods and tools of the specialized fields.
- It demonstrates the candidate's ability to address a major intellectual problem.

For regulations pertaining to formatting the dissertation and the process for approval, the reader is directed to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this catalog section.

Final Dissertation Examination

Final examinations in defense of the dissertation are open to all members of the doctoral faculty, who may attend as interested observers. The format and procedures of the defense are determined by the supervisory committee and its chair. The date, time and location must be announced and published at least two weeks before each final examination takes place. This examination may be conducted only after the dissertation has been approved by the dean of the School of Graduate Studies, and may not be administered when UMKC is not officially in session.

The defense of the dissertation is approved when a majority of the supervisory committee recommend approval and sign the Report of the Result of Final Doctoral Examination form. Within 48 hours of the defense, the supervisory committee chair will report the results of the final dissertation examination in writing to the candidate. For non-interdisciplinary doctoral candidates, the supervisory committee chair also will report the results of the defense to the principal graduate advisor (Arts and Sciences) or graduate officer. The departmental principal graduate advisor (Arts and Sciences) or graduate officer, in turn, informs the registrar.

Deposit of Approved Dissertation with Libraries

For regulations pertaining to deposit of the approved dissertation with the libraries, refer to Thesis and Dissertation Preparation and Approval Process, included under Graduate Academic Regulations in this catalog section.

International Graduate Student Admission Policies and Procedures

General Graduate Admission Policies

Minimum Admission Requirements

Graduates of schools outside the U.S. may be considered for admission to a graduate degree program at UMKC, subject to the following criteria.

1. They must have completed a course of study at least the equivalent of a U.S. baccalaureate degree.
2. They must have above-average grades in previous college study.
3. They are required to establish proof of adequate English proficiency as part of the UMKC admissions process. Applicants from countries in which English might be one of the official languages, but is not necessarily the first language of the majority of the population, must attain a minimum composite score of either 213(CBT) or 80(iBT) on the Test of English as a Foreign Language (TOEFL), or a score of 6.0 on the International English Language Testing System (IELTS) to be considered for admission.[1] The results of the examination must be received in the UMKC International Student Affairs Office before the application deadline. Exceptions to this policy:
   - Non-native speakers who hold degrees or diplomas from post-secondary institutions in English-speaking countries [the full list of countries may be found here], provided they have spent a minimum of two years in successful full-time study there and English was the medium of instruction.

- International transfer students from other institutions in the United States or Canada who have spent a minimum of two years in successful full-time study.

4. In addition to 1 through 3 above, international graduate students must satisfy any program-specific admission criteria. For instance, the Graduate Management Admission Test (GMAT) is required for applicants for graduate study toward the M.B.A. degree. Several programs require TOEFL scores that are well above the minimum stated previously. The Graduate Record Examination (GRE), including the appropriate Advanced Test, is either required or strongly recommended for all other international graduate applicants. International students planning to apply are directed to consult the appropriate degree program listing for additional criteria and medical requirements.

1 **For TOEFL information contact**
TOEFL Services
The Educational Testing Service
PO Box 6151
Princeton, NJ 08541-6151 USA
http://www.ets.org/toefl
Request official TOEFL scores be sent to UMKC's institution code 6872.
For IELTS contact
The International English Language Testing System
http://www.ielts.org
Request official IELTS scores be sent to
UMKC International Student Affairs
Student Success Center, G-04
5100 Rockhill Road
Kansas City, MO 64110

Detailed information can be obtained from U.S. embassies, consulates general, bi-national centers and other offices throughout the world.

As noted in the general section on **graduate admissions** (http://cat-edit.umkc.edu/~/Catalog/ViewCatalog.aspx?pageid=viewcatalog&topicgroupid=54139), the graduate degree programs at UMKC have varying schedules for receiving, reviewing and acting on applications for admission. Applicants are directed to the program listings elsewhere in this catalog. This institution reserves the right to consider applicants for the most appropriate term.

Required Academic Records for International Applicants

Applicants must provide complete and official certificates of all degrees, diplomas, mark sheets, grade reports and examination records. If documents are in another language, applicants must also provide a literal English translation.

Deadline for Application for Admission and International Applicant and Student Financial Statement

Deadline for Application for Admission International students must present evidence of sufficient finances to cover their university and personal expenses while they are attending UMKC. A prescribed financial statement must be completed and returned with their other application materials. UMKC will not assume any financial responsibility for international students. Students seeking admission to the graduate level after an undergraduate program must submit a new financial support statement. Student Financial Statement

Additional Information and Forms

International applicants to graduate programs who want more information and forms to apply for admission can go to http://www.umkc.edu/isao or write:

International Student Affairs
University of Missouri-Kansas City
Student Success Center, G-04
5100 Rockhill Road
Kansas City, MO 64110-2499, U.S.A.

Forms to apply for graduate admission can also be downloaded from one of the following Web sites:

- Application forms for admission to master's degree programs, the doctor of musical arts programs and the Ph.D. in counseling psychology: http://www.umkc.edu/apply.
- Application forms for admission to the Interdisciplinary Ph.D. program: http://sgs.umkc.edu/iphd/index.asp.

International Graduate Student Academic Regulations

In addition to the minimum graduate academic regulations and degree requirements common to all graduate students or specific to their particular degree programs, international graduate students at UMKC are subject to the following special requirements and regulations:

Registration with Student Advisor

Admitted international students must clear their attendance and register at the office of the international student advisor prior to their first registration at UMKC. Once admitted, international graduate students must show satisfactory and regular progress toward their graduate degrees.

Health Insurance

International students are required to purchase UMKC mandatory, exclusive health insurance.

English Proficiency Requirements

Proficiency in written and spoken English is essential to international graduate students' success in their degree programs at UMKC. To ensure that all international graduate students either already have, or have an opportunity to acquire, these necessary skills at a level appropriate to their degree program, the Graduate Officers Committee supports the following guidelines:

- Current minimum TOEFL scores for entering students and graduate teaching assistants should be strictly adhered to by all academic units without exception.
- Prior to their first enrollment in classes at UMKC, newly admitted international graduate students must take the English Evaluation Examination conducted by the UMKC Applied Language Institute (ALI) unless they are exempted from this requirement.
- Based on results of the English Evaluation Examination scores, such students must enroll in and successfully complete the applied language courses indicated as necessary by the student's academic unit in consultation with the UMKC Applied Language Institute.
- Prospective international graduate students should be aware that required coursework in English as a second language may add extra time to their individual graduate programs of study.
- The only international graduate students exempted from this admissions policy are the following:
  - Native English speakers from English-speaking countries such as Canada, England, the Republic of Ireland, Australia and New Zealand.
  - Non-native English speakers who hold degrees or diplomas from post-secondary institutions in English-speaking countries (such as the United States, Canada, England, the Republic of Ireland, Australia and New Zealand) provided that they have spent a minimum of two years of successful full-time study and English was the medium of instruction.

Policy on Award of Teaching Assistantships

In 1986, the Missouri State Legislature and the University of Missouri Board of Curators adopted a policy which seeks to guarantee effective, high quality instruction for undergraduates. The state has mandated, and the Board of Curators fully supports the ruling, that graduate students who did not receive both their primary and secondary education in a nation or territory in which English is the primary language **may not** hold a teaching appointment during their first term of enrollment at any public institution of higher education in the state of Missouri. In addition, all such students shall be tested for their ability to communicate orally in English in a classroom setting and, those students who have not previously lived in the United States shall be given a cultural orientation to prepare them for teaching prior to receiving an appointment.

The first two requirements are dictated by the Missouri Revised Statutes, Section 170.012, (http://www.moga.mo.gov/statutes/c100-199/1700000012.htm) and do not represent a change to the UMKC certification requirements:

- Students in the above category may not hold a GTA appointment during their first term of enrollment at UMKC.
- If students in this category have not previously lived in the United States, they must participate in a cultural orientation to prepare them for their teaching appointment.

UMKC Standards

The requirements for international students to become certified to be GTAs have been revised. The requirements will take effect with the fall 2013 semester. Please note the following general guidelines that precede the requirements chart.

- If a student expresses interest in becoming certified as a GTA, please remind them of the **Cultural Orientation** requirement. Domestic students are encouraged to attend the afternoon portion of the orientation. The 2014 orientation will be **Thursday, August 21**. International students should attend from 10 am until 2 pm. Domestic students should attend 12:30-2 pm.
- All international students who express interest in becoming certified as GTAs should contact Michelle Heard in the School of Graduate Studies (HeardMR@umkc.edu). She will make sure the students know what the requirements are and who to contact for each. She also oversees the IGTA database and will make sure interested students are added to the database and their progress toward certification is tracked.
- It is **the department's responsibility** to ensure that a GTA applicant has been certified before hiring. Michelle Heard will send your department a copy of each student's certification letter when a student becomes certified and is eligible for hire. Should you have questions about a student's certification status, please contact Michelle.

- A biennial report is required by the UM system and the Missouri Coordinating Board for Higher Education for GTA language proficiency. Michelle completes this report and will contact each department annually. The information you will need to track is simply the number of total Graduate Teaching Assistantships awarded for each fiscal year (i.e. Fiscal Year 2013 = July 1, 2012 – June 20, 2013 = Fall 2012 and Spring 2013), and the names of all international GTAs for each fiscal year. The most recent report was sent out April 8, 2013 for completion, covering FY 2011 and FY 2012. The next report will be started in April or May 2014, covering FY 2013.

Teaching Assistantships for International Graduate Students

- Students must have been enrolled at UMKC at least one term prior to receiving a GTA appointment.
- Students must have attained a minimum official iBT TOEFL score of 79 for admission to the university.
- **International Student GTA certification requirements:**
  - Attend an initial interview with the Applied Language Institute.
  - Attain a passing TOEFL score, unless exempted by the ALI interview.
  - Attend the fall Cultural Orientation.
  - Complete a video presentation (a mock lecture with a student and faculty panel).
    - The video presentation will be scheduled via the IGTA database. The student needs an advisor/faculty member from his/her department to serve on the panel – without this faculty member, the student cannot present a mock lecture. There will be at least 2 other faculty members on the panel, with up to 5 total. There will also be 3-5 undergraduate students on the panel.
    - The student should prepare 10-12 minutes of a mock lecture on the topic of his/her choice. There will also be a 3-5 minute question-and-answer session following the mock lecture.
    - The panel of 6-10 students and faculty will use a rubric to determine the student's level of English proficiency. There are 5 points possible in 5 categories, for a total possible 25 points. In order to pass, the student must have an average of 19 points from the panel members. The rubric categories are:
      - Comprehension — can the IGTA candidate understand the English spoken by others
      - Fluency/Delivery — does the IGTA candidate speak fluently, intelligibly, and without hesitation
      - Vocabulary — does the IGTA candidate use terms correctly and use adequate verbiage to represent his/her ideas
      - Pronunciation — does the IGTA candidate pronounce words intelligibly and with proper intonation
      - Grammar — does the IGTA candidate correctly use grammar and word order

- **All international students (except those who received an undergraduate or graduate degree from a U.S. institution) are subject to these GTA certification requirements, pending an initial interview with the Applied Language Institute. The United States is the only country of origin that is exempt. Domestic students are encouraged to attend the Cultural Orientation.**
  - When an international student becomes interested in a GTA position and the department might want to hire him/her in a future semester, this student can set up the initial interview with ALI. This interview will determine if the student will need to meet the required TOEFL speaking section score.
  - Regardless of the results of the ALI interview, **all** international students are subject to the other two GTA certification requirements – attending Cultural Orientation and passing a Panel Presentation.

Note: If you want to retake the iBT for the opportunity to receive a higher score, the current iBT cost is $180.

Each student has the responsibility to cover the cost of the exam, but each department may elect to cover these costs at their discretion.

The following table details the roles international Graduate Teaching Assistants can perform based on the internet-based TOEFL speaking section scores and their performances in mock lecture panel presentations.

TOEFL speaking score	Panel Presentation	Title	Requirements
26+	Pass	GTA Instructor of Record	• Attend Cultural Orientation • Mid-semester, students will complete evaluations to be reported to the department chair.

26+	Fail	GTA Grader	• Attend Cultural Orientation • Cannot have direct contact with the undergraduate students in the courses beyond passing out and scoring exams as a grader. • Another panel presentation can be scheduled in a subsequent semester if a student wants to become an Assistant to the Instructor in a future semester. He/she may also enroll in ENGLISH 100S - Special Topics from 1 to 6 credits for one-on-one tutorials via the Applied Language Institute(ALI)[1]
24	Pass	GTA Assistant to Instructor	• Attend Cultural Orientation • May NOT be the sole instructor in a class, but must work under the supervision of a faculty member or experienced GTA. • This is typically be a laboratory/ course assistant.
24	Fail	GTA Grader	• Attend Cultural Orientation • Cannot have direct contact with the undergraduate students in the courses beyond passing out and scoring exams as a grader. • Another panel presentation can be scheduled in a subsequent semester if a student wants to become an Assistant to the Instructor in a future semester. He/she may also enroll in English 100S-Special Topics from 1 to 6 credits for one-on-one tutorials via ALI[1]
22 or 23	Department may petition SGS Dean to allow student presentation.		• If student passes the panel presentation, he/she is eligible to be a GTA Assistant to Instructor. • If student fails the panel presentation, he/she may enroll in ENGLISH 100S – Special Topics via ALI[1] as explained below. The student may schedule another panel presentation in a subsequent semester.
Less than 22	N/A	None	• An international student who does not score at least 22 on the TOEFL speaking section is not eligible for a GTA position. • Students may enroll in ENGLISH 100S – Special Topics via ALI[1] as explained below.

1 The Applied Language Institute will first assess a student, then have him/her enroll in English 100S – Special Topics for one-on-one tutoring. Additional credits may be necessary depending on the student's degree of English proficiency. The charge for the student to enroll in this course is to be paid by the department or unit. The Applied Language Institute can be reached at (816) 235-**1233** or at 5301 Rockhill Road.

For information on dates, or to register for the next Cultural Orientation or a panel presentation, visit the IGTA Database (here (https://irapweb.umkc.edu/FormsAuthentication/default.aspx?ReturnUrl=%2freportingapps%2fsgs%2fadmin%2f))) or contact the School of Graduate Studies (816) 235-**1161.**

Exceptions to any of these certification standards must be authorized by the Dean of the School of Graduate Studies. Departments wishing to request an exception for a student must submit a written petition for exception to the graduate dean, including full justification supporting the request, prior to the beginning of the term for which the GTA appointment is sought.

If the student decides to retake the iBT they may do so at the UMKC Testing Center, which is located at 4825 Troost, Suite 206, and is the Kansas City testing site. The Testing Center can be reached at (816) 235-**5820.** The test may be scheduled online, on the phone, or via paper through ETS.

Upcoming test dates/locations can be found here (http://www.ets.org/toefl/ibt/register/centers_dates?WT.ac=toeflhome_centersdates_121127) via ETS. The UMKC Testing Center is the Kansas City testing location, and there is an Overland Park location and a Lee's Summit location. Tests are typically offered at least two weekends a month on the Friday or Saturday of the weekend.

University of Missouri (UM) System Visiting Graduate Student Program

Effective Fall 2011, the UM Visiting Graduate Student Program replaces the UM Traveling Scholars Program. The UM Visiting Graduate Student Program offers eligible graduate students a streamlined process for applying and registering for graduate courses on other UM campuses.

To participate in the UM System Visiting Graduate Student Program, a graduate student must be a degree-seeking graduate student and in good-standing on the home campus and host campus.

To apply for this program, a "UM System Visiting Graduate Student Application" should be completed and submitted to the home campus Graduate office for certification, at least two weeks before the beginning of the semester. The graduate student's home campus Graduate office will review the form; if approved, the home campus Graduate office will transmit the approved form to the host campus Graduate office. The host campus will notify the student when they are eligible to register for courses.

All course fees are paid to the host campus. Graduate students should contact their home campus Financial Aid office for more information on financial aid. International (non-U.S. citizen) students should consult the International student office on their home campus to determine eligibility for this program.

The graduate student's home campus determines transferability and the maximum number of transfer hours allowed for courses taken as a UM Visiting Graduate student. To officially transfer courses from the host campus to the home campus, students must order an official transcript from the host campus and comply with the home campus's transfer policies and processes.

For additional questions contact the School of Graduate Studies Office.

Cooperative Doctoral Degrees

Through the UM cooperative doctoral program, graduate faculty members who hold membership in the doctoral faculty of the University of Missouri are eligible to serve as directors of doctoral dissertations on their resident campus, as well as on any of the other three campuses offering a doctoral degree in the doctoral-faculty member's academic field. Students who want to pursue doctoral degree programs in conjunction with one of the other three campuses of the University of Missouri may do so in accordance with the guidelines listed below. The registrars at UMC, UMR, or UMSL can provide information on admission procedures for the doctoral programs on their respective campuses. The cooperative program is particularly appropriate for students seeking a doctoral degree that is not offered at the campus where they currently are enrolled. Direct specific inquiries regarding participation by doctoral faculty on the UMKC campus to the dean or chairperson of the UMKC academic unit offering a graduate program in the desired field of study.

In the following guidelines, the terms primary campus, graduate school or dean refer to that granting the degree.

- Students must be accepted by the department or area granting the degree and must comply with all the rules of the primary graduate school and discipline/area regulations.
- The dissertation advisor must be a member of the doctoral faculty of the University.
- Advisory/supervisory committees, comprehensive committees and oral committees, as required, will be appointed by the primary graduate dean in consultation with the graduate dean on the participating campus, drawing on faculty on both the cooperating and primary campus:
    a. The makeup of each committee normally will be recommended by the major advisor with the approval of the appropriate director of graduate studies/department chair/divisional dean as per normal campus procedures.
    b. In cases where students are on a cooperating campus:
        i The advisor/supervisory committee chair may or may not be on the same campus. If that person is on the cooperating campus, at least three of the five members of the committee will be from the primary campus.
        ii Students must complete the residency requirement on the primary campus. Exceptions to this ruling must be justified fully with emphasis on quality and cost considerations and must have the approval of the primary graduate dean.
- Selection of the cooperating departments and preparation of a program must be completed at the earliest possible moment and communicated via the primary graduate dean to the participants involved. Both graduate deans will maintain program files relative to students. Respective graduate

deans are responsible for the quality of that portion of the cooperative program that is performed on their campus and under the jurisdiction of their faculty.

- Reporting of the degree shall be the responsibility of the primary campus. The cooperating campus shall be given credit in terms of student credit hours and/or dissertation credits for the work completed on that campus and shall provide suitable recognition of dissertation advisors and the committee members.

Graduate Teaching and Research Assistantships

Financial support for graduate students is most frequently provided through the academic unit in which the student is enrolled. This support may be in the form of a Graduate Teaching Assistantship (GTA), a Graduate Research Assistantship (GRA) or a named fellowship. The stipend amounts and number of awards vary from unit to unit. Students interested in consideration for such support should contact the principal graduate advisor or graduate officer in the respective unit for information on application procedures and deadlines.

Each semester, students who hold GTA or GRA appointments also may be recommended by their academic units for chancellor's GTA/GRA fee remission awards. These awards cover the basic graduate educational fee for six credit hours.

For students who are not residents of Missouri, an additional benefit of having a GTA or GRA appointment is that it qualifies them for a chancellor's non-resident fee remission. A minimum FTE of 25 percent (a full-time equivalent of 100 percent is 40 hours) is required to be eligible for this award.

Federally Supported Sources of Financial Aid

Graduate students who are U.S. citizens or permanent residents and who are enrolled at least half-time, with financial need demonstrated via the FFS analysis, may be considered for aid through the College Work Study Program. They also may apply for a Perkins Loan (formerly NDSL) or a Guaranteed Student Loan. Additional information on these programs is available from the

UMKC Financial Aid and Scholarships Office
Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 116
5115 Oak Street
Kansas City, MO 64110-2499
(816) 235-**1154** (Kansas City Metro)
1-800-775-8652 (Outside of Metro)
finaid@umkc.edu
http://www.umkc.edu/finaid

Staff members are available for information, inquiries and assistance with applications from 8 a.m. to 5 p.m. weekdays.

Institutionally Supported Fellowship and Award Competitions

The School of Graduate Studies administers a number of annual competitions for graduate fellowships. Fellowship stipends vary from $5,500 to $15,000. Some include remission of portions of the graduate education fees and all include remission of non-resident fees, if applicable. Detailed information and application forms are available from the School of Graduate Studies office. Applications normally are due in the early spring (usually by February 1) for fellowships to be awarded for the following academic year. Application deadlines, eligibility and selection criteria, and PDF versions of the application forms are posted on the School of Graduate Studies Web site: http://sgs.umkc.edu.

Division of Student Affairs and Enrollment Management

Office of the Vice Chancellor for Student Affairs and Enrollment Management
Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 336
5115 Oak Street
(816) 235-**1141**
Fax: (816) 235-**6504**
stu-aff@umkc.edu
http://www.umkc.edu/stu-aff/

Vice Chancellor for Student Affairs and Enrollment Management:
Melvin C. Tyler

The mission of the Division of Student Affairs and Enrollment Management is to enrich the lives of students through quality educational services and purposeful co-curricular programming. Our purpose is to support the academic mission of the university by facilitating learning opportunities outside of the classroom that allow students to explore and to develop into life-long learners. The Division works to achieve the university's strategic plan goal 1: place student success at the center.

The out-of-classroom experience is significant at UMKC in that it integrates with our students' academic development to provide an enriched *total university life experience*. This Division champions a vibrant and extensive co-curricular program which offers support services that help students attain their academic and personal goals.

The Vice Chancellor's Office provides overall leadership for a comprehensive program of student services through 19 service units and 12 academic/student affairs liaisons. Descriptions of divisional departments as well as academic liaison areas are as follows:

- Academic Support and Mentoring (p. 797)
- Bookstores
- Admissions (p. 800)
- Career Services (p. 801)
- Counseling, Health, Testing, and Disability Services (p. 802)
  - Counseling Services (p. 802)
  - Student Health and Wellness (p. 804)
  - Testing Services (p. 805)
  - Student Disability Services (p. 805)
- Financial Aid and Scholarships Office (p. 806)
- HelpLine (http://www.umkc.edu/helpline)
- International Student Affairs
- Multicultural Student Affairs
- Registration and Records
- Residential Life
- Student Involvement
- Student Success Center (p. 813)
- Student Union
- Swinney Recreation Center
- UMKC Central (p. 815)
- Women's Center
- Student Affairs Liaisons Located in Academic Units

Academic Support and Mentoring

Academic Support and Mentoring (ASM)
Student Success Center, Level 2
(816) 235-**1174**
Fax: (816) 235-**5156**
asm@umkc.edu

http://www.umkc.edu/asm

Director: Marion E. Stone, Ph.D. contact information (http://www.umkc.edu/lookup/search.cfm?LastName=stone)

The mission of Academic Support and Mentoring (ASM) is to promote educational access, retention, and academic excellence for students of all ages throughout our campus, our community, and the world.

Services offered by ASM include the following:

Supplemental Instruction (SI)

Supplemental Instruction (SI) is an academic support model that utilizes peer-assisted study sessions. The SI program targets traditionally difficult academic courses and provides peer facilitated, regularly scheduled, out-of-class, voluntary review sessions. The SI study sessions are informal seminars in which students compare notes, discuss readings, develop organizational tools, and predict test items. This free form of academic assistance is attached directly to selected courses; however, the generalized skills learned in SI are transferable to other coursework. Research has demonstrated that participation in SI improves grades and reduces unsuccessful course attempts. SI services are announced at the beginning of each semester by the course professor and SI leader. This program was developed at UMKC in 1973 and is used in hundreds of colleges and universities around the world. The International Center for Supplemental Instruction (housed within ASM) conducts training workshops and provides on-site training to other institutions.

Peer Assisted Study Sessions (PASS) is a mandatory form of SI in which students enroll in sessions when they register for their classes. Students are not charged for the sessions.

Math and Science Tutoring

Math and Science Tutoring (MaST) is dedicated to providing individual attention to math and science students in order to help students be more successful in challenging subjects. MaST is staffed by trained part-time tutors who offer assistance to UMKC students at no cost. Help is offered on a walk-in basis, by appointment, or online; students may work individually or in small groups with tutors. Textbooks are available. Math courses covered include:

MATH 100	Intermediate Algebra	3
MATH 110	College Algebra	3
MATH 116	Mathematics For Liberal Arts	3
MATH 120	Precalculus	5
MATH 125	Trigonometry	2
MATH 130	Mathematics for Teachers: Number Systems	3
MATH 140	Mathematics for Teachers: Elementary Geometry	3
MATH 206	Brief Calculus And Matrix Algebra	3
MATH 210	Calculus I	4
MATH 220	Calculus II	4
STAT 235	Elementary Statistics	3

Science courses covered include:

BIOLOGY 108	General Biology I	3
BIOLOGY 109	General Biology II	3
CHEM 211	General Chemistry I	4
CHEM 212R	General Chemistry II	4
PHYSICS 240	Physics For Scientists and Engineers I	5
PHYSICS 250	Physics For Scientists and Engineers II	5

MaST is located on the third floor of the Miller Nichols Library.

English Tutoring

English Tutoring supplements the services of The Writing Studio and provides support for students at every level. Some of the services include editing, reinforcement of grammar, composition, punctuation, and spelling skills. Free assistance is available by appointment or online. Call ASM (816) 235-1174 to arrange assistance.

Reading Enhancement

Reading Enhancement provides students opportunities to bolster their higher level reading skills in order to be more successful at the university level. Services include assessment, assistance with vocabulary and comprehension, organization of reading assignments, and managing complex reading coursework. This free help is available by appointment and in workshop format. Call ASM (816) 235-1174 for more information.

Individual Academic Strategy Sessions

Individual Academic Strategy Sessions provide students the opportunity to meet individually with a professional learning specialist to learn organizational, note taking, and study skills; time management; test taking tips; and other helpful strategies to aid them in being more successful at the university level. These free sessions are held in the Student Success Center and are available by appointment or on a drop-in basis. Call ASM (816) 235-1174 for more information.

Academic Success Workshops

Academic Success Workshops are 50-minute sessions held throughout the year that focus on topics such as *Using Your UMKC Resources, How to Succeed in College, Studying for Finals*, etc. These free workshops are offered on a drop-in basis in the Student Success Center. The schedule of workshops can be found on our website http://www.umkc.edu/asm and will be advertised on the TVs found across campus.

Jumpstart AmeriCorps

Jumpstart joins together dedicated college students, called Corps members, and preschool children from low-income communities. Jumpstart AmeriCorps members have the unique opportunity to inspire young children to learn, serve in a local community, work on a team, and build professional skills. All Corps members receive professional-caliber training to help them implement Jumpstart's outcome-based program, promote children's school success, and become stronger citizens. Upon completion of a term of service with Jumpstart, college students receive a $1,175 Education Award from AmeriCorps. Jumpstart is working toward the day every child in America enters school prepared to succeed.

Video-Based Supplemental Instruction

The Video-Based Supplemental Instruction program (VSI) is a highly structured approach to learning that helps students master course content as they develop and refine reasoning and critical thinking skills. In VSI, professors of core curriculum courses record their lectures and students are enrolled in a video section of the college course. In the video sections, trained facilitators use the recorded lectures as a tool and guide students through the learning cycle. VSI is used as an asynchronous dual-credit credit program that allows rural Missouri high school students to earn college credit in select coursework.

Bookstores

UMKC Bookstore

Student Union
5100 Cherry Street
(816) 235-**BOOK (2665)**
Fax: (816) 235-**1443**
bookstore@umkc.edu
http://www.umkcbookstore.com

Health Sciences Bookstore

Health Sciences Building
2418 Charlotte Street
(816) 235-**2191**
Fax: (816) 235-**2747**
umkchealthbooks@umkc.edu
http://www.umkchealthbooks.com

Manager: Pete Eisentrager Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=eisentrager)

Owned and operated by the University of Missouri, the UMKC bookstores provide a wide array of educational materials and a variety of services. Student success hinges on having the necessary resources at the right time and the right price. At the main bookstore in University Center (http://www.umkc.edu/virtualtour/uc.asp), students can find a wide array of educational materials and a variety of services to assist in their academic success. Required and recommended textbooks are immediately available, as well as numerous supplemental materials including general reference and study guides. The UMKC bookstore also carries bestsellers, fiction, non-fiction and academic titles as well as an assortment of school and office supplies. Need something special to show your college spirit? Come browse through our large selection of UMKC clothing and gifts. Other services for your convenience include:

- Textbook Reservation program
- Textbook Buyback
- Graduation Fairs
- The Booker's Dozen reading rewards program
- Special Order programs

Technology is Affordable and Easy

At RooTech, located inside the main bookstore, UMKC students are automatically eligible for special savings on technology hardware, software and supplies. Look no further for a technology package that is user friendly and residence hall ready. A valid UMKC ID is necessary to obtain these terrific savings with educational pricing.

Textbook Buyback

There aren't too many items that can be purchased, used for a few months and then returned to the store for cash. During the last two weeks of the fall and spring semesters, an independent wholesale book company conducts book buyback to help the campus bookstore fill the textbook department with used books required for the upcoming semester. At this time, students can sell back their books for cash. If an instructor has requested a particular book for the next semester, the bookstore will pay up to 50 percent of the new price until the order is filled. Even if you originally bought the book for used price, you'll still get 50 percent of the new price if the book is needed. If a textbook is not required for the upcoming semester or if an instructor has not yet turned in their order, the wholesale book company may buy back your books to fill orders at other colleges and universities. They may offer you 0-30 percent of the new book price. Sometimes, books cannot be bought back due to a newer edition being used or if the book is in unsaleable condition.

Convenient Payment Options

Customers may use cash, personal checks, credit cards (MC, Visa or Discover), UMKC Bookstore Gift Cards and student charge. A valid photo ID is required for check transactions and a valid UMKC ID is required for student charge.

Student Charge

Student charge is available for financially enrolled students. Student charge allows students to purchase bookstore items with their UMKC ID and charge it to their UMKC account. Financial enrollment means that a student has made the minimum educational fee payment for the academic semester. A student may not student charge if they are not officially enrolled for the current semester (eg. if you're not enrolled for summer school, you can't student charge during the summer semester). A student may charge a maximum of $1,250 per semester. Once the limit is reached, another form of payment is needed. Making a payment to your University of Missouri bill will not adjust the balance back to $1,250.

Whether visiting in person or online, you will find there's more at your UMKC Bookstore, where profits support student services, facilities and programs.

Admissions

Admissions

Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 120
5115 Oak Street
(816) 235-**1111** (Kansas City Metro)
1-800-775-**8652** (Outside of Metro)
Fax: (816) 235-**5544**
admit@umkc.edu
http://www.umkc.edu/admissions

Mailing Address
University of Missouri-Kansas City
Admissions
5100 Rockhill Road
Kansas City, MO 64110-2499

Director: Tamara Cloutier Byland

This office is responsible for recruitment, admissions and orientation. See the General Undergraduate Admissions Policies and Procedures section of this catalog for additional information.

Admissions

The Office of Admissions coordinates the admission of domestic students to undergraduate, graduate and professional programs, as well as visiting, community, and dual credit high school program applications to the university. Applicants to the School of Law (p. 545) and School of Dentistry (p. 356)

should refer to those sections of the catalog. Domestic students include Permanent Residents and students who have been granted Assylee or Refugee status. International students apply through International Student Affairs (p. 807).

Recruitment

The office also coordinates the recruitment of students to all undergraduate programs. Recruitment programming includes coordinating communication campaigns with prospective students, creating print and electronic recruitment materials, attending college fair programs, high school and community college visits. Requests for information about UMKC and its academic programs are handled through the Communications Center in the Office of Admissions. E-mail us at admit@umkc.edu for information.

Orientation

In conjunction with the Office for Student Involvement, the Office of Admissions coordinates orientation programs for new freshmen and transfer students. Admitted students receive information about orientation in late spring. Orientation is mandatory for new freshmen and optional for transfer students.

Welcome Center

The Welcome Center is the central location for greeting campus visitors, including prospective students and their families. Campus visits usually include a tour and an opportunity for guests to meet with an Admissions representative in their area of interest. Customized tours are also available for groups or individuals who have specialized interests or needs. Large group visits such as UMKC Preview Days are also coordinated in the Admissions Welcome Center. The Welcome Center is located in the Student Success Center, Level 1. To schedule a visit to UMKC, go to the Welcome Center website (http://www.umkc.edu/welcome).

Communications Center

The Communications Center coordinates initial data entry for inquiries to UMKC and provides responses from the university. All Purchased student prospects and inquiry records are managed in the Communications Center as are the campaigns (mail, email, call) to prospective undergraduate students.

Career Services

Career Services
Student Success Center, Level 2
(816) 235-**1636**
Fax: (816) 235-**5156**
careerservices@umkc.edu
http://www.career.umkc.edu

Director: Greg Hayes

The mission of Career Services is to empower students and others to successfully develop, evaluate, and initiate career planning and professional development within a constantly changing work environment. In addition, Career Services embraces diversity in all forms and strives to be an inclusive community that fosters an open, enlightened, and productive environment.

The Career Services staff is a select group of professionals representing a wide array of backgrounds. All are trained in current trends and provide a variety of programs and services in career planning, life planning and development. Professional staff can assist students in career exploration and effective career decision-making. Career Services offers EDUC 160, in the fall semester for two credit hours.

Career planning services include choosing an academic major, assessment of interests and values, goal clarification and enhancing skills such as resume writing, interviewing and conducting a job search. Students have access to a library of current reference materials related to career planning. Students may schedule individual appointments with career counselors for purposes of career assessment.

To enhance placement of UMKC students and graduates, Career Services maintains on-campus recruitment programs, sponsors job fairs and career days and develops and maintains contact with local, national and international employers.

Students may find internships, work-study and on-campus jobs, and part- and full-time positions in Roo Career Network. Roo Career Network is our system to promote student and employer connections by allowing students to create job alerts, schedule appointments, request interviews, and communicate with alumni mentors. Visit our Web site (www.career.umkc.edu (http://www.career.umkc.edu)) to access Roo Career Network and watch the *University News* (http://www.unews.com) for activities sponsored by Career Services and for on-campus recruiting schedules.

Career Services also provides a full range of career planning and development services for UMKC alumni. For additional information, call (816) 235-**1636**.

Counseling, Health, Testing, and Disability Services

The mission of **Counseling, Health, Testing, and Disability Services** is to provide high quality and comprehensive psychological, health, testing, and disability services which support the personal and academic potential of individuals and programs in a diverse campus community. These offices combine multiple services to promote the emotional, mental and physical well-being and academic success of the campus community. Dr. Arnold Abels is the executive level director over all these services.

Director of Counseling, Health, Testing and Disability Services
Director of Counseling: Arnold Abels, Ph.D. Contact information (http://www.umkc.edu/lookup/search.cfm?LastName=abels)

Counseling Center

4825 Troost Avenue, Suite 206
(816) 235-**1635**
Fax: (816) 235-**6350**
http://www.umkc.edu/chtc/counseling

For more information, see the Counseling Center section.

Student Health and Wellness and Student Health Pharmacy

4825 Troost Avenue, Suite 115
(816) 235-**6133**
Student Health Pharmacy (816) 235-**6103**
studenthealth@umkc.edu
http://www.umkc.edu/chtc/health

Administrator/Nurse Practitioner: Scott Thompson, R.N., B.S.N., M.S.N., F.N.P. Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thompson)

For more information, see the Student Health and Wellness section.

Testing Services

4825 Troost Avenue, Suite 206
(816) 235-**1635**
http://www.umkc.edu/chtc/testing

Associate Director of Testing: Jim Wanser Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wanser)

For more information, see the Testing Services section.

Student Disability Services

4825 Troost Avenue, Suite 104
(816) 235-**5696**
Fax: (816) 235-**6363**
disability@umkc.edu
http://www.umkc.edu/disability

Coordinator: R. Scott Laurent Contact information (http://www.umkc.edu/lookup/search.cfm?LastName=laurent)

For more information, see the Student Disability Services section.

Counseling

Counseling Services

4825 Troost Avenue, Suite 206
(816) 235-**1635**
Fax: (816) 235-**6350**
http://www.umkc.edu/chtc/counseling

Executive Director of Counseling, Health, Testing and Disability Services/Director of Counseling: Arnold Abels, Ph.D. contact information (http://www.umkc.edu/lookup/search.cfm?LastName=abels)

Counseling Services is one of the areas in the **Counseling, Health, Testing and Disability Services.** The mission of Counseling Services is to provide services to foster the psychological well being, personal development and educational potential of our diverse students, faculty, staff and campus community.

We know that being a college student means more than attending class, reading textbooks, and taking tests. Life happens; most UMKC students have a lot of things on their plate to deal with other than academic tasks and expectations. The people at Counseling Services understand this and are here to help. Sometimes, that may mean learning more effective ways to balance time, manage stress, and handle relationships. Other times, it may mean dealing with depression, anxiety, risky behaviors, or other serious mental health concerns. These are all things that the professional staff of Counseling Services are equipped to assist with, in a confidential and professional setting.

In a recent survey of Counseling Services clients…
…86% said that the problem(s) that brought them to visit Counseling Services have improved;
…87% said they would return if they were to experience problems in the future; and
…91% said they would recommend Counseling Services to a friend.

If you need assistance, take the advice of your fellow students and consider talking with one of our counselors. We are here to help!

Counseling Services

- Individual Counseling can focus on such concerns as relationship issues, anxiety, depression, procrastination, eating disorders, loss, loneliness, indecision, academic problems, crisis intervention, stress management and strengthening of social skills.
- Couples Counseling is available when one or both partners are affiliated with UMKC. Relationship counseling focuses on improving or understanding relationships like those between partners, spouses, roommates, and friends.
- Group Counseling offers a great opportunity for UMKC students to learn about themselves and their relationships with others and work on interpersonal concerns in a professionally facilitated exchange with others. General interpersonal process therapy groups are regularly offered, while topic-themed groups (e.g., stress reduction) are occasionally offered. Group therapy is free and unlimited for students.
- Psychological Assessment services help students better understand their emotional or learning concerns. The Assess for Success program specifically assesses learning concerns and Attention Deficit/Hyperactivity Disorder (ADHD). Call 235-1635 and ask for the Assess for Success program for more information.
- Clients of the Center who would benefit from medication consultation or management are either referred to Student Health or outside providers for such services.
- A Multidisciplinary Eating Disorder Treatment Team provides support for the physical, emotional, and nutritional health of clients with eating disordered behaviors.
- Consultations with students, faculty, staff and parents are available about their concerns only without revealing who is a client as is dictated by law and ethics.
- Workshops and Presentations for students and staff on a variety of topics are available. Student organizations that have program needs can contact the office by phone or the web.
- Alcohol and Drug Services are available, including consultations, individual counseling, and outreach programs.

Fees, Appointments and Confidentiality

All students, faculty and staff are eligible for services. Students receive up to eight free counseling sessions every academic year and additional sessions are $15/session. Sessions for faculty and staff are $20/session. Testing fees are determined on a case-by-case basis. Services are offered at 4825 Roost as well as limited hours on Hospital Hill.

Visits to the Center and the contents of discussions with the staff are strictly confidential. No information regarding clients is released to any person, agency, or University personnel without written permission of any client 18 and older, unless mandated by state law.

Call (816) 235-1635 for an appointment or additional information.

MindBody Connection

Student Health and Wellness partners with the UMKC Counseling Center to provide the MindBody Connection.

The MindBody Connection supports students' life balance and holistic health and wellness through a variety of experiential activities and resources. The college experience can be stressful and challenging even for the strongest of students; the MindBody Connection strives to help students with stress reduction and strengthening of coping and life skills that foster college success. The MindBody Connection's motto is "Take Care of Yourself," focusing on physical, mental, and emotional wellness as integral to supporting students in attaining their educational goals.

Interactive services and programs include:

- Relaxation Station with massage chair, soothing musical background, and aromatherapy
- Catch the emWave by HeartMath (stress management/heart coherence biofeedback software)
- Tuesday Tune-Ups (weekly programs on a variety of stress reduction practices including creative, movement, and meditative activities)

- Wii Hours of the Day (offered later in the day after quiet hours)
- Staff on site to help with questions and guidance

Students can use the quiet space in the central room for a resting stop in a busy day or as a space to study or use the computer stations for personal use. A reading library is available for exploring ideas and sharing of creative expressions. Educational materials related to holistic health & wellness are available at the Connection as well as an opportunity to take a quick assessment of how one is doing in various life domains, identifying strengths and challenges or growth edges. Staff at the Connection can help with recommendations and connections to campus, community, or web resources that can further assist students in identified areas. Additional resources for our students who are veterans are also available.

The MindBody Connection is located on Level 1 of the Student Success Center, open daily and is supported collaboratively by the campus Student Health & Wellness Services and the campus Counseling Center. For more information about the MindBody Connection, visit the suite or http://www.umkc.edu/mindbody or email mindbody@umkc.edu.

Student Health and Wellness and Student Health Pharmacy

Student Health and Wellness
4825 Troost Avenue, Suite 115
(816) 235-**6133**
Student Health Pharmacy (816) 235-**6103**
studenthealth@umkc.edu
http://www.umkc.edu/chtc/health

Administrator/Nurse Practitioner: Scott Thompson, R.N., B.S.N., M.S.N., F.N.P Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thompson)

Student Health and Wellness is one of the areas in the **Counseling, Health, Testing and Disability Services.** The mission of Student Health and Wellness is to provide quality health care and health promotion that maximizes student learning potential.

Student Health provides assessment of acute and chronic health problems and treatment and/or referral as appropriate. Student Health personnel include nurse practitioners, registered nurses, a pharmacist, and administrative personnel. There is no visit charge for currently enrolled UMKC students; additional services or laboratory testing may involve a charge. These additional charges can be paid for with cash, check or charged to the student's UMKC account.

Student Health and Wellness services include: well-woman exams, blood pressure measurement, contraceptive counseling, first aid (non-emergency), immunizations (including Hepatitis A and B, meningitis, MMR, tetanus [TDaP], gardisil, and seasonal flu shots), physical examinations, STD testing, travel consultation, allergy injections with student-furnished serum, and tuberculosis screening.

A part-time pharmacy is also available at Student Health to fill prescriptions, which can be paid for with cash, check or charged to the student's UMKC account. For further information or specific medication questions, call the pharmacist at 816-235-6103.

Health promotion services include informational brochures, updated web information, health fairs, and classroom presentations. Student Health reaches out to students with programming related to healthy sexual behaviors, alcohol and drug awareness, safe driving, nutrition and a promotion of a well-rounded integration of mental and physical health. A student desiring specific health information may contact Student Health and Wellness by phone (816-235-6133) or e-mail studenthealth@umkc.edu.

Student Health is open Monday - Friday and offers late afternoon appointments two days per week. Students can make an appointment by calling 816-235-6133 or an appointment can be made from the website. More information about services and health information is available at http://www.umkc.edu/chtc/health.

MindBody Connection

Student Health and Wellness partners with the UMKC Counseling Center to provide the MindBody Connection.

The MindBody Connection supports students' life balance and holistic health and wellness through a variety of experiential activities and resources. The college experience can be stressful and challenging even for the strongest of students; the MindBody Connection strives to help students with stress reduction and strengthening of coping and life skills that foster college success. The MindBody Connection's motto is "Take Care of Yourself," focusing on physical, mental, and emotional wellness as integral to supporting students in attaining their educational goals.

Interactive services and programs include:

- Relaxation Station with massage chair, soothing musical background, and aromatherapy
- Catch the emWave by HeartMath (stress management/heart coherence biofeedback software)
- Tuesday Tune-Ups (weekly programs on a variety of stress reduction practices including creative, movement, and meditative activities)
- Wii Hours of the Day (offered later in the day after quiet hours)

- Staff on site to help with questions and guidance

Students can use the quiet space in the central room for a resting stop in a busy day or as a space to study or use the computer stations for personal use. A reading library is available for exploring ideas and sharing of creative expressions. Educational materials related to holistic health & wellness are available at the Connection as well as an opportunity to take a quick assessment of how one is doing in various life domains, identifying strengths and challenges or growth edges. Staff at the Connection can help with recommendations and connections to campus, community, or web resources that can further assist students in identified areas. Additional resources for our students who are veterans are also available.

The MindBody Connection is located on Level 1 of the Student Success Center, open daily and is supported collaboratively by the campus Student Health & Wellness Services and the campus Counseling Center. For more information about the MindBody Connection, visit the suite or http://www.umkc.edu/mindbody or email mindbody@umkc.edu.

Testing Services

Testing Services

4825 Troost Avenue, Suite 206
(816) 235-**1635**
Fax: (816) 235-**6350**
http://www.umkc.edu/chtc/testing

Associate Director of Testing: Jim Wanser Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=wanser)

Testing Services is one of the areas in the **Counseling, Health, Testing and Disability Services.** Its mission is to provide high quality and comprehensive testing services which support the personal and academic potential of individuals and programs in a diverse campus community.

Testing Services provides a comprehensive offering of examinations for admission, licensure, and professional certification to both students and community constituents. Services include the administration of all exams offered through PROMETRIC, including the GRE, TOEFL, MCAT, CPA, USMLE, FINRA/NASD, etc. In addition, the ACT, LSAT, MAT, and C-Base are routinely offered for academic admission. For licensure and certification, the PRAXIS and CFP are offered on all national test dates. The CLEP program is also offered to interested students, as well as test proctoring services for correspondence, on-line, or distance education courses.

University Assessment/Exit Exams (ETS-PP and Major Field Exams) are also administered through Testing Services. Students may schedule exams at http://www.umkc.edu/exitexams.

Testing Services is open Tuesday through Saturday from 7:30 am to 4:30 pm. All tests are administered by appointment on space available basis. Government issued I.D. (driver's license, passport, or military I.D.) is required for all exams and there are prepaid fees associated with most exams. Registration for national examinations is typically on-line or through the Testing Center at (816) 235-**5820** or -**1635**.

Student Disability Services

Student Disability Services
4825 Troost Avenue, Suite 104
(816) 235-**5696**
Fax: (816) 235-**6363**
disability@umkc.edu
http://www.umkc.edu/disability

Coordinator: R. Scott Laurent Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=laurent)

Student Disability Services is one of the areas in the **Counseling, Health, Testing and Disability Services.** The mission of Student Disability Services is to educate and support the UMKC community to understand the unique challenges, myths and stereotypes faced by people with disabilities; to recognize the unique contributions that people with disabilities make to society; to accept and engage people with disabilities in the daily flow of life; and to provide reasonable accommodations to help students demonstrate their abilities, knowledge and skills. The office is committed to ensuring that students with disabilities feel welcomed and supported at UMKC, that they are engaged in the campus community, that they feel that UMKC is their university and that UMKC is responsive to their unique needs.

Student Disability Services provides programming and supportive services at no charge to students with a disability. Our primary mission is the provision of reasonable and appropriate academic accommodations. While all accommodations are based on the functional limitations caused by a disability, common accommodations are extended exam time, peer notetakers, exams in reduced distraction rooms, textbooks in alternate formats, and sign language interpreters. Other accommodations may be available depending on the need caused by the disability.

To receive services through this office, students must have a disability that has been documented by a qualified medical or clinical professional. The documentation should be comprehensive, usually not more than three years old, and should detail the functional limitations caused by the disability. For

further information on documenting your disability please see our website at http://www.umkc.edu/disability. Students should contact the office as soon as possible to arrange for accommodations so as to avoid delays in the provision of accommodations.

Financial Aid and Scholarships Office

Financial Aid and Scholarships Office
Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 101
5115 Oak Street
(816) 235-**1154** (Kansas City Metro)
1-800-775-8652 (Outside of Metro)
Fax: (816) 235-**5511**
finaid@umkc.edu
http://www.umkc.edu/finaid

Director: Scott Young

The Financial Aid and Scholarships Office has two major functions: (1) to provide financial assistance to students who otherwise would be unable to attend UMKC and (2) to administer campus-wide merit- and talent-based scholarship programs. Extensive information plus a number of free scholarship search opportunities are available on our web page.

Financial aid is intended as a supplement to the students' own resources. Families are expected to contribute from income and assets to the extent they are able, and students are expected to contribute from assets, summer employment and part-time employment during the school year. Costs for students vary greatly, but only modest budgets can be supported through financial aid programs. Students who have high standards of living or large debts may find that financial aid funds alone will not be sufficient.

To apply for aid, students must apply for admission or readmission to UMKC and must submit a Free Application for Federal Student Aid (FAFSA). Priority deadline for filing the FAFSA is March 1 preceding the academic year in which financial aid is desired.

In awarding aid, the Financial Aid and Scholarships Office will determine the student's eligibility for amounts and types of aid. Most aid packages are awarded for the academic-award year (fall and spring terms); however, aid for summer term applicants is awarded as funds are available.

The types of student financial aid are:

- Scholarships and grants, which are gift aid amounts not requiring repayment.
- Long-term loans repayable after termination of schooling at low interest rates.
- Short-term loans repayable within the same academic period.
- Employment in the Federal Work-Study Program.

To be eligible for most aid, students must maintain satisfactory academic progress, and be regularly enrolled in at least a half-time academic course load. Federal programs also require U.S. citizenship or permanent residency. Many programs require financial need, although some student loans are generally available regardless of financial need.

UMKC defines and measures what is considered Satisfactory Academic Progress (SAP) toward certificate/degree completion for financial aid eligibility. The policy falls within federal guidelines and must measure quality (GPA) and quantity (number of credit hours successfully completed). The policy is different for undergraduate, graduate and professional students. Students enrolling in their first semester at UMKC and students who are readmitted to UMKC are considered to be making satisfactory progress. Eligibility is checked at the end of each semester. This policy is applicable with respect to eligibility for all types of federal, state and university financial aid administered by the UMKC Financial Aid and Scholarships Office. Satisfactory Academic Progress requirements are detailed on the following website: http://www.umkc.edu/finaid.

New freshman and transfer students accepted to the University by March 1 are automatically considered for several merit-based institutional scholarships. In addition, incoming freshman and transfer students may apply for competitive scholarships online at http://www.umkc.edu/finaid by February 1. Scholarship recipients must be enrolled full-time and earn a specified GPA for renewal. All offers of scholarship and aid eligibility are made in writing to students completing the application process.

Most types of aid are applied directly to the student's fee charges. Any remaining balance of aid and any checks from outside sources are normally disbursed by check to the student or by direct deposit to the student's bank account through the Cashier's Office. Aid is generally available in proportionate amounts at regular registration periods. Earnings in the Federal Work-Study Program, however, are paid biweekly for actual hours worked.

Aid recipients are responsible for promptly informing the Financial Aid and Scholarships Office of any changes in financial status, reduction of course load, changes from undergraduate to graduate status, or total withdrawal. The Financial Aid and Scholarships Office may be required to return all or a portion of aid based on a change in enrollment status. Address changes should be made promptly through the UMKC Registration and Records Office.

Aid from all sources, including external ones, must not exceed the federally regulated cost of attendance. For that reason, students must report all aid awarded through other sources to the Financial Aid and Scholarships Office.

For the most up-to-date information regarding specific financial aid awards available at UMKC visit the Financial Aid and Scholarships website at http://www.umkc.edu/finaid.

HelpLine

Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 336
5115 Oak Street
(816) 235-**2222**
FAX: (816) 235-**6504**
helpline@umkc.edu
http://www.umkc.edu/helpline

The UMKC HelpLine/Ombudsman function offers a confidential, independent and neutral resource for problem solving and information sharing for our campus community. Contact the HelpLine with questions and concerns about University policies and procedures. The HelpLine serves students, staff, faculty and the community via phone, e-mail, walk-ins and appointments. For more information, visit http://www.umkc.edu/helpline.

The HelpLine is located in the Office of the Vice Chancellor for Student Affairs and Enrollment Management in the Administrative Center room 336, and can be contacted at (816) 235-2222 or via e-mail at helpline@umkc.edu. The HelpLine is also the contact for information on the Student Accident and Sickness Insurance.

International Student Affairs

International Student Affairs
Student Success Center, Level 0
Tel: (816) 235-**1113**
Fax: (816) 235-**6577**
isao@umkc.edu
http://www.umkc.edu/isao

Director: Sandy Gault Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=gault)

International Student Affairs (ISA) recruits, admits, orients, advises and retains international students and scholars. International students are defined as those students who have entered the United States on a nonimmigrant visa or have a U.S. permanent resident application pending with the U.S. Citizenship and Immigration Services.

UMKC is authorized by federal law to issue form I-20 and DS-2019 to nonimmigrant students and is responsible for ensuring adherence to institutional and federal regulations.

ISA evaluates international transcripts to determine admissibility by converting international credits and grades and determining recognition status of international institutions in comparison to regional accreditation in the U.S.

For more information on international admissions please see Undergraduate International Student Admission Policies (p. 751) and Graduate International Student Admissions Policies (p. 790).

ISA provides international students, scholars and their families with a successful and productive experience at UMKC and Kansas City, promotes and supports cultural opportunities, and provides social and cultural programming.

ISA supports student success by providing: pre-departure and post-arrival orientation, new arrival housing services, monthly newsletters, optional and curricular practical training assistance, F & J visa advising, referrals to campus services, partnerships with academic advisors, and support for campus nationality groups, International Student Council, the International Student Ambassador Program, and much more.

Programming supported by ISA includes: New Student Orientation, International Education Day, State ID trips, Home for the Holidays, Culture Night, International Olympics, Kansas City's Ethnic Enrichment Festival, and campus and community cultural events.

Those who have been granted asylum or refugee status in the United States or individuals who have been granted Permanent Residence will apply for admission through the UMKC Admissions Office located in the Administrative Center.

Multicultural Student Affairs

Multicultural Student Affairs
Student Union, suite 319
Phone: (816) 235-**1109**
Fax: (816) 235-**5645**
http://www.umkc.edu/msa

Director: Tiffany Williams Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=williams)

The mission of Multicultural Student Affairs is to enhance and improve the college experience of students of color at UMKC. The office also serves to educate the campus community on the multicultural experience. Our mission is accomplished by:

- Maintaining an open door policy; constantly striving to place students at the center and supporting student success.
- Providing a comfortable, resourceful, and safe space for students to utilize in the Student Union.
- Interacting with and assisting students through formal and informal mentoring and coaching. Part of these interactions involves encouraging and supporting students to participate in campus activities and organizations and to take advantage of the many leadership opportunities available to them. We also assist students in locating and utilizing resources on campus and in the community.
- Planning a variety of activities and events throughout the academic year that stimulate educational, cultural and social growth. These activities include interactive discussions, community outreach programs, traditional events during African American History Month and Hispanic Heritage Month, and the Multicultural Graduation Reception.
- Supporting and advising multicultural student organizations including TAASU (the African American Student Union), ALAS (the Association of Latin American Students), NAACP (the National Association for the Advancement of Colored People), Lambda Theta Phi Latino Fraternity, Inc., NPHC (the National Pan-Hellenic Council), and many more.
- Collaborating with other departments, academic units and student organizations to further enhance our programs so that we can adequately meet the needs of students of color at UMKC.

Through these services and programs, we assist students of color to become integrated into the academic and social systems of campus life. Our office serves to complement the classroom experience of students at UMKC.

Multicultural Student Affairs also directs the activities of the **African American History and Culture House** (affectionately known as the Culture House). The mission of the Culture House is to increase and enrich the general understanding of African American history and culture. The Culture House serves as a place for students to study, hang out, attend events and meetings and meet other students. The Culture House has study and meeting areas, an art gallery, a computer lab and a TV lounge. The Culture House also sponsors events and art exhibits throughout the year.

Registration & Records Office

Registration and Records
Administrative Center (http://www.umkc.edu/virtualtour/administrative-center.asp), Room 115
5115 Oak Street
(816) 235-**1125**
Fax: (816) 235-**5513**
registrar@umkc.edu
http://www.umkc.edu/registrar
http://www.umkc.edu/quickguide

Registrar: Douglas E. Swink Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=swink)

The mission of the Registration and Records Office is to provide accurate and professional services to ensure the integrity of official student records while enforcing academic policies.

Services provided by the Registration and Records Office include the following:

- Preparation of the schedule of classes.
- Registration for students in all UMKC academic units.
- Administration of degree processing.
- Monitoring of undergraduate and graduate student academic probation.
- Maintenance of all official, permanent student records.
- Maintenance of class lists, grade rolls, transcripts and enrollment reports.

See the Academic Regulations and Information section earlier in this catalog for additional information and complete contact information.

Veterans Affairs

The UMKC Student Veterans Virtual Resource Center (http://www.umkc.edu/veterans) is a comprehensive website dedicated to providing military Service-members and Veterans with tools and resources to be successful students. On this site there is information about campus resources and GI Bill benefits, Missouri residency requirements, acquiring military transcripts and records, and the UMKC Student Veterans Organization. (http://roogroups.collegiatelink.net/organization/umkcsvo) This site also provides links to many other Service-member and Veteran specific resources and organizations available on campus, in the community, and nationally. UMKC salutes and supports our student Service-members and Veterans and invites them to become an integral part of our campus community.

The Veterans Certifying Official in the Registration and Records Office must be contacted for certification of enrollment for the Department of Veterans Affairs. It is the responsibility of the student to contact this office if any changes are made to enrollment status. Failure to do so can result in over payments or the failure to receive benefits. The phone number is (816) 235-**1125.**

Residential Life

Residential Life Business Office
Oak Street Residence Hall (http://www.umkc.edu/virtualtour/oak-street.asp), Room 2004
5051 Oak Street
(816) 235-**8840**
Fax: (816) 235-**8114**
housing@umkc.edu
http://www.umkc.edu/housing

Mailing Address
University of Missouri-Kansas City
Residential Life
5100 Rockhill Road
Kansas City, MO 64110-2499

Director: Sean Grube contact information (http://www.umkc.edu/lookup/search.cfm?LastName=grube)

All of UMKC's residential facilities are conveniently located on the west side of campus, near the Student Union, Student Success Center (cafeteria), Swinney Recreation Center and within easy walking distance to all other Volker campus buildings. UMKC residence halls house approximately 880 students and are both less than eight years old. Both Oak Street Residence Hall and Herman and Dorothy Johnson Residence Hall feature semi-private bathrooms, social and quiet study lounges, music practice rooms, kitchenettes on every floor, large indoor and outdoor recreation and lounging areas and a high-tech classroom. UMKC's Oak Place Apartments is a 500 bed apartment complex serving the needs of second year students through graduate students. The apartments are fully furnished with all utilities paid in 1, 2 and 4 bedroom units. All UMKC Residential Life facilities have wireless and Ethernet hook-ups for every student, cable television hook-ups and microwave/refrigerator units all in student rooms.

Research has shown that over 50% of all learning that takes place at the University occurs outside the classroom. Studies also show that students who live on campus are more likely to be academically successful. At UMKC, the average GPA for on-campus students is 3.10, compared to 2.68 for students living off-campus. Additionally, students that live on campus have a higher retention rate, and are more likely to graduate on time. The location of our facilities encourages student participation in campus events and activities, and our staff members are trained to provide support and resources for all students living on campus. Residential Life at UMKC invites you to participate in the learning experience that it can offer to you – become one of our 1400 diverse learners from all over the world!

Student Involvement

Student Union, Suite 320
5100 Cherry
(816) 235-**1407**
Fax: (816) 235-**5590**
getinvolved@umkc.edu
http://www.umkc.edu/getinvolved

Director: Angela Cottrell, Ed.D. Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=cottrell)

The mission of the UMKC Office of Student Involvement (OSI) is to actively encourage student development, foster leadership, celebrate diversity, and facilitate co-curricular and community engagement for all students.

The Office of Student Involvement provides students the opportunity to develop personally and professionally through their leadership and engagement. Located on the DISCOVER (Diversity, Involvement, Student Government, Campus Organizations, Volunteer, Engagement, and Retention) floor in the Student Union, OSI is here to assist you in getting involve in one of more than 250 campus organizations and leadership opportunities.

The main functional areas that embody OSI include:

- Associated Students of University of Missouri (ASUM)
- Campuswide Honor Societies
- Clubs and Organizations
- Communiversity
- Departmental Honorary and Professional Societies
- Leadership and Service Programs

- LGBTQIA Programs and Services
- Social Fraternities and Sororities
- Student Government Association (SGA) (p. 812)
- Union Programming Board (UPB) (p. 813)
- University News (p. 813)

Associated Students of University of Missouri (ASUM)

Student Union, Room 303J
Phone: 816.235.1231
http://studo.umkc.edu/asum/index.htm

The Associated Students of the University of Missouri (ASUM) provides education for students about the political process, provides the public with information concerning student interests, increases political awareness, concern, and participation among students, and represents the interests and welfare of Missouri students before the General Assembly, the Board of Curators, the Governor, and other executive agencies.

ASUM supports a variety of programs on campus throughout the year to increase student awareness and involvement in the legislative process.

Campuswide Honor Societies

- **The Delta Alpha Chapter of Mortar Board** at UMKC is one of the nearly 200 national chapters of this senior honor society. Juniors are annually selected for membership on the basis of scholarship, leadership and campus and community service. UMKC's Mortar Board chapter, installed in 1973, emphasizes University service.
- **Omicron Delta Kappa** is a national leadership honor society of students and faculty members, with circles on more than 200 college campuses throughout the country. The society recognizes and encourages the achievement of superior scholarship and leadership. Membership is granted on the basis of merit. Once achieved, it becomes as much an obligation and responsibility in citizenship as it is a mark of highest distinction and honor. In addition to the prestige that accompanies membership in Omicron Delta Kappa, all members are expected to engage cooperatively in effective leadership and services for the good of the institution and the community.
- **Phi Kappa Phi**, founded in 1897, was the first national honor society to recognize superior scholarship in all fields of study and to take into membership the highest-ranking student from all branches of learning. UMKC's chapter was constituted and installed with 16 faculty members on March 28, 1969. The national honor society replaced Torch and Scroll, the scholastic honorary which had served the University of Kansas City and then the University of Missouri-Kansas City. Each year, the highest-ranking students in the University are elected into membership.
- **Golden Key** is a international academic honors organization dedicated to excellence. The society is interdisciplinary and unites the talents of the brightest undergraduate students in America. Students qualify on the basis of objective academic criteria. No more than the top 15 percent of the juniors and seniors enrolled may be eligible. Members are actively involved with various community service projects.
- **Order of Omega** is the leadership honor society for social Greek organizations. The purpose of Order of Omega is to recognize those Greeks who attain a high academic and leadership standard, to bring together the most representative fraternity and sorority members to address local or intercollegiate affairs and to bring together members of the faculty, alumni and Greek system on a basis of mutual interest, understanding and helpfulness.
- **Alpha Sigma Lambda** provides an association for and recognition of academically outstanding adult/returning students in continuing higher education. The society is a nonprofit organization devoted to the advancement of scholarship.
- **Phi Beta Delta** was founded in 1986 and established itself as a national organization in 1987 with 38 chapters. The goal is to recognize the scholarly achievement of international students and scholars, U.S. students who have studied abroad and faculty and staff who are involved in international activities. They serve as a vehicle for development of academic-based international programming, provide an on-campus network of faculty, staff and students involved in international endeavors and works to extend this network to thousands of members in chapters nationwide.
- **Alpha Lambda Delta** honors excellent academic achievement by students in their first and second year of study in higher education. The society has numerous programs to encourage continued superior classroom performance, such as awards, national workshops, campus activities, scholarships, fellowships and loans for undergraduate, graduate and professional study.

For more information about campuswide honor societies call (816) 235-**1407**.

Clubs and Organizations

The University of Missouri—Kansas City has over 250 student organizations that embody a wide variety of interests including cultural, educational, recreational, and social clubs. Students can get involved through co-curricular opportunities and foster new interests as members of student organizations.

Students who are involved on campus tend to have a better connection with the university, perform better in the classroom, and are selected to professional and graduate programs at a higher rate than those students who do not get involved.

Each fall the Office of Student Involvement hosts a student organization fair where students can learn more about the myriad of student organizations on campus. And, if you can't find what you're looking for, you can always create your own student organization!

To obtain more information, visit https://roogroups.collegiatelink.net or call 816.235.1407.

CommUniversity

Communiversity is an informal learning program offering free, non-credit courses to UMKC students (and the Greater Kansas City community for a small fee). More than 900 classes are offered each year by volunteer instructors from the campus and community.

Classes can be found in art appreciation, leading healthier life styles, dance lessons, cooking classes, outdoor adventure, psychic topics, and more.

For more information and to check out the schedule of classes, visit http://www.umkc.edu/commu or call 816.235.1448.

Departmental Honorary and Professional Societies

Several academic disciplines offer honor societies that select members on the basis of grades and class standings. Honoraries are offered in the following Schools and departments:

- Bloch School of Management
- College of Arts and Sciences (specifically the Departments of Sociology, Criminal Justice and Criminology, Communication Studies, Economics, English, Geosciences, History, Physics, Political Science, and Psychology)
- Conservatory of Music and Dance
- School of Biological Sciences
- School of Computing and Engineering
- School of Dentistry
- School of Education
- School of Law
- School of Medicine
- School of Nursing
- School of Pharmacy

For specific membership requirements, contact the academic department listed or the Office of Student Involvement.

LGBTQIA Programs and Services

Student Union, Room 325
(816)235-**6556**
lgbtqia@umkc.edu
http://www.umkc.edu/lgbtqia

The University of Missouri—Kansas City welcomes all students, faculty, staff, administrators, and community members that identify as members of the LGBTQIA (Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, and Ally) community.

Programs occur throughout the academic year to help further personal growth and academic success of LGBTQIA students while educating and raising awareness among non-LGBTQIA campus constituents.

The Safe Space Training Program provides resources and information on creating safe and inclusive environments for people who identify. In collaboration with the Office of Residential Life, the Social Justice Coordinator is a para-professional student who lives in the residence halls and provides educational programs, social activities, and helps to support our LGBTQIA students.

LGBTQIA Programs and Services include:

- Lounge space for relaxation between classes, a place for lively discussion, a round of board games, or just a safe and inviting place to hang out.
- Computers available for student use and a wireless network that ensures your laptop is always connected.
- A large selection of books and magazines available to read or check out.
- A wide selection of educational and social events offered every semester.
- Extensive campus and community resources and information.
- A professional, confidential support network to assist with the coming out process or difficulties experienced by identifying as an LGBTQIA individual.

Leadership Programs

The Office of Student Involvement is dedicated to assisting students discover and develop their ability to lead themselves, their organizations, the University, and their future communities.

OSI provides opportunities for students to make meaningful contributions to their community while building their academic and civic skills. Our support and encouragement of service-learning projects is guided by four principles:

- Meet Community Needs: Service-learning projects put the talents and energies of UMKC's students to work solving real issues in their communities; taken together, these programs make a significant national contribution.
- Improve Participant's Lives: Students' lives are enriched through service-learning as they become engaged in their own educational process, see the work they do benefit those around them, and become actively contributing citizens and community members. The Institute for Leadership & Service is dedicated to ensuring that our programs improve the lives of every participant, building academic, civic, and character excellence.
- Strengthen Communities: Service-learning projects bring together students, teachers, parents, and organizations to improve their community. By working together towards common goals, participants build trust and strengthen community ties.
- Build Partnerships: The Institute for Leadership & Service is committed to stimulating strong, sustainable partnerships among local schools, colleges, and organizations in order to improve communities' abilities to meet their ongoing needs.

For more leadership and service opportunities, visit http://www.umkc.edu/getinvolved or call (816) 235-1407.

Social Fraternities and Sororities

UMKC's fraternities and sororities make an important contribution to life on campus by providing leadership opportunities for students and service to the community. Sororities and fraternities play a vibrant role in campus life. Students who choose to join a social fraternity or sorority organization will have the opportunity to be part of a well-rounded, co-curricular experience. Recruitment activities typically occur in the fall, but also occur in the spring depending upon the chapter.

Sororities and fraternities at UMKC have been a large part of campus life since 1952. Our organizations constantly work together to promote the highest ideals and standards. Each fraternity and sorority is unique in its own way, but all offer the opportunity to experience leadership, develop high academic standards, social activities, and community service and philanthropic projects.

Currently, UMKC has 16 social fraternities and sororities and three governing councils.

Interfraternity Council Chapters:

- Beta Theta Pi
- Lambda Chi Alpha
- Sigma Alpha Epsilon
- Sigma Phi Epsilon
- Lambda Theta Phi

Panhellenic Council / Local Chapters:

- Alpha Delta Pi
- Alpha Sigma Alpha
- Chi Omega
- Delta Rho
- Delta Zeta

NPHC Chapters:

- Alpha Phi Alpha Fraternity, Inc.
- Phi Beta Sigma Fraternity, Inc.
- Delta Sigma Theta Sorority, Inc.
- Kappa Alpha Psi Fraternity, Inc.
- Sigma Gamma Rho Sorority, Inc.
- Zeta Phi Beta Sorority, Inc.

Student Government Association (SGA)

Student Union, Room 303N

816.235.1426
https://roogroups.collegiatelink.net/organization/umkcsga

The Student Government Association (SGA) is dedicated to providing representation of all UMKC students and serve as a liaison between the student body and the University of Missouri—Kansas City administration, faculty, and staff. The goal of SGA is to act upon the will of the majority while protecting the interests of the minority.

Each academic unit provides representation through a governing council that also serves the needs of students in those academic areas. Council elections are held annually.

For more details or to learn more about becoming an executive member or senator, please contact the current SGA executives at the information provided above.

Union Programming Board (UPB)

5100 Cherry Street
Student Union, Suite 320
Phone: 816.235.1457
Fax: 816.235.5590
https://roogroups.collegiatelink.net/organization/UPB

The Union Programming Board (UPB) plays an integral role in creating a vibrant campus experience for students. The purpose of UPB is to provide quality social, educational, and entertainment-based activities and programs to the UMKC student body that address emotional, intellectual, occupational, physical, social, and spiritual well-being.

UPB strives to provide students with opportunities for leadership development, programming, and arts and events management. Students are always welcome to join The Mob—UPB's spirit group which helps execute events throughout the academic year. Students are also encouraged to apply to become an executive member!

University News

(816) 235-**1393**
http://www.unews.com

The *University News* student newspaper is published weekly for the UMKC student community. Students interested in becoming involved with the campus newspaper should call (816) 235-**1393**.

Student Success Center

Student Success Center
5000 Holmes
Information Desk Phone: (816) 235-**5071**
www.umkc.edu/success (http://www.umkc.edu/success)

Director of Operations: Jody Jeffries Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jeffries)

The mission of the Student Success Center is to provide high-quality, integrated, and responsive services that promote students' academic and personal success in support of our retention and graduation goals. The space will provide for a more collaborative and effective delivery of academic advising, tutoring, career counseling, transfer support, and other services to meet the diverse needs of our students now and in the future. The Student Success Center is a key factor in achieving the University's Strategic Plan Goal 1: place student success in the center.

Offices and services located in the Student Success Center include:

- UMKC Central
- UMKC Welcome Center
- University College
- Academic Support and Mentoring
- Writing Studio
- Career Services
- MindBody Connection
- International Student Affairs
- International Academic Programs

- School of Medicine Advising for Years 1 and 2
- Cafeteria and UMKC Café
- Barbershop
- Computer kiosks

Student Union

UMKC Student Union
5100 Cherry Street
(816) 235-**1406**
Fax: (816) 235-**1419**
http://www.umkc.edu/union

Director: Jody Jeffries Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=jeffries)

The UMKC Student Union, opened in August of 2010, provides a welcoming and sustainable environment that values the diversity of all UMKC students. The 109,742 square foot, LEED certified student facility serves as the campus living room and the central hub for student programming and engagement. Conveniently located at the corner of 51st Street and Cherry Street, the facility was designed “by UMKC Students, for UMKC Students.”

The Student Union features student event and activity areas, including a 6400 square foot multipurpose room, 329 seat movie theater, coffeehouse performance stage, additional large, medium, and small meeting rooms, and student lounge spaces. The facility also hosts an IS Computer Lounge and electronic workroom, the Office of Student Involvement, the Office of Multicultural Student Affairs, LGBTQIA Rainbow Lounge, the UMKC Bookstore, the one-card office, the Student Government Association Chamber and offices, and the Student Organization spaces. In addition, the Union offers a dynamic retail dining experience with Jazzman’s Café and Bakery, Chick-Fil-A Express, Baja Fresh Express, and SubConnection as part of the Union Marketplace.

With WI-FI coverage throughout, the Student Union becomes the place to be for relaxation and co-curricular activity. Billiards and gaming, including both XBOX 360 and Wii stations, are available in the Jazzman’s Café and Bakery coffee house. Daily locker use and locker rentals are available, including powerstations to charge laptops and other electronics. RedBox automated DVD rental is available to students 24 hours a day, 7 days a week.

Natural daylight, reclaimed wood, a recycling and composting program, storm water management design, and low-emitting materials on the interior are all a part of the Student Union’s sustainable design. The Garden Roof Terrace, located on the fourth level, offers breathtaking views of the city that UMKC calls home.

University Bookstores

The UMKC Bookstores are wholly owned and operated auxiliaries of the University of Missouri. We operate the UMKC Bookstores to ensure that our students and faculty receive the best possible course materials, service and support. 100% of the revenue derived from the UMKC Bookstore operations are utilized to provide educational, social and recreational opportunities for UMKC students.

Bookstores are located at the Student Union and the Hospital Hill Campus, where students can find a wide array of educational materials, including textbooks, office supplies, reference materials, and UMKC items. Other services include: textbook reservations, textbook buy-backs, graduation fairs, RooTech technology packages, and convenient payment options.

Swinney Recreation Center

Swinney Recreation Center (http://www.umkc.edu/virtualtour/swinney-rec.asp)
5030 Holmes Street
(816) 235-**1556**: Membership
(816) 235-**2712**: Campus Recreation
Fax: (816) 235-**5470**
src@umkc.edu
http://www.umkc.edu/src

Swinney Annex at Hospital Hill
901 East 24th Terrace
(816) 235-**5147**

Director: Marsha Pirtle Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pirtle)

The mission of the Swinney Recreation Center is to encourage personal growth by providing diverse recreational opportunities through quality facilities and services in an environment that promotes respect, lifelong learning, leisure-time activities, and sportsmanship.

Swinney Recreation Center includes the following:

- Stanley E. Durwood Soccer Stadium and Recreation Field
- 1/4-mile outdoor track
- 1/8-mile indoor track
- 25-meter indoor/outdoor pool
- Handball, racquetball and squash courts
- Fitness training center
- Wellness center
- Five multipurpose courts

Swinney offers classes and activities, including aerobics, spinning, yoga, Kinesis, massage therapy, swimming lessons (group or private), SCUBA, and more. Activities and equipment at the Annex include: boxing equipment, cardio equipment, table tennis, Wii, and light weight equipment.

In conjunction with the Swinney Recreation Center, the UMKC Campus Recreation/Intramural Department offers a variety of individual and team sports and programs. Student Intramural Leagues consist of Flag Football, Volleyball, Basketball, Kickball, Softball, and Ultimate Frisbee. Individual tournaments include Table Tennis, Golf Chipping, Three Point Shot, and many others.

All students who have paid the multipurpose fee are eligible to use the center. Student membership in the center runs from the first day of class of the current semester to the first day of class of the following semester. Memberships are also available for other university affiliates and household members.

UMKC Central

UMKC Central
Student Success Center, Level 2
UMKC Central Phone: (816) 235-**6000**
UMKC Central Fax: (816) 235-5076
umkccentral@umkc.edu
http://www.umkc.edu/central

UMKC Central Customer Service Manager: Amber Daugherty

The keystone for the Student Success Center is **UMKC Central**, one convenient location for students to take care of core business transactions in four key areas: Admissions, Cashiers, Financial Aid, and Registration and Records. Our staff members are cross-trained in a variety of functions to help students get answers, information, and meet their academic and financial objectives. Student inquiries are generated electronically, making it easier for our staff members to follow through and ensure students' issues are resolved.

Women's Center

Women's Center
Haag Hall (http://www.umkc.edu/virtualtour/haag-hall.asp), room 105
5120 Rockhill Road
(816) 235-**1638**
Fax: (816) 235-**5522**
womens-center@umkc.edu
http://www.umkc.edu/womenc
http://www.umkc.edu/endviolence

Director: Brenda L. Bethman, Ph.D. Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=bethman)

The mission of the Women's Center at the University of Missouri-Kansas City is to advocate, educate, and provide support services for the advancement of women's equity at the University and within the community at large.

In support of this mission, the Women's Center:

- Facilitates student development through co-curricular experiences that affirm students' identities and foster leadership opportunities;
- Assists the University in achieving its retention goals by offering programming and services that promote student success;
- Recognizes, celebrates, and promotes awareness of the multicultural realities of women's lives, particularly across race, sexual orientation, gender expression and identity, class, age, and abilities;
- Develops women leaders by providing mentoring opportunities and leadership development programs;
- Develops and sponsors programming that enhances the skills of women and assists in their development as students, scholars, and professionals;

- Fosters awareness of the effects of gender roles on women and men;
- Builds alliances and promotes collaboration among University departments and community organizations to utilize existing resources to effectively serve a diverse community of women;
- Promotes the effective and constructive feminist activism of UMKC students, staff, faculty and community members;
- Serves as a resource for the campus and Greater Kansas City communities on issues related to women's lives.

Violence Prevention and Response

The mission of the **Violence Prevention and Response Project** at the University of Missouri-Kansas City is to strengthen the University and community response to gender-based and sexual violence through victim support services, advocacy, training, education, and outreach to the campus and community.
The goals of the Violence Prevention and Response Project are:

- To unify campus resources through the coordination of existing services which address the issues of sexual violence
- To provide a safe place, referrals and information to those affected by sexual violence
- To assess campus needs for information and activities addressing sexual violence
- To participate in the creation and coordination of educational prevention programs about sexual violence

Student Affairs Offices Located in Academic Units

College of Arts and Sciences

Office of Associate Dean for Undergraduate Programs
Scofield Hall (http://www.umkc.edu/virtualtour/scofield.asp), Room 302
711 E. 51 Street
(816) 235-**2534**
http://cas.umkc.edu

Associate Dean: Kati Toivanen contact information (http://www.umkc.edu/lookup/search.cfm?LastName=toivanen)

The associate dean coordinates programs and support to meet curricular and co-curricular needs of undergraduate students.

Staff in the Arts and Sciences Academic Advising Office (9 Scofield Hall) and Program for Adult College Education (PACE, 104 Scofield Hall) provide academic advising to prospective and current students and referrals to faculty advisors, evaluate transfer work and transcripts, monitor degree progress, process class lists, grade rolls, petitions and special requests, conduct graduation degree checks, assist with freshman and transfer orientations, serve as liaisons to other UMKC and community college advising offices and represent the College at other special programs and recruiting events.

Through the dean's office, coordination and support are also provided for numerous areas related to academic programs, including:

- Curriculum and program development.
- Academic standards, grading and appeals.
- Articulation efforts.
- Assessment measures.
- Catalog production.
- Commencement exercises.
- Scholarships.
- First Year Experience program.
- Enrollment management.
- Various recruitment and retention activities.
- High School College Partnerships.

In these efforts, the associate dean and staff work with the College of Arts and Sciences faculty and staff, and also coordinate with other University of Missouri academic programs, community colleges and other student affairs offices, including the Office of Admissions, Registration and Records, Financial Aid and Scholarships, Center for Academic Development, Student Involvement, etc.

Conservatory of Music and Dance

Advising and Admissions Offices
Grant Hall (http://www.umkc.edu/virtualtour/grant.asp), Room 138
5228 Charlotte Street
(816) 235-**2900**
conservatory@umkc.edu

http://conservatory.umkc.edu

The Conservatory's Advising and Admissions offices provide registration assistance, as well as advising, admissions and scholarship information to all prospective, admitted and currently enrolled graduate and undergraduate students. Advising staff assist undergraduate and graduate students with curricular and co-curricular concerns and act as liaisons with other University offices. Information needed to complete the admission or enrollment processes can be obtained in this office.

Henry W. Bloch School of Management

Office of Student Services
Bloch School (http://www.umkc.edu/virtualtour/bloch.asp), Room 115
5110 Cherry Street
(816) 235-**2215**
bloch@umkc.edu
http://www.bloch.umkc.edu

Assistant Dean for Student Services: Kami Thomas contact information (http://www.umkc.edu/lookup/search.cfm?LastName=thomas)

Staff in the Bloch School Student Services office provide academic support to meet the needs of undergraduate and graduate students. Assistance is provided to prospective, admitted and currently enrolled students in the bachelor's of business administration, master's of business administration, master's of public administration, bachelor's of science in accounting, and master's of science in accounting.

Staff provide academic advising and referral to University resources and support services, determine admissibility to various degree programs and assess preparedness for academic work in the Bloch School.

Other services include scholarship administration, graduation degree checks and notification of insufficient academic progress. Student Services staff work with faculty and other staff to coordinate academic policies and procedures, class schedules, room assignments and enrollment information.

School of Biological Sciences

Undergraduate Programs Office
Biological Sciences Building (http://www.umkc.edu/virtualtour/sbs.asp), Room 016
5007 Rockhill Road
(816) 235-**2580**
sbs-undergrad@umkc.edu
http://sbs.umkc.edu

Director of Curriculum: Lynda S. Plamann Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=plamann)

The Director of Curriculum coordinates all student matters for undergraduate students pursuing degrees in the School of Biological Sciences. Advisors in the office provide pre-admissions information, registration advising, information about research opportunities, honors programs, career choices and pursuit of advanced degrees, as well as processing degree checks, add-drops and other procedural matters.

The School of Biological Sciences provides academic advising for all undergraduate students each semester prior to registration. Information and appointments can be obtained by calling (816) 235-**2580**.

Graduate students in the school receive advising and administrative support from the School of Biological Sciences Graduate Programs Office. Students may obtain information from that office by calling (816) 235-**2352**.

School of Computing and Engineering

Office of Student Affairs
534 Flarsheim Hall
(816) 235-**2360**
sce@umkc.edu
http://www.sce.umkc.edu/

The Office of Student Affairs in the School of Computing and Engineering is a valuable resource for both prospective and current SCE students. Information about tutoring, career services, student organizations and teams and scholarships can be obtained by contacting our office.

Both the CME and CSEE departments in the School of Computing and Engineering provide advising and counseling to prospective students who are planning to major in SCE degree programs. In addition both offices enroll all visiting and community students wanting to take courses offered within SCE. Following admission and acceptance into SCE programs, students are assigned a faculty advisor and all SCE students are required to be advised each semester and should contact the department offices for appointments:

Civil and Mechanical Engineering

352 Flarsheim Hall
(816) 235-**5550**
cme@umkc.edu
http://www.sce.umkc.edu/cme

Computer Science Electrical Engineering
546 Flarsheim Hall
(816) 235-**5661**
csee@umkc.edu
http://www.csee.umkc.edu/

Scholarship information for the School of Computing & Engineering can be obtained by visiting http://www.sce.umkc.edu and clicking "SCE Scholarships."

School of Dentistry - Office of Student Programs

Office of Student Programs
Dental School (http://www.umkc.edu/virtualtour/dentalschool.asp), Room 420
650 E. 25th Street
(816) 235-**2080**
dentistry@umkc.edu
http://dentistry.umkc.edu

Assistant Dean for Student Programs: Richie Bigham contact information (http://www.umkc.edu/lookup/search.cfm?LastName=bigham)

The Office of Student Programs (OSP) at the School of Dentistry functions within three primary areas of focus and responsibility: admissions/recruitment, student records and student support services.

Representative services/activities provided by the OSP include identification and counseling of potential applicants, processing applications to the school, registration and maintenance of student records, initial assistance in financial aid and counseling and housing.

The majority of students' needs and services are provided directly by the office. For others, office personnel furnish initial assistance, with subsequent referral to other student affairs offices (e.g., UMKC's Counseling and Testing Center, Career Services, Financial Aid and Scholarships Office, etc.), as necessary. In this regard, the OSP serves as a liaison with these University departments.

The OSP also is responsible for a health careers opportunity program. Through the several components of this program, minority and educationally disadvantaged students interested in dentistry are identified, and their opportunity for enrollment and retention in dental school to the point of graduation is enhanced.

School of Education

Office of Student Services
Education Building (http://www.umkc.edu/virtualtour/education.asp), Room 129
615 E. 52nd Street
(816) 235-**2234**
education@umkc.edu
http://education.umkc.edu

Assistant Dean of Student Services: Christine Timmerman

The School of Education Student Services office mission is to facilitate student success by providing quality services and support in the spirit of building a community of learners. The office is a referral and resource for all students in the School of Education. Primary responsibilities are to provide quality advising for undergraduates and to coordinate the processing of certification. The staff also assists with recruitment events, contact with prospective students, freshmen and transfer orientation, admissions to teacher education, School of Education scholarship materials, commencement and other student-centered activities.

Advising

Academic advisors are available to meet with undergraduate education and pre-education majors and those seeking teacher certification. In addition, all students are assigned a faculty advisor who is available for assistance in program and career planning. Appointments are required.

Certification

Certification applications and testing information for Missouri and Kansas is kept on file in the Student Services office. The staff processes all applications for education-related certification.

School of Graduate Studies

Office of Student Affairs
Administrative Center (http://www.umkc.edu/virtualtour/admincenter.asp), Room 343
5115 Oak Street
(816) 235-5391
graduate@umkc.edu
http://sgs.umkc.edu

Manager of Student Services: Constance Smith Mahone

School of Law

Office of Student Services
School of Law (http://www.umkc.edu/virtualtour/law.asp), Room 1-200
500 E. 52nd Street
(816) 235-**1644**
http://www.umkc.edu/law

Director of Student Services:
Adela Fleming contact information (http://www.umkc.edu/lookup/search.cfm?LastName=fleming)

Director of Law School Career Services:
Jenny Jordan Redix contact information (http://www.umkc.edu/lookup/search.cfm?LastName=redix)

Law School Registrar:
Tina Melville contact information (http://www.umkc.edu/lookup/search.cfm?LastName=melville)

The School of Law is committed to its students' success. This begins with the School's Admissions Office. Along with the Faculty Admissions committee, it endeavors to recruit and admit students who are likely to succeed, are a good "fit" for UMKC and who add to the diversity of the School. Our Registrar is the primary contact for current students, providing assistance with student records, course selection, registration, grades and other matters related to the academic process. She also serves as the students' first contact with the Bar regarding student practice rules and admission to the Bar. The Associate Dean for Students oversees the Registrar and interacts with students regarding academic requirements, application of academic rules and policies, the course schedule and part time and full time status. Every student has a faculty advisor who assists with career development and course planning, and the Associate Dean reviews each students proposed schedule to insure fairness in the course selection process and each students' progress toward the degree.

The School's Director of Student Services works closely with students on matters relating to non-academic counseling, assistance with problems that arise during the year, exam rescheduling, disability accommodation (as liaison to the campus office), and general non-academic support. The Director also works with the School's many student groups and coordinates programs regarding bar admissions, character and fitness screening and the bar exam. She is very accessible to students and is committed to meeting their legitimate needs. Academic support needs of students are addressed by the Director of the Academic Strategies Program, a member of the faculty who oversees the program and provides individual assistance to students in developing effective law school study skills. The School's Laptop Clinic is available to students to assist with their computing needs.

The Career Services Office, staffed by a Director, a Coordinator and an Administrator, assists students in planning their careers and executing their job searches for part-time, summer and permanent employment. The Office presents numerous programs that introduce students to the many areas of practice and non-practice use of the J.D. degree. It runs the on-campus interviewing program and maintains lists of job openings. The Office also coordinates the School's Pro Bono/Public Service Honors Program and its new Solo and Small Firm Incubator.

School of Law students also interface with Campus offices in many areas, including Financial Aid, Cashier, Counseling and Testing, Disabled Student Services and Registrar.

School of Medicine

Office of Student Affairs
School of Medicine, Room M4205
2411 Holmes Street, Dean's Office
(816) 235-**1900**
medicine@umkc.edu
http://research.med.umkc.edu

The School of Medicine's Office of Student Affairs coordinates a variety of support services that are available to all medical students and are in line with the competencies expected of a UMKC School of Medicine graduate. These services include but are not limited to academic and career counseling,

financial planning, personal support, enrichment activities, student events and student organizations and activities. The School of Medicine has at least 25 student organizations and a number of traditions and activities.

Academic Advising

The School of Medicine has a number of personal and academic support systems in place to assist students at all levels of the program. There are two education team coordinators with offices on the Volker campus who help the first- and second-year students in curriculum planning and who are available to counsel them on problems.

Each group of 10-13 students has a physician-scholar (or docent) who instructs the students in medical coursework during the first two years and who also serves as a role model and personal counselor. Additionally 10-12 Year 2 students are selected as peer mentors to the Year 1 class. These students are selected because of their past academic performance and their success in integrating themselves into life at UMKC and the School of Medicine.

From year 3 through year 6, each student is a member of a 12-student team assigned to a docent who teaches and counsels throughout these years of the curriculum. Teams are assigned an education team coordinator to advise about course selection and personal problems in consultation with the docent. In their third and fourth years, students are partnered with older students who serve as senior partners. Additional campus resources are available to students in the areas of counseling and support including the UMKC Counseling and Testing Center. Staff regularly meet with students individually, in class meetings and in multiple orientation settings to discuss relevant and timely policies, processes and resources.

Career Advising

The School of Medicine's career advising staff provide medicine specific guidance to students by meeting with students individually as they develop Curricula Vitae and Personal Statements; advise on career choice, residency selection and interviewing process and maintaining a database of physician specialists in the Kansas City area and elsewhere who are willing to mentor students in their specialty exploration and choice. They provide presentations on how to assess compatibility and 'fit' with different career paths; explore specialty options and make an informed choice; construct curricula vitae and personal statements; research residency programs and prepare to be a competitive applicants; as well as interview skillfully and follow up properly.

Academic Support Services

The School of Medicine provides academic support to all its students. The curriculum provides challenging coursework, and students should explore all opportunities for alternative study methods. Students have the responsibility to become life-long learners and to meet their own and the school's learning goals. The following services are offered:

Support for Basic Science Courses

During the first years the students take several basic science courses and are given as much support as possible. A course called, Learning Basic Medical Sciences is designed to give all students in their first year at the Medical School a core of learning strategies to prevent academic difficulty and to improve higher-order cognitive skills. Course topics surround discussions of learning styles, efficient study techniques and current basic science coursework. Study groups are available in the core basic science courses of the school curriculum. The groups consist of three to five students and a group facilitator/tutor, meeting once or twice a week. Test performance has consistently been enhanced for students actively participating in these groups. Therefore, all medical students are encouraged to participate fully. Study-group leaders are selected on the basis of their own performance in the course, their abilities to communicate course content and the recommendations of course professors.

Lecturers in the School of Medicine provide several support sessions and open office-hours during the week as well as individual appointments for students to attain their learning goals. For many classes the school provides successful senior medical students as tutors. Tutors set meeting times and agenda according to students' needs. Students are also encouraged to take advantage of Supplemental Instruction for courses in which it is offered.

Additional Assistance

Individual assistance is available to medical students through a variety of means. Students may receive individual analysis of their study techniques, including reading comprehension; time management; short- and long-term retention techniques; and test-taking abilities. Analysis of a student's basic science knowledge is available through several computer-assisted programs. If required, individual tutoring may be available to supplement the assistance offered through study-group programs. Counseling support also is available to students with personal issues that may hinder their academic performance.

United States Medical Licensing Exam Step 1 Preparation Students preparing for Step 1 of the USMLE are offered a variety of programs to supplement their individual review of the basic sciences. These programs consist of discussion groups, interactive video review sessions, individual test-taking analysis and a Step 1 mock exam. Some of the programs are free to all students and other involve enrollment in fee-based programming. In addition to academic preparation support, resources are available to help students manage the stress related to their preparation for the exam.

Financial Support

The School of Medicine has a full-time Counselor of Student Finances to assist students and parents in understanding the financing of medical school. This individual provides ongoing financial literacy programming to the student body and can assist students one-on-one with the budget planning process.

Wellness Program

The School of Medicine has a full-time Wellness Program Coordinator who coaches students and serves as a point of referral. In addition to Wellness Planning and Coaching, the UMKC School of Medicine Wellness Program offers a variety of workshops throughout the year.

School of Nursing and Health Studies

Office of Student Services
Health Sciences Building
Hospital Hill Campus
2464 Charlotte Street
(816) 235-**1700**
nurses@umkc.edu
http://nursing.umkc.edu

Director of Student Services: Judy Jellison contact information (http://www.umkc.edu/lookup/search.cfm?LastName=Jellison)

The Office of Student Services at the School of Nursing provides numerous services to meet the needs of current students and individuals desiring admission to the School of Nursing. This office coordinates all activities related to admission, advisement, enrollment, registration, graduation, and other student support services. The office assists students seeking financial aid and scholarship monies.

The Office of Student Services maintains student records for graduates and current students and provides assistance to nursing student organizations. In addition, Student Services personnel provide information to prospective students and the community at large regarding UMKC and the School of Nursing.

School of Pharmacy

Office of Student Affairs
Health Sciences Building
Hospital Hill Campus
2464 Charlotte Street
(816) 235-**1613**
pharmacy@umkc.edu
http://pharmacy.umkc.edu

Associate Dean of Student Affairs: Patricia Marken contact information (http://www.umkc.edu/lookup/search.cfm?LastName=marken)
Director of Student Affairs: Shelly M. Janasz contact information (http://www.umkc.edu/lookup/search.cfm?LastName=janasz)

The Student Affairs Office at the School of Pharmacy provides those essential services that develop, maintain and support currently enrolled undergraduate and professional students, as well as pre-pharmacy students desiring admission to the UMKC School of Pharmacy. The School of Pharmacy offers the Doctor of Pharmacy degree and participates with the School of Graduate Studies offering of the interdisciplinary Ph.D. emphasis areas in pharmaceutical sciences and pharmacology and toxicology.

Student support services include, but are not limited to, academic advising, short-term counseling referral, assistance in identifying scholarships, financial aid, and part-time employment, finding tutorial assistance, records retention, registration and progression, assistance to student organizations with professional projects, certification of graduation completion and enrollment verifications. The Pharmacy Office of Student Affairs works closely with the director of alumni affairs within the School in developing programs that link current students and alumni. Staff and administrators in the office also serve on a number of School and University committees and task forces, and are responsible for drafting reports to pharmacy agencies such as the American Association of Colleges of Pharmacy and the Accreditation Council for Pharmacy Education. In addition, Office staff travel to and participate in recruiting fairs and functions held regionally and state wide, provide summer outreach programs for underrepresented students and host campus visits throughout the year. Staff in the Pharmacy Office of Students Affairs act as advisors for the UMKC Pre-Pharmacy Society and individual Pharm.D. Class Offices.

The Student Affairs office at the School of Pharmacy coordinates activities with other departments in the Division of Student Affairs to provide programs of special interest to pharmacy students. The office also works as a liaison to other academic units and student affairs' departments on campus, as well as state licensing boards. It assists the School of Pharmacy faculty in administering curricular functions, class scheduling, admissions and retention policies and faculty advising.

Several events are sponsored through the office including: the admissions interview process, doctor of pharmacy orientation, professional dedication ceremony, pharmacy career day, graduation awards celebrations and commencement.

Libraries

Administrative Offices, University Libraries
Miller Nichols Library (http://library.umkc.edu), Room 212
800 E. 51st Street
Administration (816) 235-**1531**
Service Desk (816) 235-**1526**
Fax: (816) 333-5584
http://library.umkc.edu/

Dental Library (http://library.umkc.edu/dental)
School of Dentistry (http://dentistry.umkc.edu)
650 E. 25th Street
(816) 235-**2030**
http://library.umkc.edu/dental

Health Sciences Library (http://library.umkc.edu/hsl)
School of Medicine (http://www.med.umkc.edu)
2411 Holmes Street
(816) 235-**1880**
http://library.umkc.edu/hsl

Leon E. Bloch Law Library
School of Law (http://www.law.umkc.edu)
500 E. 52nd Street
(816) 235-**1650**
http://www.umkc.edu/law/library

Mailing Address:
University of Missouri-Kansas City
University Libraries
5100 Rockhill Road
Kansas City, MO 64110-2499

University Libraries Faculty and Staff Directory (http://library.umkc.edu/ulstaff)

Dean of Libraries:
Bonnie Postlethwaite (http://www.umkc.edu/lookup/search.cfm?LastName=postlethwaite)

Director of Strategic Initiatives and Planning:
David Lindahl (http://www.umkc.edu/lookup/search.cfm?LastName=lindahl)

Assistant Director for Administrative Services:
Jennifer L. Eigsti (http://www.umkc.edu/lookup/search.cfm?LastName=eigsti)

Advancement Director:
Mark Mattison (http://www.umkc.edu/lookup/search.cfm?LastName=mattison)

Director of Public Services (Miller Nichols Library):
Cindy Thompson (http://www.umkc.edu/lookup/search.cfm?LastName=thompson)

Head of Resource Sharing:
Jennifer Salvo-Eaton (http://www.umkc.edu/lookup/search.cfm?LastName=salvo)

Head of Circulation Services (Miller Nichols Library):
Mary E. Anderson (http://www.umkc.edu/lookup/search.cfm?LastName=anderson)

Head of Music/Media Library:
Nara Newcomer (http://www.umkc.edu/lookup/search.cfm?LastName=newcomer)

Head of Teaching and Learning Services (Miller Nichols Library):
Diane Hunter (http://www.umkc.edu/lookup/search.cfm?LastName=hunter)

Director of Scholarly Communications:

Brenda L. Dingley (http://www.umkc.edu/lookup/search.cfm?LastName=dingley)

Director of Health Sciences Libraries:
Peggy Mullaly-Quijas (http://www.umkc.edu/lookup/search.cfm?LastName=mullaly)

Dental Librarian
Marie Thompson (http://www.umkc.edu/lookup/search.cfm?LastName=thompson)

Director of Special Collections:
Stuart Hinds (http://www.umkc.edu/lookup/search.cfm?LastName=hinds)

Sound Recording Specialist (Marr Sound Archives):
Chuck Haddix (http://www.umkc.edu/lookup/search.cfm?LastName=haddix)

Director of Collections and Access Management:
Buddy Pennington (http://www.umkc.edu/lookup/search.cfm?LastName=pennington)

Head of Collections:
Steve Alleman (http://www.umkc.edu/lookup/search.cfm?LastName=alleman)

Leon E. Bloch Law Library Staff Directory (http://law.umkc.edu/library/library-staff.asp)

Director, Leon E. Bloch Law Library: Paul D. Callister (http://www.umkc.edu/lookup/search.cfm?LastName=Callister)
Associate Director/Director of InformationTechnologies, Leon E. Bloch Law Library: Michael J. Robak (http://www.umkc.edu/lookup/search.cfm?LastName=Robak)

Description

The University Libraries (http://library.umkc.edu) consist of the Miller Nichols Library, the Health Sciences Library and the Dental Library, and we partner with the Leon E. Bloch Law Library. Our mission states that the University Libraries is an essential partner in empowering intellectual discovery, facilitating scholarship and creative activity, and preserving intellectual and cultural records.

The University Libraries provide research facilities, resources and services in support of academic programs. We partner with the campus Office of Services for Students with Disabilities (http://www.umkc.edu/disability) (OSSD) and are committed to providing services and assistance to all members of the UMKC Community. Information about services for individuals with disabilities (http://library.umkc.edu/disability) can be found on the Web site at http://library.umkc.edu/disability and by calling 816-235-1508 or the Miller Nichols Library Reference Desk at 816-235-1526. The Library accepts calls through the National Relay Service (711) and the Missouri Relay Service (800-735-2966).

The Miller Nichols Library (http://library.umkc.edu) serves primarily the College of Arts and Sciences (http://cas.umkc.edu), the Conservatory of Music and Dance (http://conservatory.umkc.edu), and the schools of management (http://www.umkc.edu/bloch), education (http://www.umkc.edu/education), biological sciences (http://sbs.umkc.edu) and computing and engineering (http://www.sce.umkc.edu). Specialized libraries include; the Leon E. Bloch Law Library (http://law.umkc.edu/library/default.asp) in the School of Law (http://law.umkc.edu), the Dental Library (http://library.umkc.edu/dental) in the School of Dentistry (http://dentistry.umkc.edu), and the Health Sciences Library (http://library.umkc.edu/hsl) located in the School of Medicine (http://med.umkc.edu), and serving the schools of Medicine (http://med.umkc.edu), Nursing & Health Studies (http://sonhs.umkc.edu/scholarships.asp) and Pharmacy (http://pharmacy.umkc.edu). UMKC faculty, students and staff have access to all collections and services, subject to the policies in effect at each library location.

Other Collections:

- Marr Sound Archives (http://library.umkc.edu/marr) (Miller Nichols Library)
- Music/Media (http://library.umkc.edu/Music) (Miller Nichols Library)
- Dr. Kenneth J. LaBudde Special Collections (http://library.umkc.edu/spec-col-home) (Miller Nichols Library)
- The State Historical Society of Missouri (http://shs.umsystem.edu/about/kansascity.shtml) (Research Center-Kansas City - Newcomb Hall)
- University Archives (http://www.umkc.edu/University_Archives) (Newcomb Hall)

Faculty

Ayyoub Ajmi Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ajmi); librarian I; digital communications and learning initiatives librarian, Leon E. Bloch law Library; B.S. (University of Texas in Arlington); M.L.I.S. (University of North Texas - Denton).

Stephen P. Alleman Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=alleman); librarian III; head of collections; B.A. (Tulane University); M.L.S. (Louisiana State University); M.A. (University of New Orleans).

Christine A. Angolia Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=angolia); librarian II; research and liaison librarian; B.A. (Hartwick College); M.P.A. (New York University); M.L.S. (State University of New York, Albany).

Thomas G. Burns Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=burns); librarian II; research and liaison librarian; B.A. (University of Kansas); M.A. (University of Kansas); M.L.S. (Emporia State University).

Paul D. Callister[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=callister); director, Leon E. Bloch Law Library, and professor of law; B.A. (Brigham Young University); J.D. (Cornell Law School); M.S.L.I.S. (University of Illinois at Urbana-Champaign).

Marsha G. Carothers Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=carothers); librarian I; assistant dental librarian; B.A. (University of Missouri-Kansas City); M.A. (University of Missouri-Columbia); M.A. (University of Missouri-Kansas City).

Scott Curtis Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=curtis); librarian III; research and liaison librarian; B.S. (University of Pittsburgh); M.S. (The George Washington University); M.L.S. (Emporia State University).

Brenda L. Dingley Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=dingley); librarian II; director of scholarly communications; B.A. (Indiana University); A.M.L.S. (University of Michigan-Ann Arbor).

Cindi Ernst Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=ernst)**;** librarian II; government documents/reference librarian; Leon E. Bloch Law Library; B.S. (University of Southern Mississippi); M.I.S.L.T. (University of Missouri-Columbia).

Stuart Hinds Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hinds); librarian II; director of special collections; B.A. (University of Missouri-Kansas City); M.A. (University of Iowa).

Tracey Hughes Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hughes); librarian II; dental instructional resources librarian/ reference librarian; B.S. (McPherson College); M.I.S.L.T. (University of Missouri-Columbia); M.A.L.S. (University of Missouri-Kansas City).

Diane K. Hunter Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=hunter); librarian III; head of teaching and learning services; A.B. (Indiana University); M.S. (Georgetown University); M.L.S. (Ball State University).

Chris Le Beau Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lebeau); librarian III; assistant teaching professor and research and liaison librarian; B.A. (Marymount College); M.L.S. (Long Island University); M.B.A. (Creighton University).

David L. Lindahl Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=lindahl); librarian IV; director of strategic initiatives and planning; B.S. (University at Buffalo); M.S. (Rochester Institute of Technology).

Lawrence D. MacLachlan Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=maclachlan); librarian IV; director of research and instructional services, Leon E. Bloch Law Library; B.A., J.D. (Wayne State University); M.L.S. (Catholic University of America).

Peggy Mullaly-Quijas[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=mullaly); librarian III; director of health sciences libraries and adjunct faculty of school of medicine; B.S. (Fordham University); M.L.I.S. (State University of New York at Albany), Ph.D. (Walden University).

Nara L. Newcomer Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=newcomer); librarian III; head of music/media Library; B.A. (Bethany College); M.L.S., M.A. (State University of New York at Buffalo).

Buddy D. Pennington Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=pennington); librarian II; director of collections and access management; B.S., B.S., M.L.S. (University of Missouri-Columbia).

Bonnie Postlethwaite Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=postlethwaite); librarian IV; dean of libraries; B.S.E. (University of Kansas); B.A. (University of Kansas); M.A. (University of Kansas); M.S.L.S. (University of Illinois).

Michael J. Robak Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=robak); librarian III; associate director and director of information technologies, Leon E. Bloch Law Library; A.B. (Wasbash College); J.D. (Indiana University-Indianapolis); M.S.L.I.S. (University of Illinois at Urbana-Champaign).

Sandy Rodriguez Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=rodriguez); librarian II; special collections metadata librarian; B.M.M.E., M.S.L.S. (University of Kentucky).

Jennifer R. Salvo-Eaton Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=salvo); librarian I; head of resource sharing; B.A. (University of Iowa); M.L.S.I.S. (Long Island University).

Susan U. Sanders Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sanders); librarian III; clinical medical librarian/reference librarian; B.A. (Montclair State University); M.L.S. (Emporia State University); MEd (University of Missouri-Columbia).

Kathleen A. Schweitzberger Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=schweitzberger); librarian III; head of metadata and cataloging; B.S. (University of Kansas); M.L.S. (Emporia State University); M.P.A. (University of Missouri-Kansas City).

Wendy A. Sistrunk Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sistrunk); librarian III; head of special formats metadata and cataloging; B.M. (Kansas State University); M.M. (Arizona State University); M.S. (Simmons College).

Marlene B. Smith Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=smith); librarian II; Medical School multimedia learning lab manager; B.A. (University of Missouri-Kansas City); M.A. (University of Missouri-Columbia).

Nancy D. Stancel Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=stancel); librarian IV; director of technical services, Leon E. Bloch Law Library; B.S. (Florida Atlantic University); M.A.L.S. (University of Missouri-Columbia); Ph.D. (University of Missouri-Kansas City).

Kristy E. Steigerwalt Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=steigerwalt); librarian II; clinical medical librarian; Pharm.D. (University of Missouri-Kansas City0; M.L.S. (University of Missouri-Columbia).

Susan Sykes Berry[1] Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=sykes%20berry); librarian III; health sciences library instruction reference librarian and adjunct faculty of school of nursing; B.S. (University of Florida); M.A. (University of Iowa); M.A. (University of Missouri-Kansas City).

Cynthia Marie Thompson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Thompson); librarian II; director of public services; B.A. (William Jewell College); M.A. (University of Missouri-Columbia).

Marie Thompson Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=thompson);librarian II; dental librarian; B.A. (University of Missouri Kansas City);M.A. (University of Missouri-Columbia)

Gloria L. Tibbs Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=Tibbs); librarian II; teaching and learning services librarian; B.A., M.L.S. (Emporia State University).

Fu Zhuo Contact Information (http://www.umkc.edu/lookup/search.cfm?LastName=zhuo); librarian III; research and liaison librarian; B.A., M.A. (Wuhan University); M.ED. (University of Western Ontario); M.L.I.S. (University of Alberta).

1 Associate or Adjunct Graduate Faculty

2 Members of UMKC Graduate Faculty

3 Members of UMKC Doctoral Faculty

4 Located at UM-St. Louis campus

Leon E. Bloch Law Library

(816) 235-**1650**
http://www.umkc.edu/law/library
The Leon E. Bloch Law Library (http://www.umkc.edu/law/library) is a comfortable, efficient and user-friendly facility located in the School of Law at 52nd and Oak streets and open to both students and members of the public. All UMKC students may check materials out with a current student ID.
The library contains holdings in all major areas of legal scholarship and practice, including international, comparative and government materials. Most of the collection is on open shelves, with ample research and study space provided by tables and study carrels, and dedicated work space provided for student editors of the UMKC Law Review and the Urban Lawyer.
The library has highly qualified reference librarians with many years of legal practice as well as library experience. Reference librarians are available during the regular semester as follows:
Monday - Thursday 9 a.m. - 7 p.m.
Friday 9 a.m. - 5 p.m.
Sunday 3 p.m. - 7 p.m.
However, please note that access to the library is restricted after 7:00 p.m. to law students and faculty. Exceptions may be made for other students needing to do research, on a case-by-case basis.
The physical collection is augmented by subscription databases, an international interlibrary loan system, and a state-wide lending consortium, including the university and law libraries of the University of Missouri - Columbia, Saint Louis University and Washington University, with 18 million items held within the state-wide system.

Electronic Resource Center

Technology has reshaped legal research in ways that will forever alter how attorneys and judges approach their work. The information professionals of the Leon E. Bloch Law Library (http://www.umkc.edu/law/library) have embraced this transformation by providing wireless networking throughout the law building and the Jerry Haley Electronic Resource Center (JHERC). The JHERC includes 40 Pentium-processor equipped computers, an instructional lab, Internet access, and numerous subscription databases.
The lab also includes printers, a scanner and a dedicated workstation for the visually impaired. Librarians provide instruction in legal information technologies during the first-year legal research and writing course, at a special research "boot camp" during spring intersession, and in upper-level courses and extra-curricular activities as needed.

Law Library and Resource Center Hours

Monday - Thursday 7 a.m. - Midnight
Friday 7 a.m. - 7 p.m.
Saturday 9 a.m. - 5 p.m.
Sunday Noon - Midnight
However, please note that access to the library is restricted after 7:00 p.m. to law students and faculty. Exceptions may be made for other students needing to do research, on a case-by-case basis. Summer, spring break and intersession hours are available at http://law.umkc.edu/library/hours.asp.

Special Notices

- Academic Honesty and Student Code of Conduct
- Acceptable Use Policy (p. 828)
- Equal Opportunity Guidelines and Procedures (p. 829)
  - Guidelines on Sex Discrimination (p. 829)
  - Guidelines on Discrimination on the Basis of Religion or National Origin (http://catalog.umkc.edu/special-notices/equal-opportunity-guidelines/guidelines-on-discrimination-on-basis-of-religion-national-origin)
  - Guidelines on Sexual Harassment (p. 830)
  - Minimum Standards of Progress for Veterans (p. 830)
- Notice of Nondiscrimination
- Policy on Positive Work and Learning Environment (p. 836)
- Policy on Student Records (p. 837)
- School Honor Codes (p. 837)
  - School of Dentistry Honor Codes (p. 837)
  - School of Law Honor Codes (p. 838)
  - School of Medicine Honor Codes (p. 843)
  - School of Nursing Honor Codes (p. 851)
  - School of Pharmacy Honor Codes (p. 858)
- Statement of Human Rights
- Student's Right-To-Know
- Telecommunications Services for the Speech and Hearing Impaired (p. 865)
- UMKC AIDS Policy Statement

Academic Honesty and Student Code of Conduct

The Board of Curators of the University of Missouri recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. Academic dishonesty, including cheating, plagiarism or sabotage, is adjudicated through the University of Missouri Student Conduct Code (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct) and Rules of Procedures in Student Conduct Matters (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.020_rules_of_procedures_in_student_conduct_matters).

There are also academic honor codes in the schools of pharmacy, dentistry, medicine, nursing and law.

- School of Pharmacy Honor Codes
- School of Medicine Honor Codes (p. 843)
- School of Dentistry Honor Codes (p. 837)
- School of Nursing and Health Studies Honor Codes (p. 851)
- School of Law Honor Codes (p. 838)

Acceptable Use Policy

(110.005 Acceptable Use Policy; Bd. Min. 9-14-00.)

This policy is also available at http://www.umsystem.edu/ums/rules/collected_rules/facilities/ch110/110.005_acceptable_use_policy.

This policy applies to all users including faculty, staff, students, and guest users of University of Missouri computer networks, equipment, or connecting resources.

1. **University Inspection of Personal Electronic Information**
   Electronic information on University networks or equipment, including, but not limited to, electronic mail and personal information, is subject to examination by the University where:
   a. It is necessary to maintain or improve the functioning of University computing resources;
   b. Where there is a suspicion of misconduct under University policies, or suspicion of violation of Federal or State laws; or
   c. It is necessary to comply with or verify compliance with Federal or State law.
2. **Acceptable Use Guidelines**

a. Responsibilities of Users of University Computer Resources:
   i Respect the intellectual property rights of authors, contributors, and publishers in all media.
   ii Protect user ID, password, and system from unauthorized use.
   iii Adhere to the terms of software licenses and other contracts. Persons loading software on any University computer must adhere to all licensing requirements for the software. Except where allowed by University site licenses, copying software licensed for University use for personal use is a violation of this policy.
   iv Adhere to other University and campus policies, including the Collected Rules and Regulations of the University of Missouri, and, if applicable, the University Business Policy Manual, Human Resources Manual and policies established for a specific resource.
   v Adhere to data access policies of the University or those established by law.
   vi Use University computer resources in a manner that is compliant with University policies and State and Federal law.

b. Prohibited Uses of University Computer Resources:
   i Unauthorized or excessive personal use. Use may be excessive if it overburdens a network, results in substantial use of system capacity, or otherwise subjects the institution to increased costs or risks (employees additionally may be subject to discipline for unauthorized or excessive personal use of computer resources).
   ii Uses that interfere with the proper functioning of the University's information technology resources.
   iii Uses that unreasonably interfere with the ability of others to make use of University computer resources.
   iv Attempting to gain or gaining unauthorized access to the computer system, or files of another.
   v Use of University computer resources to infringe the intellectual property rights of others.
   vi Use of University computer resources for personal profit, except as permitted under the University's conflict of interest policy.

3. **Enforcement of Acceptable Use Policy**
   Violation of the Acceptable Use Policy may result in a denial of access to University computer resources, and those disciplinary actions provided or authorized by the Collected Rules and Regulations of the University of Missouri.
   Students who violate these guidelines will be subject to sanctions as outlined in section 200.010 (http://www.umkc.edu/umkc/catalog/html/append/policy/conduct.html) of the Student Conduct Code. All such cases will be forwarded to the Primary Administrative Officer in the Student Life Office for appropriate action.
   Faculty or staff who violate these guidelines will be subject to disciplinary measures as outlined within the University Policy Manuals.
   Violations of some of the above guidelines may constitute a criminal offense. Individuals using UMKC computing resources are urged to review the University Policy Manual, Computer Crimes Bill passed by the Missouri State Legislature (http://www.umkc.edu/is/cio/policy/mo-crime.html) and the MOREnet Acceptable Use Policy (http://www.more.net), all of which are stored on-line for easy access.

Equal Opportunity Guidelines

The University of Missouri – Kansas City (UMKC) has established policies and programs of equal opportunity that provide access and opportunity to all. It is the fundamental policy of UMKC to provide equal opportunity regardless of race, creed, color, sex, sexual orientation, national origin, age, Veteran status or disability status in all education, employment and contracted activities.

The Affirmative Action office is responsible for coordinating UMKC's Affirmative Action and Equal Opportunity program, monitoring the University's compliance with federal and state laws, regulations and the investigation of discrimination and harassment complaints by students, faculty and staff against University employees. Additional information may be found on the Affirmative Action website: http://www.umkc.edu/HR/Affirmative-Action/AAP.asp.

Guidelines on Sex Discrimination

Sex Discrimination, Harassment, and Assault

Title IX of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads:

" No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal Financial Assistance" -Title IX of the Education Amendments of 1972, and its implementing regulations at 34 C. F. R. Part 106.

Sex discrimination includes sexual harassment, assault, and/or violence.

Title IX is often thought of as the law that applies to athletic programs, Title IX is much broader than Athletics and applies to many programs at UMKC.

While compliance with the law is everyone's responsibility at UMKC, you can find a list of staff members below who have primary responsibility for Title IX compliance.

UMKC Title IX Coordinators/Deputy Coordinators (http://www.umkc.edu/hr/TitleIX/Title_IX_Coordinators.asp)

Guidelines on Sexual Harassment

(Executive Order No. 20, 3-17-81; 330.060 Sexual Harassment; Bd. Min. 3-18-93.)

This policy is also available at http://www.umsystem.edu/ums/rules/collected_rules/personnel/ch330/330.060_sexual_harassment.

This University of Missouri policy aims for an increased awareness regarding sexual harassment by making available information, education and guidance on the subject for the University community.

1. **Policy Statement**
   It is the policy of the University of Missouri, in accord with providing a positive, discrimination-free environment, that sexual harassment in the work place or educational environment is unacceptable conduct. Sexual harassment is subject to discipline, up to and including separation from the institution.
2. **Definition**
   Sexual harassment is defined for this policy as either
   a. Unwelcome sexual advances or requests for sexual activity by a University employee in a position of power or authority to a University employee or a member of the student body, or
   b. Other unwelcome verbal or physical conduct of a sexual nature by a University employee or a member of the student body to a University employee or a member of the student body, when:
      i Submission to or rejection of such conduct is used explicitly or implicitly as a condition for academic or employment decisions; or
      ii The purpose or effect of such conduct is to interfere unreasonably with the work or academic performance of the person being harassed; or
      iii The purpose or effect of such conduct, to a reasonable person, is to create an intimidating, hostile, or offensive environment.
3. **Non-Retaliation**
   This policy also prohibits retaliation against any person who brings an accusation of discrimination or sexual harassment or who assists with the investigation of sexual harassment. Notwithstanding this provision, the University may discipline an employee or student who has been determined to have brought accusation of sexual harassment in bad faith.
4. **Redress Procedures**
   Members of the University community who believe they have been sexually harassed may seek redress, using the following options:
   a. Pursue appropriate informal resolution procedures as defined by the individual campuses. These procedures are available from the campus Equal Opportunity/Affirmative Action Officer.
   b. Initiate a complaint or grievance within the period of time prescribed by an applicable grievance procedure. Faculty are referred to Section 370.010, "Academic Grievance Procedures"; staff to Section 380.010, "Grievance Procedure for Administrative, Service and Support Staff" and students to Section 390.010, "Discrimination Grievance Procedure for Students". Pursuing a complaint or informal resolution procedure does not compromise one's rights to initiate a grievance or seek redress under state or federal laws.
5. **Discipline**
   Upon receiving a charge of sexual harassment against a member of faculty, staff, or student body, the University will investigate and, if substantiated, will initiate the appropriate disciplinary procedures. There is a five year limitation period from the date of occurrence for filing a charge that may lead to discipline. An individual who makes an accusation of sexual harassment will be informed:
   - At the close of the investigation, whether or not disciplinary procedures will be initiated; and

Minimum Standards of Progress for Veterans

Veterans Affairs regulations require that all veterans drawing VA educational benefits at UMKC must comply with the Veterans Affairs Minimum Standards of Progress. These standards dictate that the veteran must be making satisfactory progress toward a degree while enrolled. The University's academic and probation policies have been approved by the Veterans Affairs as those Minimum Standards of Progress.

Undergraduate Student

Undergraduate degree-seeking students' academic status is assessed at the end of every term, whether the student is full-time or part-time for that term. A summer session is considered the same as a semester for the purpose of the following regulations:

1. In general, students will be placed on academic probation whenever their official UM grade-point average falls below 2.0 (C average). Some academic units may have a higher grade-point average requirement. New freshman admitted to UMKC on the basis of high school records, who have grade-point averages between 1.50 and 1.99 at the end of the first semester of either full- or part-time study will be placed on academic

warning. Students on academic warning must achieve an overall C average by the end of their second semester or be placed on regular probation. They then would be subject to the regular probation requirements.

2. Students on academic probation will be restored to good standing when their UM grade-point average reaches 2.0 or the GPA level established by their academic units.
3. Students on academic probation must maintain the grade-point average required by their academic units during each subsequent semester or summer session while on probation. Otherwise, they are ineligible to re-enroll without the approval of the academic units.
4. Students on academic probation must remove themselves from probation within three successive semesters (including the semester in which they originally were placed on probation). Otherwise, they are ineligible to re-enroll without the approval of the academic units.
5. Students are responsible for knowing their academic status by referring to the term grade reports and their permanent academic records in the UMKC Records Office.

Graduate and Professional Students

Because there may be some variation in the academic and probation policies in the various graduate and professional schools within the University, reference should be made to the appropriate sections in this catalog.

Conduct

Institutional policy relating to conduct for veteran students is the same as for all other students. Statement of requirements is shown elsewhere in this catalog.

Student Records

Adequate records are kept by the school to show the progress of each eligible veteran. The records are sufficient to show continued pursuit at the rate for which enrolled and the progress being made.

These records include the final grade in each subject completed and a record of the date of withdrawal from any class the veteran does not complete. The last date of attendance must be reported to the Veterans Affairs.

No veteran will be considered to have made satisfactory progress when the veteran fails all subjects undertaken except with a show of mitigating circumstances, when enrolled in two or more unit subjects. This is immediately reported to Veterans Affairs. The determination for the continuance of benefits is made by the regional office of the Veterans Affairs.

Discrimination Grievance Procedure for Students

(390.010 Discrimination Grievance Procedure for Students; Bd. Min. 12-17-82, Bd. Min. 1-25-90, Amended Bd. Min. 10-16-03)

This policy is also available at http://www.umsystem.edu/ums/rules/collected_rules/grievance/ch390/grievance_390.010.

1. **General**
   a. It is the policy of the University of Missouri to provide equal opportunity for all enrolled students and applicants for admission to the University on the basis of merit without discrimination on the basis of their race, color, religion, sex, sexual orientation, national origin, age or disability, or Vietnam era veteran status. Sexual harassment shall be considered discrimination because of sex. This policy shall not be interpreted in such a way as to violate the legal rights of religious organizations or military organizations associated with the Armed Forces of the United States of America.
   b. To insure compliance with this policy, all University of Missouri prospective or enrolled students shall have available to them this student discrimination grievance procedure for resolving complaints or grievances regarding alleged discrimination.
   c. This grievance procedure neither supersedes nor takes precedence over established University procedures of due process for any and all matters related to Academic Dishonesty, Grade Appeals, Traffic Appeals, Disciplinary Appeals, or other specific campus procedures which are authorized by the Board of Curators and deal with faculty/staff responsibilities.
   d. These proceedings may be terminated at any time by the mutual agreement of the parties involved. **Note:** A grievance concerning specific incidents filed under this discrimination grievance procedure shall not be processed on behalf of any student who elects to utilize another University grievance procedure. In addition, the filing of a grievance under these procedures precludes the subsequent use of other University grievance or appeals procedures for the same incident.
2. **Definitions**
   a. A complaint is an informal claim of discriminatory treatment. A complaint may, but need not, constitute a grievance. Complaints shall be processed through the informal procedure herein set forth.
   b. A Grievance is the written allegation of discrimination which is related to:
      i Recruitment and admission to the institution.
      ii Admission to and treatment while enrolled in an education program.
      iii Employment as a student employee on campus.

iv Other matters of significance relating to campus living or student life, including, but not limited to: assignment of roommates in resident halls; actions of fraternities and sororities; membership in or admission to club/organizations; student health services; and financial aid awards.

c. A student is any person who has applied for admission or readmission, or who is currently enrolled, or who was a student of the University of Missouri at the time of the alleged discrimination.

d. Persons with disabilities--For the purpose of this student discrimination grievance procedure, a "person with a disability" has been substituted for "handicapped individual" (Section 504, Rehabilitation Act of 1973) and shall be defined as ". . . any person who:

i Has a physical or mental impairment which substantially limits one or more of such person's major life activities;

ii Has a record of such impairment; or

iii Is regarded as having such an impairment." For purpose of this definition, "major life activity" means any mental or physical function or activity which, if impaired, creates a substantial barrier to employment or education. Any reference in this document to written materials or to written or oral presentations within the student discrimination grievance procedure may be adjusted to accommodate persons with disabilities for whom the stated materials or required presentations would not be appropriate. Cost of such accommodation will be borne by the University, with no charge to the individual.

e. Appropriate Administrative Officer -- The primary administrative officer on the staff of the Chancellor (in the area of Student Affairs/Services, Administrative Services, Development, and Academic Affairs) having administrative responsibility for the unit in which the discrimination is alleged to have occurred.

f. Grievance Consultant -- At any step the Director of Equal Opportunity or of Affirmative Action may be asked to serve as a consultant by any of the parties involved in this grievance procedure.

3. **Complaints**

a. Policies and Procedures -- A student with a complaint will be provided with copies of appropriate policies and procedures pertaining to student complaints and grievances, and the Chief Student Personnel Administrator or his/her designee and the Officer for Equal Opportunity/ Affirmative Action shall be available to assist the student in understanding the opportunities afforded through such policies and procedures. The student may choose to have an advisor participate in any stage of the grievance procedures, subject to the restrictions of the hearing procedures set forth in Section 390.010 F.

b. Joint Complaint -- If more than one student is aggrieved by the same action, these students may, by mutual written agreement among themselves, file with the Chief Student Personnel Administrator a complaint and pursue their complaints jointly under this grievance procedure. If the number of students in such a case is so large as to make it impractical for them to be heard individually in a joint proceeding, they may, by mutual agreement, elect one or more of their number to act on behalf of them all.

c. Students may informally discuss a complaint with the relevant supervising administrator. Every reasonable effort should be made to resolve the matter informally at this administrative level. If a satisfactory resolution is not reached, the student may pursue the matter through each level of administrative jurisdiction up to and including the Appropriate Administrative Officer, or file a grievance within the time specified in D.1.b.

d. Complaints Involving Recruitment

i Undergraduate applicants must first present complaints about recruitment to the Director of Admissions. If a satisfactory resolution is not reached, the applicant may appeal the matter to the immediate supervising officer of the Director of Admissions.

ii Applicants for graduate study may request a meeting with the academic department head and the Dean of the College, or their designees, who are actually involved in the recruitment effort to discuss the matter informally. If a satisfactory resolution is not reached, the applicant may appeal to the Dean of the Graduate School and finally to the Appropriate Administrative Officer.

e. Complaints Involving Admissions (Undergraduate or Professional)

i Undergraduate and professional student applicants shall present complaints to the Director of Admissions or to the Dean of the School or College, depending upon where the application was originally filed.

ii This University official shall compare the person's academic qualifications against the official University admissions criteria and review the denial. If the denial is sustained, the applicant may appeal this decision to the official's immediate supervisor or to the appropriate admissions committee.

f. Complaints Involving Admissions (Graduate) -- Applicants to the Graduate School may ask for a meeting with the academic department head of the program to which the applicant was seeking admission. This official shall explain the reasons for the denial of recommendation for admission. If a satisfactory resolution is not reached, the applicant may then appeal to the Dean of the Graduate School or to the appropriate admissions committee. If the denial is upheld, the applicant may appeal the decision to the appropriate administrative officer.

g. Complaints Involving Admissions to or Treatment in an Educational Program or in the Granting of Assistantships -- An undergraduate or graduate student enrolled at the institution who has a discrimination complaint involving admission to or treatment in an educational program or in the granting of assistantships may request a conference with the appropriate department head and with the Dean of the School or College (or the Dean's designee) to discuss the matter informally. If a satisfactory resolution is not reached, the student may present a grievance pursuant to Section 390.010 F.

h. Complaints Involving Non-academic Matters Related to Campus Living and Student Life -- A currently enrolled student who has a University-related complaint concerning discrimination in non-academic matters including but not limited to assignment of roommates, actions of fraternities and sororities, membership in or admission to clubs/organizations, student health services and financial aid awards, may request

a conference with the appropriate administrative supervisor, department head or director to discuss the matter informally. If a satisfactory resolution is not reached, the student may present a grievance pursuant to Section 390.010 D.

i. Complaints Involving Student Employment on Campus -- A student enrolled at the University who alleges that discrimination occurred either in applying for work or while working as a student employee at a University job may request a conference with the supervisor, department head or director of the employing unit to discuss the matter informally. If a satisfactory resolution is not reached, the student may present a grievance pursuant to Section 390.010 D.

j. Complaints Involving Financial Aid (Undergraduate, Graduate, Professional):
   - i Undergraduate, graduate and professional student aid applicants shall present complaints to the Director of Student Financial Aid where the application was originally filed or the award originally made.
   - ii This University official shall compare the person's financial and academic qualifications against the official University financial aid criteria and review the award amount or denial of the aid. If the original judgment is sustained, the applicant may appeal this decision to the official's immediate supervisor or to the appropriate financial aid committee.

4. **Initiating a Grievance**
   a. Policies and Procedures -- A student with a grievance will be provided copies of appropriate policies and procedures pertaining to student complaints and grievances, and the Chief Student Personnel Administrator or designee, and the Officer for Equal Opportunity/Affirmative Action, shall be available to assist the student in understanding the opportunities afforded through such policies and procedures. The student may choose to have an advisor participate in any stage of the grievance procedure, subject to the restrictions of the hearing procedures set forth in Section 390.010 F.
      - i Joint Grievance -- If more than one student is aggrieved by the same action, these students may, by mutual written agreement among themselves, file with the Chief Student Personnel Administrator a grievance and pursue their grievances jointly under this grievance procedure. If the number of students in such a case is so large as to make it impractical for them to be heard individually in a joint proceeding, they may, by mutual agreement, elect one or more of their number to act on behalf of all of them.
      - ii Regardless of their nature, all discrimination grievances are to be filed with the Chief Student Personnel Administrator. A grievance must have been filed by a student within one-hundred-eighty(180) calendar days of the date of the alleged discriminatory act.

   b. Filing a Grievance
      - i All grievances must be presented in writing and contain the following information:
        1. A clear concise statement of the grievance which includes the name of the person(s) against whom the grievance is made, the date(s) of the alleged discrimination and a statement describing the specific supporting evidence;
        2. A brief summary of the prior attempts to resolve the matter, which includes the names of persons with whom the matter was discussed, and the results of those previous discussions;
        3. A specific statement of the remedial action or relief sought.
      - ii Within seven (7) working days, the original grievance form with an explanation will be returned to the student if, in the judgment of the Chief Student Personnel Administrator, the statements are vague or do not meet the above requirement. The student may make the necessary corrections and resubmit the grievance within seven (7) days.

   c. Any grievance not filed within the time limits specified in Section 390.010 D.1.b shall be deemed waived by the grievant. The Chief Student Personnel Administrator may extend the time limits only if adequate cause for an extension of the time limits can be shown by the student.

   d. For informational purposes, copies of the grievance shall be forwarded to the Appropriate Administrative Officer and the Director of Equal Opportunity/Affirmative Action.

   e. Within fifteen (15) working days of receipt of a grievance that satisfies the requirement of Section 390.010 D.l.b, the Appropriate Administrative Officer, with the consent of the parties involved, may establish an informal hearing with the aggrieved student, the responding faculty/staff/organization, the respondent's supervisor and the Appropriate Administrative Officer's designee. The Appropriate Administrative Officer shall not involve himself/herself in this meeting. If the informal means of resolving the grievance fails, a grievance committee will be impaneled as called for in Section 390.010 E.1.

5. **Formation of a Grievance Committee**
   a. It is the Appropriate Administrative Officer's responsibility to initiate the selection of the grievance committee within fifteen (15) working days after the request for the formation of a grievance committee, or after the completion of the informal hearing provided for in Section 390.010 F.5 without satisfaction to the grievant.

   b. A grievance hearing panel shall be established by October 1 of each year from which a grievance committee should be constituted. The panel shall consist of ten (10) faculty, ten (10) staff and ten (10) students. Selection of the panel will be made by the Chief Student Personnel Administrator from recommendations by the appropriate faculty, staff and student associations. Selection of membership will consider sex, race, disability, academic rank, student classification and employee classification. Membership on the hearing panel shall be for two years. A member's term shall expire on September 30 of the second year unless he/she is serving at that time on a hearing committee still in the process of reviewing an unresolved grievance. In such case, the member's term shall expire as soon as the committee has submitted a written report of its findings and recommendations to the Appropriate Administrative Officer.

   c. A hearing committee shall be composed of five (5) members. The grievant shall select two (2) members from the grievance hearing panel provided by the Chief Student Personnel Administrator. The responding faculty/staff/organization shall select two (2) members from the grievance hearing panel. Both parties should have their selections made within 15 working days of the receipt of the request. The four committee members shall then select an additional member from the grievance hearing panel to serve as chair. Neither members of the

immediate departmental unit nor student members of pertinent student organizations involved in the grievance shall be eligible to serve on the committee.

d. Any person selected to a grievance committee will be expected to serve on such committee and to be present at all sessions. If a member is absent from a single session, that person will be required to review all tapes or transcribed proceedings of that session prior to the next meeting of the committee. Should a member be absent from two sessions or should a member request to be excused from service for reasons of illness, necessary absence from the campus or other hardship, then the member shall be replaced in the same manner used in the original selection (see Section 390.010 E.3). If a member is unable or ineligible to serve for whatever reason, the replacement shall review all tapes or written transcripts and all submitted evidence prior to service on the committee. Five members of the hearing committee, duly selected as in Sections 390.010 E.3 and E.4 must attend the opening and closing session of the hearing.

6. **Hearing Procedures for Formal Grievances**

a. It shall be the responsibility of the Appropriate Administrative Officer to coordinate the procedures contained herein, to make provisions for hearing rooms, to coordinate secretarial and recording services and to otherwise serve the grievance committee as needed.

b. At the first organizational meeting of the grievance committee, the committee shall elect a chairperson from among the members to preside over subsequent meetings. Then the chairperson shall schedule a hearing at the earliest convenient time when all affected parties can be present.

c. A quorum consists of a minimum of four members of the committee except as provided by Section 390.010 E.4.

d. The grievance committee shall invite the grievant and the responding person to all hearings. Attendance at the hearings shall be limited to persons who have an official connection with the case as determined by the chairperson. The grievant and the responding person may choose to be accompanied by an advisor. Others whose participation in the hearing is considered essential in order to assist the committee in establishing the facts of the case shall appear before the committee only long enough to give testimony and to answer questions of committee members.

e. It is within the duties and responsibilities of all members of a grievance committee to commit themselves to observe procedures consistent with fairness to all parties concerned. For example, it is a matter of principle that members of the grievance committee will not discuss a case with anyone outside of the hearing process and that their finding will not be influenced by anything other than the evidence presented to them in meetings in which all affected parties are present.

f. The grievance committee shall set forth the rules of procedure for the hearing within the guidelines set forth herein. The chairperson may, for good cause and with the concurrence of a majority of the entire committee, authorize deviation from the suggested format, in which case the principal parties shall be notified.

   i The grievant shall be heard first in all phases of a grievance hearing and shall be primarily responsible for the presentation of his/her position.

   ii The advisor of the grievant or respondent may advise that person and may briefly explain his or her position but shall not be permitted to testify or to cross-examine.

   iii A reasonable time limit should be established for opening and closing statements and shall be announced prior to the hearing.

   iv Length of hearing sessions may be established in advance; every effort should be made to conduct the hearing as expeditiously as possible, with equal fairness to both parties.

   v The interested parties shall provide the chairperson with the names of the advisor and potential witnesses at least forty-eight (48) hours prior to the hearing. It is the responsibility of the interested party, working with the chairperson, to ensure the presence of these individuals in a timely manner.

   vi After initial witnesses for both parties have been heard, such witnesses may be recalled for additional questioning if requested by either party or the grievance committee. The committee may call new witnesses whose testimony it deems relevant or helpful.

   vii In order to promote the truthful, unfettered exchange of information and ideas, all testimony pertaining to the grievance hearing shall be held in confidence.

   viii Only evidence relevant to the grievance may be introduced. Questions regarding the admissibility of evidence shall be decided by the chairperson.

g. At any point in the proceedings prior to the time at which the committee reaches its final decision, the grievant may withdraw any portion or all of the grievance with the consent of a majority of the committee members and of the respondent. In all cases of withdrawal at the consent of the committee and of the respondent, the grievant shall not have the privilege of reopening the same grievance at any time in the future. In the event that the student refuses to participate further in the committee hearing, the committee may choose to continue the case or to move to closure with an appropriate closing statement as per Section 390.010 F.9.

h. A confidential tape recording of the grievance hearing shall be made and will be accessible to the parties involved, the committee, the Appropriate Administrative Officer, the Chancellor, the President, members of the Board of Curators and authorized representatives on a need-to-know basis. Either party to the grievance may request that the committee provide a written transcript of testimony. The cost of preparation of such a transcript is to be paid by the party making such request unless Section 390.010 B.4 is applicable. After the report of the grievance committee has been prepared, the tapes and relevant materials will be sealed and filed in the Appropriate Administrative Office. Unless extraordinary circumstances apply, these materials will be destroyed at the end of five years.

i. At the conclusion of the grievance hearing, the members of the grievance committee shall meet in closed session to deliberate upon their findings. A majority vote of the entire committee shall be required on all decisions. The grievance committee shall make a written report on

findings and recommendations to the Appropriate Administrative Officer of the University, with copies to the grievant(s) and the responding person(s). The written report will contain:

i A statement of the purpose of the hearing,

ii Issues considered,

iii A summary of the testimony and other evidence presented,

iv Findings of fact as developed at the hearing, and

v Recommendations for final disposition of the case.

j. The Appropriate Administrative Officer will make his/her decision. This decision and the actions that have been taken shall be presented to both parties in writing. If the administrative officer does not accept the recommendations of the grievance committee, a written statement of the reasons for so ruling must be given to both parties and to the chairperson of the committee.

k. If requested by the grievant or the responding party, normally within seven (7) calendar days of the notification of the decision, the decision of the Appropriate Administrative Officer may be subject to a review of the records by the Chancellor. Any review and decision by the Chancellor shall be made normally within thirty (30) calendar days. The decision of the Chancellor can be appealed to the President, who shall have thirty (30) calendar days in which to make a decision, which shall be final.

l. Grievances shall receive prompt attention. The hearing and the report of the grievance committee shall normally be completed within sixty (60) calendar days of the formation of the grievance committee, and a final decision shall be made by the Appropriate Administrative Officer normally within ten (10) calendar days thereafter. In any case in which these time schedules should prove to be inadequate, the committee shall present, in writing, an amended time schedule to all parties involved.

Student Discrimination Grievance Procedure Form

(Use additional sheets if needed)

1. Your Name:
   Check One: Male____ Female____
   Student I.D. No.:
   Mailing Address:
   City, State, Zip Code:
   Telephone:
2. Submitted to (Campus specific title for Chief Student Personnel Administrator):
   On (Month/Day/Year):
3. The basis for the grievance is alleged discrimination on the basis of (Race/Color/Religion/Sex/National Origin/Age/Disability):
4. University official or unit against whom this grievance is filed (Name/ Department):
5. Explain in a clear and detailed statement the following:
   a. The nature of the grievance and a description of specific supporting evidence:
   b. The specific remedial action or relief sought:
      For grievances alleging discrimination to admission and/or treatment while enrolled in an educational program, employment on campus, or other matters of consequence relating to campus living or activities.
   c. A summary outlining with whom the point(s) of dissatisfaction were discussed and with what results:
6. Date you consider the "Informal discussion" ended:
   I HAVE READ AND UNDERSTAND THE ABOVE GRIEVANCE FORM AND GRIEVANCE PROCEDURE FOR STUDENTS.
   THIS GRIEVANCE I AM FILING IS TRUE TO THE BEST OF MY KNOWLEDGE, INFORMATION, OR BELIEF.
   Signature_____ Date_____
   This form forwarded to (Appropriate Administrative Officer):
   On (Month/Day/Year):
   By (Campus-specific title for Chief Student Personnel Administrator):
   (Campus Address)

Suggested Format for Hearing

1. Opening remarks accompanied by written submission of parties' outlines of relevant, non-redundant evidence to be offered to committee.
   a. **Grievant**
   b. **Respondent**
2. Consideration of any decision on objections to acceptance of items of evidence.
3. Presentation of relevant, non-redundant evidence.
   a. **Grievant (with additional questions from Respondent and/or committee)**
      i Witnesses
      ii Non-testimonial evidence

   b. **Respondent (with additional questions from Grievant and/or committee)**
      i Witnesses
      ii Non-testimonial evidence

4. Opportunity for presentation of any rebuttal evidence.
   a. **Grievant**
   b. **Respondent**
5. Presentation of additional evidence requested by committee.
6. Summation of case
   a. **Grievant**
   b. **Respondent**

Notice of Nondiscrimination

Notice of Non-Discrimination

UMKC does not discriminate on the basis of race, color, ethnic or national origin, sex, sexual orientation, gender identity, religion, age, ancestry, disability, military status, veteran status, in admissions, educational programs or activities and employment. The University complies with all federal and state laws and University of Missouri System policy regarding nondiscrimination and affirmative action, including Title IX of the Education Amendments of 1972, Section 504 of the rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964 and the state of Missouri Human Rights Act Chapter 213 RSMO.

UMKC considers any allegations of sexual harassment, sexual misconduct, sexual violence and sex/gender discrimination serious and will thoroughly investigate.

Any person who feels they have been discriminated against or who have inquiries regarding this institution's compliance with the foregoing regulations may contact UMKC's Affirmative Action by visiting:

The Office of Affirmative Action
Administrative Center
5115 Oak Street, Room 212
Kansas City, MO 64110

(816) 235-**1771**
http://www.umkc.edu/HR/Affirmative-Action/default.asp

Policy on Positive Work and Learning Environment

(330.080 Maintaining a Positive Work and Learning Environment; Executive Guideline No. 3, 7-18-97; Executive Order No. 3 replaced by policy stated in Bd. Min. 1-29-99.)

This policy is also available at http://www.umsystem.edu/ums/rules/collected_rules/personnel/ch330/330.080_maintaining_a_positive_work_and_learning_environment

1. The University of Missouri is committed to providing a positive work and learning environment where all individuals are treated fairly and with respect, regardless of their status. Intimidation and harassment have no place in a university community. To honor the dignity and inherent worth of every individual -- student, employee, or applicant for employment or admission -- is a goal to which every member of the university community should aspire and to which officials of the University should direct attention and resources.
2. With respect to students, it is the University's special responsibility to provide a positive climate in which students can learn. Chancellors are expected to provide educational programs and otherwise direct resources to creative and serious measures designed to improve interpersonal relationships, to help develop healthy attitudes toward different kinds of people, and to foster a climate in which students are treated as individuals rather than as members of a particular category of people.
3. With respect to employees, the strength we have as a university is directly related to maintaining a positive work environment throughout the institution. The University should provide a positive recruiting and work environment focused on the duties and skills of the work to be performed. It is the expectation of the University that all employees and potential employees will be treated on the basis of their contribution or potential contribution without regard to personal characteristics not related to competence, demonstrated ability, performance, or the advancement of the legitimate interests of the University. The General Officers are expected to provide training programs for supervisors to assist in achieving this objective.
4. With respect to violations of the policy, faculty, staff and students may utilize their respective grievance procedures approved by the Board of Curators. The approved grievance procedures are as follows: Grievance procedure in Section 370.010 for faculty; grievance procedure in Section 380.010 for staff; and grievance procedure in Section 390.010 for students, and each such procedure shall be deemed as amended to include

grievances filed under this policy. This policy shall not be interpreted in such a manner as to violate the legal rights of religious organizations, or military organizations associated with the Armed Forces of the United States of America.

Policy on Student Records

UMKC conforms to federal regulations known as the Family Educational Rights and Privacy Act, or FERPA. The purpose of FERPA is to provide rights to students and their families with regard to access and privacy of academic records. FERPA guarantees students at the postsecondary level the right to inspect and view their academic records. It also prohibits UMKC from releasing information from a student's record to any third party unless the student authorizes the release.

The UM System policy on student records is available at: http://www.umsystem.edu/ums/rules/collected_rules/information/ch180/180.020_student_records.

School Honor Codes

- School of Dentistry Honor Codes (p. 837)
- School of Law Honor Codes (p. 838)
- School of Medicine Honor Codes (p. 843)
- School of Nursing Honor Codes (p. 851)
- School of Pharmacy Honor Codes (p. 858)

School of Dentistry Honor Codes

Standards of Professional Conduct

(Approved by the Faculty of the School of Dentistry: 9/12/2002, Curator approval 4/2004)

Definition: In this document, "student" shall refer to any person having once been admitted to the School of Dentistry who has not completed a course of study and who intends to or does continue a course of study in or through the School of Dentistry. For the purpose of these rules, student status continues whether or not the University's academic programs are in session.

Students at the University of Missouri at Kansas City School of Dentistry are seeking special knowledge, skills, and privileges. The confirmation of a professional degree, inferring the acquisition of knowledge and privileges, places the graduate of this institution in a unique position of assuming direct responsibility for health issues of those persons and institutions who place their trust in the University and the dental and dental hygiene professions. It is a demonstration of, and commitment to, special knowledge, protection of privileges, and assumption of responsibility and trust that, by definition, delineates a professional. Therefore, those who would aspire to receive the confirmation of a professional degree are expected to provide satisfactory evidence that exceeds knowledge and technical competence. Evidence that the well-being of patients, trust of society and respect of colleagues is a primary goal must be demonstrated. Accordingly, students must subscribe to principles of ethics and a code of professional conduct that gives testimony to their commitment and ability to deserve the privileges and trust with which society and their patients will honor them. This document serves as a guide for students.

The Standards of Professional Conduct are drawn from the Principles of Ethics and Code of Professional Conduct of the American Dental Association, and the American Dental Hygienists' Association Code of Ethics. The former recognizes that students are under the supervision of graduate dentists and dental hygienists and other faculty during interactions with patients. Students should aspire to meet the high ideals of their professions which may exceed their legal duties, but must meet the minimum standards expressed in the School of Dentistry's Code of Professional Conduct.

1. Dental and dental hygiene students must achieve and consistently demonstrate acceptable levels of personal hygiene and dress.
2. Dental and dental hygiene students must achieve and consistently demonstrate concern for patients, peers, and others. Dental and dental hygiene health care providers have a duty to ensure:
    a. Patients are treated according to their desires and must be included in treatment decisions.
    b. Patient confidentiality in the entire range of the provider-patient relationship which includes dental records.
    c. That no harm or potential harm is done to the patient either through intent, ignorance, lack of preparation for the patient encounter, lack of skill, personal impairment of any kind.
    d. That no patient is "abandoned" which is defined as discontinuance of care without just cause and without giving the patient adequate notice and the opportunity to obtain the services of another provider.
    e. That the patient's welfare (i.e. the provision of competent and timely delivery of dental care within the bounds of clinical circumstances as presented by the patient such as needs, desires and values) is paramount and takes precedence above all else. This also includes the obligation to a) identify and report perioral signs of abuse and neglect and to consult with faculty to report suspected cases to proper authorities as required by law; and, b) report instances of faulty treatment whether intentional or not, to the appropriate faculty member.
    f. That all people including patients, staff, faculty and all other individuals are treated fairly, respectfully, and without prejudice.
    g. All standards and requirements of patient care established by the School of Dentistry are followed.

3. Dental and dental hygiene students' behavior must exemplify the highest moral and ethical standards. The following represents conduct that is incompatible with these standards:
    a. Any behavior that tends to gain an unfair advantage for any student in an academic matter. This includes, but is not necessarily limited to, the following guidelines:
        i No student shall, during an examination have, use or solicit any unauthorized information or material (written or oral), copy from another student's paper or discuss the examination with any other person.
        ii No student shall during an examination knowingly give any unauthorized aid to another student.
        iii No student shall acquire by any means knowledge of the contents of an examination yet to be given.
        iv No student shall fraudulently claim for credit any classroom, clinical, laboratory, or other procedure or assignment performed by an unauthorized person, including a fellow student.

Anyone who has reasonable cause to believe that a student has acted unethically is obligated to bring the matter to the attention of the Assistant Dean for Student Programs or his/her designee who will follow the process identified in the Preliminary Procedures section of the UMKC School of Dentistry Honor Council Due Process Procedures for Violations of the Standards of Professional Conduct, to determine whether there has been a violation and whether charges should be brought.

School of Law Honor Codes

I. Preamble

We, the students at the University of Missouri - Kansas City School of Law, recognizing that the recorded evaluation of our academic pursuits must reflect the products of intelligence guided by integrity, do hereby establish this Honor Code so that all who may inquire can be assured that our individual accomplishments were honestly achieved; and so all who achieve may welcome inquiry. Wherefore we pledge ourselves, each and all, to careers founded in integrity and to the enforcement of the standards herein defined. Each student shall have the affirmative duty of assisting in the implementation of this Code.

II. Definitions

1. **Academic Matter**:
   All examinations, writing assignments, and programs or activities (such as Moot Court, Law Review or Urban Lawyer) which in any manner affect or result in a Law School grade or satisfaction of a requirement for graduation.
2. **Accused**:
   Student who is the subject of a hearing on an Honor Code violation.
3. **Class:**
   Group of students, based on year in Law School and academic progress. For the purposes of this code, those who are in their post third-year or are working on advanced degrees, shall be deemed third-year students.
4. **Gender**:
   Any use of grammatical gender reference shall be interpreted as applying equally to males and females.
5. **Matter Relating to Academic Credentials:**
   Any representation made to any person concerning academic achievements or performance in Law School sponsored programs affecting a requirement for graduation.
6. **SBA President:**
   President of the Student Bar Association.
7. **Student:**
   A student (as defined in 200.020.B.8. of the University's Collected Rules and Regulations) at the University of Missouri-Kansas City School of Law.
8. **Unauthorized Sources**:
   All written material and persons except as otherwise authorized by the instructor.

III. Violations

1. **Jurisdiction:**
   Any conduct by a student that tends to gain or give an unfair advantage for any student in any academic matter or in any matter relating to academic credentials is considered unethical and a violation of the Code. It shall not be necessary for the Prosecutor to prove that any advantage was, in fact, achieved. Any conduct by a student impeding the fair operation of this Code is also a violation of this Code
2. **Specific Violations**:
   Prohibitions of the Code include, but are not limited to, the following:
   - During an examination, no student shall have, consult, give to another, receive from another, or solicit from another any information or material unless specifically authorized by the instructor.
   - No student shall knowingly convey, directly or indirectly, to another student any information about the contents of an examination that the other student has yet to take.

- No student, with the intent to improve his or her grade, shall convey to
- an instructor any information that tends to identify his or her authorship of an examination yet to be graded.
- No student shall work on his or her examination other than during the time prescribed, nor in a room other than one designated for the taking of the examination.
- For any assignment that counts toward a grade or is required for graduation, no student shall consult unauthorized sources of information.
- No student shall remove or withhold library material from the library, or secrete such material in the library, or destroy or mutilate such material, or use such material in a manner calculated to gain an unfair advantage for either him or herself or another student in connection with any academic matter.
- No student shall make any false representation on a resume, transcript or other written material relating to his or her Law School credentials. Nor may any student falsely represent his or her Law School credentials in any other way to a potential employer or academic institution.
- No student shall plagiarize. Violation of the plagiarism policy adopted by the faculty of the Law School on October II, 1990 is a violation of the Code. A statement of the offense and definition of plagiarism is incorporated in this Code by reference and linked to this Code at the following Web address: **http://law.umkc.edu/pdfs/plagiarism-policy-and-guidelines.pdf**
- No student other than the accused shall fail to report a suspected violation of this Code or fail to give information about such violation, testify, or attend hearings authorized by the Code, except for good cause shown.
- No student witness shall fail to appear at a hearing held under the Code, unless good cause exists.
- No student shall improperly induce a person not to comply with this Code.
- No student shall fail to use best efforts in the performance of his or her duty under this Code.

3. **Mens Rea:**
   Unless otherwise specifically stated in this Code, a student is not guilty of a violation unless he or she acted knowingly or recklessly with respect to each material element of the violation.
4. **Specific Exclusions:**
   The Code does not cover:
   - Infractions of rules limiting smoking, soft drinks and coffee, etc., to certain designated examination rooms.
   - Disciplinary matters not related to academic credentials or academic matters. The University of Missouri Standards of Conduct details these matters not covered by this Honor Code.

IV. Honor Court and Prosecutor

.01 Honor Court. There shall be a body known as the Honor Court composed of a Chief Justice and four Associate Justices. The Chief Justice shall be selected by a majority vote of the entire Court to serve at the pleasure of the Court.

The Honor Court shall hear all cases involving alleged violations of this Code by students, excepting those cases disposed of informally per 6.03. The proper Court to hear a charge shall be the Court sitting at the time of the hearing rather than at the time of the violation. The Court shall also make advisory opinions.

Four (4) Justices shall constitute a quorum. Each of the justices shall have one (1) vote. The Chief Justice shall be entitled to vote on all matters before the Court.

The Chief Justice, or his or her designee, shall inform new students of this Code during orientation. A copy of the Code shall be published in each edition of the Law School Student Handbook and available in the law building in the Dean’s office.

.02 Student Prosecutor. There shall be a Student Prosecutor and an Assistant Student Prosecutor. The Prosecutor shall conduct investigations and present the case against the accused. The Student Prosecutor shall not make plea agreements at any time.

V. Appointments and Qualifications

.01 General. The Justices of the court shall be two third-year students, two second-year students and one first-year student. There shall be alternate justices in the same number and composition.

The Student Prosecutor shall be a third-year student. The Assistant Student Prosecutor shall be a second-year student.

.02 Appointment and Term of Office:

1. Justices. One first-year justice, one first-year alternate justice, one second-year justice, and one second-year alternate justice will be selected by the SBA President on the basis of applications submitted to him or her. The selection will be made at the first SBA meeting of the fall semester that includes the first-year representatives.
   Justices will serve three one-year terms unless they re- sign, graduate, are removed for cause or become other- wise ineligible. Justices who graduate may serve until the first-year justices are appointed.
   Justices seated at the time this Code becomes effective are deemed to have been appointed in accordance with this section.
2. Prosecutor. The student prosecutor shall be the person who was the assistant student prosecutor during the previous academic year, provided, however, that if that person is no longer eligible, the SBA President shall select a student prosecutor. The selection of the assistant student

prosecutor shall be made by the SBA President before the end of winter semester classes. Selections shall be made on the basis of the designee's class for the following year.
The Prosecutor's term of office shall begin on the first day of the summer session, provided, however, that cases arising before or during the winter semester final examination period shall be conducted by winter semester office-holders.

.03 Forfeiture of Office for Cause. A student is ineligible to continue as a Justice, Prosecutor or an alternate if he or she is placed on academic or disciplinary probation, or if for any other reason his or her continuation in office may not be in the best interest of the School of Law as determined by the Board of Governors.

.04 Disqualified from Duty. Justices or Prosecutors shall disqualify themselves from performing their duties when they feel that they cannot impartially perform those duties. The accused can raise or suggest grounds for such disqualification of a justice. The failure of Justices to disqualify themselves may be raised on appeal as a possible abuse of discretion.

Disqualification of a Justice or Prosecutor creates a temporary vacancy and shall be filled pursuant to 5.05(b).

.05 Vacancies.

1. Permanent Vacancies. If by graduation, or for any other reason, a permanent vacancy occurs during a normal term of office, such vacancy shall be filled in a manner consistent with 5.01. If for any reason a vacancy is not filled when needed, it may be treated as a temporary vacancy and filled as prescribed. 5.05(b).
2. Temporary Vacancies. Vacancies that are created when a student is unavailable, disqualifies him or herself or the Court sustains a challenge for cause, shall be filled by the SBA President who shall ask the alternate from the same class to serve. If the alternate is not available, the SBA President shall select another member of the class who is not ineligible to serve.

IV. Violation and Investigation Reports

.01 Reports Made. Any person may report a suspected violation of the Honor Code. Reports may be made to either the SBA President or to the Associate Dean.

If reported to the SBA President, the SBA President shall notify the Associate Dean of the report of a suspected violation as soon as possible.

.02 When Made. Reports of suspected Honor Code violations must be made within 45 days of the discovery of the suspected violation.

.03 Informal Disposition or Submission of Case to Student Prosecutor. The Associate Dean shall have the authority to investigate the reported suspected violation of the Honor Code before initiating formal disciplinary procedures and give the student the opportunity to present his/her personal version of the incident or occurrence. After doing so, the Associate Dean may, for good cause shown, informally dispose of the case, and, after explaining to the student the various options available, shall fix a reasonable time within which the student suspected to have violated the Honor Code shall accept or reject a proposed informal disposition. If no informal disposition is deemed appropriate by the Associate Dean or the student rejects a proposed informal disposition, the Associate Dean shall notify the student prosecutor of the report of a suspected violation of the Honor Code. Should the Prosecutor disqualify him or herself pursuant to 5.04, the SBA President shall fill the temporary vacancy pursuant to 5.05(b). Any statements made by the student suspected of violating the Honor Code to the Associate Dean in the course of the informal disposition process shall not be communicated to the student prosecutor or be admissible against the student in subsequent Honor Court proceedings.

.04 Investigation by the Prosecutor. Upon notification by the Associate Dean of the report of a suspected violation of the Honor Code, the Prosecutor shall conduct an investigation.

Any student called upon to supply information relevant to the investigation, other than the accused, shall comply as fully as possible.

At the completion of the investigation, if the Prosecutor feels the evidence is insufficient to justify prosecution.

The Prosecutor shall so notify the SBA President and the Associate Dean, and with their concurrence the case may be dropped.

If the Prosecutor determines that probable cause exists to prosecute a person for a violation of the Honor Code, he or she shall send notice of this finding to the Associate Dean of the Law School.

.05 Submission of Case to Grand Jury.

1. Upon notice that the Prosecutor has determined that probable cause exists to prosecute a person for a violation of the Honor Code, the Associate Dean shall con- convene a grand jury hearing.
2. The Associate Dean shall select six names at random from the Law School student body. The Associate Dean shall summon the people selected to attend a meeting with himself and the SBA President. At this meeting the Associate Dean shall inform the students selected that the first three qualified students selected will be required to serve on a grand jury to determine whether or not probable cause exists to believe the Honor Code has been violated. The Associate Dean may excuse any grand juror for cause and replace that grand juror with an alternate. The Associate Dean shall inform the grand jury of their membership on the grand jury and all grand jury proceedings are confidential. The SBA President and the grand jurors shall select a date, time and place for the grand jury proceeding, providing that the selection of such a date will not unreasonably delay the Honor Court proceedings. The SBA President shall inform the Chief Justice and the Prosecutor of the date of the hearing.

3. The Prosecutor shall have the duty of providing the Chief Justice with a copy of the items of evidence that form the basis for his or her determination that probable cause exists to prosecute for a violation of this Honor Code. The copies provided by the Prosecutor to the Chief Justice shall have all identifying characteristics removed except as necessary to establish probable cause that a violation of this Code has been committed. The Prosecutor shall place a copy of these items of evidence and a summary of why he or she believes probable cause exists in a signed and sealed envelope. The envelope of evidence shall be delivered to the Chief Justice before the grand jury proceeding. If the suspected violation is plagiarism, the Prosecutor shall provide the Chief Justice with the original sources that the grand jury needs to adequately evaluate the evidence provided in the packet. The Chief Justice shall make arrangements to provide the grand jury with the source material. This packet shall also contain a form for the grand jury to report its findings.
   The investigative power of the grand jury is strictly limited to the evidence presented by the Prosecutor. The grand jury shall not independently investigate the matter. The grand jury may submit written questions to the prosecutor through the Chief Justice.
4. The Chief Justice of the Honor Court will initiate the grand jury proceeding by informing the grand jury that the grand jury proceedings are to be confidential. The Chief Justice should elicit from the grand jurors signed statements that the grand jurors understand fully the duty of confidentiality. The Chief Justice shall advise the students that the information presented to the grand jury will be known only to the student prosecutor and themselves and that a breach of confidentiality may be an Honor Code violation.
5. After the Chief Justice has fulfilled the obligations imposed by section (d), he or she should give the grand jury the sealed envelope provided by the Prosecutor containing the evidence and remove him or herself from the grand jury proceedings.
6. After the Chief Justice has left the grand jury room, the grand jury will break the seal on the evidence envelope and examine the contents. The grand jury shall examine the evidence and determine whether probable cause exists for finding a violation of this Code. A decision shall be made within a reasonable period of time, not to exceed ten (10) days.
7. The finding of probable cause or the lack of probable cause will be determined by a majority vote of the grand jurors. This vote is binding on all members of the grand jury.
8. After the grand jury has reached a decision. it shall record that decision on the form provided for such purpose in the envelope described in 6.04(c) and sign it. The evidence shall be returned to the envelope provided by the Prosecutor, sealed, and signed. The envelope shall be delivered to the Chief Justice in a place and manner prescribed by the Chief Justice.
9. The Chief Justice shall deliver the envelope with the grand jury finding to the Associate Dean. The Associate Dean shall break the seal on the envelope in the presence of the Prosecutor who shall verify that the envelope contains all the items of evidence the Prosecutor originally placed in the envelope.
10. The Associate Dean shall reveal the finding of the grand jury only in furtherance of the procedures of this Honor Code and then only to the necessary parties.

.06 Hearing Date and Notice. A hearing shall be held as soon as possible after the grand jury has determined that there is probable cause to believe the accused has violated the Honor Code. In no case shall more than 45 days elapse between the suspected violation report and the hearing, unless a later date is agreed upon by the Prosecutor and the student charged.

The student shall be notified of a hearing in writing by the Chief Justice. The notice shall set forth the date, time and place of the alleged violation, the conduct to be inquired into, and the date, time, and place of hearing before the Honor Court. The notice shall be given at least seven (7) days in advance of the scheduled date of the hearing, unless a shorter time be fixed for good cause.

VII. Hearing Procedure

.01 Confidentiality. Honor Court hearings shall be closed to the public unless the accused requests a public hearing, in which case one shall be provided. An audio recording shall be made of the proceeding and shall become part of the record.

.02 Ex Parte Communication. Except as to procedural matters, there shall be no ex parte communication with any Justice by the Prosecutor, by defense counsel or by the accused.

.03 Pre-Trial Motions. All pre-trial motions, including motions in limine, shall be in writing and given to the Chief Justice at least four days prior to the hearing. The Court may set a time limit on hearing pre-trial motions. The Court shall hear pre-trial motions no later than the day before the trial.

.04 Evidence. A student defendant or prosecutor appearing before the Honor Court shall have the right to present any evidence by witness or affidavit relating to any charge or defense. The formal rules of evidence shall not apply and the Court may consider relevant testimony of witnesses, affidavits, written reports, and any other relevant evidence.

.05 Witnesses. At least two (2) days in advance of the scheduled date of the hearing, witnesses shall be notified by the party calling them of their obligation to appear. Witnesses shall bring with them whatever documentation is requested. Failure of a student witness to appear, without good cause, is a violation of this Code.

The Prosecutor may not call the defendant as a witness. The defendant may elect to testify or not, as he or she chooses. No unfavorable inference may be drawn should the defendant choose not to testify.

.06 The Court. The Chief Justice shall preside at the hearing. The Prosecutor shall present the case against the accused. The accused may represent him or herself or may be represented by an advisor or legal counsel.

.07 The Hearing. The Prosecutor shall make an opening statement and present the evidence against the accused. The Accused or his or her representative may elect to make an opening statement either at the conclusion of the Prosecutor's opening or after the Prosecution's evidence has been presented. At the conclusion of the Prosecution's case-in-chief, the accused may present his or her evidence.

Each party shall have the right to cross-examine the opposing party's witnesses. Either party may present further rebuttal evidence when, in the discretion of the Chief Justice such evidence is relevant and will not unduly delay the proceedings. After all evidence has been presented, the Prosecutor may make a closing argument, if so elected, the Prosecutor may present a rebuttal.

.08 Court's Decision. The Court shall promptly deliberate and make its findings and determinations in executive session. If seventy-five percent (75%) of the members of the court find by clear and convincing evidence that the accused has committed the violations charged, it shall recommend to the Dean one or more of the sanctions prescribed in 8.02, subject to the mitigating circumstances exception in 8.03.

If at all possible, the Court shall render a decision immediately following its deliberations. In no event shall its decision be announced later than three (3) days following the conclusion of the hearing. An oral presentation of the Court's findings and recommendations is permitted following the hearing, but a written report including findings of facts, conclusions and recommended disposition shall be filed within one week after conclusion of the hearing. Concurring or dissenting opinions may be filed according to the same terms.

The report of the Court, including any concurring or dissenting opinions, and the entire record of the proceedings shall be submitted to the Dean and the accused as soon as possible after issuance.

.09 Procedural Questions. Procedural questions arising during the course of proceedings that are not covered by these rules shall be resolved by the Chief Justice. All objections concerning procedure shall be made/raised in writing to the Chief Justice. The Chief Justice shall answer all objections in writing and forward both the objection and the decision to both the Prosecutor and defense counsel and to all other justices sitting on the Court for that hearing.

The decision of the Chief Justice on a procedural question may be challenged by the accused, the prosecutor, or a sitting member of the Court. The Chief Justice shall present any challenge to the sitting Court and the ruling of the majority of the Court shall be final. There shall be a form, prepared by the Chief Justice, for appealing a procedural decision. The party challenging the decision shall complete the form and forward a copy to all sitting justices. All such challenges must be made on a timely basis.

.10 Review of Record by Dean. Upon receipt of the Court's report, the Dean will, within a reasonable amount of time, review the entire record, including the Court's findings of facts, conclusions and recommendations and render a decision in the case.

The Dean may remand for further consideration of specific issues. A decision by the Dean to remand shall include a list of questions for the Court. The Court shall then respond in writing within fourteen (14) calendar days. The Dean may not reverse a finding of not guilty by the Court.

The Dean's decision shall be transmitted in writing to the accused and to the Chief Justice of the Honor Court. Where the accused has been found guilty by the Court, a copy of the Dean's decision will be placed in the student's official file.

VIII. Sanctions

.01 Report of Misconduct. Where a finding that the accused has violated the Code has been made, the misconduct may be called to the attention of the proper University authorities, Bar authorities or any other affected parties for appropriate action.

.02 Sanctions. The following sanctions may be recommended by the Court to the Dean and imposed by the Dean:

1. Expulsion. Permanent separation of the student from the School of Law.
2. Dismissal. An involuntary separation of the student from the School of Law. It does not imply or state a minimum separation time.
3. Suspension. Separation of the student from the School of Law for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
4. Probation. Disciplinary probation, subject to any appropriate terms or conditions.
5. Reprimand. Written or oral reprimand.

.03 Mitigating Circumstances. When considering a recommended sanction upon finding that a violation has occurred, the Court may consider mitigating circumstances such as, but not limited to, any physical, mental, financial, or emotional problems of the accused. If the severity of mitigating circumstances requires, the Court may recommend no sanction be levied on the accused, even though a violation has occurred.

If the Court considers mitigating circumstances when recommending a sanction, the written report of the Court shall include a full explanation thereof.

IX.Appeals

.01 Right to Petition for Review (other than dismissal or suspension). In all cases where the discipline imposed by the Dean is other than dismissal or suspension, the accused may petition the Chancellor in writing for a review of the decision within ten (10) consecutive calendar days after notification. A copy of the Petition for Review must also be served upon the Dean within such time. The Petition for Review shall state the grounds or reasons for review, and the Dean may answer the petition within ten (10) consecutive calendar days if he or she so desires.

The Chancellor or his or her designated representative may grant or refuse the right of review. In all cases where the Petition for Review is refused, the decision shall be final. If the Chancellor or representative reviews the decision, the action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

.02 Right of Appeal (dismissal or suspension only). When a student is dismissed or suspended from the University for an Honor Code violation by the Dean, the student may appeal such decision to the Chancellor within twenty (20) consecutive days after notification of the decision of the Dean. A copy of the notice of appeal will contemporaneously be given by the student to the Dean. The student may file a written memorandum for consideration by the Chancellor with the notice of appeal, and the Chancellor may request a reply to such memorandum by the appropriate party. The Chancellor or his/her designee shall review the full record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify the Dean and the student in writing of the decision on the appeal. The action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

.03 Status During Appeal. In the cases of suspension or dismissal where a notice of appeal is filed within the required time, a student may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit a student to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not seriously disrupt the University or constitute a danger to the health, safety or welfare of the University community. In such event, however, any final disciplinary action imposed shall be effective from the date of the action of the Dean.

X. Advisory Opinions

.01 When required to do so, the Court may render advisory opinions on matters relating to the application of the Code.

.02 A box shall be located in a public area of the Law School for the purpose of receiving written requests by students of the Law School for advisory opinions.

.03 The Honor Court shall submit its advisory opinion, in writing, to the Dean and the SBA President.

.04 The Dean, within a reasonable time, shall respond to the advisory opinion.

.05 The advisory opinion and the Dean’s response shall be appropriately posted and made available to the students in the library.

.06 Conduct consistent with an advisory opinion shall be presumed not to be in violation of the Code.

XI. Amendments

.01 Amendments to the Honor Code may be proposed by petition of any ten (10) students, by the Board of Governors of the Student Bar Association on its own motion, or by petition of a majority of the Honor Court.

.02 A proposed amendment shall be adopted if at the adoption election at least two-thirds (2/3) of the students voting shall vote favoring the proposed amendment.

XII.Adoption

This Honor Code shall be in effect when approved by a two-thirds vote of the students voting, by the Dean of the School of Law, the Chancellor, and by the Board of Curators.

School of Medicine Honor Codes

I. Preamble

Medicine is a profession characterized by 1) a prolonged specialized training in a body of knowledge and skills; 2) ethical principles; 3) a service orientation; and 4) judgment. The medical profession determines its own standards of education, training, licensure, and practice and has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a potential future member of this profession, a medical student must recognize responsibility and an obligation not only to patients, but also to society, other health professionals, and self to behave in a manner compatible with the medical profession’s standards of conduct.

One of the goals of a medical school is to educate a medical student during the transition to a professional life. The University of Missouri-Kansas City School of Medicine has an obligation to evaluate students pursuing the M.D. degree as thoroughly as possible for their cognitive abilities, their academic and professional knowledge and skills, their integrity, and their suitability for the practice of medicine. Accordingly, the Standards of Professional Conduct detailed in this document have been developed to guide the pre-professional behavior of medical students of the University of Missouri-Kansas City School of Medicine and to prepare the medical students to meet the ethical standards of the medical profession.

II. Standards of Professional Conduct

A. Professional Integrity

1. **Honesty**
   A medical student shall deal honestly with people including, but not limited to, colleagues, instructors, representatives of the University, patients, attending physicians, and other members of the health care team. Medical students are expected to demonstrate honesty and integrity in all aspects of their interaction with patients and staff -- particularly in assuring accuracy and completeness of their part of the medical record. The medical student shall be willing to admit errors and must not mislead others or promote himself/herself at the patient's expense. The medical student shall strive to report, by utilizing the Honor Council Procedures for Violations of the Standards of Professional Conduct, those medical students deficient in character or competence, or who engage in fraud or deception.
   The basic principle underlying all research is honesty. Scientists and medical students who participate in research have a responsibility to provide research results of the highest quality; to gather facts meticulously; to keep impeccable records of work done; to interpret results realistically, not forcing them into preconceived molds or models; and to report new knowledge through appropriate channels. Co-authors of research reports must be sufficiently acquainted with the work of their co-workers that they can personally vouch for the integrity of the study and validity of the findings, and must have been active in the research itself.
   - Examples of academic dishonesty include, but are not limited to, the following:
     - **Cheating**
       1. use of any unauthorized assistance in taking quizzes, tests, or examinations;
       2. dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
       3. acquisition or possession without permission of tests or other academic material belonging to a member of the University faculty or staff;
       4. in any way giving assistance to others who are participating in any of the three preceding types of behavior; or,
       5. falsifying attendance records or other official documents.
     - **Plagiarism**
       1. use by paraphrase or direct quotation of the published or unpublished work of another person without fully and properly crediting the author with footnotes, citations or bibliographical reference;
       2. unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials;
       3. unacknowledged use of original work/material that has been produced through collaboration with others without release in writing from collaborators.
     - **Sabotage**
       1. Unauthorized interference with, modification of, or destruction of the work or intellectual property of another member of the University community.
   - Examples of dishonesty related to clinical practice include, but are not limited to, the following:
     - **Falsification of Patient's Medical Record**
       Writing progress notes regarding the patient's status, including, but not limited to, clinical observations or results in the patient's chart when the medical student has not seen or evaluated the patient, or using incorrect times of data entry.
     - **Falsification of Patient's Medical Information**
       Reporting medical information such as physical examination findings, lab values, test results, and any other relevant patient information to other students, residents, attending physicians, the patient, the patient's family, or other relevant medical personnel that has been fabricated by the medical student.
2. **Responsibility**
   A medical student must acquire competences with the appropriate concepts, knowledge, and skills which the faculty determine to be essential. These competences shall be utilized to care for the sick and to promote the health and welfare of society. A medical student shall recognize a responsibility to participate in activities contributing to an improved community.
   Medical students in the care of patients must not be harmful, dangerous, or negligent to the mental or physical health of a patient or the public. Negligent means the failure to use that degree of skill and learning ordinarily used under the same or similar circumstances by other medical students.
   Medical students must pay tuition and other University fees, such as the Quarterly Profile Exam fee, on time. Medical students must complete required forms of evaluation, degree forms, examination applications, etc. on time.
   Students must be familiar with and follow the rules and regulations of the School of Medicine, the University, and related professional organizations.

B. Medical Professional Behavior

1. **Nondiscrimination**
   A medical student shall be dedicated to providing supervised competent medical service with compassion, respect for human dignity, and without discrimination. It is against University regulations to discriminate on the basis of race, color, creed, sex, age, national origin, disability, or Vietnam

Era Veterans status. The University has an AIDS policy statement consistent with state law that prohibits discrimination against persons with AIDS or who are HIV positive.

2. **Representation**
   A medical student shall accurately represent himself/herself to others including, but not limited to, colleagues, instructors, representatives of the University, patients, attending physicians, and other members of the health care team. Examples of misrepresentation include, but are not limited to, the following:
   a. A medical student shall never use the title of "Doctor" or M.D., as this clearly misrepresents the student's position, knowledge, and authority.
   b. Use of fraud, deception, lies, or bribery in securing any certificate of registration or authority, diploma, permit or license issued, or in obtaining permission to take any examinations.
   c. Impersonation of any person holding a certificate of registration or authority, permit, license or allowing any person to use his/her certificate of registration or authority, permit, license or diploma from any school.
   d. Forgery, alteration, or misuse of a patient's medical records or knowingly furnishing false information to the medical team and/or professional organizations.
3. **Confidentiality**
   A medical student shall respect the rights of patients, colleagues, and other health professionals, and shall safeguard patient confidences within the constraints of the law. The patient's right to confidentiality in regard to his/her medical record, which includes confidentiality of personal and social history, is a fundamental tenet to medical care.
   The discussion in public of the problems of an identified patient, without the patient's permission, by professional staff (including medical students) violates patient confidentiality and is unethical. Under no circumstances can any medical record be removed from the institution. Photocopying of the entire record is never permitted for presentations or rounds; students are permitted to extract information, but not copy "wholesale" parts of the chart. Names of patients should be omitted from any documents used for these presentations.
4. **Disclosure**
   While the medical student is a member of the medical team and under faculty supervision, a medical student shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.
   Sharing of medical information appropriately with a patient and colleagues involved in the care of the patient is a fundamental ethical requirement. The patient must be well informed to make health care decisions and work intelligently in partnership with the medical team. Information that the patient needs for decision making shall be presented in terms the patient can understand. If, for some reason, the patient is unable to comprehend, there shall be disclosure to the patient's authorized representative.
   Failure of a medical student to share medical information relevant to a patient with the patient and colleagues involved in the care of the patient is unethical. Providing inaccurate information with these individuals is also unacceptable.
5. **Assessment of Personal Competence (Self-Evaluation)**
   Medical students shall seek consultation and supervision whenever their ability to play their role in the care for a patient is inadequate because of lack of knowledge or experience.
   Students are expected to respond to constructive criticism by appropriate modification of behavior.
   It is unacceptable for a medical student to attempt procedures or to prescribe therapies without supervision.
6. **Professional Demeanor**
   The medical student is expected to be thoughtful and professional when interacting with patients and their families, attending physicians, supervising residents, and other medical students, and whenever his/her behavior may influence adversely the judgments of others about the professional school or University.
   Students shall maintain a neat and clean appearance, and dress in attire that is generally accepted as professional by the patient populations served.
   Inappropriate behavior includes, but is not limited to, the use of offensive language, gestures, or remarks. Attempting, directly or indirectly, by way of intimidation, coercion or deception, to obtain or retain a patient or discourage the use of a second opinion or consultation is not appropriate.
7. **Informed Consent**
   Students are to understand the physician's obligation to obtain informed consent from patients, but are <u>not</u> responsible for obtaining it for a physician. Simply, it is the <u>physician's</u> responsibility to ensure that the patient or his/her surrogate be appropriately informed as to the nature of the patient's medical condition, the objectives of proposed treatments, treatment alternatives, and risks involved. The patient's or surrogate's concurrence must be obtained without coercion.
8. **Conflict of Interests**
   If a conflict of interest arises, the moral principle is clear -- the welfare of the patient must be, at all times, paramount. For example, gifts, hospitality, or subsidies offered by manufacturers and distributors of medical and pharmaceutical equipment/goods shall not be accepted if acceptance would influence the objectivity of clinical judgement.
9. **Misconduct with Patients**
   The medical student will not engage in romantic, sexual, or other non-professional behaviors with a patient -- even upon the apparent request of a patient -- while the medical student is involved with the patient's care.
10. **Impairment**

The medical student will not use alcohol or drugs in ways that impair his/her ability to perform the work of the profession or results in compromised patient care. It is the responsibility of every medical student to strive to protect the public from an impaired colleague and to assist that colleague whose capability is impaired because of alcohol or drug use.
In some instances a medical student's alcohol or drug problem may also be referred to the AIMS Council. However, consideration by the AIMS Council does not remove the medical student's obligation to comply with these Standards of Professional Conduct or the University's Student Conduct Code.

11. **Criticism of Colleagues**
Professional relations among all members of the medical community shall be marked by civility. Scholarly contributions shall be acknowledged and each person shall recognize and facilitate the contributions of others to this community; slanderous comments and acts are not acceptable. Medical students shall deal with professional, staff, and peer members of the health team in a considerate manner and with a spirit of cooperation. It is unethical and harmful for a medical student to disparage, without sufficient evidence, the professional competence, knowledge, qualifications, or services of a colleague to anyone. It is also unethical to imply without reliable evidence -- by word, gesture, or deed -- that a patient has been poorly managed or mistreated by a colleague.
12. **Teaching**
The word "doctor" (for the Latin "docere" -- to teach) implies a responsibility to share knowledge and information with colleagues and patients. It is incumbent upon those entering this profession to teach what they know of the science, art, and ethics of medicine. It includes communicating clearly and teaching patients so that they are properly prepared to participate in their own care and in the maintenance of their health.

III. University of Missouri Student Conduct Code

In addition to the conduct detailed in the preceding sections, a medical student is subject to the University of Missouri Student Conduct Code, as administered by the Office of the Vice Chancellor for Student Affairs, except for provisions dealing with academic dishonesty, Section 200.010 B.1.

Conduct for which students are subject to sanctions falls into the following categories:

1. Forgery, alteration, or misuse of University documents, records or identification, or knowingly furnishing false information to the University.
2. Obstruction or disruption of teaching, research, administration, conduct proceedings, or other University activities, including its public service functions on or off campus.
3. Physical abuse or conduct which threatens or endangers the health or safety of any person.
4. Attempted or actual theft of, damage to, or possession without permission of property of the University or of a member of the University community or of a campus visitor.
5. Unauthorized possession, duplication, or use of keys to any University facilities or unauthorized entry to or use of University facilities.
6. Violation of University policies, rules or regulations or of campus regulations including, but not limited to, those governing residence in University-provided housing, or the use of University facilities, or the time, place and manner of public expression.
7. Manufacture, use, possession, sale, or distribution of alcoholic beverages or any controlled substance without proper prescription or required license or as expressly permitted by law or University regulations.
8. Disruptive or disorderly conduct or lewd, indecent, or obscene conduct or expression.
9. Failure to comply with directions of University officials acting in the performance of their duties.
10. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals.
11. Actual or attempted theft or other abuse of computer time, including but not limited to:
    a. unauthorized entry into a file to use, read, or change the contents, or for any other purpose;
    b. unauthorized transfer of a file;
    c. unauthorized use of another individual's identification and password;
    d. use of computing facilities to interfere with the work of another student, faculty member, or University official;
    e. use of computing facilities to interfere with normal operation of the University computing system; and
    f. knowingly causing a computer virus to become installed in a computer system or file.

HONOR COUNCIL PROCEDURES FOR VIOLATIONS OF THE STANDARDS OF PROFESSIONAL CONDUCT

University of Missouri-Kansas City School of Medicine
Approved by the University of Missouri Board of Curators: December 1994

Honor Council Procedures for Violations of the Standards of Professional Conduct

University of Missouri-Kansas City School of Medicine

I. Jurisdiction of the Honor Council

The Honor Council shall be concerned with incidents of alleged violations by University of Missouri-Kansas City School of Medicine students of the School's Standards of Professional Conduct, Sections II.A and II.B. Violations of Section III will be referred to the Office of the Vice Chancellor for

Student Affairs. The standards identify areas of conduct which are judged unacceptable for individuals either who are in or aspire to the profession of medicine. The Standards of Professional Conduct are published in the Council on Evaluation Policy Manual and Guidelines document of the School of Medicine. It is distributed to all newly accepted students during orientation. When a medical student has been charged with one or more acts of misconduct according to these standards, the Honor Council shall adhere to the following procedures detailed herein. The Honor Council shall have the authority to recommend sanctions upon any student appearing before the Council. The disciplinary proceedings described are not to be construed as judicial trials. Care shall be taken, however, to comply as fully as possible with the spirit and intent of these procedural safeguards.

II. Organization of the Honor Council

1. Composition
   The Honor Council voting members shall consist of the Chair representing the Dean's Office, five faculty/staff members (1 Docent, 1 Basic Scientist, 2 Clinical Scientists, and 1 Humanities/Social Sciences representative), and one student member (1 Years III-VI). Four members constitute a quorum. Two nonvoting Honor Council staff, the Council Coordinator and the Administrative Assistant, assist the Chair in investigations and generation of reports and are present at the hearings to take minutes.
2. Eligibility and Appointment
   Faculty/staff, and student members shall be appointed to the Honor Council by the Dean of the School of Medicine.
3. Chair
   The Chair shall count as one member of the Honor Council and shall be entitled to vote on all matters before the Council.
4. Time of Appointment and Term of Office
   The Chair and faculty/staff members of the Honor Council shall serve for the duration of their appointments by the Dean. The student member of the Honor Council shall serve for one year.

A student is ineligible to continue as a member of the Honor Council if he/she is placed on academic or disciplinary probation, or if for any other reason his/her continued membership on the Council may not be in the best interest of the School of Medicine as determined by the Dean.

III. Procedures for Report of Violation, Investigation, Informal Disposition, and Notice

A. Report of Violation

An alleged violation of the Standards of Professional Conduct should be reported to the Chair or his/her designee of the Honor Council as soon as possible after discovery of the incident.

B. Preliminary Procedures and Investigation

The Chair of the Honor Council or his/her designee shall investigate any reported student misconduct before initiating formal conduct procedures. The reporter will be requested to meet with the Chair or his/her designee to discuss the alleged violation.

The Chair is responsible for notifying, in writing, the accused student of the charge brought against him/her prior to the commencement of the investigation. In addition, the student charged with misconduct shall receive a copy of these Procedures for Violations of the Standards of Professional Conduct along with the written notice. The Chair shall meet with the accused student to give the student the opportunity to present a personal version of the incident or occurrence.

C. Informal Disposition

After conducting an investigation, the Chair or his/her designee shall provide a written report to the Dean, the accused student, and the Honor Council members.

The Chair shall have the authority to dismiss a charge that is determined unfounded or to impose appropriate sanctions and shall fix a reasonable time within which the student shall accept or reject a proposed informal disposition.

A failure of the student either to accept or reject within the time fixed shall be deemed to be an acceptance and, in such event, the proposed disposition shall become final upon expiration of such time.

If the student rejects informal disposition, it must be in writing and shall be forwarded to the Honor Council.

The Chair may refer cases to the Honor Council for formal investigation and hearing without first offering informal disposition.

The Dean or his/her designee may at any time temporarily suspend or deny readmission to a student from the School of Medicine pending formal procedures when the Dean or his/her designee finds and believes from available information that the presence of a student on campus would seriously disrupt the School of Medicine or constitute a danger to the health, safety, or welfare of members of the School of Medicine community. The appropriate procedure to determine the future status of the student will be initiated within seven calendar days.

D. Notice of Hearing

Upon completion of the investigation, when a student rejects informal disposition or the charge justifies a formal hearing, in the judgment of the Honor Council Chair, the Chair will schedule a formal hearing as soon as possible.

The reporter, witnesses, and accused student will be given written notice of the hearing by certified mail or personal delivery. The notice shall set forth the date, time, and place of the alleged violation, the conduct for inquiry, the date, time, and place of the hearing before the Council, request for attendance of the parties involved, and a reference for the accused student to the Rights of the Accused Student Upon Hearing which are outlined in these Procedures.

Notice by certified mail may be addressed to the last address currently on record with the School of Medicine. Failure by the accused student to have a current correct local address on record with the School of Medicine shall not be construed to invalidate such notice.

The notice shall be given at least seven (7) consecutive calendar days prior to the hearing, unless a shorter time be fixed by the Chair for good cause.

Any request for continuance shall be made in writing to the Chair who shall have the authority at his/her discretion to postpone the hearing if he/she determines the request is timely and made for good cause. The Chair shall notify the Honor Council members, the accused student, the reporter, the witnesses, and any other relevant individuals of the new date for the hearing.

If the accused student fails to appear at the scheduled time, the Honor Council may hear and determine the matter in the student's absence.

IV. Procedure for Honor Council Hearing

Rights of the Honor Council

The Honor Council shall have the right to:

- hear together cases involving more than one student which arise out of the same act of misconduct, but in that event shall make separate findings and determinations for each student;
- permit a stipulation of facts by the Honor Council member who performed the investigation and the student involved;
- permit the incorporation in the record by a reference of any document, affidavit, or other material produced and desired in the record by the School of Medicine or the student charged;
- question witnesses or challenge other evidence introduced by either the School of Medicine or the student at any time;
- hear from the Council Chair about dispositions made in similar cases
- and any dispositions offered to the student appearing before the Council;
- call additional witnesses or require additional investigation;
- dismiss any action at any time or permit informal disposition as otherwise provided;
- permit or require at any time, within a reasonable time as determined by the Council, amendment of the Notice of Hearing to include new or additional matters which may come to the attention of the Council before final determination of the case; provided, however, that in such event the Council shall grant to the student or the School such time as the Council may determine reasonable under the circumstances to answer or explain such additional matters; and,
- dismiss any person from the hearing who interferes with or obstructs the hearing or fails to abide by the rulings of the Council Chair on any procedural question or request of the Chair for order.

A. Rights of the Accused Student Upon Hearing

A student scheduled to appear before the Honor Council pursuant to formal notice of charges and disciplinary hearing shall have the right to:

- submit a written response to the charge outlined in the Notice before the scheduled hearing is to commence;
- request in advance of the scheduled hearing a review of any materials contained in his/her hearing file which will be kept in the Council on Evaluation Office;
- submit a written request for the identities of witnesses to be called to testify before the Council;
- be present at the hearing;
- have an advisor or counselor appear with him/her and to consult with such an advisor or counselor during the hearing; however, the advisor/counselor will not be allowed to question witnesses and/or members of the Council;
- hear or examine evidence presented to the Honor Council against him/her;
- question witnesses present who are testifying against him/her at the hearing;
- present evidence by witness, affidavit, written report, other memoranda, photographs, drawings, and any other relevant evidence of any defense the student desires;
- make any statement to the Honor Council in mitigation or explanation of the conduct in question;
- remain silent to avoid self-incrimination;
- be informed in writing of the findings and any decisions imposed by the Honor Council, Coordinating Committee, and the Dean; and,
- appeal the decision and/or disposition to the Chancellor, as herein provided.

B. Rights of Witnesses

Witnesses shall be notified of the scheduled time, date, and location of the hearing. Witnesses shall bring with them whatever documentation is requested. Failure of a student witness to appear, without good cause, is a violation of the Standards of Professional Conduct.

C. Record of Hearing

All proceedings of the Honor Council are to be held in the strictest confidence by the members and all other persons involved. The hearings shall be audio taped, and written minutes are also recorded. The notice, exhibits, hearing record, verdict, and disposition of the Honor Council shall become the "Record of the Case". This official document shall be filed under strictest security in the permanent records of the Evaluation Council Office. The record shall be accessible at reasonable times and places to both the University and the student for the purpose of review or appeal.

D. Conduct of the Hearing

The Honor Council Chair shall preside at the hearing, call the hearing to order, call the roll of the Honor Council members in attendance, ascertain the presence or absence of the student charged with misconduct, read the Notice of Hearing and charge and verify the receipt of notice of charge by the student, report any continuances requested or granted, establish the presence of any advisor or counselor of the student, call to the attention of the student charged and the advisor any special or extraordinary procedures to be employed during the hearing, and permit the student to make suggestions of or objections to any procedures for the Honor Council to consider.

All requests to address the Council shall be addressed to the Chair. The Chair will rule on all requests and points of order and may consult with Council's legal advisor prior to any ruling. The Chair's ruling shall be final, and all participants shall abide thereby, unless the Chair shall present the question to the Council at the request of a member of the Council, in which event the ruling of the Council by majority vote shall be final.

Rules of common courtesy and decency shall be observed at all times. An advisor or counselor may be permitted to address the Council at the discretion of the Chair. An advisor or counselor may request clarification of a procedural matter or object on the basis of procedure at any time by addressing the Chair after recognition.

Opening Statements:

1. The Honor Council Chair or his/her designee shall make opening remarks outlining the general nature of the case and testify to any facts the investigation has revealed.
2. The accused student may make an opening statement to the Council about the charge at this time or at the conclusion of the School of Medicine's presentation.

School of Medicine Evidence:

1. School of Medicine witnesses are to be called by the Chair of the Honor Council and identified or written reports of evidence are introduced as appropriate.
2. The Council may question witnesses at any time.
3. The student may question witnesses or examine evidence at the conclusion of the School of Medicine's presentation.

Student Evidence:

1. The student shall have the opportunity to make a statement to the Honor Council about the charge.
2. The student may present evidence through witnesses or written memoranda.
3. The Council may question the student or witnesses at any time.

Rebuttal Evidence:

- The Honor Council may permit the School of Medicine or the student to offer a rebuttal of the other's presentation.

If it appears that essential testimony is unavailable, or that for other good cause the hearing should be deferred, the Council may continue, recess or discontinue the hearing without prejudice.

V. Determination of the Honor Council

Following the hearing, the Council shall promptly deliberate in closed session out of the presence of the student charged. Determination is to be made regarding both the validity of the misconduct charge *and* on the discipline, if any, to be imposed.

A. Violation of the Standards of Professional Conduct

The Honor Council shall determine if the evidence presented in the hearing supports the charge of violation of the Standards of Professional Conduct. The Council shall render a decision, by simple majority vote, of whether a violation has been committed by the accused. Each charge of misconduct, if there are more than one, shall be considered individually and/or collectively at the discretion of the Council.

B.Discipline Imposed

The Honor Council shall determine the discipline to be imposed, if any, based upon its deliberations. One of the following forms of discipline is to be recommended by means of simple majority vote of the Council members. Where there are multiple violations, there can be separate sanctions for each violation. The sanctions include, but are not limited to, the following:

- **No Disciplinary Action**. Given when the student is not found in violation of the Standards of Professional Conduct.
- **Warning**. A written reprimand to the student that the student has violated the Standards of Professional Conduct. A copy is to be placed in the student's file.
- **Probation**. A written reprimand to the student for violation of the Standards of Academic Conduct that includes a designated period of time, the probability of more severe sanctions if the student violates any institutional regulation(s) during the probationary period, and subject to any appropriate terms or conditions, such as loss of privileges, restitution, and discretionary assignments.
- **Suspension**. An involuntary separation of the student from the School of Medicine for a specified period of time or until a special conditions have been met, with a statement whether suspension should relate back to the date of the offense, begin at the time imposed, or begin at a date specified in the future. At the conclusion of the period of suspension, the suspended student is automatically returned to student status. Conditions for readmission may be specified.
- **Dismissal.** An involuntary separation from the the School of Medicine for an indefinite period of time. The order of dismissal may specify a date before which the faculty will not consider a petition for readmission from the dismissed student.
- **Expulsion.** Permanent separation of the student from the School of Medicine.

The above sanctions apply to the status of the accused student in the School of Medicine. Any sanction impacting a student's enrollment status and/or privileges will be forwarded to the Vice Chancellor for Student Affairs or designee for information purposes.

An oral presentation of the Council's findings and recommendations is permitted following the hearing, but a written document including findings of fact, verdict, and recommended disposition shall be completed as soon as possible after the hearing. This Final Report of the Council shall be submitted to the Coordinating Committee, the Dean, and the Office of the Vice Chancellor for Student Affairs.

VI. Decision of the Coordinating Committee

The findings and determination of the Honor Council serve as recommendations to the Coordinating Committee and to the Dean of the School of Medicine. The Coordinating Committee, chaired by the Associate Dean for Academic Affairs and composed of members detailed in The Academic Plan for the School of Medicine, reviews the charge of misconduct, the findings of fact, the decision of the Council, and the recommended discipline to be imposed from the Honor Council.

After deliberation and careful consideration, the Coordinating Committee approves, by simple majority vote, one of the following actions: 1) to sustain the recommendations of the Honor Council; 2) to amend the recommendations of the Honor Council to another type of sanction; 3) to remand the Honor Council's recommendations; or, 4) to reverse the Honor Council's recommendations.

The findings and determinations of the Honor Council and the Coordinating Committee shall be transmitted to the Dean in writing within seven (7) consecutive calendar days following the Coordinating Committee meeting. A copy of this recommendation shall also be transmitted to the accused student by certified mail or personal delivery in the indicated time frame.

VII. Decision of the Dean

Upon receipt of the documents from the Honor Council and the Coordinating Committee, the Dean shall review the entire record that includes the following: 1) formal notice of the charges; 2) minutes of the Honor Council hearing; 3) written findings of the Honor Council and its recommendations to the Coordinating Committee; and 4) written decision of the Coordinating Committee concerning the sanction passed.

The Dean will, within a reasonable amount of time, make a decision to either affirm, amend, or reverse the Coordinating Committee's sentence, or remand the Coordinating Committee for further proceedings.

The Dean shall notify the student in writing by certified mail or personal delivery of his/her final decision. Copies of the letter will be sent to the Honor Council Chair, the Coordinating Committee Chair, and the Evaluation Council Office for placement in the student's file and in the official hearing file.

VIII. Right of Appeal

When a recommendation from the Honor Council and the Coordinating Committee is made for some form of disciplinary action other than "none", and this is upheld by the Dean, or if a recommendation of "no disciplinary action" is revised to one of greater severity by the Dean, the student may appeal such decision to the Chancellor or his/her designated representative by filing written notice of appeal with the Chancellor within ten (10) consecutive calendar days after notification of the decision of the Dean. A copy of the Notice of Appeal will also be given by the student to the Dean of the School of Medicine at the time of filing. The student may file a written memorandum for consideration by the Chancellor with the Notice of Appeal.

The Chancellor or his/her designated representative shall review the full record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify the Dean and the student in writing of the decision on the appeal. The action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

Status during Appeal: In cases of suspension, dismissal or expulsion where a Notice of Appeal is filed within the required time, a student may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit a student to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not disrupt the University or constitute a danger to the health, safety or welfare of the University community. In such event, however, any final disciplinary action imposed shall be effective from the date of the action of the Dean.

IX. Status of the Standards of Professional Conduct

Amendments to the Standards of Professional Conduct and/or Honor Council Procedures for Violations may be proposed by petition of any twenty-five members of the student body, the Honor Council on its own motion, or the faculty.

A proposed amendment in the Standards of Professional Conduct and/or Honor Council Procedures for Violations must be approved by the Honor Council, the Coordinating Committee, the Dean, the Chancellor, and the Board of Curators.

The Standards of Professional Conduct and/or Honor Council Procedures for Violations may be terminated at any time by action under the general amending procedure.

All students in the School of Medicine are subject to the jurisdiction of the Standards of Professional Conduct and Honor Council Procedures for Violations upon enrollment.

To insure their knowledge of the Standards of Professional Conduct and Honor Council Procedures for Violations, the presentation of these documents shall be an integral part of the orientation of newly accepted students to the School of Medicine.

School of Nursing Honor Codes

Honor Code Procedures for Violations of the Standards of Professional and Ethical Behavior

University of Missouri-Kansas City School of Nursing

I. Jurisdiction of the School of Nursing

The School of Nursing (SON) shall have jurisdiction over incidents of alleged violations of the University of Missouri-Kansas City School of Nursing's Standards of Professional and Ethical Behavior, Sections IIA and IIB by students accepted into degree programs in the School of Nursing while at the School of Nursing or enrolled in any nursing course or on clinical rotations at affiliated institutions. Alleged violations of the University of Missouri Student Conduct Code as described in Section III will be referred to the Office of the Vice Chancellor for Student Affairs. The Standards of Professional and Ethical Behavior identify areas of conduct which are judged unacceptable for individuals who are either in or aspire to be in the profession of nursing. The Standards of Professional and Ethical Behavior and these Procedures will be distributed to all newly enrolled students during orientation. When a nursing student has been charged with one or more acts of misconduct according to these standards, the Honor Council shall adhere to the following procedures detailed herein.
The Honor Council shall have the authority to recommend sanctions upon any accused appearing before the Council. The disciplinary proceedings described are not to be construed as judicial trials. Care shall be taken, however, to comply as fully as possible with the spirit and intent of these procedural safeguards.

II. Sanctions

The following sanctions may be imposed upon any nursing student found to have violated Sections IIA and IIB of the University of Missouri – Kansas City School of Nursing Standards of Professional and Ethical Behavior:

- Warning – A notice in writing that the student is violating or has violated the Standards of Professional and Ethical Behavior.
- Probation – A written reprimand for violation of specific provisions of the Standards of Professional and Ethical Behavior that includes a designated period of time and the probability of more severe sanctions if the student violates any institutional regulations(s) during the probationary period.
- Loss of Privileges - Denial of specified privileges in the School of Nursing for a designated period of time. Discretionary Sanctions. Work assignments in the School of Nursing, service to the School of Nursing, or other related discretionary assignments in the School of Nursing.
- Suspension from the School of Nursing – An involuntary separation from the School of Nursing for a specified period of time after which the student is eligible to return. Conditions for readmission may be specified.
- Dismissal from the School of Nursing – An involuntary separation from the School of Nursing for an indefinite period of time. It does not imply or state a minimum separation time.
- Expulsion from the School of Nursing – Permanent separation from the School of Nursing.

III. Organization of the Honor Council

A. Composition

The Honor Council members shall consist of the Chair; three voting faculty members, one representing each program, BSN, MSN, PhD (3 votes); five student members, 4 from the BSN program and one from the MSN or PhD program. Five members or their alternates (2 faculty, excluding the chair, and

three students) constitute a quorum. An assigned staff member will assist the Chair in generation of reports and will be present at the hearings to take minutes.

B. Eligibility and Appointment

Faculty members Voting members of the faculty who have no more than a 50% administrative appointment are eligible to serve as chair or members of the honor council. Voting members of the School of Nursing Faculty Forum shall elect the chair of the Honor Council and the undergraduate and graduate faculty representatives. Alternates for each position will also be elected.
Student members In order to be eligible for election to the Honor council, students must be in good standing within the School. A student who is placed on academic or disciplinary probation is ineligible for service on the Honor council. In addition, a student may be determined ineligible for service if his or her membership on the Council is assessed by the Chair not to be in the best interest of the School.
Each BSN class shall elect their student representative and their alternates. The graduate representative and alternate shall be elected from among students in all SON graduate programs.

C. Time of Appointment and Term of Office

All members shall serve a one-year appointment, with the exception of the chair who will serve 2 years. Members may be serve more than one term if they are re-elected in subsequent years. Members will serve until they resign or a new member is voted into their position.
Election of student members shall be held on an annual basis at the beginning of the academic year, no later than September 15.
Election of faculty will occur at the last spring faculty forum meeting of the year for the next academic year during regular School committee elections. Faculty vacancies are filled by special election.
After fall elections, a preliminary meeting of all members (including the chair) will be held within two weeks in order to discuss the role and function of the Honor Council.

D. Hearing Panel of the Honor Council

All faculty representatives including alternate and the three most senior students not in the accused student's class will serve as a hearing panel for the honor code violation. A chair of the Hearing Panel will be elected by simple majority vote of the members of the panel.
Voting by the hearing panel will take place by secret ballot.
The chair of the hearing panel will not vote except in case of a tie among the rest of the hearing panel in which case, the chair shall vote to break the tie. Proxy votes will not be allowed.

E. Primary Administrative Liaison (PAL)

A primary administrative liaison (PAL) will be appointed by the Dean for a minimum of a two year term. The PAL is not eligible to serve as a member of the Honor Council while serving as the PAL. The PAL and the Chair, when possible, should be serve overlapping terms. The PAL will draft the charge and represent the School of Nursing in all cases.

IV. Procedures for Report of Violation, Investigation, Informal Disposition, and Notice

A. Report of Violation

An alleged violation of the Standards of Professional and Ethical Behavior should be reported to the PAL of the Honor Council or designee as soon as possible after discovery of the incident. The PAL shall inform the chair and Honor Council of the alleged violation within one week if a hearing will be required. The Chair shall notify the Dean of all accusations. If the PAL determines that no violation occurred then the Dean and the Honor Council will be informed via an annual report submitted at the end of each academic year.

B. Preliminary Procedures and Meeting

The PAL shall determine whether the allegations fall within Sections IIA or IIB, or Section III of the Standards of Professional and Ethical Behavior, and shall refer any allegations of violations of Section II to the UMKC Office of Student Affairs. The PAL shall investigate any reported violation of Sections IIA or IIB before initiating formal conduct procedures.
The PAL will notify the accused, in writing by certified mail, of the allegations brought against him/her prior to the commencement of the preliminary meeting between the PAL and the student. In addition, the student shall receive a copy of these Procedures for Violations of the Standards of Professional and Ethical Behavior along with the written notice. The PAL shall meet with the accused student to give the student the opportunity to present a personal version of the incident or occurrence.
Following the investigation the PAL shall determine the appropriate preliminary outcome: no formal charge of misconduct, informal disposition, or formal disposition involving an honor council meeting. The PAL will notify the Chair and the Dean of the outcome as required in section IV A.

C. Informal Disposition

The PAL shall have the authority to propose appropriate sanctions to the accused student and within a week the student shall accept or reject a proposed informal disposition.
A failure of the student either to accept or reject the informal disposition within the 10 working days shall be deemed to be an acceptance and, in such event, the proposed disposition shall become final upon expiration of such time.
If the student rejects informal disposition, it must be in writing and the matter shall then be forwarded to the Honor Council for a formal hearing.

D. General Statement of Procedures

A student charged with a breach of the Standards of Professional and Ethical Behavior is entitled to a written notice of the charge against him or her and a formal hearing unless the matter is disposed of under the rules for informal disposition. Honor Code Procedures are not to be construed as judicial trials and need not wait for legal action before proceeding; however, care shall be taken to comply as fully as possible with the spirit and intent of the procedural safeguards set forth herein. The University of Missouri Office of the General Counsel shall be legal advisor to the Committee and to the PAL.

E. Notice

The PAL shall initiate formal proceedings by arranging with the chair to call a meeting of the Honor Council and by giving written notice to the accused student by email and by certified mail to the student's last address currently on record with the Office of the Registrar. Failure of the student to have a current correct local address on record shall not be construed to invalidate such notice. The notice shall set forth the date, time and place of the alleged violation and the date, time and place of the hearing before the Honor Council.

F. Conflicts of Interest

Any member of the Honor Council may recuse him or herself if he or she believes he or she has a conflict of interest. The PAL or the accused student may raise the question of a member's Conflict of Interest at the initial meeting of the Honor Council to hear the charge against the student, and the Chair will determine whether the member should be recused. The member will be replaced by his or her alternate. If both the member and the alternate are recused, the appropriate electing body will chose a second alternate for this case only. [See Section IIB for election procedures.].

G. Temporary Suspension

The Dean or his/her designee may at any time temporarily suspend or deny readmission to a student from the School of Nursing pending formal procedures when the Dean or his/her designee finds and believes from available information that the student would seriously disrupt the School of Nursing or constitute a danger to the health, safety or welfare of members of the School of Nursing Community. The appropriate procedure to determine the future status of the student will be initiated within seven calendar days.

V. Procedure for Honor Council Hearing

A. Rights of the Honor Council

- Hear together cases involving more than one accused student which arise out of the same transaction or occurrence, but in that event shall make separate findings and determinations for each accused;
- Permit a stipulation of facts by the involved accused and the PAL;
- Permit the incorporation in the record by a reference of any documentation produced and desired in the record by the PAL or the accused student;
- Question witnesses or challenge other evidence introduced by either the PAL or the accused student at any time;
- Hear from the PAL about dispositions made in similar cases and any dispositions offered to the student appearing before the Committee;
- Call additional witnesses or require additional investigation; · Dismiss any action at any time;
- Permit or require at any time amendment of the Notice of Hearing to include new or additional matters which may come to the attention of the Council before final determination of the case; provided, however, that in such event the Council shall grant to the accused or the PAL such time as the Council may determine reasonable under the circumstances to answer or explain such additional matters; and,
- Dismiss any person from the hearing who interferes with or obstructs the hearing or fails to abide by the rulings of the Council Chair.

B. Rights of the Accused Student Upon Hearing – An accused student appearing before the Honor Council shall have the right to:

Submit, if he or she should choose to do so, a written response to the charge outlined in the Notice before the scheduled hearing is to commence;

- Review and obtain copies, in advance, of any materials that will be presented by the PAL at the hearing;
- Submit a written request for a list of witnesses to be called by the PAL at the hearing;
- Be present at the hearing;
- Have an advisor or counselor appear with the accused and to consult with such an advisor or counselor before and/or during the hearing; however, the advisor/counselor will not be allowed to question witnesses and/or address members of the Council. The accused student must notify the chair at least 48 hours in advance with the name and relationship of the advisor and the name of any witness that will attend the hearing;
- Hear or examine evidence presented to the Honor Council; · Question the PAL and any witnesses who testify at the hearing;
- Present evidence by witness, affidavit, or documents in any media; · Make any statement to the Honor Council in mitigation or explanation of the conduct in question;
- Be informed in writing of the findings and any decisions imposed by the Honor Council;
- Appeal the decision and/or disposition to the Dean and to the Chancellor, as herein provided.

C. Conduct of the Hearing

All proceedings of the Honor Council are to be held in confidence by the members. The hearings shall be taped or stenographically recorded. The notice, exhibits, hearing record, verdict, and findings and determination of the Honor Council shall become the record of the Case and shall be filed in the Dean's office at the School of Nursing. The record shall be accessible at the reasonable times and places to both the PAL and the accused student for the purpose of review or appeal.

The Honor Council Chair shall preside at the hearing, call the hearing to order, call the roll of the Honor Council members in attendance, ascertain the presence or absence of the accused student, read the Notice of Hearing and Charge and verify the receipt of Notice of Charge by the accused, report any continuances requested or granted, establish the presence of any advisor or councselor of the accused student, call to the attention of the accused student and the advisor any special or extraordinary procedures to be employed during the hearing, and permit suggestions for or objections to any procedures for the Honor Council to consider. NOTE: Advisors will not be allowed to question the PAL, witnesses, and/or address members of the Council.
All requests to address the Council shall be addressed to the Chair. The Chair will rule on all requests and points of order and may consult with Council's legal advisor prior to any ruling. The Chair's ruling shall be final, and all participants shall abide thereby, unless the Chair shall present the question to the Council at the request of a member of the Council, in which event, the ruling of the Council by majority vote shall be final.
Rules of common courtesy and decency shall be observed at all times.

1. Opening Statements:
   - The PAL may make an opening statement outlining the general nature of the case.
   - The accused student may make an opening statement to the Council about the charge at this time or at the conclusion of the School of Nursing's presentation.
2. School of Nursing's Evidence:
   - Witnesses of the School of Nursing are to be called, identified and questioned by the PAL, and any written reports or evidence introduced by the PAL as appropriate.
   - The Council may question witnesses at any time.
   - The accused student may question witnesses or examine evidence at the conclusion of the PAL's presentation.
3. Accused Student's Evidence:
   - If the accused student has not elected to make an opening statement previously, he or she shall have the opportunity to make a statement to the Honor Council about the charge at this time.
   - The accused student may present evidence through questioning witnesses or by written memoranda or other documents.
   - The Council may question the accused student or witnesses at any time.
   - The PAL may question witness or examine evidence at the conclusion of the accused student's presentation.
4. Rebuttal Evidence:
   The Honor Council may permit the PAL or the accused to offer a rebuttal to the other's presentation.

VI. Determination of the Honor Council

Following the hearing, the Council shall promptly deliberate in closed session out of the presence of the accused, the witnesses, and the PAL. The Honor Council shall determine by a simple majority vote based on the evidence presented in the hearing whether they believe the student violated the Standards of Professional and Ethical Behavior as charged, and if so what sanction, if any, is appropriate. Separate findings shall be made as to the conduct of the student and as to the sanction, if any, to be imposed. The Council shall promptly submit its findings and determination in writing to the accused student and to the PAL.

The findings and determination of the Honor Council shall serve as a decision for the School of Nursing.

VII. Appeal to the Dean

If the student so desires, he or she may appeal the decision of the Council to the Dean within 10 business days of the Honor Council decision. A copy of the Notice of Appeal shall be given by the student to the PAL. The student may file a written memorandum for consideration by the Dean with the Notice of Appeal, and the Dean may request a reply from the PAL. The Dean shall review the record of the case and the appeal documents, and may affirm, reverse, or remand the case for further proceedings before the Honor Council.
The Dean shall notify the accused of his or her decision in writing, by certified mail. Copies of the letter will be sent to the Honor Council Chair, the PAL, and will be included with the official hearing file.

VIII.Appeal to the Chancellor

The accused student may appeal from the Dean's decision to the Chancellor or designated representative by filing written notice of appeal with the Chancellor within ten (10) business days after notification of the decision of the Dean. A copy of the Notice of Appeal will also be given by the accused to the Dean of the School of Nursing and to the PAL at the time of filing. The accused student may file a written memorandum for consideration by the Chancellor with the Notice of Appeal.
The Chancellor or designated representative shall review the record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify the Dean and the accused student in writing of the decision on the appeal. The action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

IX. Status during the Appeal

In cases of suspension, dismissal or expulsion where a Notice of Appeal is filed within the required time, the accused student may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit the accused student to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not disrupt the

University or constitute a danger to the health, safety or welfare of the University Community. In such event, however, any final disciplinary action imposed shall be effective from the date of the action of the Honor Council.

X. Status of the Standards of Professional and Ethical Behavior

Amendments to the Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations may be proposed by petition of any twenty-five members of the student body, or the Honor Council on its own motion, or the faculty.

A proposed amendment in the Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations must be approved by a 2/3 majority vote of the Honor Council members present (all members have the right to vote on amendments = 9 votes), by a 2/3 majority vote of the faculty present, by the Chancellor, and by the Board of Curators.

The Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations may be terminated at any time by action under the general amending procedure.

Standards of Professional and Ethical Behaviour

University of Missouri – Kansas City School of Nursing

I. Preamble

One of the goals of a school of nursing is to educate student nurses during the transition to a professional life. The University of Missouri – Kansas City School of Nursing (UMKC-SON) has an obligation to society[1] to evaluate students pursuing the B.S.N., M.S.N., and Ph.D. degrees, as thoroughly as possible. This responsibility includes their cognitive abilities, their academic and professional knowledge and skills, their integrity, and their suitability to practice nursing in their desired professional role. Accordingly, the Standards of Professional and Ethical Behavior detailed in this document have been developed to guide students who are enrolled at all levels with the UMKC-SON, including undergraduate and graduate students, and are designed to assure accountability for the professional and ethical standards of the nursing profession.

II. Integrity

A. Personal and Professional Integrity

1. **Honesty**
   A student nurse shall deal honestly with people including, but not limited to, colleagues, instructors, representatives of the University, patients, attending physicians, nursing staff, any representative of our clinical agencies, and other members of the health care team. Student nurses are expected to demonstrate honesty and integrity in all aspects of their interaction with patients and staff – particularly in assuring accuracy and completeness in their actions and documentation. The student nurse shall be willing to admit errors and must not mislead others or promote himself or herself at the patient's expense. The student nurse shall strive to report, by utilizing the Honor Council Procedures for Violations of the Standards of Professional and Ethical Behavior, those student nurses deficient in character or competence, or who engage in fraud, deception, and/or dishonesty.
   A basic principal underlying all research is honesty. Scientists and student nurses who participate in research have a responsibility to provide research results of the highest quality; to gather facts meticulously, to keep impeccable records of work done; to interpret results realistically, not forcing them into preconceived molds or models; and to report new knowledge through appropriate channels. Co-authors of research reports must be sufficiently acquainted with the work of their co-workers that they can personally vouch for the integrity of the study and validity of the findings, and must have been active in the research itself.
   - Examples of academic dishonesty include, but are not limited to, the following:
     i **Cheating**
     - Use of any unauthorized assistance in taking quizzes, tests, or examinations;
     - Dependence upon the aid of unauthorized sources in writing papers, preparing reports, solving problems, or carrying out assignments;
     - Acquisition or possession without permission of tests or other academic material belonging to a member of the University faculty or staff;
     - Use of assignments or papers prepared in one class for another class without disclosing such information to the faculty
     - In any way giving assistance to others who are participating in any of the three preceding types of behavior; or
     - Falsifying attendance records or other official documents.

     ii **Plagiarism**
     - Use by paraphrase or direct quotation of the published or unpublished work of another person without fully and properly crediting the author with footnotes, citations or bibliographical reference;
     - Unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials; or
     - Unacknowledged use of original work/material that has been produced through collaboration with others without release in writing from collaborators.

     iii **Sabotage**

- Unauthorized interference with, modification of, or destruction of the work or intellectual property of another member of the University.

iv **Falsification of Patient's Medical Record or Information**

- Examples of dishonesty related to clinical practice include, but are not limited to, the following:
  - Writing progress notes or other documentation regarding the patient's status, including, but not limited to, clinical observations, medication administration or results in the patient's chart when the student nurse has not seen or evaluated the patient, or using incorrect times of data entry.
  - Reporting medical information such as physical examination findings, lab values, test results, medications, or any other relevant patient information to other students, nurses, nursing supervisors, residents, attending physicians, the patient, the patient's family or other relevant health care personnel that has been fabricated by the student nurse.

2. **Responsibility**
   A student nurse must acquire competencies with the appropriate concepts, knowledge and skills that the faculty determine essential. These competencies shall be utilized to care for the sick and to promote the health and welfare of society[2]. A student nurse shall recognize a responsibility to participate in activities contributing to an improved community.
   Student nurses in the care of patients must not be harmful, dangerous, or negligent to the mental or physical health of a patient or the public. Negligent means failure to exercise that degree of skill and learning ordinarily used under the same or similar circumstances by other student nurses.
   Students must be familiar with and follow the rules and regulations of the School of Nursing, the University, and professional organizations which they are required to follow as nursing students. Copies of such rules and regulations are attached herewith.

B. Professional Nursing Behavior

1. **Nondiscrimination**
   A nursing student shall provide care to patients without discriminating based on race, color, creed, sex, age, national origin, disability or Vietnam Era Veterans status.
   It is against the University regulations to discriminate on the basis of race, color, creed, sex, age, national origin, disability, or Vietnam Era Veterans status. The University has an AIDS policy statement consistent with state law that prohibits discrimination against persons with AIDS or who are HIV positive.
2. **Confidentiality**
   A student nurse shall respect the rights of patients, colleagues, affiliated institutions, and other health professionals, and shall safeguard patient confidences within the constraints of law. The patient's right to confidentiality in regard to his or her medical record, which includes confidentiality of personal and social history, is a fundamental tenet to health care.
   The discussion in public of the problems of an identified patient, without the patient's permission, by professional staff (including other students) violates patient confidentiality and is unethical. Under no circumstances can any medical record be removed from any institution. Photocopying of the entire record is never permitted for presentations, rounds, or conferences; if permitted by the health care institution or provider students are permitted to extract information, but not copy 'wholesale' parts of the chart. Names of the patients should be omitted from any documents used for these presentations.
3. **Disclosure**
   While the student nurse is a member of the patient care team and under direct or indirect faculty supervision, a student nurse shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation and use the talents of other health professionals when indicated.
   Sharing of medical information appropriately with a patient and colleagues involved in the care of the patient is a fundamental ethical requirement. The patient must be well informed to make health care decisions and work intelligently in partnership with the patient care team. Information that the patient needs for decision-making shall be presented in terms that patient can understand. If, for some reason, the patient is unable to comprehend, there shall be disclosure to the patient's authorized representative.
   Failure of a student nurse to share medical information relevant to a patient with a patient and colleagues involved in the care of the patient is unethical. Providing inaccurate information with these individuals is also unacceptable.
4. **Misconduct with Patients**
   The student nurse will not engage in nonprofessional behaviors with a patient – even upon the apparent request of a patient – while the student nurse is involved with the patient's care.
5. **Representation**
   A student nurse shall accurately represent himself or herself to others including, but not limited to, colleagues, instructors, representatives of the University and their affiliates, partner institutions, patients, nurses, and other members of the health care team.
   Examples of misrepresentation include, but are not limited to the following:
   - Misrepresentation of the student's position, knowledge, and authority, including use of the title "nurse" by an undergraduate student nurse, or by use of the titles advanced practice nurse (APRN), nurse practitioner (NP), clinical nurse specialist (CNS), nurse midwife (NM), or nurse anesthetist (CRNA) by a graduate student.
   - Use of fraud, deception, lies, or bribery in securing any certificate or registration or authority, diploma, permit or license issued, or in obtaining permission to take any examinations.
   - Impersonation of any person holding a certificate of registration or authority, permit, license or allowing any person to use his/her certificate of registration or authority, permit license, or diploma from any school.

- Forgery, alteration, or misuse of a patient's medical records or knowingly furnishing false information to the other members of the health care profession and/or professional organizations.

6. **Assessment of Personal Competence (Self-Evaluation)**
   Student nurses shall seek consultation and supervision whenever their ability to play their role in the care for a patient is inadequate because of lack of knowledge or experience.
   Students are expected to respond to constructive criticism by appropriate modification of behavior.
7. **Professional Demeanor**
   The student nurse is a representative of UMKC, and should realize that their behavior may positively and negatively affect the judgments of others about UMKC-SON.
   UMKC-SON students are expected to be thoughtful and professional when interacting with faculty, patients and their families, nurses, attending physicians, nursing preceptors, affiliated institutional staff, other students, and other members of the health care team.
   Students shall maintain a neat and clean appearance, and dress in attire that is generally accepted as professional by the patient populations served.
   Inappropriate behavior includes, but is not limited to, the use of offensive language, gestures, or remarks. Attempting, directly or indirectly, by way of intimidation, coercion or deception, to obtain or retain a patient or discourage the use of a second opinion or consultation is not appropriate.
8. **Impairment**
   The student nurse will not use alcohol or drugs in ways that impair his/her ability to perform the work of the profession or results in compromised patient care. It is the responsibility of every student nurse to strive to protect the public from an impaired colleague and to assist that colleague whose capability is impaired because of alcohol or drug use.
9. **Conflict of Interest**
   If a conflict of interest arises, the moral principle is clear – the welfare of the patient must be, at all times, paramount. For example, gifts, hospitality, or subsidies offered by manufacturers and distributors of medical and or other equipment/goods shall not be accepted if acceptance would influence the objectivity of clinical judgment.
10. **Criticism of Colleagues**
    Professional relations among all members of the medical community shall be marked by civility. Scholarly contributions shall be acknowledged and each person shall recognize and facilitate the contributions of others to this community; slanderous comments and acts are not acceptable.
    Student nurses shall deal with professional, staff, and peer members of the health team in a considerate manner and with a spirit of cooperation.
    It is unethical and harmful for a student nurse to disparage, without sufficient evidence, the professional competence, knowledge, qualifications, or services of a colleague to anyone. It is also unethical to imply without reliable evidence – by word, gesture, or deed – that a patient has been poorly managed or mistreated by a colleague.
11. **Teaching**
    It is incumbent upon those entering this profession to teach what they know of the science, art, and ethics of nursing care. It includes communicating clearly and teaching patients so that they are properly prepared to participate in their own care and in the maintenance of their health.

III. The University of Missouri Student Conduct Code

In addition to the conduct detailed in the preceding sections, a student nurse is subject to the University of Missouri Student Conduct Code, as administered by the Office of the Vice Chancellor for Student Affairs, except for provisions dealing with academic dishonesty, Section 200.01 0 B. 1.

Conduct for which students are subject to sanctions falls into the following categories:

1. Forgery, alteration, or misuse of University documents, records or identification, or knowingly furnishing false information to the University.
2. Obstruction or disruption of teaching, research, administration, conduct proceedings, or other University activities, including its public service functions on or off campus.
3. Physical abuse or conduct which threatens or endangers the health or safety of any person.
4. Attempted or actual theft of, damage to, or possession without permission of property of the University or of a member of the University community or of a campus visitor.
5. Unauthorized possession, duplication, or use of keys to any University facilities or unauthorized entry to or use of University facilities.
6. Violations of University policies, rules or regulations or of campus regulations including, but not limited to, those governing residence in University-provided housing, or the use of University facilities, or the time, place and manner of public expression.
7. Manufacture, use, possession, sale or distribution of alcoholic beverages or any controlled substance with out proper prescription or required license or as expressly permitted by law or University regulations.
8. Disruptive or disorderly conduct or lewd, indecent, or obscene conduct or expression.
9. Failure to comply with direction of University officials acting in the performance of their duties.
10. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals.
11. Actual or attempted theft or other abuse of computer time, including but not limited to:
    - Unauthorized entry into a file to use, read, or change the contents, or for any other purpose;
    - Unauthorized transfer of a file;

- Unauthorized use of another individual's identification and password;
- Use of computing facilities to interfere with the work of another student, faculty member, or University official;
- Knowingly causing a computer virus to become installed in a computer system or file.

Details of the policies, procedures, sanctions, and due process for violations of the University of Missouri Student Conduct Code are found in the University of Missouri – Kansas City General Catalogue and the student handbook.

[1] ANA (2003). Nursing's Social Policy Statement.

[2] ANA(2003). Nursing's Social Policy Statement.

School of Pharmacy Honor Codes

Honor Council Procedures for Violations of the Standards of Professional Growth and Ethical Behavior

University of Missouri-Kansas City School of Pharmacy

I. Jurisdiction of the Honor Council

The Honor Council shall be concerned with specified incidents of alleged violations by University of Missouri-Kansas City School of Pharmacy students of the School's Standards of Professional and Ethical Behavior, Sections IIA and IIB. Violations of the University of Missouri Student Conduct Code as described in Section III will be referred to the Office of the Vice Chancellor for Student Affairs. The standards identify areas of conduct which are judged unacceptable for individuals who are either in or aspire to be in the profession of pharmacy. The Standards of Professional and Ethical Behavior are distributed to all newly enrolled students during orientation. When a pharmacy student has been charged with one or more acts of misconduct according to these standards, the Honor Council shall adhere to the following procedures detail herein. The Honor Council shall have the authority to recommend sanctions upon any accused appearing before the Council. The disciplinary proceedings described are not to be construed as judicial trials. Care shall be taken, however, to comply as fully as possible with the spirit and intent of these procedural safeguards.

II. Organization of the Honor Council

A. Composition

The Honor Council members shall consist of the Chair; three voting faculty members, one from each division (3 votes); and one student member from each year 2-6 of the professional degree programs (5 students). The three most senior students no in accused's class will vote. Voting will take place by secret ballot. The chair and faculty members will not be administrators or division chairs. Four members or their alternates (2 faculty (to exclude the chair), 2 students) constitute a quorum. One nonvoting Honor Council staff member will assist the Chair in generation of reports and will be present at the hearings to take minutes. In case of a tie among the Honor Council as a whole, the chair shall vote in order to make the final determination upon recommendations from the other members. Proxy votes will not be allowed.

B. Eligibility and Appointment

The chair of the Honor Council shall be elected by the full faculty. An alternate will also be elected. The three division representatives and an alternate for each shall be elected by their respective divisions. The student representatives and their alternates shall be elected by their class officers. All elections shall be held on an annual basis at the beginning of the academic year, no later than September 15. After elections, a preliminary meeting of all members to discuss the role and function of the Honor Council will be held within two weeks.

C. Time of Appointment and Term of Office

All members shall serve a one year appointment or until replaced by election but may be re-elected in subsequent years. A student is ineligible to continue as a member of the Honor Council if placed on academic or disciplinary probation, or if for any other reason membership of the Council may not be in the best interest of the School of Pharmacy as determined by the Honor Council chair. In this case, the alternate would assume membership on the Council, and another alternate would be chosen by the class officers.

D. Primary Administrative Liaison (PAL)

A primary administrative liaison (PAL) will be appointed by the Dean for a minimum of a two year term. The PAL will draft the charge and represent the School of Pharmacy in all cases. The PAL will include all references to the School of Pharmacy within this document.

III. Procedures for Report of Violation, Investigation, Informal Disposition, and Notice

A. Report of Violation

An alleged violation of the Standards of Professional and Ethical Behavior should be reported to the PAL of the Honor Council or designee as soon as possible after discovery of the incident. The Chair shall notify the Dean of all accusations.

B. Preliminary Procedures and Meeting

The PAL shall investigate any reported student misconduct before initiating formal conduct procedures. The PAL is responsible for notifying the accused, in writing by certified mail, of the allegations brought against him/her prior to the commencement of the preliminary meeting and shall receive a copy of these Procedures for Violations of the Standards of Professional and Ethical Behavior along with the written notice. The PAL shall meet with the accused student to give the student the opportunity to present a personal version of the incident or occurrence.

C. Informal Disposition

The PAL shall have the authority to dismiss an allegation or propose appropriate sanctions to the accused student and shall fix a reasonable time within which the student shall accept or reject a proposed informal disposition. A failure of the student either to accept or reject within the time fixed shall be deemed to be an acceptance and, in such event, the proposed disposition shall become final upon expiration of such time. If the student rejects informal disposition, it must be in writing and shall be forwarded to the Honor Council.

D. Prior to Formal Hearing

The PAL shall draft the charge and call the Honor Council into session for a preliminary meeting within 10 working days of receipt of a written accusation of misconduct. The Chair of the Honor Council shall approve meeting dates. In the case that an elected member and an alternate have a conflict of interest in the case, the electing body would choose another member for the one case at the time of the preliminary meeting. [See section IIB for election procedures.] If the case is found to be within the jurisdiction of the Honor Council, a formal hearing will be held. If it is not within the jurisdiction of the Honor Council, the case will be forwarded to the Office of the Vice Chancellor for Student Affairs or other appropriate action will be taken. The PAL and the accused may meet with the Chair separately to discuss these policies and procedures. The Dean, designee, or other appropriate university official(s), may at any time temporarily suspend or deny readmission to the accused from the School of Pharmacy pending formal procedures when the Dean or the Chancellor or the Chancellor's designee finds and believes from available information that the presence of the accused on campus would seriously disrupt the School of Pharmacy or constitute a danger to the health, safety, or welfare of members of the School of Pharmacy community. The appropriate procedure to determine the future status of the accused will be initiated within seven calendar days of any action taken.

E. Notice of Formal Hearing

If the accusation is found at the preliminary meeting to be within the jurisdiction of the Honor Council, the formal hearing will be held within 15 working days of mailing of the official notice. Notice by certified mail will be sent to the address currently on record with the UMKC Registrar's Office. Failure by the accused to have a current local address on record with the Registrar's Office shall not be construed to invalidate such notice. The PAL, witnesses, and the accused will be given written notice of the hearing by certified mail. The notice shall set forth the date, time, and place of the alleged violation, the conduct for inquiry, the date, time and place of the hearing before the Council, request for attendance of the parties involved, and a reference for the accused to the Rights of the Accused Student Upon Hearing which are outlined in these Procedures. The notice shall be given at least seven (7) consecutive calendar days prior to the hearing, unless a shorter time be fixed by the Chair for good cause. Any request for continuance shall be made in writing to the Chair who shall have the authority to postpone the hearing if it is determined that the request is timely and made for good cause. The Chair shall notify the Honor Council members, the accused, the PAL, the witnesses, and any other relevant individuals of the new date for the hearing. If the accused fails to appear at the scheduled time, the Honor Council may hear and determine the matter in the accused's absence.

IV. Procedure for Honor Council Hearing

A. Rights of the Honor Council

The Honor Council shall have the right to:

- hear together cases involving more than one accused which arise out of the same act of misconduct, but in that event shall make separate findings and determinations for each accused;
- permit a stipulation of facts by the accused involved and the PAL;
- permit the incorporation in the record by a reference of any document, affidavit, or other material produced and desired in the record by the PAL or the accused charged and make a determination of whether the information is relevant to the case at hand.
- question witnesses, the accused, and/or the PAL or challenge other evidence introduced by either the PAL or the accused at any time;
- hear from the Council Chair about dispositions made in similar cases;
- call additional witnesses or require additional investigation,
- dismiss any action at any time;
- permit or require at any time, within a reasonable time as determined by the Council, amendment of the Notice of Hearing to include new or additional matters which may come to the attention of the Council before final determination of the case; provided, however, that in such event the Council shall grant to the accused or the School such time as the Council may determine reasonable under the circumstances to answer or explain such additional matters; and,
- dismiss any person from the hearing who interferes with or obstructs the hearing or fails to abide by the rulings of the Council Chair on any procedural question or request of the Chair for order.

B. Rights of the Accused Upon Hearing

The accused scheduled to appear before the Honor council pursuant to formal notice of charges and disciplinary hearing shall have the right to:

- submit a written response to the charge outlined in the Notice before the scheduled hearing is to commence;
- request in advance of the scheduled hearing a review of any materials contained in the accused's hearing file which will be kept in the Student Affairs Office;
- submit a written request for the identities of witnesses to be called to testify before the Council;
- be present at the hearing;
- have an advisor or counselor appear with the accused and to consult with such an advisor or counselor before and/or during the hearing: however, the advisor/counselor will not be allowed to question witnesses and/or address members of the Council:
- hear or examine evidence presented to the Honor Council
- question the PAL and/or witnesses present who are testifying at the hearing.
- present evidence by witness, affidavit, written report, other memoranda, photographs, drawings, and any other relevant evidence of any defense the accused desires:
- make any statement to the Honor Council in mitigation or explanation of the conduct in question;
- remain silent to avoid self-incrimination;
- be informed in writing of the findings and any decisions imposed by the Honor Council, the Executive Committee; and, • appeal the decision and/or disposition to the Chancellor, as herein provided.

C. Rights of School of Pharmacy

The Primary Administrative Liaison (PAL) has the right to:

- be present at the hearing;
- present evidence by witness, affidavit, written report, other memoranda, photographs, drawings, and any other relevant evidence the PAL desires;
- offer rebuttal at the appropriate time as determined by the Chair;
- question witnesses or the accused;
- have an advisor or counselor appear with the PAL and to consult with such an advisor or counselor before or during the hearing; however, the advisor/counselor will not be allowed to question witnesses and/or address members of the Council;
- hear or examine evidence presented to the Honor Council by witnesses or the accused; and,
- be informed in writing of the findings and any decisions imposed by the Honor Council or the Executive Committee.

D. Rights of Witnesses

Witnesses shall be notified of the scheduled time, date, and location of the hearing. Witnesses shall bring with them whatever documentation is requested. Failure of a student witness to appear, without good cause, is a violation of the Standards of Professional and Ethical Behavior.

E. Record of Hearing

All proceedings of the Honor Council are to be held in the strictest confidence by the members and all other persons involved. The hearings shall be audio taped, and written minutes will also be recorded. The notice, exhibits, hearing record, verdict, and disposition of the Honor Council shall become the record of the Case. This official document shall be filed under strictest security in the permanent records of the Students Affairs Office of the School of Pharmacy. The record shall be accessible at the reasonable times and places to both the University and the accused for the purpose of review or appeal.

F. Conduct of the Hearing

The Honor Council Chair shall preside at the hearing, call the hearing to order, call the roll of the Honor Council members in attendance, ascertain the presence or absence of the accused, read the Notice of Hearing and Charge and verify the receipt of Notice of Charge by the accused, report any continuances requested or granted, establish the presence of any advisor or councilor of the accused, call t the attention of the accused and the advisor any special or extraordinary procedures to be employed during the hearing, and permit suggestions for or objections to any procedures for the Honor Council to consider. NOTE: Advisors will not be allowed to questions the PAL, witnesses, and/or address members of the Council All requests to address the Council shall be addressed to the Chair. The Chair will rule on all requests and points of order and may consult with Council's legal advisor prior to any ruling. The Chair's ruling shall be final, and all participants shall abide thereby, unless the Chair shall present the question to the Council at the request of a member of the Council, in which event, the ruling of the Council by majority vote shall be final. Rules of common courtesy and decency shall be observed at all times.

1. **Opening Statements**
   - The Honor Council Chair or designee shall make opening remarks outlining the general nature of the case.
   - The accused may make an opening statement to the Council about the charge at this time.
   - The PAL may make an opening statement and may add additional clarification to other opening statements as necessary.
   - Witnesses of the School of Pharmacy are to be called by the PAL and identified or written reports of evidence are introduced as appropriate.
   - The Council may question witnesses at any time.
   - The accused may question witnesses or examine evidence at the conclusion of the PAL's presentation.
2. **School of Pharmacy's Evidence**

- The PAL may question own witnesses.
- The accused shall have the opportunity to make a statement to the Honor Council about the charge.
- The accused may present evidence through witnesses or written memoranda.
- The Council may question the accused or witnesses at any time.
- The PAL may question witnesses or examine evidence at the conclusion of the accused's presentation.
- the accused may question own witnesses.
- Accused's Evidence:

3. **Rebuttal Evidence:**
   The Honor Council may permit the PAL or the accused to offer a rebuttal to the other's presentation. If it appears that essential testimony is unavailable, or that for other good cause the hearing should be deferred, the Council may continue, recess or discontinue the hearing without prejudice.

V. Determination of the Honor Council

Following the hearing, the Council shall promptly deliberate in closed session out of the presence of the accused, the witnesses, or the PAL. Determination is to be made regarding both the validity of the charge and the discipline, if any, to be imposed.

A. Violation of the Standards of Professional and Ethical Behavior

The Honor Council shall determine if the evidence presented in the hearing supports the charge of violation of the Standards of Professional and Ethical Behavior. The Council shall render a decision, by simple majority vote, of whether a violation has been committed by the accused. Each charge, if there are more than one, shall be considered individually and/or collectively at the discretion of the Council.

B. Discipline Imposed

The Honor Council shall determine the discipline to be imposed, if any, based upon its deliberations. The following forms of discipline are to be recommended by means of a simple majority vote of the Council members. Where there are multiple violations, there can be separate sanctions for each violation. The sanctions include, but are not limited to, the following:

- **No Disciplinary Action –**
  Given when the student is not found in violation of the Standards of Professional and Ethical Behavior.
- **Warning –**
  A written reprimand that the student has violated the Standards of Professional and Ethical Behavior.
- **Probation –**
  A written reprimand for violation of the Standards of Academic Conduct that includes a designated period of time, the probability of more severe sanctions if the student violates any institutional regulations(s) during the probationary period, and subject to any appropriate terms or conditions, such as loss of privileges, restitution, and discretionary assignments.
- **Suspension –**
  An involuntary separation from the School of Pharmacy for a specified period of time or until special conditions have been met, with a statement whether suspension should relate back to the date of the offense, begin at the time imposed, or begin at a date specified in the future. At the conclusion of the period of suspension, the suspended student is automatically returned to student status. Conciliation for readmission may be specified.
- **Dismissal –**
  An involuntary separation from the School of Pharmacy for an indefinite period of time. The order of dismissal may specify a date before which the faculty will not consider a petition for readmission from the dismissed student.
- **Expulsion –**
  Permanent separation from the School of Pharmacy. A copy of the imposed sanction is to be placed in the student's non-academic file.

C.

An oral presentation of the Council's findings and recommendations is permitted following the hearing, but a written document including findings of fact, verdict, and recommended disposition shall be completed as soon as possible after the hearing. This Final Report of the Council shall be submitted to the Executive Committee and the Office of the Vice Chancellor for Student Affairs. All parties will be notified in writing of the Honor Council's recommendation by certified mail within seven calendar days.

VI. Decision of the Executive Committee

The findings and determination of the Honor Council serve as recommendations to the Executive Committee. The Executive Committee, as described in the School of Pharmacy By-Laws, chaired by the Dean or designee, reviews the charge, the finding of fact, the decision of the Council, and the recommended discipline to be imposed from the Honor Council. They also assured that the procedures outlined for the Honor Council were successfully followed. The Executive Committee has the right to request further information from either party. Either party can also request to address the Executive Committee. In either case, both parties will be notified of the request, the nature of the request, and be asked to attend if deemed necessary by the Executive Committee. Both parties will have the same rights as they have upon hearing as outlined in IV B & C of this document. The Executive Committee hearings shall be audio taped, and written minutes will also be recorded. The notice, exhibits, hearing record, verdict, and disposition of the

Executive Committee shall become the record of the Case. This official document shall be filed in the permanent records of the Student Affairs Office of the School of Pharmacy. The record shall be accessible at the reasonable times and places to both the University and the accused for the purpose of review or appeal. After deliberation and careful consideration, the Executive Committee approves, by simple majority vote, one of the following actions:

- to sustain the recommendations of the Honor Council;
- to amend the recommendations of the Honor Council to another type of sanction;
- to remand the Honor Council's recommendations; or,
- to reverse the Honor Council's recommendations.

The Dean shall notify the accused of the findings of the Honor Council and the Executive Committee in writing, by certified mail, within seven calendar days of the Executive Committee meeting. Copies of the letter will be sent to the Honor Council Chair, the PAL, and the Office of Student Affairs for placement in the accused's file and in the official hearing file.

VII. Right of Appeal

When a recommendation from the Honor Council and the Executive Committee is made for some form of disciplinary action other than 'no disciplinary action', the accused may appeal such decision to the Chancellor or designated representative by filing written notice of appeal with the Chancellor within ten (10) consecutive calendar days after notification of the decision of the Executive Committee. A copy of the Notice of Appeal will also be given by the accused to the Dean of the School of Pharmacy at the time of filing who will transmit copies to the Executive Committee and the Honor Council. The accused may file a written memorandum for consideration by the Chancellor with the Notice of Appeal.
The Chancellor or designated representative shall review the record of the case and the appeal documents and may affirm, reverse, or remand the case for further proceedings and shall notify the Dean and the accused in writing of the decision on the appeal. The action of the Chancellor shall be final unless it be to remand the matter for further proceedings.

Status During Appeal

In cases of suspension, dismissal or expulsion where a Notice of Appeal is filed within the required time, the accused may petition the Chancellor in writing for permission to attend classes pending final determination of appeal. The Chancellor may permit the accused to continue in school under such conditions as may be designated pending completion of appellate procedures, provided such continuance will not disrupt the University or constitute a danger to the health, safety or welfare of the University Community. In such event, however, any final disciplinary action imposed shall be effective from the date of the action of the Executive Committee.

VIII. Status of the Standards of Professional and Ethical Behavior

Amendments to the Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations may be proposed by petition of any twenty-five members of the student body, or the Honor Council on its own motion, or the faculty.

A proposed amendment in the Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations must be approved by a 2/3 majority vote of the Honor Council members present (all members have the right to vote on amendments = 9 votes), by a 2/3 majority vote of the faculty present, by the Chancellor, and the Board of Curators.

The Standards of Professional and Ethical Behavior and/or Honor Council Procedures for Violations may be terminated at any time by action under the general amending procedure.

Standards of Professional and Ethical Behavior

University of Missouri-Kansas City School of Pharmacy

I. Preamble

One of the goals of a pharmacy school is to educate a pharmacy student during the transition to a professional life. The University of Missouri-Kansas City School of Pharmacy has an obligation to evaluate students pursuing the B.S. and Pharm.D. practice degrees as thoroughly as possible for their cognitive abilities, their academic and professional knowledge and skills, their integrity, and their suitability for the practice of pharmacy. Accordingly, the Standards of Professional and Ethical Behavior detailed in this document have been developed to guide the pre-professional behavior of **professional degree-seeking** pharmacy students of the University of Missouri-Kansas City School of Pharmacy and to prepare the pharmacy students to meet the ethical standards of the pharmacy profession.
Students enrolled in the graduate programs in pharmaceutical sciences and pharmacology will be governed by the University of Missouri Student Conduct Code.

II. Professional Integrity

A. Professional Integrity

1. **Honesty**
   A pharmacy student shall deal honestly with people including, but not limited to, colleagues, instructors, representatives of the University, patients, attending physicians, and other members of the health care team. Pharmacy students are expected to demonstrate honesty and integrity in all aspects of their interaction with patients and staff – particularly in assuring accuracy and completeness in their actions and documentation. The pharmacy student shall be willing to admit errors and must not mislead others or promote himself/herself at the patient's expense. The pharmacy

student shall strive to report, by utilizing the Honor Council Procedures for Violations of the Standards of Professional and Ethical Behavior, those pharmacy students deficient in character or competence, or who engage in fraud or deception.
The basic principle underlying all research is honesty. Scientists and pharmacy students who participate in research have a responsibility to provide research results of the highest quality; to gather facts meticulously, to keep impeccable records of work done; to interpret results realistically, not forcing them into preconceived molds or models: and to report new knowledge through appropriate channels. Co-authors of research reports must be sufficiently acquainted with the work of their co-workers that they can personally vouch for the integrity of the study and validity of the findings, and must have been active in the research itself.

- Examples of academic dishonesty include, but are not limited to, the following:
  - **Cheating**
    - use of any unauthorized assistance in taking quizzes, tests, or examinations;
    - dependence upon the aid of unauthorized sources in writing papers, preparing reports, solving problems, or carrying out other assignments;
    - acquisition or possession without permission of tests or other academic material belonging to a member of the University faculty or staff;
    - in any way giving assistance to others who are participating in any of the three preceding types of behavior; or
    - falsifying attendance records or other official documents.
  - **Plagiarism**
    - use by paraphrase or direct quotation of the published or unpublished work of another person without fully and properly crediting the author with footnotes, citations or bibliographical reference;
    - unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials; or
    - unacknowledged use of original work/material that has been produced through collaboration with others without release in writing from collaborators.
  - **Sabotage**
    - unauthorized interference with, modification of, or destruction of the work or intellectual property of another member of the University community.
- Examples of dishonesty related to clinical practice include, but are not limited to, the following:
  - **Falsification of Patient's Medical Record or Information**
    - Writing progress notes or other documentation regarding the patient's status, including, but not limited to, clinical observations or results in the patient's chart when the pharmacy student has not seen or evaluated the patient, or using incorrect times of data entry.
    - Reporting medical information such as physical examination finds, lab values, test results, an any other relevant patient information to other students, residents, attending physicians, the patient, the patient's family, or other relevant health care personnel that has been fabricated by the pharmacy student. 2. Responsibility

2. **Responsibility**
   A pharmacy student must acquire competencies with the appropriate concepts, knowledge, and skills which the faculty determine to be essential. These competencies shall be utilized to care for the sick and to promote the health and welfare of society. A pharmacy student shall recognize a responsibility to participate in activities contributing to an improved community.
   Pharmacy students in the care of patients must not be harmful, dangerous, or negligent to the mental or physical health of a patient or the public. Negligent means the failure to use that degree of skill and learning ordinarily used under the same or similar circumstances by other pharmacy students.
   Students must be familiar with and follow the rules and regulations of the School of Pharmacy, the University, and related professional organizations.

B. Pharmacy Professional Behavior

1. **Nondiscrimination**
   It is against University regulations to discriminate on the basis of race, color, creed, sex, age, national origin, disability, or Vietnam Era Veterans status. The University has an AIDS policy statement consistent with state law that prohibits discrimination against persons with AID or who are HIV positive.
2. **Representation**
   A pharmacy student shall accurately represent himself/herself to others including, but not limited to, colleagues, instructors, representatives of the University, patients, pharmacists and other members of the health care team.
   Examples of misrepresentation include, but are not limited to the following:
   - A pharmacy student shall never use the title of "pharmacist", as this clearly misrepresents the student's position, knowledge, and authority.
   - Use of fraud, deception, lies, or bribery in securing any certificate of registration or authority, diploma, permit or license issued, or in obtaining permission to take any examinations.
   - Impersonation of any person holding a certificate of registration or authority, permit, license or allowing any person to use his/her certificate of registration or authority, permit, license, or diploma from any school.

- Forgery, alteration, or misuse of a patient's medical records or knowingly furnishing false information to the other members of the health care profession and/or professional organizations.

3. **Confidentiality**
   A pharmacy student shall respect the rights of patients, colleagues, and other health professionals, and shall safeguard patient confidences within the constraints of the law. The patient's right to confidentiality in regard to his/her medical record, which includes confidentiality of personal and social history, is a fundamental tenet to medical care. Proprietary information from clerkship and/or externships shall not be shared.
   The discussion in public of the problems of an identified patient, without the patient's permission, by professional staff (including other students) violates patient confidentiality and is unethical. Under no circumstances can any medical record be removed from the institution. Photocopying of the entire record is never permitted for presentations or rounds; students are permitted to extract information, but not copy 'wholesale' parts of the chart. Names of patients should be omitted from any documents used for these presentations.
4. **Disclosure**
   While the pharmacy student is a member of the patient care team and under faculty supervision, a pharmacy student shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.
   Sharing of medical information appropriately with a patient and colleagues involved in the care of the patient is a fundamental ethical requirement. The patient must be well informed to make health care decisions and work intelligently in partnership with the patient care team. Information that the patient needs for decision making shall be presented in terms the patient can understand. If, for some reason, the patient is unable to comprehend, there shall be disclosure to the patient's authorized representative.
   Failure of a pharmacy student to share medical information relevant to a patient with the patient and colleagues involved in the care of the patient is unethical. Providing inaccurate information with these individuals is also unacceptable.
5. **Assessment of Personal Competence (Self-Evaluation)**
   Pharmacy students shall seek consultation and supervision whenever their ability to play their role in the care for a patient is inadequate because of lack of knowledge or experience.
   Students are expected to respond to constructive criticism by appropriate modification of behavior.
   It is unacceptable for a pharmacy student to dispense prescription medications or to prescribe therapies without supervision.
6. **Professional Demeanor**
   The pharmacy student is expected to be thoughtful and professional when interacting with faculty, patients and their families, attending physicians, pharmacy preceptors, other students, and other members of the health care team and whenever his/her behavior may influence adversely the judgments of others about the professional school of University.
   Students shall maintain a neat and clean appearance, and dress in attire that is generally accepted as professional by the patient populations served.
   Inappropriate behavior includes, but is not limited to, the use of offensive language, gestures, or remarks. Attempting, directly or indirectly, by way of intimidation, coercion or deception, to obtain or retain a patient or discourage the use of a second opinion or consultation is not appropriate.
7. **Conflict of Interest**
   If a conflict of interest arises, the moral principle is clear – the welfare of the patient must be, at all times, paramount. For example, gifts, hospitality, or subsidies offered by manufacturers and distributors of medical and pharmaceutical equipment/goods shall not be accepted if acceptance would influence the objectivity of clinical judgment.
8. **Misconduct with Patients**
   The pharmacy student will not engage in romantic, sexual, or other nonprofessional behaviors with a patient – even upon the apparent request of a patient – while the pharmacy student is involved with the patient's care.
9. **Impairment**
   The pharmacy student will not use alcohol or drugs in ways that impair his/her ability to perform the work of the profession or results in compromised patient care. It is the responsibility of every pharmacy student to strive to protect the public from an impaired colleague and to assist that colleague whose capability is impaired because of alcohol or drug use.
10. **Criticism of Colleagues**
    Professional relations among all members of the medical community shall be marked by civility. Scholarly contributions shall be acknowledged and each person shall recognize and facilitate the contributions of others to this community; slanderous comments and acts are not acceptable. Pharmacy students shall deal with professional, staff, and peer members of the health team in a considerate manner and with a spirit of cooperation.
    It is unethical and harmful for a pharmacy student o disparage, without sufficient evidence, the professional competence, knowledge, qualifications, or services of a colleague to anyone. It is also unethical to imply without reliable evidence – by word, gesture, or deed – that a patient has been poorly managed or mistreated by a colleague.
11. **Teaching**
    It is incumbent upon those entering this profession to teach what they know of the science, art, and ethics of pharmaceutical care. It includes communicating clearly and teaching patients so that they are properly prepared to participate in their own care and in the maintenance of their health.

III. The University of Missouri Student Conduct Code

In addition to the conduct detailed in the preceding sections, a pharmacy student is subject to the University of Missouri Student Conduct Code, Section 200.010 Section B of the Collected Rules and Regulations of the University of Missouri (except for provisions dealing with academic dishonesty) (http://

www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.010_standard_of_conduct), which is enforced with the procedures appearing in Section 200.020 (http://www.umsystem.edu/ums/rules/collected_rules/programs/ch200/200.020_rules_of_procedures_in_student_conduct_matters).

Summary:

- Details of the policies, procedures, sanctions, and due process for violations of the Standards are available on the School of Pharmacy website.
- Details of the policies, procedures, sanctions, and due process for violations of the University of Missouri Student Conduct Code are found in the University of Missouri-Kansas City General Catalogue and the student handbook.
- Please contact the School of Pharmacy Associate Dean for Student Affairs if you have questions or need additional information about any of the policies covered in this document.

Revision: 12/18/13 – Non-substantive/clerical revision only.

Student's Right-To-Know

In accordance with Public Law 101-542, UMKC reports 71 percent of its first-time freshmen return the second year.

The UMKC Police Department publishes an annual campus report on personal safety and crime statistics. The report includes statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings owned or controlled by UMKC; and on public property within, or immediately adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault and other matters.

The report is available at the UMKC Police Department, Room 214B, 4825 Troost Building or via the Web site: http://www.umkc.edu/safetyreport.

Various state and federal laws, specifically the Higher Education Opportunity Act (http://www2.ed.gov/policy/highered/leg/hea08), require the University of Missouri—Kansas City to provide information and notice to students on a variety of topics. Federal disclosure requirements for student consumer information can be found at the following website: http://www.umkc.edu/registrar/procedures/student-consumer-info.asp.

Telecommunications Services for the Speech and Hearing Impaired

UMKC offices and departments may be reached through Relay Missouri, a telecommunications relay service for those who are hearing or speech impaired. Trained relay agents ensure the calls are completed. The toll-free Relay Missouri access numbers:

- (800)735-2966 (Text Telephone)
- (800)735-2466 (Voice)

UMKC AIDS Policy Statement

To address special needs of the University of Missouri-Kansas City, the following policy is in effect:

Faculty, staff and students should be aware that discrimination on the basis of race, color, religion, national origin, ancestry, sex, sexual orientation, age and handicap (to include AIDS), is prohibited by state law. All are expected to conduct university-related activities without any such discrimination. Failure to fulfill these obligations may subject faculty, staff and students to disciplinary action. Such action shall be taken in accordance with the following University of Missouri procedures: Rules of Procedure in Student Disciplinary Matters and the Dismissal for Cause Procedure.

Those who feel they may have been discriminated against may use the Grievance Procedure for Administrative, Service and Support Staff; Discrimination Grievance Procedure for Students; and Academic Grievance Procedures.

This statement is based on the recommendations of the Missouri Human Rights Commission and is in accordance with the statements of professional responsibility and codes of ethics of the Association of American Medical Colleges, the American Medical Association, the American Dental Association, and the National League of Nursing.

Faculty of the University of Missouri-Kansas City

UMKC Online

UMKC offers a number of online courses and programs. The current schedule of online courses can be found on the Registrar's page at: https://www.umkc.edu/registrar/printable-online-class-schedule/. At this site, you can also take a short assessment to see if an online course is right for you.

Online courses can take a variety of forms, from online synchronous to online asynchronous. Make sure you understand the requirements for each type of online course before you register. Definitions used for the delivery of online courses at UMKC can be found at the Registrar's page under the Codes and Definitions tab at: http://www.umkc.edu/registrar/procedures/room-scheduling.asp#anchor-6

Additional information related to online training, courses, tutoring and other resources that support online learning can be found at the UMKC Online homepage located at: www.umkc.edu/online (http://www.umkc.edu/online).

Course Offerings

Undergraduate Course Offerings

Accounting (ACCTNG)

Courses

ACCTNG 210 Introduction To Financial Accounting Credits: 3
An overview of basic concepts and terminology associated with reporting financial information to parties outside of an organization. This course requires students to take an accompanying lab that meets one day a week.
Prerequisites: MATH 110 (or equivalent) and completion of 30 credit hours.

ACCTNG 211 Introduction To Managerial Accounting Credits: 3
An introduction to the use of cost accounting concepts and information in managing the activities of a business.
Prerequisites: ACCTNG 210 (or equivalent).

ACCTNG 307 Cost Management Credits: 3
A study of the principles and techniques of cost accounting with emphasis on the structure of cost accounting systems and the processing, summarizing and reporting of cost information. Topics include various issues relevant for manufacturing and service organizations, and introduction of situations that require the application of cost information to managerial settings.
Prerequisites: ACCTNG 211 (or equivalent) and junior standing.

ACCTNG 310 Intermediate Accounting I Credits: 3
A study of theory and application of external corporate reporting. The course covers a variety of financial accounting issues including assets, liabilities, revenue recognition, and accounting change analysis. Publications and pronouncements of the accounting professions are emphasized where applicable.
Prerequisites: ACCTNG 210 and Bloch student.

ACCTNG 311 Intermediate Accounting II Credits: 3
Continued study of intermediate accounting. The course covers a variety of financial accounting issues including corporate equities, income taxes, pensions, other post-employment benefits, leases, and the statement of cash flows. Publications and pronouncements of the accounting profession are emphasized where applicable.
Prerequisites: ACCTNG 310 (or equivalent).

ACCTNG 350 Accounting Systems And Controls Credits: 3
This course examines a number of systems employed to process accounting information, the internal control activities typically used in each system and associated documentation techniques.
Prerequisites: ACCTNG 310, MIS 202.

ACCTNG 405 Auditing Credits: 3
A study of how the auditor determines the nature and amount of evidence that should be accumulated considering the unique aspects of an engagement, as well as some idea of how that evidence is evaluated in the context of a financial audit.
Prerequisites: ACCTNG 311, ACCTNG 350 (or equivalents).

ACCTNG 408 Federal Income Taxation Credits: 3
An examination of the theory and practice of taxation as applied to individuals and businesses.
Prerequisites: ACCTNG 211 (or equivalent).

ACCTNG 409 Advanced Taxation Credits: 3
An examination of the theory, practice, and research methodology of taxation as applied to corporations, partnerships, estates and trusts.
Prerequisites: ACCTNG 408 (or equivalent).

ACCTNG 420 Advanced Accounting Credits: 3
A study of the accounting business combinations and the preparation of consolidated financial statements.
Prerequisites: ACCTNG 311 (or equivalent).

ACCTNG 421 Governmental/Not-For-Profit Accounting Credits: 3
An overview of accounting for state and local governments and not-for-profit entities. Pronouncements of the accounting profession are emphasized where applicable.
Prerequisites: ACCTNG 311 (or equivalent).

ACCTNG 496 Internship: Accounting Credit: 1
An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

ACCTNG 497 Special Topics In Accounting Credits: 1-3
Study and research in accounting areas of special student interest, under individual faculty supervision and guidance.
Prerequisites: senior standing.

American Studies (AMER-ST)

Courses

AMER-ST 250 Introduction To American Studies I Credits: 3
This course is the first half of the year long, required introductory course in American Studies. It is also open to all undergraduates. It focuses on works and authors, from the turn-of-the century to the present, who are generally considered part of the American Studies canon and emphasizes understanding what America is/was according to these writers. The course is grounded in questions of citizenship, civic responsibility, ethics, character, progress and westward expansion. It will also look at the place of distinct disciplines (political science, English, anthropology, history, sociology, communication studies) in grappling with many of these questions. The course will introduce students to American Studies as an area of study and interdisciplinary scholarship as a methodological tool.

AMER-ST 251 Introduction To American Studies II Credits: 3
This course is the second half of the year long, required introductory course in American Studies. It is also open to all undergraduates. Students will be expected to locate themselves within American Studies as an area of study and will be pushed to think critically about the field by looking at the work of scholars in Cultural History, Media Studies, Regional Studies, Black Studies, Public History, Critical Legal Studies, Women's Studies and American Studies in an international context. Students will also be encouraged to place this scholarship in dialogue with that from the first semester in order to look at the boundaries of a field that is constantly changing.
Prerequisites: AMER-ST 250.

AMER-ST 300CD American Social Film: Silver Screen And The American Dream Credits: 3
This course will combine American social history and American film history. Using Hollywood entertainment films, the course will look at Hollywood as an indicator of social, political and economic conditions in the United States from the early 1900's to the late 1950's. The main topics are war and the threat of war, poverty and affluence, racial tensions, censorship, and political zealotry. A paper is required and a social history textbook, a film history textbook, a play by Arthur Miller, an a collection of articles constitute core readings. This course is offered as a cluster with COMM-ST 402CD and ENGLISH 300CD.

AMER-ST 301 American Stds: Is/Tutorial: Themes In The American Popular Arts Credits: 4
This course uses the popular arts as an entree to the examination of stereotypes in American life, to a better understanding of challenges to tradition, and to assessing the consequences of conflict that have resulted from cultural pluralism. This is a modified independent study course. Students are exposed to some of America's best-known literature, films and music. Instructional audio tapes and traditional literature about American Culture show the relevance of examples of popular art to broader themes.
Co-requisites: AMER-ST 303PW.

AMER-ST 302 Survey Of American Studies Credits: 4
This course offers a look at changes and continuities in American life from the era of British colonization to the present. It emphasizes philosophical, scientific and creative ideas that have had lasting effects, changing social structure, the factors that determine lifestyle, and the consequences of the national preoccupation with pluralism and consensus. The course also covers the main features of American political history.
Co-requisites: AMER-ST 303PW.

AMER-ST 303PW Methods & Problems In American Studies Credits: 4
This course examines four topics that are important in American culture; each topic is approached from a different methodological perspective. The topics (problems) are related to cultural resources in the Kansas City area (such as a museum exhibit or a library research collection) and may change from semester to semester. Methods of problem solving are determined by the topic; however, students should expect to participate in oral history, interpretation of material culture, and traditional archival research and document analysis.

AMER-ST 303WI Methods & Problems In American Studies Credits: 4
This course examines four topics that are important in American culture; each topic is approached from a different methodological perspective. The topics (problems) are related to cultural resources in the Kansas City area and may change from semester to semester. Methods of problem solving are determined by the topic; however, students should expect to participate in oral history, interpretation of material culture, and traditional archival research and document analysis.
Prerequisites: RooWriter.

AMER-ST 340 Seminar: Critical Issues In American Culture Credits: 3
An interdisciplinary seminar which will examine various cultural topics relevant to understanding contemporary issues in American society. Students will write individual research papers as well as offer critiques of each other's work.

AMER-ST 340P American Material Culture: The 20th Century Credits: 4
This course will focus on the material culture of modern and post-modern America. This is an area of inquiry particularly well-suited to the examination of material culture resources. Students will be required to write a term paper or do a material culture project.

AMER-ST 340PP American Material Culture: The 1950's Credits: 4
This course will focus on the period of American culture from demobilization after World War II to the end of the 1950's--an era particularly well-suited to employing material culture resources as evidence. Students will be required to write a term paper or do a material culture project.

AMER-ST 341 American Material Culture: Objects And Images Credits: 4
This course will examine American cultural and social history from earliest times to the present, with a special emphasis on the ways artifacts and visual images can provide information and insight about the American experience.

AMER-ST 341P American Material Culture: Objects And Images Credits: 4
This course will examine American cultural and social history from earliest times to present, with a special emphasis on the ways artifacts and visual images can provide information and insight about the American experience.

AMER-ST 342 American Material Culture: Museums Credits: 4
This course will focus on local institutions that use material culture in their presentation of history and the American experience.

AMER-ST 342P American Material Culture: Museums Credits: 4
This course will focus on local institutions that use material culture in their presentation of history and the American experience.

AMER-ST 375 Censorship And Popular Culture In America Credits: 3
The First Amendment to the Constitution states that "Congress shall make no law ... abridging the freedom of speech or the press." The American experience, however, is that controversial books, radio and television programs, motion pictures, and, most recently, the Internet have been subjected to various types of censorship. This course will study the censorship of popular culture in America.

AMER-ST 380 Decade Of Dissent: The 1960's Credits: 3
The social movements and conflicts that developed during the 1960's continue to define American culture in the 1990's. Questions of racial and gender equity, a greater willingness to challenge authority, concerns about the environment, and a new openness about issues of sexuality all developed during the Sixties and remain as arenas of debate today. This course will examine the origins, contexts, and major themes of these social and cultural movements.

AMER-ST 400 Special Studies Credits: 1-3
Pertinent courses from academic units throughout campus may be listed with this course and applied to the major's requirements in American Studies.

AMER-ST 400A Special Studies Credits: 1-3

AMER-ST 400B Special Studies Credits: 1-3

AMER-ST 400CW CC: Critical Issues in Women's & Gender Studies Credits: 3
What does it mean to grow up a female in America? How does being female influence the body, the mind, identity? This course is an interdisciplinary exploration of the issues that have shaped the lives of American women throughout the life cycle and across the timeline. This course examines the role that culture and society have played in shaping and defining what it means to be an American girl and woman.

AMER-ST 400D Special Studies Credits: 1-3

AMER-ST 400F Special Studies Credits: 1-3

AMER-ST 400G Special Studies Credits: 1-3

AMER-ST 400J Special Studies Credits: 1-3

AMER-ST 400L Special Studies Credits: 1-3

AMER-ST 400M Special Topics Credits: 1-3

AMER-ST 400P Special Studies Credits: 1-3

AMER-ST 400S Special Studies Credits: 1-3
Pertinent courses from academic units throughout campus may be listed with this course and applied to the major's requirements in American Studies.

AMER-ST 400SF Special Studies Credits: 1-3
Pertinent courses from academic units throughout campus may be listed with this course and applied to the major's requirements in American Studies.

AMER-ST 400W Special Studies Credits: 1-3

AMER-ST 430 American Studies Internship Credits: 1-6
Internship opportunities for advanced students involved in community and campus activities. Students must receive approval of the Director or Assistant director of American Studies prior to enrollment. No more than 6 credit hours can be taken.

AMER-ST 440WI Senior Seminar Credits: 3
Students enrolling in this course will produce an interdisciplinary research paper under the direction of the instructor in cooperation with other American Studies faculty. and peer review with other American Studies students.
Prerequisites: AMER-ST 400, RooWriter.

Anthropology (ANTHRO)

Courses

ANTHRO 103 Introduction To Cultural Anthropology Credits: 3
An introduction to culture and the basic concepts of anthropology. Topics include kinship, language, and cultural change.

ANTHRO 205 The Social Life of Things Credits: 3
This course examines the ways anthropologists have studied the connections between people and things. It explores how social relationships are created and changed through the use and exchange of objects, and how objects themselves take on particular meanings and histories in these processes. In questioning the relationship between material culture and human sociality, the course will expose students to a range of ethnographic and historical case studies, as well as introduce them to some core theoretical perspectives and debates within anthropology

ANTHRO 207 Writing Culture: The Craft of Ethnography Credits: 3
This course will explore the contexts in which powerful social groups learn, talk, and write about less powerful groups. The course material will explore how the identities and biases of anthropologists condition how they perceive, analyze, and represent others. Students will compare changes in ethnographic methods, theories, and styles across time and geography.

ANTHRO 212 Global Health Credits: 3
This course will use the lens of critical medical anthropology to analyze the sources of poor health outcomes, health disparities, and the global impacts of health policy. Students will explore the connections between population health and other aspects of social life, such as power, inequality, war, and economics, exploring the ways in which globalization and the privatization of health creates conditions that facilitate disease.

ANTHRO 280 Empire Credits: 3
This is an interdisciplinary, team-taught course designed to teach students ways to think about the complexities of human cultures, past and present, helping them examine how imperialism continues to shape contemporary understandings of personal, institutional, and cultural identities (both of selves and others). The course analyzes global cultures with a focus on the economic, environmental, political and social consequences of specific imperial regimes and the ongoing impact of these regimes on particular groups that continue to live with the legacies of empire.
Prerequisites: DISC 100 (or equivalent) and Anchor I.

Cross Listings: ENGLISH 280.

ANTHRO 300C Special Topics Anthropology Credits: 1-3
Each time this course is offered, a different area of anthropology, to be announced, will be examined.

ANTHRO 300CE Empire (Cluster Course) Credits: 3
This is an interdisciplinary, team-taught course designed to teach students ways to think about the complexities of human cultures, past and present, helping them examine how imperialism continues to shape contemporary understandings of personal, institutional, and cultural identities (both of selves and others). The course engages students in the analysis of global cultures with a focus on the economic, environmental, political and social consequences of specific imperial regimes and the ongoing impact of these regimes on particular groups that continue to live with the legacies of empire.

ANTHRO 302 Social Stratification Credits: 3
The distribution of power, privileges and prestige are examined in a historical and comparative perspective. The process whereby distribution systems develop, become institutionalized, and become transformed are analyzed.
Cross Listings: SOCIOL 302.

ANTHRO 303CN Cluster Course: Terrorism, Civil War and Trauma Credits: 3
This interdisciplinary course examines the modern experience of terrorism and civil war in the light of art, film, history, literature, and philosophy. It explores a number of traumatic events, historic and contemporary, challenging us to think about such contemporary issues as violence and identity formation, civil rights and state-sponsored terrorism, pacifism and patriotism, resistance and collaboration, fundamentalism and fascism, neo-colonialism and anti-imperialism.
Cross Listings: ENGLISH 300CN.

ANTHRO 305 Language and Culture Credits: 3
This course is designed to familiarize students with the basic objects, aims, and methods of linguistic anthropology. Students will acquire this familiarity by studying both theoretical and ethnographic articles that focus on some of the major areas of concern within the field including: the evolution of human language, linguistic particularity and universality, the relationship of language to thought, structuralism and semiotics, trope theory, language and emotion, sociolinguistics, the development of writing systems, and language conservation and change.

ANTHRO 306 Culture, Emotion, and Identity Credits: 3
This course introduces students to some of the key theoretical perspectives and debates within the field of psychological anthropology. By drawing upon cross-cultural studies of emotion, personhood, sexuality, illness, and consciousness it seeks to understand some of the ways that culture and society influence human psychology and experience.

ANTHRO 314 Anthropology of Gender Credits: 3
This class explores theories of the social construction of gender in cross-cultural contexts. It will also explore global issues of local and international politics, the economy, work and education as these relate to gender.

ANTHRO 322 Race And Ethnic Relations Credits: 3
The nature, origin and dynamics of ethnic and race relations in the U. S. and other societies. Specific attention will be given to the historical and contemporary contexts of prejudice, discrimination and confrontation.
Cross Listings: SOCIOL 322.

ANTHRO 324 Diversity And You Credits: 3
This course will examine diversity from the perspectives of race, ethnicity, class and gender. Emphasis will be placed on the impact of racism, classism and sexism on interpersonal relationships and strategies to encourage diversity in schools, neighborhoods, and the work place. Students may also enroll in "directed research" in conjunction with his course.

ANTHRO 326 Consumer Society Credits: 3
This course explores the emergence of Consumer Society as both a sociohistorical development and as an object of social scientific inquiry. Students will explore how the study of Consumer Society has been animated by different scholarly questions, debates, and analytic approaches.
Cross Listings: SOCIOL 326.

ANTHRO 327 US Government’s Indian Policies: Practices Of A Colonizing Nation Credit: 1
This class will convey information about the implementation of US Government policies, from treaty making, establishing reservations, removing, confronting tribes militarily, and abolishing reservations through allotment resulted in consequences detrimental to tribal welfare. The colonization process created ramifications and consequences that Indian people contend with to this day. This class will provide a historical overview of the consequences associated with political, social, and economic processes that divested Indian people of control over their lives and land they originally lived on.
Cross Listings: SOCIOL 327.

ANTHRO 328 Body and Society Credits: 3
Body and Society is an interdisciplinary and comparative approach to the study of the body as the subject and object of social processes. Interdisciplinary approaches to topics such as meaning, ritual, performance, and practice will provide a framework for classical as well as contemporary explorations of bodily representation and experiences across a variety of cultural contexts.
Prerequisites: ANTHRO 103.

ANTHRO 329 The Imagery Of The American Indian In Film Credit: 1
This course will trace the imagery of the American Indian used by film makers through the years and how this has played a role in reinforcing certain inaccurate perceptions of American Indian cultural, social, and economic life. The course examines the sociological implications created by persistently showing misrepresented images of American Indians. The goal is to measure and compare the reality of American Indian life (values, traditions, and beliefs) with the images created by film makers from the early years of the 20th century to the present.
Cross Listings: SOCIOL 329.

ANTHRO 331 Urban Anthropology Credits: 3
A course designed to apply anthropological methods to the study of various urban environments. The approach to the subject is comparative, seeking to spell out those features of the urban setting which vary from culture to culture as well as those which are common to all.

ANTHRO 339 American Indian Leaders: Past And Present Credit: 1
This course will examine the definition of leadership as it relates to American Indian issues. Consideration will be given to the nuances of leadership by examining the social, cultural, economic, and political situations that gave cause for particular individuals to assume roles of leadership. The course will compare and contrast the notions of leadership within American Indian ranks with those practiced by non-Indian leaders. It will trace the evolving nature of leadership within tribal nations and American Indian communities from past to present, as well as looking at Indian leadership roles in time of war and peace. Lives of the major characters of American Indian historical record will be reviewed, such as Geronimo, Crazy horse, Sitting Bull, Osceola, Tecumseh, Pontiac, Black Hawk, Quannah Parker, and Captain Jack.
Cross Listings: SOCIOL 339.

ANTHRO 340R Social Change Credits: 3
Examines the key dimensions that bring about change in societies, including revolutions and evolutionary processes. Attention is given to the global context of social change, as well as the role of social actors and social movements.
Cross Listings: SOCIOL 340R.

ANTHRO 341R The Anthropology Of Economic Institutions Credits: 3
Examines in a comparative perspective the social, cultural and political framework of economic activities. Emphasis is placed on socioeconomic systems and the contradictions they generate.
Cross Listings: SOCIOL 341R.

ANTHRO 343 Societies And Cultures Of Latin America Credits: 3
A survey of emerging cultures and societies in Latin America; pre-history and geography; the Mayan, the Aztec and Incan civilizations; contemporary Indian, peasant and urban subcultures; the impact of forces such as migration, urbanization, peasant mobilization, and agrarian reform.

ANTHRO 347 The American Indian Image: Stereotype Vs. Reality Credit: 1
This class will take a historical, sociological, and cultural approach to review how society at large views American Indians. The course will trace the origin and continued use of American Indian stereotyped views, and assess the sociological and psychological complications that result when judging Indians solely on stereotyped imagery. The course will review the historical content of American Indian life as portrayed in early plays, films, and newspaper accounts and compare these stereotyped images with the reality of American Indian life by providing a depiction of a series of historical events that will offer a more balanced and accurate consideration for American Indian life past and present.
Cross Listings: SOCIOL 347.

ANTHRO 348 Latin American Immigrants & Refugees in the U.S. Credits: 3
The course is an introduction to the study of the culture and societies of U.S. citizens and immigrants of Latin American heritage living in the U.S. The course emphasizes recent anthropological as well as historical and cultural studies. Topics covered: ethnohistory, kinship, labor, intergenerational relations, gender transnationalism and immigration and cultural diffusion over successive generations.

ANTHRO 373 Anthropology of Religion Credits: 3
This course explores the ways anthropologist have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

ANTHRO 374 Anthropology of Childhood Credits: 3
This course explores how children’s lives are shaped by cultural, economic, and political forces and relations. Drawing upon a range of case studies and disciplinary perspectives it will consider how and why children emerge as sites of contestation and debate, and it will examine the various ways in which the category and experience of childhood unfold in different socio-historical contexts. The main objective of the course is to better understand the social construction of childhood and use the study of childhood as a privileged window for exploring the articulation of cultural, economic and political relations within the context of contemporary global society.

ANTHRO 381 Archaeological Resources Management Credits: 3
This class examines contemporary issues managing archaeological resources. The class is intended for students seeking work in Cultural Resources Management (CRM); those already working CRM, or student anthropology, environmental studies, geology, geography, public administration and other fields likely to deal with archaeological and historical resources in a research or employment setting. This class does not require a background in archaeology.
Cross Listings: GEOLOGY 407.

ANTHRO 382 Archaeological Field Survey Methods Credits: 3
This class offers instruction in the basic skills required to conduct field surveys in archaeology and other geosciences disciplines. In the classroom, students learn about the development of archaeology as a scientific discipline and how to recognize some of the basic field data sought by archaeologists. Students learn about mapping and land navigation techniques. The field phase of instruction includes visits to archaeological sites in the region.
Cross Listings: GEOLOGY 408.

ANTHRO 383 Field School in Archaeology Credits: 3
This class offers students an opportunity to attend a field school in archaeology. Students will be taught how to: design archaeological research, set-up excavation, keep a wide range of excavation records, make maps and drawings, take photographs related to excavation problems, identify and receiver a broad spectrum of artifact and faunal remains, collect samples for specialized analysis and use a wide range of excavations tools. This course will also introduce students to recording and analyzing excavated materials in the archaeological laboratory.
Cross Listings: GEOLOGY 409.

ANTHRO 384 North American Prehistory Credits: 3
This class offers instruction in the archaeological survey of prehistoric North America from the Arctic to northern Mexico. The course outlines cultural developments within this region from the peopling of the Americas near the end of the last Ice Age to the arrival of Europeans over 10,000 years later. The diversification of Native American societies across this time span is examined in relation to social and environmental challenges, including the transformation of hunter-gatherer groups into chiefdoms and complex agricultural societies.
Cross Listings: GEOG 457.

ANTHRO 385 Archaeology as Anthropology: The Development of Human Societies Credits: 3
This class examines the development of archaeology as a distinctive branch of anthropology, and archaeology’s role in a centuries-long debate about the causes of cultural variation and the development of human societies. This class examines how the Enlightenment, colonialism, the geological discovery of :Deep Time? and the Darwinian Revolution not only give rise to anthropology and archaeology, but launched an enduring debate about how and why we study cultural behavior.
Cross Listings: CLASSICS 370.

ANTHRO 386 Introduction to Prehistoric and Classical Archaeology Credits: 3
An introduction to archaeological research methods that traces human origins and cultural development from the earliest fossil evidence to the threshold of written history and civilization. This class emphasizes the evolutionary and cultural developments that allowed our ancestors to colonize the continents and develop lifeways involving hunting and gathering, farming and urbanism.
Cross Listings: HISTORY 400C and CLASSICS 369.

ANTHRO 397 Independent Readings in Anthropology Credits: 1-3
Intensive readings in an area selected by the student with prior consultation with instructor.
Prerequisites: Twelve hours of anthropology.

ANTHRO 414 Feminist Theories Credits: 3
This class introduces the major feminist theories and their primary authors over the last 200 years. The class takes both a historical view (beginning with two millennia of male-centered theories about women) and a conceptual approach (theories are grouped by common ground) and familiarizes the student with both the historical processes that necessitate feminist theories as well as with the breadth and depth of the historically and currently available scholarship.

ANTHRO 441 Globalization and Development Credits: 3
Focuses on issues of economic development, social stratification, political institutions, and political mobilization in societies where colonialism provided the context for their long-term disadvantages in the international economic order. Specific attention is paid to the intersection of the international components that define the options and limits for societal development (e.g., market shifts, international institutions and contracts, foreign policies, and migration) and the distinct social, political and cultural implications of these factors for developing societies.
Cross Listings: SOCIOL 441.

Arabic (ARABIC)

Courses

ARABIC 110 Elementary Arabic I Credits: 5
Fundamentals of the language, essentials of conversation, grammar, practical vocabulary, useful phrases, and the ability to understand, read and write simple classical Arabic.

ARABIC 120 Elementary Arabic II Credits: 5
Continuation of ARABIC 110.
Prerequisites: ARABIC 110 (or equivalent).

ARABIC 211 Second Year Arabic I Credits: 3
Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.
Prerequisites: ARABIC 120.

ARABIC 221 Second Year Arabic II Credits: 3
Continuation of ARABIC 211.

ARABIC 280 Special Intermediate Arabic Topics I Credits: 1-3
Instruction of Arabic on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: Elementary I and II college-level courses or equivalent.

ARABIC 290 Special Intermediate Arabic Topics II Credits: 1-3
Continuation of ARABIC 280. May not be repeated for credit.

Architectural Studies (ENV-DSN)

Courses

ENV-DSN 110 The Meaning Of Architecture Credits: 3
Architecture is a visual and physical expression of civilization. This course will introduce to the student an understanding and appreciation of architecture and our built environment through a broad examination of cultural and aesthetic paradigms. The student will be informed of the historic legacy and value of architecture; how it impacts our society today and our daily lives. This course will employ slides, lectures, and text to familiarize the student with a select group of significant works of architecture of the western world. Local site visits may be required therefore transportation will be the student’s responsibility.

ENV-DSN 201 Environmental Design Studio I Credits: 4
Foundation studies introducing the principles, processes and vocabularies of environmental design. Instruction in two and three dimensional visualization of objects and spaces. Instruction in the use of instrument-aided drawing, freehand drawing and model building to represent and communicate design ideas at different scales of observation.

ENV-DSN 202 Environmental Design Studio II Credits: 4
Continuation of ENV-DSN 201.
Prerequisites: ENV-DSN 201.

ENV-DSN 203 Survey of the Design Professions Credit: 1
Overview of the evolution of the design professions. Comparative study of the roles of the architect, interior architect, interior designer, landscape architect and planner; their working methods, collaborative endeavors, and interaction with consultants and specialists. Description of career paths, educational alternatives, licensure, and professional organizations.

ENV-DSN 248 Fundamentals of Architectural Technology Credits: 3
Instruction in the fundamentals if architectural technology with emphasis on the concepts and principles necessary for developing an integrated approach to building design.

ENV-DSN 250 History of the Designed Environment I Credits: 3
This course will present an overview of the developments in architectural, urban, landscape and interior design which have had an impact on the physical environment from ancient times through the medieval up to the gothic period. A central objective of the course is to gain an understanding of why these developments occurred and how the needs and aspirations of a given time were manifested in physical form.

ENV-DSN 251 History of the Designed Environment II Credits: 3
This course will present an overview of the developments in architectural, urban, landscape and interior design which have had a consequential impact on the physical environment of the Western world from the Italian Renaissance (starting in the 15th century) up to the present day.

ENV-DSN 252 History of the Designed Environment III Credits: 3
The history of the designed environment from the mid-18th century to the present.

ENV-DSN 301 Architectural Design Studio I Credits: 5
Instruction in architectural design focusing on the application of elements and principles of form and space in design. Instruction in the use of techniques for visually representing design ideas.
Prerequisites: ENV-DSN 202.

ENV-DSN 302 Architectural Design Studio II Credits: 5
Instruction in architectural design focusing on the synthesis of basic social, functional, technical, and aesthetic factors in design. Continued instruction in techniques for visually representing ideas.
Prerequisites: ENV-DSN 301.

ENV-DSN 347 Structural Systems in Architecture I Credits: 4
Introduction to structure as a building system. Overview of contemporary structural systems and heir components, including wood, timber, steel, concrete, masonry, and hybrid structures. Discussion of building code requirements for structure, general guidelines for building structures, including appropriate application, and methods for schematic estimation of structural member sizing. Basic understanding of how gravity and lateral forces are propagated through a structural frame from load to building foundation.
Prerequisites: MATH 110, PHYSICS 210.

ENV-DSN 413 Environmental Systems in Architecture I Credits: 4
Instruction in bioclimatic and ecological design principles as a basis for architectural and landscape design: emphasis on passive solar heating and cooling and daylighting.

ENV-DSN 449 Structural Systems in Architecture II Credits: 3
Instruction in strength of materials focusing on the behavior of building materials under loading: their ability to resist deformation and failure. Instruction in sizing simple structural elements.
Prerequisites: ENV-DSN 347.

Art (ART)

Courses

ART 105 Introduction To Photography Credits: 3
An introduction to the general practice of photography. The course centers on the basic technical and aesthetic aspects of the medium. A fully adjustable digital camera is required.

ART 112 Foundation Drawing Credits: 3
This course focuses on developing skills and techniques of observational drawing. No previous drawing experience required.

ART 114 Foundation Digital Design Credits: 3
This introductory course on techniques and practical applications for digital arts, graphic design, and computer multimedia. Fulfills the College of Arts and Sciences computer competency requirement.

ART 121 Foundation 2D Design Credits: 3
The principles of visual thinking with emphasis on color theory and perception of form and space.

ART 131 Foundation 3D Design Credits: 3
Introductory study in three-dimensional formal principles with emphasis on the aesthetic properties.

ART 204 Digital Video and Motion Design I Credits: 3
This introductory digital video and motion design course is intended for studio majors. General techniques and practical application of animation, video, text and sound in the digital arts and graphic design fields are addressed. Lectures, demonstrations, readings, discussions and application sessions.
Prerequisites: ART 112, ART 114, ART 121 and ART 131.

ART 206 Photography I Credits: 3
An introduction to photography as a means of creative self-expression. The course centers on the technical and aesthetic aspects of the medium.A fully adjustable digital camera is required.
Prerequisites: ART 112, ART 114, ART 121 and ART 131.

ART 212 Intermediate Drawing Credits: 3
Continuation of foundation drawing. Emphasis is on gaining technical facility with various drawing mediums and expanding conceptual approaches.
Prerequisites: ART 112.

ART 218 Graphic Design I Credits: 3
A beginning level introduction to Graphic Design principles, such as layout, design, concept, basis design theory, graphic design production, and use of industry-level design software and tools.
Prerequisites: ART 112, ART 114, ART 121, and ART 131.

ART 221 Painting I Credits: 3
Exploration of the visual language in paint with continued emphasis on color and design.
Prerequisites: ART 112, ART 114, ART 121 and ART 131.

ART 224 Print Media I Credits: 3
Through hands-on lessons, students will learn a variety of printmaking methods like intaglio, lithography, relief, etc. and approaches to making visual work. Recommended preparation: ART 212.
Prerequisites: ART 112, ART 114, ART 121, ART 131.

ART 230 Fibers I Credits: 3
From altering the surface of fabric to three-dimensional construction, students are taught the basics of fiber arts. This is a hands-on introduction to surface design and soft sculptural hand processes. The course will cover dyeing, shibori, screen-printing, knitting, crochet, and basic sewing. Projects are individualized by expertise, availability of supplies, and students' own objectives.
Prerequisites: ART 121.

ART 235 Digital Imaging I Credits: 3
This course explores the different ways to connect digital imaging to one's creative practice. Students will learn advanced imaging techniques in order to develop a consistent artistic voice that reflects personal interests and talents. Conceptual issues of digital media will be explored as they relate to contemporary art making.
Prerequisites: ART 114.

ART 300CO Cluster Course: Nature And The Environment: Art And Aesthetics Credits: 3

ART 305 Photography II Credits: 3
An advanced course in which students develop a deeper understanding of personal interests, sensibilities and goals as they relate to producing and appreciating creative photography. A fully adjustable digital camera is required.
Prerequisites: ART 206.

ART 309 Print Media II Credits: 3
A continuation of ART 224, this course deepens students' understanding of the historical conventions of and contemporary approaches to print media. Explores concepts and techniques through material involvement.
Prerequisites: ART 224.

ART 310 Digital Video and Motion Design II Credits: 3
This intermediate to advanced level digital video and motion design course is a continuation of ART 204. This course is intended for studio majors; it addresses advanced techniques of video post-production and motion graphic design. Lectures, demonstrations, readings, discussions, and application sessions. Recommended Preparation: ART 206 and ART 235.
Prerequisites: ART 204.

ART 311 Painting II Credits: 3
Painting in oil or acrylic on the intermediate level with continued emphasis on color.
Prerequisites: ART 221.

ART 312 Figure Drawing I Credits: 3
A study of the structure of the human figure with emphasis on the dynamics of figure movement.
Prerequisites: ART 212.

ART 322 Advanced Drawing Credits: 3
Further development of technique and content. Emphasis is on forming and clarifying a personal voice.
Prerequisites: ART 212.

ART 327 Interactive Media Design Credits: 3
This course will cover the theoretical, social/cultural, and historical contexts of interactive media; the current importance and usages of the web and social media; and explore methods and tools of exploiting the media through the creation of websites, digital publications, and "apps". Students will learn to use and work with development languages such as HTML 3/5, CSS (cascading style sheets), and content management systems (CMS) such as Wordpress. Students should have an understanding of Adobe Photoshop.
Prerequisites: ART 235.

ART 330 Fibers II Credits: 3
Intermediate study of surface design and soft sculptural hand processes. Projects are individualized by expertise, availability of supplies, and students' own objectives.
Prerequisites: ART 230.

ART 335A Digital Imaging II Credits: 3
This class will strengthen the competence and knowledge of digital imaging techniques. Research, conceptual and verbal abilities within digital image making will be explored. Students will apply new techniques to their personal interests in the studio arts.
Prerequisites: ART 235.

ART 338 Graphic Design II Credits: 3
Intermediate study of graphic design theory, methodology and techniques, stressing a visual approach to problem solving in design, image making techniques, materials, and production processes standard to the industry.
Prerequisites: ART 218 and ART 348.

ART 340 3D Modeling and Animation Credits: 3
This course addresses the usage of virtual three-dimensional modeling and animation in the contemporary art and design fields.
Prerequisites: ART 204.

ART 348 Introduction To Typography Credits: 3
This course explores the formal and applied aspects of typography as tools for design and artistic expression. Focus is on how type relates to art, layout, and design. Both hand produced typography and computer assisted design software will be incorporated.
Prerequisites: ART 112, ART 114, ART 121 and ART 131.

ART 403 Advanced Typography Credits: 3
A continuation of ART 348 Typography, this course looks at more sophisticated typographic practice, typographic design theory, and both traditional methods of typographic design and practice such as letterpress and hand type and computer/digital based typography including motion-and time-based media such as web-sites and multimedia.
Prerequisites: ART 348 and ART 338.

ART 404 Digital Portfolio Credits: 3
Digital portfolio production and marketing course for senior studio art majors. Lectures, demonstrations, readings, discussions, and application sessions.
Prerequisites: ART 112, ART 114, ART 121 and ART 131.

ART 405 Art In Secondary School Credits: 3
An introduction to the special problems, procedures and materials associated with the art curriculum in the public schools. This course meets certification requirements in "Special Methods of Teaching Field.

ART 406 Advanced Problems In Photography Credits: 3
This course provides students a forum in which the issues and techniques of contemporary photography can be investigated on a rather esoteric level. The format of the course allows for a mutual decision by the instructor and students, dictating which investigations will be pursued during that particular semester. Possible areas of investigation would include, but are not limited to, color photographic theory and practice, non-silver photographic techniques (e.g. Kwikprint, gum bichromate, cyanotype, Van Dyke Brown, etc.), hand coloring techniques, photo-collage, etc.
Prerequisites: ART 305.

ART 411 Painting III Credits: 3
Painting on the intermediate level with a focus on experimentation and developing a personal visual language and expression.
Prerequisites: ART 311.

ART 412 Figure Drawing II Credits: 3
A continuation of ART 312. Drawing on the advanced level with study of the figure in environmental context.
Prerequisites: ART 312.

ART 421 Painting IV Credits: 3
Painting on the advanced level with supervised individual selection of technique and subject matter.
Prerequisites: ART 411.

ART 422 Advanced Drawing II Credits: 3
Continuation of ART 322.
Prerequisites: ART 322.

ART 423WI Design Seminar Credits: 3
Capstone course for studio art majors with a focus on graphic design. Pertinent issues in practice, theory and history of design will be examined through selected readings, slide presentations and invited speakers. A research paper/presentation on a topic evolving from the discussions will be required. The course will also address resume and portfolio preparation for the design profession. This course is writing intensive.
Prerequisites: ART 338, RooWriter.

ART 430 Graphic Design III Credits: 3
Advanced application of graphic design techniques to complex design problems. The course will stress individualized assignments and portfolio preparation.
Prerequisites: ART 338.

ART 439 Student Design Agency Credits: 3-6
Student Design Agency is a faculty-supervised design agency that works with actual clients to produce real world visual marketing solutions to clients needs. Acceptable for graduate credit with approval.

ART 493 Directed Projects in Studio Art Credits: 1-6
With permission of instructor, advanced students pursue independent research and production of a significant semester-long project. Acceptable for graduate credit with approval.

ART 495 Special Topics in Studio Art Credits: 1-6
In depth exploration of a special topic in Studio Art. Course may be repeated if topic is unique for each repeated effort. Acceptable for graduate credit with approval.

ART 498A Special Problems In Drawing Credits: 1-6
With permission of the department, an advanced student may pursue selected projects on a group or individual basis. Acceptable for graduate credit with approval.

ART 498B Special Problems In Painting Credits: 1-6
With permission of the department, an advanced student may pursue a selected subject in oil, acrylic, or watercolor painting on a group or individual basis. Acceptable for graduate credit with approval. May be repeated for credit.

ART 498E Special Problems In Graphic Design Credits: 1-6
With permission of the department, an advanced student may pursue selected projects on a group or individual basis. Acceptable for graduate credit with approval.

ART 498J Advanced Problems In Intaglio Credits: 1-6
With permission of the department, an advanced student may pursue selected projects on a group or individual basis. Acceptable for graduate credit with approval.

ART 498L Special Problems In Photography Credits: 1-6
With permission of the department, an advanced student may pursue selected projects on a group or individual basis. Acceptable for graduate credit with approval.

ART 498M Special Problems In Electronic/Media Credits: 1-6
With permission of the Department, an advanced student may pursue selected projects in electronic media on a group or individual basis. Acceptable for graduate credit with approval.

ART 498O Special Problems In Graphic Design Internship Credits: 1-6
Advanced students are accepted into the production studios of participating graphic design companies in the metropolitan region as a training experience.

ART 498Q Special Studies in Art: Internship Credits: 1-6
Advanced students gain invaluable practical experience in a professional setting in the field of art.

ART 499WI Senior Seminar Credits: 3
Capstone course for studio majors in all media. Course addresses contemporary theoretical and practical issues in studio art practice, and prepares students for graduation. Multiple papers, class presentations, and a portfolio preparation are required.
Prerequisites: RooWriter.

Art - Special Studies (ART-SS)

Courses

ART-SS 498F Special Problems In Casting Credits: 1-6
With permission of the department, an advanced student may pursue selected projects on a group or individual basis. Acceptable for graduate credit with approval.

Art History (ART-HIST)

Courses

ART-HIST 100 Topical Studies In Art History Credits: 1-3
This course consists of a series of lectures on selected subjects of European, American and Oriental art.

ART-HIST 110 Introduction to the History of Art: Pyramids to Picasso Credits: 3
This is an introduction to the history of art, with in-depth discussions of painting, sculpture, prints, and architecture. Students will be introduced to significant works from major historical periods; their cultural roles, style and composition, and the artistic processes involved in their creation. Emphasis is placed upon Western art history, with attention paid to important interactions with other world traditions, including the arts of Islam, Japan, and Africa. The comprehensive collections of The Nelson-Atkins Museum of Art contribute an important component to the course.

ART-HIST 200 American Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of the United States. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: CONSVTY 237, HISTORY 200, PHILOS 231.

ART-HIST 201 From Cave Paintings to Cathedrals Credits: 3
Students will learn to analyze and place in an art historical context Western art and architecture from approximately 35,000 BCE to 1250 CE. Art and architecture from all relevant cultures and religions - pagan, Christian, and Islamic - will be covered; particular emphasis will be placed on the accomplishments of Egyptian and Greek artists.

ART-HIST 202 From Michelangelo to Modernism Credits: 3
This course will examine major monuments of Western art and architecture during the late Middle Ages through the Modern period. Art will be examined in its cultural context stressing artistic intent, issues of gender, changing patterns of patronage, and the ascending status of the artist in society.

ART-HIST 240 European Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: CONSVTY 238, FRENCH 295, GERMAN 295, HISTORY 240, PHILOS 212, SPANISH 295.

ART-HIST 253 History Of The Designed Environment I, Ancient And Medieval Credits: 3
An overview of developments in architectural, urban, land and interior design which have shaped the physical environment of the Western world from prehistory through the period known as the "Romanesque." Emphasis will be given to relationships between institutions, values and needs of different societies and the architectural forms produced by those societies.

ART-HIST 254 History Of The Designed Environment II, Late Medieval To Modern Credits: 3
An overview of developments in architectural, urban, land and interior design which have had an impact on the physical environment of the Western World from the Gothic era to the beginning of the modern era. A central objective of the course is to gain an understanding of why these developments occurred and how the needs and aspirations of a given time were manifested in physical form.

ART-HIST 255 History Of The Designed Environment III, Modern (1750 To Present) Credits: 3
An overview of developments in architectural, urban, land and interior design which have shaped the physical environment of the Western world during the Modern period. Issues to be explored include renewed interest in archaeology during the eighteenth century, shifts in patronage, the impact of new industrial materials and techniques, demands for an array of new building types, and dilemmas of expression throughout the modern era. Our concerns will broaden and become more global in scope when we examine the twentieth century.

ART-HIST 260 World Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of one or more regions of the world as well as dynamics of interaction between them. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: CONSVTY 239, FRENCH 285, HISTORY 260, PHILOS 232, SPANISH 285.

ART-HIST 264 The Grotesque in Art and Culture Credits: 3
This course explores the vibrant and subversive role of the grotesque in the visual arts from 1500 to the present day. The grotesque comprises an alternate image tradition that is often overlooked, or even actively suppressed. This course will explore the distinct strands of the grotesque: witty and inspired improvisation, from Michelangelo to Picasso; rowdy and subversive carnivalesque, from Bruegel to Hogarth to DeKooning; and the monstrous and uncanny, from Bosch to Goya to Kahlo.

ART-HIST 300CD CC:The African Diaspora In The Arts And Culture Credits: 3
This cluster course examines aspects of African culture in the Diaspora: Africa, the Caribbean and certain parts of South and North America. Attention will be on charms, painting, sculpture, secret scripts, textiles, as well as religions and spirituality. Understanding African Diaspora culture also involves an analysis of historical and sociological movements, the interpretation of written culture, and the effects of Africa's response to colonialism. The transmission of African cultures will be addressed by a close investigation of visual and material culture, and the cosmological constructions of African peoples. Methodologies are from Art History, Literature and Religious Studies.
Prerequisites: Sophomore standing.

ART-HIST 300CF Cluster Course: African/African American Women And Creativity Credits: 3

ART-HIST 300CJ Cluster Course: Aestheticism In The Arts Credits: 3
This cluster course will deal with aesthetic problems in the arts illustrated with specific examples in music, literature and the visual arts.

ART-HIST 302 Survey Of Western Art II Credits: 3
A survey of late medieval, Renaissance and Baroque art in Europe. The course will start with the beginnings of panel painting, independent sculpture and the graphic arts in late medieval Europe, trace the coming of the Renaissance in architecture and the figurative arts, and conclude with the Baroque tradition.

ART-HIST 303 World Currents of Contemporary Art Credits: 3
This survey course provides an introduction to the densely interconnected trajectories of contemporary art in different parts of the world. It explores the continuities and discontinuities between modern and contemporary art in the context of intensifying transnational exchanges since the 1960s. Students will become familiar with the intersections of contemporary art with everyday life, mass media, politics and technology.

ART-HIST 315 The Arts Of African and New World Cultures Credits: 3
This historical survey of ethnographic arts includes two diasporas: 1) African art and the influences of Africans on the arts of new world cultures (in Brazil, Surinam, Cuba, Haiti, and the United States) ;and 2) Meso-American art and the influence of Meso-Americans on the arts of the Native North American cultures. Emphasis is placed on interdisciplinary theoretical approaches drawn from Art History, Anthropology, and folklore, as well as the importance of geography and trade. These ethnographic arts are examined from aesthetic, political, religious, and economic perspectives, in comparison with arts made in these countries in Western European traditions, including the cross-cultural impact that these various art traditions have on each other.
Cross Listings: BLKS 315.

ART-HIST 319 Asian Art Credits: 3
The survey will emphasize the philosophical and cultural context of the arts of India, Southeast Asia, China, Korea and Japan. The course will stress the elements that give an underlying unity to the arts as well as those qualities which distinguish the art of each country as unique.

ART-HIST 365 The Artist in Society Credits: 3
This interdisciplinary course explores the various roles of artists in society. Using historical examples and building on current best practices, students will engage critically with the interplay between artistic pursuits, social justice, and community engagement.
Prerequisites: Anchor II, DISC 200.

Co-requisites: DISC 300.

Cross Listings: CONSVTY 365.

ART-HIST 384 Telling Stories: History, Memory, and American Life Credits: 3
How we remember the past is shaped not only by academic historians but also by collectors, curators, librarians, archivists, artists, architects, urban planners and ordinary people. This course will invite students to participate in the shaping of history and memory through civic engagement in their community. Students will use resources available in local institutions to raise critical awareness about historical issues relevant to the present.
Prerequisites: Anchor II, DISC 200.

Co-requisites: DISC 300.

Cross Listings: HISTORY 384.

ART-HIST 402CC CC: Making the Modern in France: Dance, Art, Music, and Literature Credits: 3
This cluster course will take an interdisciplinary approach to understand the way modernism developed within the arts, with a focus on late-19th, early 20th-century France. Developments in literature, art, dance, and music and their interconnectedness to cultural and historical events will be highlighted and explored.
Cross Listings: FRN-LNG 402CC.

ART-HIST 415WI Romanticism Credits: 3
Art of the Romantic Era, principally in Europe, from c. 1790 to c. 1860. Consideration is given to the problems of patronage, criticism and stylistic influences.
Prerequisites: Any ART-HIST course, RooWriter.

ART-HIST 416WI Later 19th Century Painting And Sculpture Credits: 3
From Realism through Post-Impressionism. A study of art, principally in Europe, from c. 1850 to c. 1905, with consideration given to factors influencing stylistic changes during this period.
Prerequisites: Any ART-HIST course, RooWriter.

ART-HIST 424 Early 20th Century European Painting And Sculpture Credits: 3
A study of European painting and sculpture from c. 1900 to c. 1940.
Prerequisites: Any ART-HIST course.

ART-HIST 426 Twentieth Century Painting Credits: 3
A study of major artists and stylistic changes in painting, beginning c. 1905. Consideration also given to the role of media and to drawings and prints during this period.
Prerequisites: Any ART-HIST course.

ART-HIST 429WI American Painting And Sculpture Credits: 3
A study of the history of painting and sculpture, and other figurative arts, from earliest colonial times to the present. Emphasis will be placed on those artists who illuminate the major achievements in American art, and also the ongoing role played by European training and tradition.
Prerequisites: Any ART-HIST, RooWriter.

ART-HIST 439 Paris in the Age of the Rococo Credits: 3
In the early 18th century, Paris overtook Rome as the artistic center of Europe. We explore all of the visual arts during the vibrant "Rococo," the age of Watteau, Chardin, and Boucher.
Prerequisites: Any ART-HIST course.

ART-HIST 440WI French Art: Renaissance And Baroque Credits: 3
A history of French art from the time of Louis XII through the Age of Louis XIV, with emphasis on painting and architecture.
Prerequisites: Any ART-HIST course, RooWriter.

ART-HIST 441WI Northern Baroque: The Age Of Rubens, Rembrandt And Wren Credits: 3
The arts of England and the Low Countries in the 17th and early 18th centuries. Emphasis on painting and the graphic arts in the Spanish and Dutch Netherlands and on architecture in England.
Prerequisites: Any ART-HIST course, RooWriter.

ART-HIST 443 Meso-American Art Credits: 3
The course will discuss 2500 years of the arts of ancient Mexico and Guatemala. Included is the rise of such important cultures as the Olmec, Maya, and Aztec. Equal emphasis will be placed on the development of elaborate ceremonial centers such as Monte Alban and the Teotihuacan, as well as the ceramic traditions of the West and East coasts of Mexico.
Prerequisites: ART-HIST 315.

ART-HIST 445 Northern European Art: 15th And 16th Centuries Credits: 3
A study of panel painting, sculpture and manuscript illumination in Flanders, France, Germany, and Spain from the Hundred Years' War through the Reformation. Special emphasis will be placed upon the stylistic and iconographic innovations of such major Northern artists as Claus Sluter, Jan van Eyck, Jerome Bosch, Pieter Bruegel, Jean Fouquet and Albrecht Durer. Artistic developments will be presented within the context of changing economic, political, religious and social institutions of the period.
Prerequisites: Any ART-HIST course.

ART-HIST 447WI Italian Baroque: The Age Of Caravaggio, Bernini And Borromini Credits: 3
Painting, sculpture and architecture in Italy from the creation of the Baroque style in the late 16th century to the beginnings of the Barochetto era.
Prerequisites: Any ART-HIST course, RooWriter.

ART-HIST 450 15th Century Italian Art And Architecture Credits: 3
An examination of the visual arts from the International Style and the Early Renaissance to the beginnings of the High Renaissance. Problems of patronage, artistic theory, the Antique, the role of art in humanist circles, and the effect of religious, political and economic developments on the arts will also be discussed.
Prerequisites: Any ART-HIST course.

ART-HIST 452 Greek Art And Architecture Credits: 3
A survey of Greek sculpture, vase painting, and architecture from the third millennium to the first-century B.C. Emphasis will be placed on the relationship of Minoan and Helladic aesthetics, and the connections between late Helladic and Geometric forms, and the nature and development of the classical and baroque styles.
Prerequisites: Any ART-HIST course.

ART-HIST 455 History Of Photography Credits: 3
A survey of the history of photography as a pictorial art; technical developments and the interaction of photography with other arts will be included.
Prerequisites: Any ART-HIST course.

ART-HIST 456 The Painting And Sculpture Of China Credits: 3
Jade sculptures of the 14th-century B.C., the terra cotta army of the first emperor of China, Buddhist and secular sculptures from the Han through the Sung dynasties will be covered. The study of Chinese painting will include important new discoveries of paintings on silk dating from the third century B.C.; figure and landscape scrolls, and wall paintings from the fourth through 20th centuries A.D. The masterpieces in the Nelson-Atkins Museum will be examined in detail.
Prerequisites: Any ART-HIST course.

ART-HIST 461 Traditional and Contemporary Native American Arts Credits: 3
This course covers the history of traditional and contemporary Native North American arts, by examining cultural and aesthetic continuities between Meso-American and Native North American Arts. We also explore how Native American arts reflect the history of North America, including influences from Europeans, and conclude with contemporary Native American artists and their incorporation of various global influences.
Prerequisites: ART-HIST 315.

ART-HIST 462 History of Modern Design Credits: 3
This course examines innovations in design, beginning with the Arts and Crafts movement in the 19th century, surveying all the major design trends of the twentieth century, and concluding with contemporary developments in the age of the computer.
Prerequisites: Any ART-HIST course.

ART-HIST 463 Primitivism and Its Aftermath Credits: 3
This course explores one of the seminal movements of the modern era and its ramifications for the visual arts today. Class discussions will consider the complexities and contradictions of primitivism of its rejection of modernity. We will look at European artists' attempts at deliberate regression through their appropriations from archaic, folk, and non-western art traditions, from 1800-on, while also situating these creative endeavors within the cultural and political contexts of the period.
Prerequisites: Any ART-HIST course.

ART-HIST 464 Modern Art & the Grotesque Credits: 3
This course explores how the grotesque shaped the history, practice and theory of art in the nineteenth and twentieth centuries. The grotesque plays a major role in many modern styles, and its expressive possibilities encompass the capriccio, the carnivalesque and burlesque, the fantastic, and the abject and uncanny. Artists have incorporated the grotesque as a means to push beyond established boundaries, explore alternate modes of experience, and to challenge cultural and aesthetic conventions.
Prerequisites: Any ART-HIST course.

ART-HIST 468 Participatory Forms of Spectatorship in Contemporary Art Credits: 3
This course explores art practices from the second half of the 20th century that challenges spectators to become more actively involved in the reception and even in the production of art. The course will examine the socio-political conditions and technological developments which have contributed to the strengthening of participatory tendencies in contemporary art.
Prerequisites: ART-HIST 303.

ART-HIST 469 Sensing, Feeling, Thinking: Contemporary Art and the Mind Credits: 3
Contemporary artists are challenging viewers to reflect on how they perceive, feel and think. This seminar provides an introduction to the mental processes underlying emotion and visual cognition and familiarizes students with contemporary art practices that reveal the dynamic correlations between body, mind and subjectivity.
Prerequisites: ART-HIST 303.

ART-HIST 473 Visual Arts Administration Credits: 3
This course on professional arts administration includes assignments in: copyright laws, database management, ethics issues, evaluation design, gallery museum management, grant writing and budgeting, public relations, resume design, tax laws, and website design and management. Students are required to learn relevant computer programs. Open to music and theatre majors.
Prerequisites: Junior or Senior Standing.

ART-HIST 476 Site-Specific Art: Within and Beyond the Museum Walls Credits: 3
At a time of increased transnational mobility, contemporary artists are conceiving artworks that catalyze an enhanced awareness of the geographical and socio-political conditions of existence and art making. This seminar examines artworks that are produced outside the studio and are inspired by specific natural environments, museum settings and public spaces.
Prerequisites: ART-HIST 303.

ART-HIST 477 Contemporary Artists of the African Diaspora Credits: 3
This course examines cultural and aesthetic continuities between traditional and contemporary arts and artists in Africa and in the Americas, including the study of contemporary Africans whose cultures had the greatest influence in the Americas as well as contemporary African-American artists in Brazil, Cuba, Haiti, and the United States.
Prerequisites: ART-HIST 315.

ART-HIST 478 Pompeii and Herculaneum: The Archaeology of the Roman World Credits: 3
This class offers insights into the art, architecture, politics, economics, religions and social life of the Roman world through the study of Pompeii and Herculaneum.

ART-HIST 479 From the Parthenon to the Altar of Peace Credits: 3
The course centers on the many different styles of Greek and Roman art from the fifth century B.C. to the early first century A.D. Attention is also paid to the political and literary forces behind its imagery. Three monuments serve as the pillars upon which the course rests: the Parthenon, Pergamon Altar, and the Ara Pacis. The lessons learned about style, the interaction of politics, literature, and art and the foibles of scholarship are intended to be applied to other fields of art history.
Prerequisites: Any ART-HIST course.

Cross Listings: CLASSICS 479.

ART-HIST 480 Art Since 1945 Credits: 3
An inquiry into the range and purpose of the visual arts since 1945.
Prerequisites: ART-HIST 303.

ART-HIST 482 Scope & Methods Of Art History Credits: 3
An exploration of the discipline of art history, including theoretical issues, guiding questions and problems, diverse approaches (historical and current), and research tools. The undergraduate capstone course for art history majors.
Prerequisites: Senior standing.

ART-HIST 493 Directed Studies in Art History Credits: 1-6
With permission of instructor, advanced students pursue independent research and production of a significant semester-long research project. Acceptable for graduate credit with approval.

ART-HIST 495 Special Topics in Art History Credits: 1-6
In depth exploration of a special topic in Art History. Course may be repeated for up to 18 credit hours if topic is unique for each repeated effort. Acceptable for graduate credit with approval.

ART-HIST 497A Special Studies In Medieval/Renaissance Art Credits: 1-6
With the permission of the department, an advanced student may pursue a selected subject on a seminar or tutorial basis. Acceptable for graduate credit with approval.

ART-HIST 497B Special Studies In Baroque/Rococo Art Credits: 1-6
With the permission of the department, an advanced student may pursue a selected subject on a seminar or tutorial basis. Acceptable for graduate credit with approval.

ART-HIST 497C Special Studies In 19Th- And 20Th-Century Art Credits: 1-6
With the permission of the department, an advanced student may pursue a selected subject on a seminar or tutorial basis. Acceptable for graduate credit with approval.

ART-HIST 497D Special Studies In American Art And Architecture Credits: 1-6
With the permission of the department, an advanced student may pursue a selected subject on a seminar or individual basis. Acceptable for graduate credit with approval.

ART-HIST 497E Special Studies In Art Museum Credits: 1-6
Selections from the permanent collections and loan exhibitions in the Nelson-Atkins Museum are studied with attention to historical, aesthetic and technical considerations.
Prerequisites: Junior standing and at least nine hours of ART-HIST.

ART-HIST 497F Special Topics In Asian Art Credits: 1-6
With the permission of the department, an advanced student may pursue a selected subject on a seminar or individual basis. Acceptable for graduate credit with approval.
Prerequisites: ART-HIST 319.

ART-HIST 497H Sp St In The Art Of African, Oceanic, And New World Cultures Credits: 1-6
With permission of the department, an advanced student many pursue a selected subject on a seminar or tutorial basis. Acceptable for graduate credit with approval.

ART-HIST 497I Special Studies In Ancient Art Credits: 1-6
An advanced student may pursue a selected subject on seminar or tutorial basis. Acceptable for graduate credit with approval.

ART-HIST 497J Special Studies In Art Credits: 1-6

ART-HIST 497Q Special Studies in Art History: Internship Credits: 1-6
Advanced art history students gain invaluable practical experience in a professional setting in the field of art.

ART-HIST 498Q Special Problems in Art Internship Credits: 1-6
Advanced students gain invaluable practical experience in a professional setting in the field of art.

Arts & Sciences - General (A&S)

Courses

A&S 100 Methodologies In Liberal Arts & Sciences: Theories & Application Credits: 3
This three hour course is designed for freshmen and transfer students, to be taken during their first semester of study at UMKC. The curriculum provides students an introduction to the major disciplines and methodologies of the liberal arts and sciences (the humanities, social sciences, and sciences), including sessions on choosing majors and careers. Additional emphases will include learning to use the library, writing and computational skills, oral presentations, cultural diversity, stress management, and study strategies.

A&S 103A Critical Thinking In The Arts And Humanities Credits: 3
This 3 hour course is designed to be taken in conjunction with entry level courses in Arts and Sciences disciplines. The course is designed to enhance students' critical thinking and intellectual capacity, communication skills, and life long learning strategies. Assignments and problem solving activities in the course focus on developing thinking in the disciplines through interactive class sessions, experiments, and problem solving applications. The course is intended to be taught concurrently with a departmental course offered in the Video Supplemental Instruction model. Numerous additional assignments and activities enable students to both succeed in the departmental course and develop transferable cognitive skills at the same time.

A&S 103B Critical Thinking In The Social Sciences Credits: 3
This 3 hour course is designed to be taken in conjunction with entry level courses in Arts and Sciences disciplines. The course is designed to enhance students' critical thinking and intellectual capacity, communication skills, and life long learning strategies. Assignments and problem solving activities in the course focus on developing thinking in the disciplines through interactive class sessions, experiments, and problem solving applications. The course is intended to be taught concurrently with a departmental course offered in the Video Supplemental Instruction model. Numerous additional assignments and activities enable students to both succeed in the departmental course and develop transferable cognitive skills at the same time.

A&S 103C Critical Thinking In The Natural Sciences And Mathematics Credits: 3
This three hour course is designed to be taken in conjunction with entry level courses in Arts Sciences disciplines. The course is designed to enhance students' critical thinking and intellectual capacity, communication skills, and life long learning strategies. Assignments and problem solving activities in the course focus on developing thinking in the disciplines through interactive class sessions, experiments, and problem solving applications. The course is intended to be taught concurrently with a departmental course offered in the Video Supplemental Instruction model. Numerous additional assignments and activities enable students to both succeed in the departmental course and develop transferable cognitive skills at the same time.

A&S 110 Successful Research: Making Sense Of The World Of Information Credit: 1
Do you know what you don't know? Find out in this course as we learn and discuss many of the common things you are expected to know to succeed in college, including the importance of discovering, understanding, analyzing, and using ideas and information in order to achieve academic success and genuine learning. You will learn how to ask meaningful questions, understand the structure and content of information resources, evaluate information, and use information resources as learning tools. The course is not geared to any specific discipline, but is core to success in any discipline. The course is open to all students, but is most beneficial when taken early in a student's academic career.

A&S 115 Career Possibilities Credit: 1
This course introduces career development as a complex process of self-assessment and decision-making. Students analyze their personal interests motivation, conduct self-assessment, identify their personal values, and discuss ethical considerations as they relate to possible career choices. Visiting professionals will provide insight into career options as students explore possible career paths.

A&S 170 Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 170C Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 170D Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 200 British Life And Culture Credits: 3
A survey of British history and culture from Roman times to the present day. The course includes such topics as British education, the legal system, the economic system, the Common Market, the development of working class movements such as Trade Union Councils, pictorial arts in Britain, dramatic arts, British music, and contemporary communications. The course is taught with lectures from British authorities in the various fields, discussions with lecturers and local faculty, and field trips to places associated with the weekly lectures. Offered under the Missouri-London Program in London.

A&S 206 Contemporary Asia Credits: 3-6
An examination of selected political, cultural, economic and social forces shaping Asia today and of how they are related to Asia's past. The course is taught in Asia and employs field trips, lectures by Asian authorities on the various topics and lectures by the accompanying faculty member.

A&S 208 Contemporary World Cultures Credits: 3
An examination of societies and cultures around the world. Students visit one or more countries, where they go on field trips, meet with local experts and students, and learn by studying and doing.

A&S 210 Cross-Cultural Interaction: Experience & Understanding Credits: 3
This course focuses on the social and cultural context of interactional patterns. U.S. and international students are paired in academic activities to encourage mutual understanding and self-awareness. They will draw on a variety of resources and learning modalities to examine aspects of their own and one another's societies, cultures, religions, and family relations. Making use of intercultural theories, students will reflect upon and explore cultural myths and stereotypes and develop a general understanding of cultural similarities and differences.

A&S 215 Career Explorations Credit: 1
The primary focus of this course is to complete an in-depth self-assessment and the generation of personalized list of career paths. Personal values will inform these possibilities, which are then explored through job shadowing, informational interviews, visiting lecturers, and independent career research. Ethical considerations of chosen career paths are explored. Students reflect on the professional experiences of others and relate them to their own personal values.
Prerequisites: A&S 115.

A&S 240 Analysis Of Medical Terminology Credits: 3
Analyze the structure of medical words and apply this to basic anatomy, physiology and disease processes of the human body, stressing spelling and pronunciation.

A&S 280A Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 300CF Cluster Course: African/African American Women And Creativity Credits: 3

A&S 304CM Cluster Course: Body Images In Medicine And The Arts Credits: 3
Open to all students, this course focuses on the human body as an object of study in the history and practice of medicine. The class identifies a number of key issues which affect the attitudes that contemporary physicians often have about their patients based upon prevalent attitudes toward the human body in our society. Societal values which shape our ideas about gender, physical appearance, cosmetic surgery, obesity, and genetic abnormalities will be the focus of determining the extent to which these issues may actually affect the education of physicians and choices of medical treatment.
The course examines the evolution of these values historically through works of art and recurring themes in literature. The course is interdisciplinary, involving lectures in contemporary medicine, the history of medicine, the history of art, and literature.

A&S 310 Cross-Cultural Interaction II: Social Relations Credits: 3
This course will match international students with U.S. students to prepare them to interact more effectively in multilingual and/or intercultural settings. Students learn through readings on cultural theory and cultural relations, in-class small group activities, discussions and lectures, how issues of identity, such as age, sexual orientation, and ethnicity; impact cross-cultural interaction. Papers written for this course will help students integrate theory with previous experience, leading to an understanding of oppression in cross-cultural interaction.
Prerequisites: A&S 210.

A&S 315 Career Methods Credits: 0
In this course students begin to map out the realization of their career paths. They analyze their career choices, how these choices inform their life plans, articulate the ethical and moral requirements of these careers, and understand how their personal values and strengths match these requirements. Independent career research and entry preparation along with job shadowing, informational interviews, mock interviews, and other preparations required for the selected career choices are included in this class.
Prerequisites: A&S 215.

A&S 334 Introduction To African American Studies Credits: 3
This course provides an introduction to the contexts, theories, and methodologies that undergird African American studies. In addition to substantial time spent covering particular research skills and resources, students will also be introduced to African American culture and the issues related to African American studies from several perspectives: history, literature, sociology, communication studies, and the like. Influences and perspectives from Africa, the Caribbean and South America will also be covered. The course will thus provide a broad background in African American culture and history, an introduction to the methodologies of several disciplines, and discussion of particular contemporary and historical issues such as slavery, segregation and integration, the Civil Rights Movement, Pan-Africanism, Afrocentrism, and current political debates.

A&S 341 Union Leadership and Administration Credits: 3
This course focuses on the roles and challenges of union leadership in a changing environment. Topics include the union leaders' role as a representative, organizer and educator as well as administrative responsibilities within the union and the relationship with enterprise management in both adversarial and participatory situations. Options for leadership styles and organizational models will be discussed and explored in both theory and practice. Leaders will develop their skills of motivation, speaking, strategic planning and managing complex campaigns and diverse organizations. This course is part of the Certificate Program in Labor Studies and is offered on the University of Missouri Interactive Video Network at UMKC, UMSL, and UMC.

A&S 350 Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 350A Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 350E Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 350K Special Topics Credits: 1-4

A&S 350L Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 350R Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 350S Special Topics Credits: 1-4
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

A&S 365P Introduction To Substance Abuse Counseling: Theory And Practice Credits: 3
This course will introduce the student to the problems of substance abuse and the methods/techniques used in treatment. The course will explore theories of personality and belief systems of the chemically dependent or alcoholic individual. The course will also review the impact of the disease on the family system

A&S 400A Special Readings/Topics Credits: 1-6

A&S 400B Special Readings/Topics Credits: 1-6

A&S 400C Special Readings/Topics Credits: 1-6

A&S 400D Special Readings/Topics Credits: 1-6

A&S 400E Special Readings/Topics Credits: 1-6

A&S 400F Special Readings/Topics Credits: 1-6

A&S 400G Special Readings/Topics Credits: 1-3

A&S 400H Special Readings/Topics Credits: 1-3

A&S 400I Special Topics Credits: 1-6

A&S 400J Special Readings/Topics Credits: 1-6

A&S 400K Special Readings/Topics Credits: 1-3

A&S 400M Special Readings/Topics Credits: 1-6

A&S 400N Special Readings/Topics Credits: 1-6

A&S 400PD Special Readings/Topics Credits: 1-6

A&S 400RR Special Readings/Topics Credits: 1-3

A&S 400SA Special Readings/Topics Credits: 1-6

A&S 400SB Special Readings/Topics Credits: 1-3

A&S 400SS Special Readings/Topics Credits: 1-3

A&S 406 Contemporary Asia Credits: 3-6
An in-depth examination of selected political, cultural, economic and social forces shaping Asia today and of how they are related to Asia's past. The course is taught in Asia and employs field trips, lectures by Asian authorities on the various topics and lectures by the accompanying faculty member.
Prerequisites: Upper level standing.

A&S 419 Natural Sciences For Elementary Schools I Credits: 1-5
Selected topics from the natural sciences, their development and application for teaching in elementary school. Lectures, demonstrations, experiments and discussions. Intended for teachers in elementary schools. (This course will not be accepted for satisfaction of the Natural Science Area requirement of the Arts and Science general degree requirements).

A&S 420 Literature: A Healing Art Credits: 3
The course provides an opportunity for students to read and learn about literature, both prose and poetry, which demonstrates the importance of life stories in fostering communication between people. Through this study literature will come to be viewed as a healing art: healing physicians, patients and writers alike.
Prerequisites: Junior standing.

A&S 429 Natural Sciences For Elementary Schools II Credits: 2
Selected topics from the natural sciences, their development and application for teaching in elementary school. Lectures, demonstration, experiments and discussions. Intended for teachers in elementary schools. (This course will not be accepted for satisfaction of the Natural Science Area requirement of the Arts and Science general degree requirements).

A&S 439 Natural Sciences For Elementary Schools III Credits: 2
Selected topics from the natural sciences, their development and application for teaching in elementary schools. Lectures, demonstrations, experiments and discussions. Intended for teachers in elementary school. (This course will not be accepted for satisfaction of the Natural Science Area requirement of the Arts and Science general degree requirements).

A&S 452 Images Of The Family In Art And Literature Credits: 4
An application of the skills and knowledge gained from the companion weekend and/or weekday courses in this block by means of instructor-approved and guided independent study projects of the student's own individual or small group choice, focusing on images of the family in literature and art. Each student must select and present four projects (one on each of following faith cultures-Christianity/Judaism, Islam, and one on a topic of their choice) in written, oral and/or audio-visual media. Students meet in groups and individual sessions with the instructors of this block.

A&S 490B Special Topics Credits: 1-3

A&S 490C Special Topics Credits: 1-3

A&S 490D Special Topics Credits: 1-3

A&S 490E Special Topics Credits: 1-3

A&S 490F Special Topics Credits: 1-3

A&S 490HA Special Topics Credits: 1-3

A&S 490L Special Topics Credits: 1-3

A&S 490PA Special Topics Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

A&S 490PB Special Topics Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

A&S 490S Special Topics Credits: 1-3

A&S 490SA Special Topics Credits: 1-3

A&S 490SB Special Topics Credits: 1-3

A&S 490W Special Topics Credits: 1-3

A&S 491 International Internship Credits: 1-9
Students may participate in structured international internships under the joint supervision of employer and faculty member. They must carry out significant professional responsibilities and whatever additional assignments are determined by the faculty supervisor.
Prerequisites: Junior level standing or above.

A&S 492 Field Practicum In Aging Credits: 3-8
Students spend 180-480 contact hours in a field placement with supervision in a community agency or organization which services or advocates for older persons, and keep a journal documenting and reflecting on the practicum activities and experiences particularly as they relate to gerontological theory and research.

A&S H100 Methodologies In The Liberal Arts & Sciences: Theories & Apps Credits: 3
This three hour course is designed for freshmen and transfer students, to be taken during their first semester of study at UMKC. The curriculum provides students an introduction to the major disciplines and methodologies of the liberal arts and sciences (the humanities, social sciences, and sciences), including sessions on choosing majors and careers. Additional emphases will include learning to use the library, writing and computational skills, oral presentations, cultural diversity, stress management, and study strategies.

Astronomy (ASTR)

Courses

ASTR 150 Introduction To Astronomy: Gravity and Motion in the Universe Credits: 3
A survey of modern topics in astronomy, with an emphasis on developing conceptual models for the fundamental laws of gravity and motion underpinning the structure and evolution of the universe. Topics include lunar phases, eclipses, planetary motion, exoplanets, formation of planetary systems, star formation, supernovae, white dwarves, neutron stars, black holes, growth of galaxies, dark matter and the expansion of the universe.
Cross Listings: NAT-SCI 150, PHY-SCI 150, PHYSICS 150.

ASTR 153L Introductory Astronomy Laboratory Credits: 2
An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors.
Cross Listings: NAT-SCI 153L, PHY-SCI 153L, PHYSICS 153L.

ASTR 155 Introduction to Astronomy: Interaction of Light and Matter in the Universe Credits: 3
A survey of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter underpinning energetic phenomena in the universe. Topics include telescopes and detectors, solar system exploration, planetary climates, nuclear fusion and chemical enrichment, stars and stellar evolution, interstellar material, pulsars, quasars, gamma ray bursts, the Big Bang and the possibility of life beyond Earth.
Cross Listings: NAT-SCI 155, PHY-SCI 155, PHYSICS 155.

ASTR 353 Practical Astronomy Credits: 3
A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory.
Prerequisites: PHYSICS 240 PHYSICS 250, MATH 210 or MATH 220.

Cross Listings: PHYSICS 353.

ASTR 355 Stellar Astrophysics Credits: 3
A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.
Prerequisites: PHYSICS 240 PHYSICS 250, MATH 210 or MATH 220.

Cross Listings: PHYSICS 355.

ASTR 356 Galaxies Credits: 3
A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.
Prerequisites: PHYSICS 240 PHYSICS 250, MATH 210 or MATH 220.

Cross Listings: PHYSICS 356.

ASTR 465 Cosmology Credits: 3
This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.
Prerequisites: PHYSICS 240 PHYSICS 250, MATH 210 or MATH 220.

Cross Listings: PHYSICS 465.

Bassoon (BASSOON)

Courses

BASSOON 100A Preparatory Applied Study Credits: 2
One hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

BASSOON 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One-half hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

BASSOON 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

BASSOON 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

BASSOON 101 Freshman Bassoon I Credits: 2-4

BASSOON 102 Freshman Bassoon II Credits: 2-4

BASSOON 201 Sophomore Bassoon I Credits: 2-4

BASSOON 202 Sophomore Bassoon II Credits: 2-4

BASSOON 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

BASSOON 301 Junior Bassoon I Credits: 2-4

BASSOON 302 Junior Bassoon II Credits: 2-4

BASSOON 401 Senior Bassoon I Credits: 2-4

BASSOON 402 Senior Bassoon II Credits: 2-4

Biology (BIOLOGY)

Courses

BIOLOGY 102 Biology and Living Credits: 3
Introduction to structural organization and functional processes of living systems. For non-biology majors only. Does not count toward biology degree.

BIOLOGY 102L Biology and Living Laboratory Credit: 1
Exploration of basic biological concepts through laboratory activities requiring data collection and analysis. For non-majors only; does not count toward Biology degree requirements.
Prerequisites: BIOLOGY 102.

BIOLOGY 108 General Biology I Credits: 3
Fundamental studies in biology emphasizing the unity and diversity of life. Topics include the basic chemistry of biological processes, cell types and organelles, energy harvesting and energy producing pathways, cell and life cycles, genetics, DNA structure, genes, transcription, translation, natural selection, population genetics, speciation, and phylogenetic analysis.

BIOLOGY 108L General Biology I Laboratory Credit: 1
Basic laboratory studies in Biology emphasizing the unity and diversity of life. Structure, function, heredity, development, ecology and evolution will be explored.
Co-requisites: BIOLOGY 108.

BIOLOGY 109 General Biology II Credits: 3
Fundamental studies in biology emphasizing the unity and diversity of life. Topics include prokaryotes, fungi, invertebrate-vertebrate zoology and phylogeny, human evolution, plant structure and development, animal development and physiology, ecology (population and ecosystems).

BIOLOGY 109L General Biology II Laboratory Credit: 1
Basic laboratory studies in Biology emphasizing the unity and diversity of life. Structure, function, heredity, development, regulation of growth and evolution will be explored.
Co-requisites: BIOLOGY 109.

BIOLOGY 115 First Year Seminar Credit: 1
This course is designed to provide students with the skills necessary to achieve success at the university. The curriculum includes time management, study, reading, note-taking and test-taking strategies, health and wellness, and student support services. Additional emphasis will include career exploration, including professionalism, writing a resume, and developing plan of study for degree completion.

BIOLOGY 122 Human Genetics Credits: 3
This is a non-majors biology course in human genetics designed for those with little classroom training in the sciences. The focus will be on the nature of human genetic variation and how variation shapes and affects our lives. This includes the structure and function of genes and how genes create traits. The discussion will focus on how genes function in human development through sex determination. The inclusion of human genomic sequencing technology and personal genomics will emphasize several issues related to knowledge and privacy.

BIOLOGY 202 Cell Biology Credits: 3
Basic concepts of cellular and subcellular structure and function, including supramolecular and organelle structure and organization, bioenergetics, cell growth and cellular communication.
Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 212R, (or CHEM 212R, LS-ANATO 119, LS-ANATO 119L, LS-MCRB 121).

BIOLOGY 203 Essential Cell Biology Credits: 3
Foundations of cellular functions. Serves as a bridge between biochemistry and cell and organ physiology for dental students. Applications of fundamental principles to the physiology and pathology of the oral tissues will be stressed.

BIOLOGY 206 Genetics Credits: 3
A modern approach integrating molecular and organismal studies of the general genetics of lower and higher organisms. Chromosomal structure and function, gene transmission, heredity, plasticity and population genetics will be discussed.
Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 212R.

BIOLOGY 302 General Ecology Credits: 3
Introduction to the study of populations, communities, and ecosystems by examining the interrelationships between living organisms and their environments. The role of natural selection and evolution will also be considered.
Prerequisites: BIOLOGY 108, BIOLOGY 109 (or BIOLOGY 102).

BIOLOGY 302L Ecology Laboratory Credits: 2
This course provides laboratory and field experience in ecology. The course will cover topics including statistical analysis and data presentation, terrestrial and aquatic sampling, experimental design and scientific writing.
Co-requisites: BIOLOGY 302.

BIOLOGY 303 Invertebrate Zoology Credits: 3
Taxonomy, evolutionary relationships, behavior, reproduction, morphology and ecology of the invertebrates.
Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 212R.

BIOLOGY 305 Marine and Freshwater Biology Credits: 3
Introduction to the study of marine ecology, deep-sea biology, oceanic nekton, inter-tidal ecology, estuaries, mangroves and salt marshes, as well as ecology of rivers, lakes, streams, wetlands and human impact on aquatic habitats.
Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 211.

BIOLOGY 308 Vertebrate Zoology Credits: 3
Taxonomy, evolutionary relationships, behavior, reproduction, morphology and ecology of the vertebrates.
Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 212R.

BIOLOGY 312WL Laboratory in Developmental Biology, Genetics and Cell Biology Credits: 3
Experimental studies of genetics and development in selected eukaryotic model organisms with an emphasis on the molecular and cellular mechanism of inheritance.
Prerequisites: LS-BIOC 341.

Co-requisites: BIOLOGY 409.

BIOLOGY 314 Entomology Credits: 3
Anatomy, physiology and identification of insects with emphasis on their environmental adaptations.
Prerequisites: BIOLOGY 109 (or LS-ANATO 119).

BIOLOGY 319 Global Health: New and Emerging Infectious Diseases Credits: 3
This course will discuss infectious diseases that are newly identified, or increasing in prevalence throughout the world. Several aspects of each disease will be discussed, including transmission, symptoms, treatment, prevention, and diagnosis. The course is meant for students interested in a health-related career (medicine, dental, pharmacy, public health), but other students with a basic biology background are welcome.
Prerequisites: BIOLOGY 108, BIOLOGY 109 (or BIOLOGY 102).

BIOLOGY 322 General Parasitology Credits: 3
Parasitic protists, worms and arthropods and the disease states they may induce, will be examined in relationship to human, animal and plants hosts.
Prerequisites: BIOLOGY 109 (or LS-ANATO 119).

BIOLOGY 326 Biological Conservation Credits: 2
Applications of ecology and genetics to the conservation of communities and individual species, including discussion of the Endangered Species Act extinction processes, and the effects of habitat fragmentation.
Prerequisites: BIOLOGY 108, BIOLOGY 109.

BIOLOGY 327 Biogeography and Biodiversity Credits: 2
Evolutionary and climatological effects on the geographic distribution of organisms, including areas of endemism as well as preservation of biodiversity.
Prerequisites: BIOLOGY 108, BIOLOGY 109.

BIOLOGY 328 Histology Credits: 2
Animal tissues and their specialization in the organism, with major emphasis on higher organisms.
Prerequisites: BIOLOGY 109, BIOLOGY 202, CHEM 212R.

BIOLOGY 328L Laboratory in Histology and Cellular Ultrastructure Credits: 3
Examination of structure/function relationships at the subcellular, cellular and organ levels. Both plants and animals will be examined with emphasis on vertebrates.
Prerequisites: BIOLOGY 202, BIOLOGY 328.

Co-requisites: CHEM 212R.

BIOLOGY 328WL Laboratory in Histology and Cellular Ultrastructure Credits: 3
Examination of structure/function relationships at the subcellular, cellular and organ levels. Both plants and animals will be examined with emphasis on vertebrates.
Prerequisites: BIOLOGY 202, CHEM 212R.

Co-requisites: BIOLOGY 328.

BIOLOGY 329 Endocrinology Credits: 2
Endocrine regulation and control of growth, development, homeostasis, and reproduction. Includes study of the endocrine organs, their products, and mechanisms of action.
Prerequisites: BIOLOGY 202.

BIOLOGY 331 Reproductive Biology Credits: 2
Comprehensive overview of current concepts and knowledge regarding male and female reproductive processes, from gametogenesis through early placentation. Includes structural, developmental, physiological and pathophysiological aspects of reproduction.

BIOLOGY 338L Comparative Vertebrate Anatomy Laboratory Credits: 3
This class explores anatomical similarities and differences that exist between the major vertebrate groups and relates aspects of anatomy to evolutionary history and function. Students will gain hands-on experience of anatomy through dissection and examination of several model vertebrates.
Prerequisites: BIOLOGY 108, and BIOLOGY 109, and BIOLOGY 109L.

BIOLOGY 344 Bioorganic Structure and Biomolecular Function Credits: 3
An introduction to chemical and physical properties of complex biological macromolecules and their functions in living cells. Nomenclature, functional groups, reactions and stereochemistry are among the topics to be emphasized.
Prerequisites: BIOLOGY 109, CHEM 320, CHEM 322R.

BIOLOGY 346 Plant Biology Credits: 3
An integrated study of growth, development, and reproduction of plants, including structure and function of plant tissues and organs, as well as a survey of the recent advances in genetic engineering, plant defense mechanisms, and medical botany and the usefulness of plants to humans.
Co-requisites: BIOLOGY 202.

BIOLOGY 350 Assisting Undergraduate Learning in Biology Credits: 1-3
This course addresses current issues and pedagogy of teaching biology and providing instructional support for designated undergraduate courses in the School of Biological Sciences. Students meet weekly with the course instructor and assist in the classroom, studio, or laboratory.
Prerequisites: BIOLOGY 108, BIOLOGY 109, BIOLOGY 202, BIOLOGY 206.

BIOLOGY 405 Introduction to Evolution Credits: 3
Discussion of the biological processes that produce organic diversity through phyletic change, including variation, mutation, adaptation, population genetics, natural selection, genetic drift, gene flow, and macroevolution.
Prerequisites: BIOLOGY 206.

BIOLOGY 409 Developmental Biology Credits: 3
Principles of development and differentiation of structure during embryology in animals. Molecular, cellular and organismal level concepts and mechanisms will be considered.
Prerequisites: BIOLOGY 202, BIOLOGY 206.

BIOLOGY 427 Plant Physiology Credits: 3
A study of the biochemical and physical processes involved in plant function at the molecular and cellular level and the mechanisms by which plants respond to environmental challenges.
Prerequisites: BIOLOGY 202, BIOLOGY 206, LS-BIOC 341.

BIOLOGY 442 Neurobiology Credits: 3
Neurobiology will consist of the presentation of theory and data concerning cellular and molecular fundamentals of the nervous system, synaptic mechanisms, sensory-motor systems, and higher-order functions of the nervous system.
Prerequisites: LS-BIOC 341 (or LS-PHYS 316).

BIOLOGY 498WI Critical Analysis of Biological Issues Credits: 3
Reading and analysis of scientific literature, including original papers, on a topic of broad biological interest. Critical discussion of experimental methods and results. Writing of scientific reviews and a term paper. Taking the MFAT test is a requirement of this course, and the course satisfies the general education synthesis requirement.
Prerequisites: CHEM 320 (or CHEM 322R), RooWriter.

Black Studies (BLKS)

Courses

BLKS 101 Introduction to Urban Studies Credits: 3
A lecture and discussion course that provides the undergraduate student with an overview of the interdisciplinary field of urban social science. The student who successfully completes this course will have a broad understanding of the major issues, vocabulary, basic methods, and prominent scholars in urban studies. We will explore current events of relevance, including the opportunities and problems facing major cities in the United States, including Kansas City.
Cross Listings: URBAN ST 101, UPD 101, ECON 158.

BLKS 201 Global Systems and the Origins of Black American Culture and Institutions Credits: 3
This multi-disciplinary course examines global capitalism, European contact with Africa, the development of the African Diaspora, and the origins of Black American institutions and culture. Applying a Black studies perspective, the course explores such themes as cultural and gendered oppression, institutional destabilization, economic dislocation, liberation struggles, and creative impulses and aesthetics.

BLKS 302 Conceptual and Theoretical Foundations in African American Studies Credits: 3
This course will provide an in-depth examination of the theoretical and conceptual parameters of African American studies. We will study the evolution of the field, key scholars and creative intellectuals, and seminal categories of thought.

BLKS 315 The Arts of African and New World Culture Credits: 3
The historical survey of ethnographic arts includes two diasporas: 1) African art and the influences of Africans on the arts of new world cultures (in Brazil, Surinam, Cuba, Haiti, and the United States); and 2) Meso-American art and the influence of Meso-Americans on the arts of the Native North American cultures. Emphasis us placed on interdisciplinary theoretical approaches drawn from Art History, Anthropology, and folklore, as well as the importance of geography and trade. These ethnographic arts are examined from aesthetic, political, religious, and economic perspectives, in comparison with arts made in these countries in Western European traditions, including the cross-cultural impact that these various art traditions have on each other.
Cross Listings: ART-HIST 315.

BLKS 320 Critical Health Issues in Black Communities Credits: 3
Beginning with the African context and the opposition of chattel slavery, this course examines social, cultural, and historical factors affecting the health status of African Americans to the present era. It explores a variety of health-related issues including the interplay between environment, biology, and culture; folk and popular health practices; structured inequality and oppression; lifestyle, beliefs and values; and the organization and delivery of health care.Moreover, this course moves well beyond the idea that medical care-its presence, absence, or quality-is the singular or most critical factor determining the health of a people, community, or society. It reveals the importance of social phenomena in disease resistance and health promotion. Historical shifts from the prominence of infectious to chronic diseases; the implications to health of chattel slavery, sharecropping, segregation, poverty, and structured inequality; the relationship between psychosocial factors and disease, i.e. destabilized social settings that compromise resistance to disease; environmental racism; and the health status of African Americans as it relates to the organization of work, family structure and function, religious beliefs, the organization of medical care, lifestyle, consumer manipulation, and post-industrial society are major issues addressed by the course.

BLKS 321 The Black Family and Male-Female Relationships Credits: 3
This course examines the historical evolution and current status of the African American family in the United States. Utilizing the African experience as its starting point the course conveys a broad understanding of the role of the family in human survival and progress. We investigate such issues as male-female relationships, sexual practices, dating, marriage, single parenting, the education and socialization of children, and so on. We also examine an array of social and economic issues, including institutionalized inequality, that affects the viability of today’s African American family.

BLKS 325 African American Business Development Credits: 3
This course investigates the various challenges to African American business development and entrepreneurship on the united States. We study the lives of successful, pioneering African American businesswomen and men in order to assess how they managed to transcend the barriers of racism and structured inequality. We explore why certain kinds of enterprises emerged among African Americans and why others did not, and we scrutinize the traditional business problems for African Americans of capitalization distribution market penetration, and wealth creation.

BLKS 331 African American Literature I Credits: 3
This course provides a survey of African American literature from its beginnings to the Harlem Renaissance of the 1920s and 1930s. Areas of interest will include abolitionist literature (especially Slave Narratives), turn-of-the-century literature and the Harlem Renaissance. This course will examine any or all of the following literary forms: fiction, poetry, drama, autobiography and essay. It will view African American literature in its historical and cultural contexts.
Cross Listings: ENGLISH 331.

BLKS 332WI African American Novel Credits: 3
This course will examine the African American novel in the 19th and 20th centuries; the emphasis will be on the period from the 1920s to the present. The novels will be examined in their historical and cultural contexts.
Prerequisites: RooWriter.

Cross Listings: ENGLISH 332WI.

BLKS 333 African American Literature II Credits: 3
A survey of African American literature from its beginnings to World War I. This course will cover a range of authors, several genres, and culture forms, which may include fiction, poetry, drama, autobiography, essay, oral, contract and/or slave narratives, folklore, and songs.
Cross Listings: ENGLISH 333.

BLKS 334 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3
This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

BLKS 335 Stages Toward Freedom: African American Dramatic Traditions Credits: 3
This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zoran N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

BLKS 337 The Civil Rights Movement in African American Literature Credits: 3
This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms-speeches, essays, autobiographies, fiction, drama, poetry and film-to explore the movement’s impact on communities and cultures as well as its various debates and competing visions.

BLKS 338 Women’s Literature in Africa and the African Diaspora Credits: 3
This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

BLKS 403WI Writing for African American Studies Credits: 3
This course instructs students in how to produce advanced knowledge in the field of African American studies. It provides training in the construction of quality research papers for graduate, scholarly, and professional work and exposes students to a wide array of scholarly journals, databases, and authoritative resources in African American studies. Each time the courses taught, students will develop their research around a specific topic defined by the instructor.
Prerequisites: RooWriter.

BLKS 404 Research Seminar Credits: 3
This course introduces the logic, theory, and techniques of empirical research and applies them to African American Studies. It exposes students to a variety of research approaches in order to examine their utility for producing knowledge within the field.

BLKS 480 Special Topics/Seminar Credits: 1-3
In-depth exploration of special topics in Black Studies. When available, topics will be announced prior to registration. Course may be repeated for up to six credit hours.

BLKS 490 Directed Study/Research Credits: 1-3
Individual research and learning projects supervised by a faculty member. Course may be repeated for up to six credit hours.

Cello (CELLO)

Courses

CELLO 100A Preparatory Applied Study Credits: 2
One hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

CELLO 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

CELLO 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

CELLO 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

CELLO 101 Freshman Cello I Credits: 2-4

CELLO 102 Freshman Cello II Credits: 2-4

CELLO 201 Sophomore Cello I Credits: 2-4

CELLO 202 Sophomore Cello II Credits: 2-4

CELLO 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

CELLO 301 Junior Cello I Credits: 2-4

CELLO 302 Junior Cello II Credits: 2-4

CELLO 401 Senior Cello I Credits: 2-4

CELLO 402 Senior Cello II Credits: 2-4

Chemistry (CHEM)

Courses

CHEM 111 Physical Basis Of Chemistry Credits: 3
An introductory course in the basic principles applicable to chemistry for students who intend to take but are not adequately prepared to take CHEM 211. The emphasis is on quantitative relationships and problem solving.

CHEM 115 Elements Of Chemistry I Credits: 4
A one-term course in general chemistry with special emphasis on organic chemistry and biochemistry. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course.
Co-requisites: CHEM 115L.

CHEM 115L Elements Of Chemistry, Laboratory I Credit: 1
A one-term course in general chemistry with special emphasis on organic chemistry and biochemistry. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course.
Co-requisites: CHEM 115.

CHEM 160 Chemistry, Society, And The Environment Credits: 3
This course is intended to offer a survey of chemical and scientific concepts surrounding current issues. The emphasis will be on the application of fundamental chemical knowledge to allow a full understanding of these issues in the context of currently known facts and theories. Through classroom discussion and application of the scientific method, the ramifications of the issues will be examined. Topics will include pollution, the importance of the chemical industry, its responsibilities to society, and other items of current scientific and environmental interest.

CHEM 160L Laboratory For Chemistry, Society, And The Environment Credit: 1
This course is offered in support of CHEM 160. It will consist of field activities, experiments, and demonstrations to reinforce the concepts and ideas presented in that course.

CHEM 180P Basic Chemistry Credits: 4
A one-semester survey of basic chemistry including: atomic structure, the periodic table, chemical bonding, chemical reactions, and selected topics from organic, polymer and biochemistry. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course.
Prerequisites: MATH 110 or equivalent.

Corequisite: CHEM 181P.

Cross Listings: CHEM 115.

CHEM 181P Experimental Basic Chemistry Credits: 4
A demonstration/laboratory course designed to support and illustrate the concepts presented in Chemistry 180P. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course.
Prerequisites: MATH 110 or equivalent.

Co-requisites: CHEM 180P.

Cross Listings: CHEM 115L.

CHEM 182P Special Projects In Chemistry Credits: 4
An independent study course consisting of library work and field work designed to exemplify various applied aspects of chemistry. A terminal course that does not meet requirements as a prerequisite for any higher level chemistry course.
Prerequisites: MATH 110 or equivalent.

Co-requisites: CHEM 180P.

CHEM 206 Human Nutrition Credits: 3
Introduction to nutrition for health and wellness and the use of chemical energy in the breakdown and synthesis of biomolecules. Nutrition as it applies to a variety of life situations from infancy to older adults. Learning encompasses elements of anatomy and physiology related to nutrition and health.

CHEM 211 General Chemistry I Credits: 4
Stoichiometry, gas laws, thermochemistry, atomic structure, molecular shapes and bonding theories.
Prerequisites: Working knowledge of College Algebra.

Co-requisites: CHEM 211L.

CHEM 211L Experimental General Chemistry I Credit: 1
Introduction to the laboratory techniques used in studying the chemical properties of substances. Some quantitative techniques are included.
Prerequisites: MATH 110 or equivalent.

Co-requisites: CHEM 211.

CHEM 212LR Experimental General Chemistry II Credit: 1
Introduction to analysis and synthesis. Descriptive chemistry of the more common elements.
Prerequisites: CHEM 211 and CHEM 211L (or equivalent; each with a C-or better).

Co-requisites: CHEM 212R.

CHEM 212R General Chemistry II Credits: 4
Liquids and solids, solutions, equilibrium, kinetics, electrochemistry and thermodynamics. Introductory course to all advanced work in chemistry.
Prerequisites: CHEM 211 and CHEM 211L (or equivalent; each with a C-or better).

Co-requisites: CHEM 212LR.

CHEM 311 Laboratory Safety And Health I Credit: 1
An introduction to laboratory safety and health. Topics to be discussed include good laboratory practice; laboratory hazards; safe chemical handling, storage and disposal; first aid; protective equipment; and federal regulations.
Prerequisites: CHEM 320 or CHEM 321 (or equivalent).

CHEM 320 Elementary Organic Chemistry Credits: 4
A one-semester course covering both aliphatic and aromatic fields designed to satisfy requirements for dental schools, medical technology programs, six-year medical programs, pharmacy schools, biology majors.
Prerequisites: CHEM 211 / CHEM 211L and CHEM 212R / CHEM 212LR (or equivalents; each with a C-or better).

Co-requisites: CHEM 320L.

CHEM 320L Experimental Organic Chemistry Credit: 1
Elementary organic chemistry experiments to teach basic laboratory operations.
Prerequisites: CHEM 211 / CHEM 211L and CHEM 212R / CHEM 212LR (or equivalents; each with a C-or better).

Co-requisites: CHEM 320.

CHEM 321 Organic Chemistry I Credits: 3
The two terms (CHEM 321, CHEM 322R) constitute an integrated unit in which the chemistry of aliphatic, aromatic, and some heterocyclic compounds are studied. The study begins with simple monofunctional compounds and ends with polyfunctional natural products.
Prerequisites: CHEM 211 / CHEM 211L and CHEM 212R / CHEM 212LR (or equivalents; each with a C-or better).

Co-requisites: CHEM 321L.

CHEM 321L Organic Chemistry Laboratory I Credit: 1
CHEM 321L introduces the student to basic techniques and procedures in isolation, purification, and characterization of organic compounds and simple reactions used in the organic chemistry laboratory. The student will also be trained in the proper way to write a scientific laboratory report.
Prerequisites: CHEM 211 / CHEM 211L and CHEM 212R / CHEM 212LR (or their equivalents; each with a C-or better).

Co-requisites: CHEM 321.

CHEM 322L Organic Chemistry Laboratory II Credit: 1
CHEM 322L is an extension of CHEM 321L. CHEM 322L builds from the basic techniques, procedures, and writing to more advanced organic operations.
Prerequisites: CHEM 321 and CHEM 321L (or equivalents; each with a C-or better).

Co-requisites: CHEM 322R.

CHEM 322R Organic Chemistry II Credits: 3
Continuation of CHEM 321.
Prerequisites: CHEM 211 / CHEM 211L, CHEM 212R / CHEM 212LR and CHEM 321 / CHEM 321L (or equivalents; each with a C-or better).

Co-requisites: CHEM 322L.

CHEM 330 Elementary Physical Chemistry Credits: 3
An introductory course in the principles of physical chemistry for students who have not had calculus.
Prerequisites: CHEM 320, CHEM 322R or CHEM H322R, college physics, and a good background in algebra and trigonometry.

CHEM 341 Analytical Chemistry I: Quantitative Analysis Credits: 4
Principles of gravimetric, volumetric, electrolytic, and other methods of analysis.
Prerequisites: CHEM 212R and MATH 120.

CHEM 341WI Analytical Chemistry I: Quantitative Analysis Credits: 4
Principles of gravimetric, volumetric, electrolytic, and other methods of analysis.
Prerequisites: CHEM 211 / CHEM 211L, CHEM 212R / CHEM 212LR, and MATH 120 (or equivalents; each with a C-or better), RooWriter.

CHEM 345R Instrumental Analysis Credits: 3
An introductory course on the use of instruments for chemical analysis with particular reference to applications of interest to medical technologists and other students in the sciences. Emphasis will be placed on optical, electrochemical and separation methods.
Prerequisites: CHEM 320, CHEM 341, (or equivalents).

CHEM 367 Bioorganic Chemistry Credits: 3
An examination into the current topics at the interface between chemistry and biology. Emphasis will be on the current literature and will include such topics as nucleic acid chemistry, protein chemistry, and carbohydrate chemistry.
Prerequisites: CHEM 321 / CHEM 321L and CHEM 322R / CHEM 322L (or equivalents; each with a C-or better).

CHEM 382 Inorganic And Organic Synthesis Credits: 2
A number of inorganic, organic, and organometallic compounds will be prepared using a variety of synthetic techniques.
Prerequisites: CHEM 321 / CHEM 321L and CHEM 322R / CHEM 322L (or equivalents; each with a C-or better).

CHEM 387 Environmental Chemistry I Credits: 3
A survey of how chemical principles can be applied to the environment. Included will be topics in aquatic chemistry, atmospheric chemistry and chemistry of the geosphere and soil.
Prerequisites: CHEM 320 or CHEM 322R.

CHEM 390 Special Topics In Chemistry Credits: 1-3
This course will focus on an area of chemistry of contemporary significance. The amount of credit is to be determined by arrangement with the department. May be repeated for credit when the topic varies but no more than three hours of credit may be applied to major course requirements.
Prerequisites: CHEM 320, CHEM 322R or CHEM H322R.

CHEM 390PT Special Topics In Chemistry Credits: 1-3

CHEM 392 Chemistry Internship/Practical Training Credits: 1-3
Practical work in chemistry in an industrial, academic or other professional setting. Prior to the start of work, the department must approve the internship/practical training.
Prerequisites: CHEM 211, CHEM 211L, CHEM 212R and CHEM 212LR (or equivalents; each with a C- or better).

CHEM 395 Directed Readings In Chemistry Credits: 1-3
Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty member. Readings may not duplicate or substitute for current course offerings.
Prerequisites: CHEM 320 / CHEM 320L or CHEM 321 / CHEM 321L and CHEM 322R / CHEM 322L (or equivalents; each with a C-or better).

CHEM 399 Intro To Research Credits: 1-3
Special problems to introduce undergraduate chemistry majors to research methods. A comprehensive written report is required and a copy of the report is to be retained in the chemistry office.
Prerequisites: CHEM 212R.

CHEM 410 Chemical Literature Credit: 1
A systematic introduction to the efficient use of the chemical literature. Topics will include both classical search methods and computer search methods.
Prerequisites: CHEM 320 / CHEM 320L or CHEM 321 / CHEM 321L and CHEM 322R / CHEM 322L (or equivalents; each with a C-or better).

CHEM 431 Physical Chemistry I Credits: 3
A first course in physical chemistry having a calculus base. This course emphasizes thermodynamics with an introduction to the basic principles of quantum mechanics.
Prerequisites: MATH 210, MATH 220, MATH 250; and PHYSICS 220 or PHYSICS 250.

CHEM 432 Physical Chemistry II Credits: 3
A second course in physical chemistry having a calculus base. This course emphasizes the quantum mechanics description of atoms and molecules, molecular spectroscopy, statistical mechanics, and kinetics.
Prerequisites: MATH 210, MATH 220, MATH 250; and PHYSICS 220 or PHYSICS 250; and CHEM 431 (each with a C-or better).

Co-requisites: CHEM 437WI.

CHEM 434 Molecular Spectroscopy Credits: 3
A theoretical introduction to molecular spectroscopy and its relation to structure. Electronic, vibrational and rotational spectra of chemical systems will be discussed.
Prerequisites: CHEM 432.

CHEM 437WI Experimental Physical Chemistry I Credits: 3
Experimental methods in physical chemistry. One hour lecture and six hours laboratory each week. Satisfies writing intensive requirements for the B.A. or B.S. degree.
Prerequisites: MATH 210, MATH 220 and MATH 250; and PHYSICS 220 or PHYSICS 250; and CHEM 431 (each with a C-or better), RooWriter.

Co-requisites: CHEM 432.

CHEM 442R Analytical Chemistry II: Instrumental Analysis Credits: 3
A continuation of CHEM 341. The experimental and theoretical aspects of optical and electrochemical, chromatographic and other physicochemical methods of analysis.
Prerequisites: CHEM 341, CHEM 432.

CHEM 451R Inorganic Chemistry Credits: 3
Modern concepts and theories of inorganic chemistry.
Prerequisites: CHEM 432.

CHEM 471 Introduction To Polymer Chemistry Credits: 3
Survey of organic and inorganic monomers and polymers; the occurrence, synthesis, structures and properties of natural and synthetic polymers; discussion of general properties of plastics, elastomers, fibers, resins, and plasticizers.
Prerequisites: CHEM 432 (C-or better).

CHEM 480 Computer Applications To Chemical Problems Credits: 3
An intense course in Fortran programming and its uses in chemical problems related to theory and experimentation. Emphasis will be placed on the mathematical structures of chemical problems and the coding of those problems into Fortran. No previous programming experience is required.
Prerequisites: CHEM 320 or CHEM 322R.

CHEM 490 Special Topics In Chemistry Credits: 1-3
This course will focus on an area of chemistry of contemporary significance. The amount of credit is to be determined by arrangement with the department. May be repeated for credit when the topic varies but no more than three hours of credit may be applied to major course requirements.
Prerequisites: CHEM 431.

CHEM 495 Directed Readings In Chemistry Credits: 1-3
Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty member. Readings may not duplicate or substitute for current course offerings.
Prerequisites: CHEM 432.

CHEM 499 Senior Research Credits: 1-9
The student is given an original research problem and will be held responsible for all previous experience in working toward its solution. A well-written, comprehensive, and well documented research report is required, and a copy of the report is to be retained in the Chemistry department.
Prerequisites: CHEM 432.

CHEM H321 Honors: Organic Chemistry I Credits: 3

CHEM H321L Organic Chemistry Laboratory I - Honors Credit: 1
A more intense version of CHEM 321L.

CHEM H322LR Organic Chemistry Laboratory II-Honors Credits: 2
A more intense version of CHEM 322L. See course description for CHEM 322L.
Prerequisite: CHEM 321L.

CHEM H322R Honors: Organic Chemistry II Credits: 3

Chinese (CHINESE)

Courses

CHINESE 110 Elementary Chinese I Credits: 5
Introduction to the sound system of modern Chinese, aural comprehension, oral expression, basic structural patterns, writing systems.

CHINESE 120 Elementary Chinese II Credits: 5
Dialogue practice and conversation, reading of simple stories and essays, comparative study of Chinese and English grammar and syntax.
Prerequisites: CHINESE 110.

CHINESE 211 Second Year Chinese I Credits: 3
Introductory readings of colloquial Chinese, literature, conversation, simple composition, and comparison between written and spoken styles in modern Chinese.
Prerequisites: CHINESE 120 or equivalent.

CHINESE 221 Second Year Chinese II Credits: 3
Readings of modern Chinese with emphasis on expository writings, analysis of syntactic structure, composition and translation.
Prerequisite: CHINESE 211 or equivalent.

CHINESE 280 Special Intermediate Chinese Topics I Credits: 1-3
Instruction of Chinese on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: Elementary I and II college-level courses or equivalent.

CHINESE 290 Special Intermediate Chinese Topics II Credits: 1-3
Continuation of CHINESE 280. May not be repeated for credit.

CHINESE 380 Special Topics: Composition And Conversation Credits: 1-3
Treatment of a particular genre or area of literature in Chinese normally not offered through regular courses. May be repeated for credit when the topic changes.

Civil Engineering (CIV-ENGR)

Courses

CIV-ENGR 190 Special Topics Credits: 1-3
Selected introductory topics in the area of computing. May be repeated for credit when topic varies.

CIV-ENGR 211 The Engineering Enterprise Credits: 3
The engineering enterprise course covers four topics essential for engineering students with new venture creation interests: creating economic value, leadership, finance and marketing. The primary objective of this course is to motivate the student to think as a blend of an engineer and a businessperson.

CIV-ENGR 275 Engineering Statics Credits: 3
Fundamentals of statics; static equilibrium and introduction to elements of mechanics of elastic materials.
Prerequisites: PHYSICS 240.

Co-requisites: MATH 250.

CIV-ENGR 276 Strength Of Materials Credits: 3
Stress and strain; torsion; bending and shear stresses in beams; combined stresses; deflection of beams; columns.
Prerequisites: CIV-ENGR 275.

CIV-ENGR 311 The Technical Entrepreneur Credits: 3
The guiding principle for the course is that entrepreneurs are innovators and operate in an uncertain and risky environment. The course looks at the entrepreneurial mindset and the process of new product line launch.
Prerequisites: CIV-ENGR 211.

CIV-ENGR 318 GIS for Engineers Credits: 3
This course covers the fundamental concepts and methods for use of GIS software used to solve engineering applications and problems. The course uses module based practical learning to apply and integrate foundational knowledge, develop the skills required to model various types of imagery data, incorporate this data into projects for management and design, and provide the skills necessary for students to depict ideas and design graphically. A personal computer capable of running the software is required for the course. Non-engineering majors by instructor permission only.
Prerequisites: MEC-ENGR 130 and CIV-ENGR 319.

CIV-ENGR 319 Engineering Computation and Statistics Credits: 3
Statistical distribution functions and application to engineering problems. Limited treatment of curve-fitting and time-series analysis. Introduction to factorial design.
Prerequisites: MEC-ENGR 219, MATH 220.

CIV-ENGR 320 Introduction to Factorial Design Credit: 1
Concepts and techniques of ANOVA and factorial design to supplement standard undergraduate statistics courses.
Prerequisites: Undergraduate Statistics course.

CIV-ENGR 321 Structural Analysis I Credits: 4
Analysis of statically determinate beams, frames and trusses; shear and moment diagrams; influence line diagrams; beam deflections. Analysis of statically indeterminate structures. Energy methods.
Prerequisites: CIV-ENGR 276, MATH 345.

CIV-ENGR 323 Structural Steel Design Credits: 3
Basic principles of structural steel design. Design of beams, axially loaded members, columns, and bolted and welded connections.
Prerequisites: CIV-ENGR 321.

CIV-ENGR 335 Soil Mechanics Credits: 3
Detailed study of physical and mechanical properties of soil governing its behavior as an engineering material.
Prerequisites: CIV-ENGR 276, CHEM 211, CHEM 211L, Machine Shop Safety.

CIV-ENGR 342 Water and Wastewater Treatment Processes Credits: 3
Methods for determining and characterizing water quality, effects of pollution on streams and lakes, and an introduction to engineering systems for the distribution, collection and treatment of water and wastewater.
Prerequisites: CIV-ENGR 351.

CIV-ENGR 351 Fluid Mechanics Credits: 3
Concepts of the statics and dynamincs of fluids, with emphasis on principles of continuity, momentum and energy. Boundary layers, dimensional analysis and drag are covered briefly. Thorough treatment of pipe flow.
Prerequisites: MATH 345, MEC-ENGR 272, MEC-ENGR 285.

Cross Listings: MEC-ENGR 351.

CIV-ENGR 355WI Water Resource Engineering Credits: 5
Design and analysis of water resource infrastructure. Applied surface water hydrology, analysis of pipeline systems, design of pumping plants and power generation, cavitation, water hammer, valves operations, open channel flow in rigid channels, gradually varied and rapidly varied flow.
Prerequisites: CIV-ENGR 319, CIV-ENGR 351, RooWriter.

CIV-ENGR 357 Engineering Hydraulics Credits: 3
Analysis and design of closed conduit systems for water supply; fundamentals of open channel flow; principles of pumping and hydropower generation; transients and control of surge pressures in pipelines.
Prerequisites: CIV-ENGR 351.

CIV-ENGR 378WI Civil Engineering Materials Credits: 3
Composition, structure, properties, behavior and selection of civil engineering materials.
Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 276, Machine Shop Safety, RooWriter.

CIV-ENGR 390 Engineering Coop/Internship Credits: 0
Students may participate in structured Engineering Coop/ Internship under the supervision of employer. They must carry out significant professional responsibilities and whatever additional assignments are determined by the employer.
Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

CIV-ENGR 400 Problems Credits: 1-4
Directed investigation of civil engineering problems.

CIV-ENGR 401A Special Topics In Civil Engineering Credits: 1-3

CIV-ENGR 401CP Special Topics In Civil Engineering Credits: 1-3
Special Topics In Civil Engineering

CIV-ENGR 401D Topics In Civil Engineering Credits: 3

CIV-ENGR 401DM Topics In Civil Engineering Credits: 1-3

CIV-ENGR 401EH Topics in Civil Engineering Credits: 1-3

CIV-ENGR 401G Topics In Civil Engineering Credits: 1-3

CIV-ENGR 401GB Topics In Civil Engineering Credits: 1-3

CIV-ENGR 401GS Topics In Civil Engineering Credits: 1-3

CIV-ENGR 401HA Topics In Civil Engineering Credits: 1-3

CIV-ENGR 401J Special Topics in Civil Engineering Credits: 1-3
Study of current and new technical developments in civil engineering.

CIV-ENGR 401PM Topics in Civil Engineering Credits: 3

CIV-ENGR 401SD Special Topics In Civil Engineering Credits: 1-3

CIV-ENGR 401SP Special Topics In Civil Engineering Credits: 1-3

CIV-ENGR 401SV Topics in Civil Engineering Credits: 1-3
Study of current and new technical developments in civil engineering.

CIV-ENGR 401SW Topics in Civil Engineering Credits: 1-3
Study of current and new technical developments in civil engineering.

CIV-ENGR 401X Topics in Civil Engineering Credits: 1-3

CIV-ENGR 409 Fundamentals of Engineering Review Credit: 1
This course consists of a series of lectures and is intended as a review class for all the subjects included in the Fundamentals of Engineering exam. Classes specifically focus on the review of equations and formulas included in the reference handbook published by NCEES.
Cross Listings: E&C-ENGR 401FE, MEC-ENGR 409.

CIV-ENGR 411 Civil Engineering Systems Design I Credits: 2
Comprehensive and realistic design project using the systems approach. Design choices and their effect upon the environment. Design constraints include constructability, minimization of environmental impact and cost-effectiveness. Managerial and professional aspects of design practice.
Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), CIV-ENGR 357, CIV-ENGR 467.

CIV-ENGR 412 Civil Engineering Systems Design II Credits: 3
Continuation of CIV-ENGR 411.
Prerequisites: CIV-ENGR 411, RooWriter.

CIV-ENGR 415 Engineering Leadership and Ethics Credits: 3
Analysis of leadership, including 360-degree assessment of students' leadership. Discussion of leadership cases and application to engineering careers. Frequent analysis of engineering ethics cases using the NSPE Code.
Prerequisites: CIV-ENGR 211.

Cross Listings: CIV-ENGR 5515.

CIV-ENGR 421 Matrix Methods of Structural Analysis Credits: 3
An introduction to the fundamentals of stiffness and flexibility methods for analysis of truss and frame structures. Application of the computer programs to three dimensional structures.
Prerequisites: CIV-ENGR 321.

CIV-ENGR 422WI Reinforced Concrete Design Credits: 3
Basic principles of reinforced concrete design. Design of beams for flexture and shear; design of short and slender columns. Bond stress development. Footing design.
Prerequisites: CIV-ENGR 321, RooWriter.

CIV-ENGR 423 Advanced Structural Steel Design Credits: 3
Design of steel structures and bridges. Topics include composite beams, plate girder design, and moment resistant connections.
Prerequisites: CIV-ENGR 323.

CIV-ENGR 425 Prestressed Concrete Credits: 3
Theory and practice of prestressed concrete design. Pretensioning, posttensioning. Anchorage of steel. Materials, design specifications.
Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 427 Advanced Reinforced Concrete Design Credits: 3
Advanced topics in the design of footings, retaining walls, two-way floor slabs, torsion and continuous structures, shear friction, strut and tie design, precast design.
Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 429 Design of Structures for Blast and Fire Credits: 3
General overview of Blast Design; risk assessment and design criteria; simplifies Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 431 Fundamentals of Geomaterial Characterization Credits: 3
Overviews state-of-the-art instrumental techniques for analysis of the physio-chemical properties of soils and civil engineering materials. Analysis techniques will be presented for soils, fresh and hardened concrete, asphalt binders and metals.
Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 5531.

CIV-ENGR 432 Foundation Engineering Credits: 3
Design of basic foundation structures, footings, retaining walls, pile foundations, dams.
Prerequisites: CIV-ENGR 335.

CIV-ENGR 442 Hydraulic Structures Credits: 3
A review of the history and hydraulic design procedures for a variety of hydraulic structures including spillways, water measurement structures, canal structures and energy dissipation structures.
Prerequisites: CIV-ENGR 357.

Cross Listings: CIV-ENGR 5542.

CIV-ENGR 443 Hazardous Waste Management Credits: 3
Engineering principles involved in handling, collection, transportation, processing and disposal of hazardous wastes, waste minimization, legislation on hazardous wastes and groundwater contamination.
Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

CIV-ENGR 444 Unit Processes in Environmental Engineering Credits: 3
Chemical and physical relationships as applied to unit processes of water and wastewater.
Prerequisites: CIV-ENGR 342.

CIV-ENGR 446 Limnology Credits: 3
Physical, biological and chemical issues important in surface fresh waters. Includes carbonate chemistry, algal assay and thermocline analysis.
Prerequisites: CHEM 211, MATH 345.

CIV-ENGR 447 Contracts and Law for Engineers Credits: 3
Law of contracts, including types, construction, interpretation, performance, and termination. Construction and Engineering service contracts: proposals, general and financial conditions, specifications and drawings. Corporate and professional and person liability, insurance and bonds, property, evidence, arbitration and mediation.

CIV-ENGR 448 Environmental Public Policy Credits: 3
Engineering and economic aspects of environmental policy. Basic understanding of environmental statutes and case law.
Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

CIV-ENGR 449 Environmental Compliance, Auditing and Permitting Credits: 3
Statutes, regulations and permitting for air hazardous wastes and storage tanks. Asbestos, radon, EMF, and emerging areas of regulatory concern. Siting issues. Criminal and civil enforcement.
Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

CIV-ENGR 452 Hydraulics of Open Channels Credits: 3
Gradually varied flow and theory of the hydraulic jump. Slowly varied flow involving storage; rating curves.
Prerequisites: CIV-ENGR 351.

CIV-ENGR 453 Hydraulics and Variability of Rivers Credits: 3
Introduction to the concepts of alluvial channel behavior, evolution and change due to natural and man-induced modifications to streams and watersheds. Numerous case studies of river behavior are studied from the perspective of hydraulics, geomorphology and sediment transport.
Prerequisites: CIV-ENGR 357.

CIV-ENGR 454 River Stability and Scour Credits: 3
Bridge hydraulics, stream stability, scour at bridge piers and abutments, hydraulic modeling of floods, countermeasures for protection of bridge infrastructure.
Prerequisites: CIV-ENGR 357.

CIV-ENGR 456 Urban Hydrology Credits: 3
An introduction to urban hydrology and urban drainage systems focusing on the engineering techniques and unique issues associated with estimating and designing for rainfall/runoff in an urban metropolitan area.
Prerequisites: CIV-ENGR 357.

Cross Listings: CIV-ENGR 5556.

CIV-ENGR 463 The Engineer in Society Credits: 3
Broad concepts in law as related to business industry and the processes of design, procurement, construction, and the role of the design professional.

CIV-ENGR 466 Green Building and Sustainable Infrastructure Credits: 3
This class will discuss various green rating systems for buildings and infrastructure. Upon completion of this course students will be prepared for the LEED Green Associate Exam. The course will also discuss infrastructure project sustainability from a life cycle perspective. A semester project will involve stormwater management using "green" techniques and methods to mitigate the urban heat island. Upon completion of the course, students will better understand what sustainability means and how it applies in the context of our build environment and have a good idea of how technology will impact our sustainable future.

CIV-ENGR 467 Introduction to Construction Management Credits: 3
Structure of the construction industry; construction drawings and specifications; estimating and bidding; construction contracts, bonds and insurance; planning and scheduling of construction operations; project management; computer techniques.
Prerequisites: SCE 201 and MEC-ENGR 272 (or MATH 345).

Cross Listings: CIV-ENGR 5567.

CIV-ENGR 468 Construction Planning and Scheduling Credits: 3
Planning and scheduling of construction operations by the critical path method. Network diagramming, scheduling computations, and time-cost trade-offs. Manpower and equipment leveling. Computer and non-computer techniques.
Prerequisites: SCE 201 and CIV-ENGR 467.

Cross Listings: CIV-ENGR 5568

CIV-ENGR 469 Construction Methods and Equipment Credits: 3
Introduction to methods used to plan, construct, and manage heavy civil projects. Topics will include development, project control, equipment productivity, earthmoving fundamentals, formwork design, and other issues in heavy civil projects.
Prerequisites: SCE 201 and CIV-ENGR 467.

Cross Listings: CIV-ENGR 5569.

CIV-ENGR 470 Corrosion Engineering Credits: 3
This course will cover the physical interaction of metallic materials with their environments, called corrosion. Corrosion is an electrochemical process and the thermodynamics and kinetics of corrosion processes will be discussed.
Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 5570.

CIV-ENGR 471 Advanced Portland Cement Concrete Credits: 3
This course will cover topics such as cement chemistry, concrete proportioning, aggregates, mineral and chemical admixtures, fresh and hardened properties of concrete, and durability of concrete. Design and proportioning of concrete mixtures for desired fresh and hardened properties will be emphasized. Specialty concrete types such as high strength/high performance concrete, lightweight concrete, pervious concrete, high volume fly ash concrete, and fiber reinforced concrete will also be covered.
Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 473 Durability of Civil Engineering Materials Credits: 3
Investigation of pavements and structures including steel, reinforced concrete, and plain concrete for a variety of applications and masonry and asphalt. Explores the identification, causes of, and remediation for issues related to metallic corrosion and concrete deterioration in civil engineering projects. Course content will be delivered through lectures, labs and case study examples.
Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 5573.

CIV-ENGR 475 Seismic Design of Structures Credits: 3
Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.
Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 481 Highway and Traffic Engineering Credits: 3
Principles of highway engineering and traffic analysis, road/vehicle performance, geometric alignment of highways, traffic analysis and queuing theory, signal design, statistical analysis of traffic data and highway drainage.
Prerequisites: MEC-ENGR 285.

CIV-ENGR 484 Pavement Materials Design, Maintenance, and Rehabilitation Credits: 3
Traffic loading and volume, stress and deflection, characterization of pavement materials, design of flexible and rigid pavements, design of overlays, evaluation of pavement performance, maintenance techniques, and rehabilitation options.
Prerequisites: CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 5584.

CIV-ENGR 487 Applied Finite Element Analysis Credits: 3
The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical,structural,vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.
Prerequisites: CIV-ENGR 275, MATH 206, MEC-ENGR 130.

CIV-ENGR 491 Internship Credits: 6
For International students who must register to cover off-campus employment which is approved as related to their degree by their departmental advisor and ISAO.

CIV-ENGR 497 Engineering Hydrology Credits: 3
Fundamental concepts of hydrology in engineering; computation principles of runoff from rainfall; measurement of hydrologic quantities; quantitative and statistical estimation of design stream-flow magnitude and frequency; principles of unsteady routing of hydrographs.
Prerequisites: CIV-ENGR 319, CIV-ENGR 351.

Clarinet (CLARINET)

Courses

CLARINET 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

CLARINET 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

CLARINET 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

CLARINET 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

CLARINET 101 Freshman Clarinet I Credits: 2-4

CLARINET 102 Freshman Clarinet II Credits: 2-4

CLARINET 201 Sophomore Clarinet I Credits: 2-4

CLARINET 202 Sophomore Clarinet II Credits: 2-4

CLARINET 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: CLARINET 5300.

CLARINET 301 Junior Clarinet I Credits: 2-4

CLARINET 302 Junior Clarinet II Credits: 2-4

CLARINET 401 Senior Clarinet I Credits: 2-4

CLARINET 402 Senior Clarinet II Credits: 2-4

Classics (CLASSICS)

Courses

CLASSICS 119 Myth and Literature Credits: 3
A study of classical myth including readings from Homer to Ovid, analysis of selected myths in later literature, art, and music, and a study of contemporary definitions and approaches to myth.
Cross Listings: ENGLISH 119.

CLASSICS 120 Literary Monstrosities Credits: 3
This course explores representations of monsters in literature. Students are introduced to different ways of thinking about monstrosities from a range of cultural and historical perspectives, as well as through a variety of materials in order to approach this question from an interdisciplinary perspective.
Co-requisites: DISC 100.

Cross Listings: ENGLISH 120.

CLASSICS 210 Foundations Of Ancient World Literature I Credits: 3
This course studies ancient world literature such as The Descent of Inanna, Egyptian love poetry, Hebrew Scriptures, the epics of Homer and Virgil, the Analects of Confucius, and the Oriental wisdom of Laozi. The course also considers ancient creation epics such as the cosmic battle between Marduk and Tiamat, the Metamorphosis of Ovid, and the great Indian epic The Ramayana.
Cross Listings: WLD-LIT 210.

CLASSICS 283 Women in the Ancient World Credits: 3
This course focuses on the history, representation, literature, social lives, and political roles of women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.
Cross Listings: ENGLISH 283, HISTORY 230.

CLASSICS 285 The Classical Mediterranean World Credits: 3
This course examines the history, literature, and culture of Ancient Greece and Rome in the context of the Mediterranean world, from its origin until the Barbarian invasion. Students will read poetry, philosophy, history, rhetoric, and letters from primary text sources and they will study material evidence such as architecture, graffiti, and physical objects as representative survivals of these cultures.
Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

Cross Listings: ENGLISH 285, HISTORY 220.

CLASSICS 300 Special Topics Credits: 1-3
A course about a selected field, genre or individual figure from the ancient world that is not part of the program's regular offerings. May be repeated for credit.

CLASSICS 300A Special Topics Credits: 1-3
A course about a selected field, genre or individual figure from the ancient world that is not part of the program's regular offerings. May be repeated for credit.

CLASSICS 300CB CC: Women In The Ancient World Credits: 3
This course focuses on the history, representation, literature, social lives, and political roles of women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.

CLASSICS 300CR Roman Revolution: History And Culture From Gracci To Augustus Credits: 3
The period of Roman history from the revolution initiated by the Gracchi to the demise of the Republic and the establishment of the Principate under the Augustus will be studied. The course begins with the Scipionic Circle under whose leadership foreign imperialism, domestic factionalism, and the influx of Greek culture increased. Political, social and cultural developments which culminated in the violent death of the old system will be traced. We will also show how Augustus kept the past alive to make his new government acceptable to the tradition-loving Romans. Students will read the words of such writers as Terence, Cato, Polybius, Cicero, Caesar, Sallust, Catullus, Horace, Virgil, and Ovid, whose works cover the important genres of Roman literature-new comedy, rhetoric, satire, history, epic, pastoral and lyric poetry.

CLASSICS 300CS CC: Clio And The Other Muses Credits: 3
This course focuses on the history, art, architecture, literature, and culture of Athens in the 5th Century BCE. Course readings will include primary literary and historical sources such as lyric poetry, comedy and tragedy, philosophy, and historical writings.

CLASSICS 300CY CC: Ancient World/Cinema Credits: 3
This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.
Cross Listings: COMM-ST 300CY, ENGLISH 300CY, HISTORY 400CY.

CLASSICS 300CZ CC: Archaeology Of Ancient Disasters Credits: 3
Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe. We begin with the geological context of disaster, including earthquakes, volcanic eruptions, climate change, and soil depletion. Next, we examine how ancient societies respondent to disease, an ever present threat from the biological environment. Finally, we look at how ancient human groups were changed by stresses of cultural origin, including overpopulation, depletion of vital resources, and warfare. The study of ancient disasters not only gives us a wider understanding of human history, it may offer lessons for coping with future catastrophes.
Cross Listings: GEOLOGY 326CZ.

CLASSICS 300D Special Topics Credits: 1-3
A course about a selected field, genre or individual figure from the ancient world that is not part of the program's regular offerings. May be repeated for credit.

CLASSICS 301 Survey of Western Art I Credits: 3
A survey of ancient and medieval Western art. The course will begin with the great civilizations of the Mediterranean basin and consider the changes wrought by the introduction of Christianity and Islam. Study of the medieval era will include Romanesque and Gothic architecture through the 15th century, but will not include the beginnings of panel painting nor of independent sculpture.

CLASSICS 310WI Ancient Philosophy Credits: 3
A survey of the central figures of classical philosophy: the pre-Socratics, Socrates, Plato, Aristotle, the Stoics, the Epicureans and other philosophers of antiquity. The contributions of major philosophers to the development of science, religion, and social and political theories are studied.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent), RooWriter.

Cross Listings: PHILOS 310WI.

CLASSICS 318 Bible As Literature Credits: 3
A critical study of the major portions of the Old and New Testaments and the Apocrypha, with special attention to the development of literature from oral tradition, the literary genres, themes and archetypes represented in the collection, and the diction and style which have influenced later literature. Consideration also of the relation of Biblical literature to the historical, religious, and cultural milieu of the ancient Near East.
Cross Listings: ENGLISH 318.

CLASSICS 319 Myth And Literature Credits: 3
A study of classical myth including readings from Homer to Ovid, analysis of selected myths in later literature, art, and music, and a study of contemporary definitions and approaches to myth.
Cross Listings: ENGLISH 319.

CLASSICS 320 The Social History of the Ancient World Credits: 3
This course explores the social structures and social history of Ancient Mediterranean Civilizations with a particular focus on the cultures of Ancient Mesopotamia, Ancient Greece, and Ancient Rome.

CLASSICS 321 The Political Structure Of The Ancient World Credits: 3
This course explores the political structures of Ancient Mediterranean Civilizations with a particular focus on the civilizations of Ancient Greece and Rome from the period between 600 BCE and 300 CE.

CLASSICS 322 The Cultural and Intellectual Dimensions of Ancient Civilizations Credits: 3
This course explores the literatures of Ancient Mediterranean world with a focus on works from the cultures of Ancient Mesopotamia, Ancient Greece, and Ancient Rome.

CLASSICS 327 Archaeology of Ancient Disasters Credits: 3
Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe.
Prerequisites: Anchor II, DISC 200.

Co-requisites: DISC 300.

Cross Listings: GEOLOGY 327.

CLASSICS 340AWI Classical Literature In Translation Credits: 3
Course covers readings from the literature of classical Greece and Rome, with emphasis on critical analysis and writing about texts in the context of ancient and modern debates about their meaning.
Prerequisites: RooWriter

CLASSICS 369 Introduction To Prehistoric And Classical Archaeology Credits: 3
An introduction to archaeological research methods that traces human origins and cultural development from the earliest fossil evidence to the threshold of written history and civilization. This class emphasizes the evolutionary and cultural developments that allowed our ancestors to colonize the continents and develop lifeways involving hunting and gathering, farming and urbanism.

CLASSICS 370 Archaeology as Anthropology: The Development of Human Societies Credits: 3
This class examines the development of archaeology as a distinctive branch of anthropology, and archaeology's role in a centuries-long debate about the causes of cultural variation and the development of human societies. This class examines how the Enlightenment, colonialism, the geological discovery of Deep Time and the Darwinian Revolution not only give rise to anthropology and archaeology, but launched an enduring debate about how and why we study cultural behavior.
Cross Listings: ANTHRO 385.

CLASSICS 376 Ancient Concepts of the Hero Credits: 3
This course traces the ancient concept of the hero by reading selected ancient works by authors such as Homer, Thucycides, Livy, Plutarch, Caesar, Tacitus, and Sallust. Students will also examine the impact of the ancient concept of the hero on modern literature and art.
Cross Listings: ENGLISH 376.

CLASSICS 391WI Ancient Greek and Roman Medicine Credits: 3
This course explores the practice of medicine in the Ancient Greek and Roman Worlds from 800 BCE until 300 CE. Students will read primary sources in English and will also be introduced to Greek and Latin grammar and medical vocabulary so that they can understand and study essential terms from the history of medicine in their original language.
Prerequisites: RooWriter.

CLASSICS 430 Plato Credits: 3
Selected dialogues of Plato are studied with a view to understanding Plato's philosophy and its position in the world of Greece and antiquity. Plato's philosophy is also examined with reference to his place in the Western tradition and in modern philosophy.
Prerequisites: PHILOS 210, PHILOS 222 or an equivalent.

Cross Listings: PHILOS 430.

CLASSICS 431 Aristotle Credits: 3
Selected portions of Aristotle's works on logic, metaphysics, science, ethics, politics, and poetics are studied with a view to understanding Aristotle's philosophy and its position in the world of Greece and antiquity. Aristotle's philosophy is examined with reference to its place in the Western tradition and in modern philosophy.
Prerequisites: PHILOS 210, PHILOS 222 or an equivalent.

Cross Listings: PHILOS 431.

CLASSICS 467 Myth And Ritual Credits: 3
Myth and "ritual" have long been fundamental categories in the study of religion. This course will briefly survey some of the major theories and approaches to the study of myth and ritual from the Enlightenment to the present. Will not only trace the shifting meanings of "myth" and "ritual," but will critically evaluate the utility of diverse approaches to the study of religious phenomena designated by these terms. Reading will include theoretical works, as well as selected case studies.

CLASSICS 469 Archaeology And Biblical History Credits: 3
An examination of ancient Israel as she emerges from the ruins of the past, both lapidary and literary. Through a study of the "mute documents," artifacts man-made (storied cities, household utensils, inscribed shards from Jericho to Jerusalem) we gain an insight indispensable for Biblical studies, for ancient Near Eastern history.
Cross Listings: HISTORY 469.

CLASSICS 470 Ancient Egypt Credits: 3
This course describes the political, social and cultural evolution of ancient Egypt from pre-dynastic times, with major emphasis upon the Old, Middle, and new Kingdoms (especially the 18th dynasty and the reign of Akhenaton).
Cross Listings: HISTORY 470.

CLASSICS 470P Ancient World: The Social History Of The Ancient World Credits: 4
The optional four-credit-hour component (modified independent study) will concern the social aspects of these civilizations, i.e., their daily lives. Readings and audiovisual aids will be used to help the student who will be expected to choose one aspect of each civilization, such as women, slavery, merchants, education, medicine, etc., and write a five-page paper about that topic for each period, i.e, Mesopotamia, Egypt, Greece and Rome.
Cross Listings: HISTORY 470P.

CLASSICS 471 Ancient Greece Credits: 3
This course begins with a survey of the pre-classical Minoan and Mycenaean civilizations and then describes the rise of prominent Greek city-states (with particular emphasis upon the evolution of Sparta and the political, social and cultural contributions of Athens). The course concludes with the rise of Macedon and Alexander's conquests and significance.
Cross Listings: HISTORY 471.

CLASSICS 471P Ancient World: The Political Structure Of The Ancient World Credits: 4
The four-hour lecture period on weeknights will emphasize the historical aspects of the ancient civilizations. The lectures will be chronologically organized to focus upon their evolution from their rise to their collapse.
Cross Listings: HISTORY 471P.

CLASSICS 472 Ancient Rome Credits: 3
This course covers Roman history from its origins (including the Etruscans) to the decline of the imperial system. Particular emphasis is placed upon the political, social and economic developments in the Republic, the death of the Republic, the early Principate, and the factors that led to Rome's decline in the ancient world.
Cross Listings: HISTORY 472.

CLASSICS 472P Ancient World: The Cultural & Intellectual Dimensions Ancient Civ Credits: 4
The four weekend periods will provide the students with a general picture of these civilizations: society, religion, economics, and culture (w.f., arts, literature, philosophy, science, etc.). Guest lecturers, slides, films and video cassettes will be used to introduce the varied aspects of these ancient peoples.
Cross Listings: HISTORY 472P.

CLASSICS 475WI History Of Ancient Israel Credits: 3
Judaism has had a tremendous impact on our civilization and yet most Americans are only dimly aware of its origins and development. This course will trace the roots of the Jewish religion in its historical context from its beginnings through the formation of rabbinic culture. The rise of Christianity will be examined in its original Judaic context, and recent discoveries, particularly those pertaining to the Dead Sea Scrolls, will be interpreted.
Prerequisites: RooWriter.

Cross Listings: HISTORY 475WI.

CLASSICS 479 From the Parthenon to the Altar of Peace Credits: 3
The course centers on the many different styles of Greek and Roman art from the fifth century B.C. to the early first century A.D. Attention is also paid to the political and literary forces behind its imagery. Three monuments serve as the pillars upon which the course rests: the Parthenon, Pergamon Altar, and the Ara Pacis. The lessons learned about style, the interaction of politics, literature, and art and the foibles of scholarship are intended to be applied to other fields of art history.
Prerequisites: CLASSICS 301.

Cross Listings: ART-HIST 479.

CLASSICS 499 Senior Tutorial Credits: 3
A three-hour comprehensive reading and research tutorial leading to the writing of a senior paper. It consist of tutorial sessions and independent research leading to a major paper using original source materials.

Communication & Technology (CIT)

Courses

CIT 105P Foundations Of Computing And Problem Solving Credits: 4
This course covers the fundamentals of computer use, problem solving, and programming. Specific topics include: the general use of micro and mainframe computers, algorithm design, the relation of algorithms to programs, the fundamentals of programming in the PASCAL language, and program debugging techniques. This course is presented only in a PACE program format.
Co-requisites: MATH 110.

CIT 106P Computers: Their Uses And Impact Credits: 4
This course covers the history of computing, concepts in and classes of computer hardware and software, classes of computer application, economic issues in the development of computer hardware and software products, and philosophical, social and legal issues in the use (and abuse) of computer technology. This course is presented only in a PACE program format.

CIT 310P Web Design & Development Credits: 3
This three hour course, Web Design and Development, is designed to introduce the student to the Hyper Text Markup Language (HTML) and its use for the development of web pages. This course is offered online and no scheduled classroom attendance will be required. Correspondence through emails and the class forum is strongly encouraged.
Prerequisites: CIT 105P.

CIT 315P Web Graphics & Multimedia Credits: 3
This three hour course, Web Graphics and Multimedia, is a continuation to Web Design and Development. The course material will cover different development tools used to incorporate graphics, sounds, and videos into web pages. This course is offered online and no scheduled classroom attendance will be required. Correspondence through emails and the class forum is required.
Prerequisites: CIT 105P.

CIT 420P Cgi Perl Credits: 3
CGI Perl teaches CGI scripting techniques using the CGI.pm Perl module. Students learn how to create on-demand, server-based HTML; write and process fill-out forms; write responses to form submissions back to the client browser; store and process cookies; handle file uploads securely; create, read, and write to text databases. Students also explore CGI Perl's role in server push technology and continuous page updating. Students are not required to have previous Perl programming experience, although a through knowledge of HTML is necessary.

Communication Studies (COMM-ST)

Courses

COMM-ST 110 Fundamentals Of Effective Speaking And Listening Credits: 3
An introduction to the dimensions of effective platform speaking with special emphasis on developing critical listening skills. Lecture, performance, and discussion.

COMM-ST 140 Principles Of Communication Credits: 3
An interdisciplinary introduction to the study of contemporary communication studies including a consideration of intrapersonal, interpersonal and public communication.

COMM-ST 212 Argumentation And Debate Credits: 3
A study of the nature of logical discourse generated through the preparation and presentation of oral argument within the framework of the debate format. Lecture, performance and discussion.

COMM-ST 213 Argumentation And Critical Thought Credits: 3
An introduction to the theory and application of argument construction. The course is designed to examine the fundamental strategies of critical thinking and to help understand the relationships among critical thought and argumentation development and refutation. This course is designed for application across many fields and is not specific to debate or oral argument.

COMM-ST 220 Introduction: Modern Communications Media Credits: 3
A comprehensive survey of the content, structure and control of the communications media in American society--newspaper, motion pictures, radio and television; providing an informational frame of reference that will enable discerning students to formulate and apply useful critical concepts in evaluating America's media environment.

COMM-ST 250 Introduction To Film And Video Methods Credits: 3
This course is a comprehensive examination of film and video production methods and visual literacy. It is the foundation and prerequisite for all film, video, and new media production courses. It is also the professional media production overview course for advertising, public relations, and other creative, non-technical communications careers.

COMM-ST 260P Introduction To Web Communications Credits: 4
This four credit hour web-based multimedia course will examine the process of critically evaluating information delivered on the Internet. It is designed as an introduction for adults and students who use Internet information for work and/or school. The process of critically evaluating Internet information will be described in four modules: traditional evaluation techniques; searching and researching strategies; Internet evaluation techniques and Internet evaluation resources.

COMM-ST 265 Visual Communication Credits: 3
This course introduces the creative capture and design of photographic images as used in both print and new media for advertising, journalism, and public relations. Basic artistic and production methods are examined, including real-world professional practices and the creative control of process variables.

COMM-ST 286 Race in American Film Credits: 3
This course examines representations of race and ethnicity in American film from the silent era onward in mainstream and counter-cultural traditions. It explores how social, political, and economic conditions contribute to constructions of race and ethnicity.
Prerequisites: Anchor I and DISC 100.

Co-requisites: DISC 200.

Cross Listings: ENGLISH 282, HISTORY 282.

COMM-ST 300CY Cluster Course: Ancient World/Cinema Credits: 3
This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.
Cross Listings: CLASSICS 300CY, ENGLISH 300CY, HISTORY 400CY.

COMM-ST 303WI Introduction To Journalism Credits: 3
Introduction to the styles and techniques of reporting and writing basic news through assignments in straight news, features and in-depth stories. Exposure to the history and principles of American journalism. Practical application in writing news and news feature articles.
Prerequisites: RooWriter.

Cross Listings: ENGLISH 303WI.

COMM-ST 308 Introduction To The Study Of Human Communication Credits: 3
This course serves to introduce students to the basic theories, perspectives and methodologies used (historically and currently) in the study of speech, interpersonal and mass communication.

COMM-ST 311 Radio & Television Performance Credits: 3
A study of the specialized radio and television performing and operating situations and techniques simulated and evaluated in studio sessions. Lecture, discussion and performance.

COMM-ST 312 Advanced Public Speaking Credits: 3
Advanced study of rhetorical theory and its application to the presentation and criticism of public discourse.
Prerequisites: COMM-ST 110.

COMM-ST 312P Advanced Public Speaking Credits: 3
Advanced study of rhetorical theory and its application to the presentation and criticism of public discourse.
Prerequisites: COMM-ST 110.

COMM-ST 314WI Reporting Credits: 3
A seminar of practical application in advanced reporting. Assignments to cover news events and to pursue in-depth news reports on the campus and off. Work is turned in on deadline and critiqued by the instructor.
Prerequisites: ENGLISH 110, ENGLISH 225, RooWriter.

Cross Listings: ENGLISH 313WI.

COMM-ST 317 Persuasion Credits: 3
A study of the rhetorical, psychological and ethical principles of influencing and controlling individuals and groups, and of the methods of adapting to various attitudes and audiences through the preparation, presentation and evaluation of persuasive speeches. Lecture, discussion and performance.
Prerequisites: COMM-ST 110.

COMM-ST 320 Mass Media, Culture And Society Credits: 3
A critical exploration of the role of mass media (and its reception) in the social construction of reality. The course employs theoretical, analytical and empirical approaches derived from multidisciplinary sources, particularly "critical theory" semiology, post-structuralism, psychoanalysis and ethnography. Term paper required.

COMM-ST 322 Oral Performance In Speech Communication Credits: 3
This course is designed to develop and strengthen oral communication for students pursuing careers in pre-law, media, human resources, and education as well as increase the skills of potential professional speakers. The student will learn to develop emotional, vocal, physical, and non-verbal skills through an investigation of poetry, prose, and non-fiction literature. Through the process of reading, studying, investigating, rehearsing, and performing literary and nonliterary works, the students will learn to pay particular attention to the voice embodied in a given text and the cultural and social context within which that voice speaks.
Prerequisites: COMM-ST 110.

COMM-ST 330 Introduction To Film Studies Credits: 3
The course is an introduction to the study of film as an art form and industrial practice. Students are introduced to the basic terms and concepts of film theory, including theories of film editing and mise-en-scene while becoming familiar with the basic "canon" of major films and directors that form the foundations for the academic field of film studies.
Prerequisites: ENGLISH 110.

COMM-ST 331 Mass Media In America Credits: 3
Social history of the development of mass media, radio, film, and television, from Marconi’s first experiments to the present. Emphasis placed on relationship of American culture and American media. Term paper required.

COMM-ST 331WI Mass Media In America Credits: 3
Writing intensive. Social History of the development of mass media, radio, film and television, from Marconi's first experiments to the present. Emphasis placed on relationship of American culture and American media. Term paper required.
Prerequisites: RooWriter.

COMM-ST 338 Film Adaptation Credits: 3
The class will explore the process of adapting both fiction and non-fiction literary works into motion pictures. Students will examine the original literary source, then the interim screenplay and finally the completed motion picture. This class will also explore the practical aspects of creating a film adaptation in Kansas City. Students will interact with Kansas City area film professionals and learn about the practical aspects of filming and exhibiting films in Kansas City.
Prerequisites: Anchor II, DISC 200.

Co-requisites: DISC 300.

Cross Listings: ENGLISH 338.

COMM-ST 339 Film Theory And Criticism Credits: 3
The course serves to locate the film medium within the study of human communication while developing an understanding of the effects of film on the individual and society with an emphasis on understanding the film medium as both an art form and a reflection of a social system with national, cultural sub-cultural components. Term paper required.

COMM-ST 341 Rhetorical Theory And Criticism Credits: 3
An analysis of significant public discourse within the context of social protest and political rhetoric with attention to applying methods of communication criticism in evaluating the effectiveness of persuasive advocacy aimed at social change.

COMM-ST 341WI Rhetorical Theory And Criticism Credits: 3
Writing intensive. An analysis of significant public discourse within the context of social protest and political rhetoric with attention to applying methods of communication criticism in evaluating the effectiveness of persuasive advocacy aimed at social change.
Prerequisites: RooWriter.

COMM-ST 343 Group Dynamics Credits: 3
A study of strategies and communication relationships unique to non-dyadic situations, with an emphasis on the integral structure of leadership, roles, norms and task functions.

COMM-ST 344 Communication In Organizational Settings Credits: 3
An examination of the major elements of interpersonal, group, and oral communication competence essential to human interaction in organizational settings. The course focuses on developing communication competencies and increasing theoretical understanding of the communication process within the organizational context.

COMM-ST 344WI Communication In Organizational Settings Credits: 3
An examination of the major elements of interpersonal, group, and oral communication competence essential to human interaction in organizational settings. The course focuses on developing communication competencies and increasing theoretical understanding.
Prerequisites: COMM-ST 110 or COMM-ST 308, RooWriter.

COMM-ST 345 German Film Credits: 3
This course introduces students to the important contributions of German films to the development of movies as a unique literary art form. The class will cover important terms and concepts in film theory, the specifically German context of film, and important themes and periods in German film history. Taught in English with subtitled films.
Cross Listings: GERMAN 341.

COMM-ST 351WI Fundamentals Of Writing For The Media Credits: 3
Analysis of individual differences and common characteristics of copy for eye and ear, with emphasis on the application of both verbal and visual imagery in the process of communicating the writer's ideas and intentions. Weekly written assignments and critical analysis of the student's work.
Prerequisites: COMM-ST 110, RooWriter.

COMM-ST 354 Introduction to Screenwriting Credits: 3
An introduction to the form and language of the motion picture screenplay. Students will learn to create a workable blueprint for a movie and undertake an in-depth examination of visual storytelling. This will include understanding the basics of dramatic structure, scene and sequence construction and the role of dialogue. Emphasis will be placed on students mastering the accepted movie industry format of the screenplay. They will also adapt a short story and revise it after giving and receiving feedback in small groups.
Prerequisites: COMM-ST 330.

COMM-ST 361 Media Management Credits: 3
An analysis of the trends, patterns and methods of radio and television operations.

COMM-ST 363 Radio Production I Credits: 3
A study of the techniques of producing audio material for use in radio, in concerts, on film, on television and in the recording studio.

COMM-ST 373 Intermediate Media Production Credits: 3
An intermediate-level production course emphasizing hands-on skills in cinematography and lighting, sound, and editing.
Prerequisites: COMM-ST 250, COMM-ST 330.

COMM-ST 376 History Of The Film Industry Credits: 3
A history of the development of the American film industry from 1900 to the end of the studio era. The course will stress such issues as studio production, censorship, the economics of production and the selling of mass culture through the film medium. Term paper required.

COMM-ST 377 Interpersonal Communication Credits: 3
An intensive analysis of the dimensions of intrapersonal and interpersonal communication designed to identify the philosophies and methods which underwrite effective human communication. Lecture and discussion.

COMM-ST 377WI Interpersonal Communication Credits: 3
An intensive analysis of the dimensions of intrapersonal and interpersonal communication designed to identify the philosophies and methods which underwrite effective human communication. Lecture and discussion.
Prerequisites: RooWriter.

COMM-ST 378 Computer-Mediated Communication Credits: 3
Examination of the nature of human communication on the Internet. Design function, content innovations of computer mediated communication discussed, with emphasis on technology as a means of interpersonal communication. Research, essays, and participation in online environment required.

COMM-ST 378WI Computer Mediated Communication Credits: 3
Examination of the nature of human communication on the internet. Design, function, content innovations of computer mediated communication discussed, with emphasis on technology as a means of interpersonal communication. Research, essays, and participation in online environment required.
Prerequisites: RooWriter.

COMM-ST 379 African American Images in Film Credits: 3
This course examines the historical and social evolution of African Americans in film from the early 1900's to the present. The course will provide an overview of contributions from African Americans in cinema and trace their impact in Hollywood through critical analysis. Films show what a society accepts and rejects, therefore the course will consider major themes, historical movements, and how films capture societal issues. Most of the discussions will focus on images in front of the camera, although works from African Americans behind the camera may be explored as well.

COMM-ST 380 Contemporary Media Topics Credits: 3

COMM-ST 381 Narrative Production Credits: 3
This course covers the creative, technical, and practical aspects of short-form narrative film production.
Prerequisites: COMM-ST 250 and COMM-ST 354.

COMM-ST 382 Advanced Media Topics Credits: 3
Variable content: Media Arts and Media Studies Topics will be addressed in this course including film/video production and post-production techniques, and analytical evaluation of recent trends in media.

COMM-ST 383 Cross-Cultural Journalism & Mass Media Credits: 3
Cross-Cultural Journalism Mass Media provides journalistic tools for traditional and new media coverage of diverse ethnic, gender, ability and ideological groups inside and outside the United States. The critical role of diverse voices in a democracy will be discussed.Students at UMKC and the Missouri School of Journalism participate in joint lectures transmitted by UMKC and MU instructors from their respective campuses.

COMM-ST 384 Documentary Film History Credits: 3
Documentary Film History is an overview of the history and theory of documentary cinema. The course surveys the documentary tradition with special attention to the relationship between content and style and the issues central to documentary film making, including ethical and legal questions, the relationship between representation and power and the ways in which film speaks to notions of truth and truth telling.

COMM-ST 385 Documentary Production Credits: 3
This course is designed to familiarize students with the basics of documentary production from an artistic, ethical, and practical results-oriented perspective.
Prerequisites: COMM-ST 250.

COMM-ST 386 Animation Credits: 3
This course provides an introduction to animation production techniques and an overview of the history of American animation arts. We will address both stop-motion and computer animation using industry standard software.
Prerequisites: COMM-ST 250.

COMM-ST 388 Media Ethics Credits: 3
This course is designed to sensitize the ethical considerations the underlie the conventions and practices of print, broadcast, and internet media. By placing traditional and new media in a wider intellectual context than is generally possible under the daily demands of producing news, information, and entertainment, it seeks to produce a larger sense of media as industry and as a career choice.

COMM-ST 390 Forensic Activities Credits: 1-4
Participation in the intercollegiate forensic program. A practicum in debate, discussion, oratory and other forensic activities.

COMM-ST 391 The World(s) Of Alfred Hitchcock Credits: 3
The course offers an historical study of the film art of Alfred Hitchcock. The course gives special attention to the director's work in the silent cinema of the U.K., Hitchcock's early major British sound films, his arrival in the United States, his major World War II propaganda films, the directors maturing into a major influence on world cinema in the 1940's, and Hitchcock's "masterworks" of the 1950's-1960's.

COMM-ST 392 Great Directors Of Foreign Film Credits: 3
The course is an introduction to the major films and directors of the international cinema. Particular attention will be given to the influence of German Expressionism, Italian "Neo-Realism," the "French New Wave, the "New German Cinema" of the 1970's, post-Franco Spanish cinema, and the national cinemas of South America, India, China, and Japan.

COMM-ST 393 History Of The Hollywood Musicals Credits: 3
The course offers an historical survey of the development of the film musical as a major Hollywood film genre from the introduction of the sound film in 1927 to current manifestations of the genre. The course gives particular attention to the development of the studio musicals of the 1930's, the role of the musical during World War II, the "Golden Age" of the MGM musical in the 1950's-60's, and the effects on the traditional Hollywood musical of the Vietnam Era social upheavals.

COMM-ST 394 The World Of "Film Noir Credits: 3
The course offers an historical survey of the development of "film noir" as a major film genre. The course examines the major characteristics that define "film noir" and offers an introduction to the historical roots of this genre in German Expressionism, as well as the social and political context for the development of "film noir" as a Hollywood studio genre in the late 1940's. Particular attention is given to the social/ political conditions of the 1950's that contributed to both the rise and decline in popularity of "film noir" during the Cold War, as well as the film genre's revival in the "neo-noirs" of the 1970's.

COMM-ST 400 Special Studies Credits: 1-3
(A-N) This is an upper-level course on a subject which is not a part of the regular department offering. The course results from one or more of the following: (1) the expressed desire of students (2) the broadened or refocused scholarship of a member of the communication studies faculty (3) the temporary presence of a scholar whose specialization is not reflected in the department's regular offerings (4) the conclusion by the department that the course meets a community need (5) the effort of the Communication Studies faculty to provide an interdisciplinary approach to an era or topic.

COMM-ST 400CT Cluster Course: Healing And Cultural Diversity Credits: 3

COMM-ST 400G Special Studies In Communication Studies Credits: 1-3

COMM-ST 400M Special Studies In Communication Studies Credits: 1-6

COMM-ST 400N Special Studies Credits: 1-3

COMM-ST 400Q Special Studies In Communication Studies Credits: 1-3

COMM-ST 400W Special Studies in Communication Studies Credits: 1-3

COMM-ST 400Z Special Studies Credits: 1-3

COMM-ST 402CD CC: American Social Film: Silver Screen & American Dream Credits: 3
This course will combine American social history and American film history. Using Hollywood entertainment films, the course will look at Hollywood as an indicator of social, political, and economic conditions in the U.S. from the early 1900's to the late 1950's. The main topics are war and the threat of war, poverty and affluence, racial tensions, censorship, and political zealotry. A paper is required, and a social history textbook, a film history textbook, a play by Arthur Miller and a collection of articles constitute core readings.

COMM-ST 403CE CC: Radical Changes Since 1945 Credits: 3
This cluster course will focus on modernism, post-modernism and expressionism in the visual arts and literature since World War II. Lectures address intellectual movements-such as existentialism and formalism-and cultural development-such as increased impact of technology and mass media-in contemporary society. By focusing on these movements, we hope to provide an integrated view of the literature and visual arts of the period and to draw upon analogous developments in contemporary architecture, music, philosophy and film. This course is offered as a cluster with ENGLISH 300CE.

COMM-ST 406CD CC: Film Adaptation Credits: 3
The class will explore the process of adapting both fiction and non-fiction literary works into motion pictures. Students will examine the original literary source, then the interim screenplay and finally the completed motion picture.

COMM-ST 421P Multimedia & New Media Streaming Credits: 3
This course is designed to teach students the technology of streaming multimedia on the web and analyze the components of interactivity on the web. Students will examine the process of streaming, as well as the various advantages and disadvantages of streaming. Students will study the hardware, software, and technology involved in the different types of streaming media.

COMM-ST 422P New Media Writing For The Web Credits: 3
This course is designed to teach students new media writing and the technology of reporting for online publications. Students will analyze the components of online writing, including the design, creation, and transfer of online digital media. Students will be introduced to digital formats and production tools. Students will examine the technology of writing for the web and the particular needs of new media writing for users of the web, techniques to transfer writing electronically, and how to use resources on the web for online reporters.

COMM-ST 423P Shooting Digital Video For The Web And New Media Credits: 3
This course is designed to teach students the fundamental concepts of digital video, with special consideration given to shooting the new media and the web. Students will learn the process of digital video, the types of file formats, technical considerations of displaying video on the web, and technical features of the digital video camera. This class will enable students to maximize the use of video in various new media digital formats (CD-ROM, DVD, etc.), as well as its use on the web.

COMM-ST 424P Web Radio Credits: 3
This course is designed to teach students the technology and underlying concepts in producing Web radio. A general overview of radio techniques and historical context, as well as practical and technical information will be given. Legal and copyright implications of making Web radio will be reviewed.

COMM-ST 426 History And Criticism Of American Public Address I Credits: 3
This course examines American Public Address from 1630 to 1900, with an emphasis on the connections between rhetoric and social change. Students analyze how texts function within specific historical contexts.

COMM-ST 428 History and Criticism of American Public Address II Credits: 3
This course examines American Public Address from 1900 to present, with an emphasis on the connections between rhetoric and social change. Students analyze how texts function within specific historical contexts.

COMM-ST 431 Colloquium In Interpersonal Dynamics Credits: 3
An examination of the practical application of communication principles and theories, with focus on one of the following: health, organizational, nonverbal, intrapersonal, conflict management, computer mediated, or intercultural communication.

COMM-ST 432 Press, Politics And Public Policy Credits: 3
Undergraduate component of COMM-ST 532. An advanced course in the study of the press and political establishments in the formation of public policy.

COMM-ST 444WI Intercultural Communication Credits: 3
A consideration of communication phenomena in multicultural settings. A study of the public forum with an emphasis on the interpersonal aspects of international, intercultural, and co-cultural communication.
Prerequisites: RooWriter.

COMM-ST 446 Principles Of Advertising Credits: 3
A survey of advertising as an industry and a career field, examining its history and development in America, and its application in mass and special media. Specific procedures are studies for linking the development of advertising strategies, messages and campaigns to the marketing process, and for evaluation and selection of appropriate media to carry the advertising message.

COMM-ST 447 Interactive and Social Media Advertising Credits: 3
This course examines advertising on the Internet as a form of interactive communication, with a special focus on social media and search engines. It addresses basic concepts, current issues, and the development of interactive advertising strategies and plans. The coverage includes interactivity, pricing models, online targeting strategies, search engine optimization and advertising, social media advertising, and online video advertising.

COMM-ST 448 Principles Of Public Relations Credits: 3
An overview, presenting the function, purposes, procedures and practices of public relations, its role in society, industry, government and politics, and its potential as a career field. This is a survey course with primary emphasis on theory, supplemented with applied techniques.

COMM-ST 454 Advanced Screenwriting Credits: 3
This course provides students with advanced theory in narrative screenwriting, training in industry standard script analysis (called "coverage") and story editing. Students will be required to draft, revise and workshop a short film screenplay or will focus on a feature screenplay, delivering a draft and revision of the first act and a detailed outline for the rest of the script. Students will workshop feature screenplays in small groups, emphasizing the art of constructive story editing.
Prerequisites: COMM-ST 354.

COMM-ST 456 Electronic Journalism Credits: 3
A practical approach to the practices and principles of broadcasting news media, including preparing copy for microphone and camera, editing wire copy, reporting public affairs and public relations, and an intensive scrutiny of the concepts of freedom and responsibility as they apply to the press and current legislation.

COMM-ST 457 Producing And Distributing Media Credits: 3
Survey of Contemporary practices used in the producing, funding and distribution of media for theatrical, broadcast, home video/DVD and web-based markets.

COMM-ST 462 Public Broadcasting Credits: 3
A study of the development of public broadcasting, its position and responsibilities in the world of modern communications. Programming and operations concepts and philosophies of public broadcast facilities will be studied and analyzed.
Prerequisites: COMM-ST 220.

COMM-ST 466 Advanced Electronic Journalism Credits: 3
An advanced study of television and Internet news gathering, field production and performance for electronic media.
Prerequisites: COMM-ST 456.

COMM-ST 470 Directing Credits: 3
An advanced course in video techniques with emphasis on creating complex formats for broadcasting, recording and performance. Lecture, discussion, and laboratory.
Prerequisites: COMM-ST 250.

COMM-ST 471 Advanced Media Production Credits: 3
An advanced course in media production techniques focused on the creation of a significant individual media work and professional development.
Prerequisites: COMM-ST 250, COMM-ST 373, and COMM-ST 354.

COMM-ST 473 Directing Actors and Scenes Credits: 3
This intensive workshop class seeks to deepen the student director's understanding of the acting process and provide ways of clearly and creatively communicating with actors. The course will deepen students' understanding of blocking scenes and designing camera coverage. It will explore the role of the director as a guiding creative force in the making of a film through collaboration and provide techniques for scene analysis and preparation. Students will cast, rehearse and present a live performance for their final project and design appropriate camera coverage.
Prerequisites: COMM-ST 250.

COMM-ST 478 Media Law Credits: 3
A comprehensive examination of the law as it pertains to advertising, public relations, journalism, commercial and electronic media, broadcast regulatory agencies, corporate speech and corporate participation in elections. Students will study topics that include the First Amendment, defamation and privacy. Court opinions and legislation will be the course's primary focus, however students will also examine contemporary and historic theory of free expression.

COMM-ST 483 Research Seminar In Communication Studies Credits: 3
This is the departmental capstone course and is required for majors in their last semester of their senior year. The course summarizes and extends student's theoretical and applied understanding of the role of communication competence in the work place and beyond. The course also focuses on refining student's research competencies and their appreciation of the cultural role of modern communication methods.

COMM-ST 484 Communication Studies Activities Credits: 1-4
Internships opportunities for advanced students involved in community and campus activities. Student must receive approval of advising professor in semester prior to enrollment. No more than four hours with any one project.

COMM-ST 498 Special Problems In Communication Studies Credits: 1-3
Research and/or projects for advanced upper class students. Student must receive approval of advising professor in semester prior to enrollment. No more than three hours with any one instructor.

Computer Science (COMP-SCI)

Courses

COMP-SCI 100 Computer Fundamentals and Applications Credits: 3
The course covers essential computer concepts and skills. The emphasis is on using the computer as a tool to enhance productivity. Topics include basic computer concepts such as what to look for when buying a computer and how to avoid hackers and viruses when operating one. Students will also learn how to create word processing, spreadsheet, database, and presentation documents using the Microsoft Office suite of applications. The course prepares students to succeed in both college and business by enabling them to write reports, analyze and chart data, prepare presentations and organize large data sets.
Prerequisites: MATH 110 (or equivalent).

COMP-SCI 101 Problem Solving and Programming I Credits: 3
Problem solving, algorithms, and program design. Use of structured programming, lists, control structures, recursion, objects and files in Python. Introduction to graphical interface programming. Coding, testing and debugging using a modern development environment.
Prerequisites: MATH 110 (or equivalent).

COMP-SCI 111 Introduction to Computing Credits: 3
This course provides a broad and general introduction to the computing fields underlying computer science, information technology and computer engineering and its impact on humanity and society. It introduces important concepts of the field, including hardware, software, communications networks, algorithmic processes, information representation, and programming. The course is not programming oriented, but some light programming might be required. The course also introduces academic skills and strategies for success as a student and in a professional career.

COMP-SCI 190 Special Topics Credits: 1-3
Selected introductory topics in the area of computing. May be repeated for credit when topic varies.

COMP-SCI 190A Special Topics Credits: 1-3
Selected introductory topics in the area of computing. May be repeated for credit when topic varies.

COMP-SCI 190C Special Topics Credits: 1-3
Selected introductory topics in the area of computing. May be repeated for credit when topic varies.

COMP-SCI 191 Discrete Structures I Credits: 3
Mathematical logic, sets, relations, functions, mathematical induction, algebraic structures with emphasis on computing applications.
Prerequisites: MATH 110.

COMP-SCI 1EC Computer Science Elective Credits: 99
Transfer Credit

COMP-SCI 201L Problem Solving and Programming II - Lab Credit: 1
Programming exercises and demonstrations to reinforce concepts learned in COMP-SCI 201 and provide additional practice in C++ programming.
Prerequisites: COMP-SCI 101, COMP-SCI 191.

Co-requisites: COMP-SCI 201R.

COMP-SCI 201R Problem Solving and Programming II Credits: 3
Problem solving and programming using classes and objects. Algorithm efficiency, abstract data types, searching and sorting, templates, pointers, linked lists, stacks and queues implemented in C++.
Prerequisites: COMP-SCI 101, COMP-SCI 191.

Co-requisites: COMP-SCI 201L.

COMP-SCI 243 C and Unix Credits: 3
Syntactics and semantics of C applied to dynamic structures, recursion, abstract data types, libraries. General introduction to UNIX operating system and UNIX file system, and use of UNIX system calls in C.
Prerequisites: COMP-SCI 101.

COMP-SCI 281R Introduction to Computer Architecture and Organization Credits: 3
Digital Logic and Data Representation, process architecture and instruction sequencing, memory hierarchy and bus-interfaces and functional organization.
Prerequisites: COMP-SCI 101, COMP-SCI 191.

COMP-SCI 282 Assembler Language Programming Credits: 3
Use of an assembler language for a virtual machine, internal representation of data and instructions, the assembly process, linking, loading and program relocation and execution. I/O, exception handling, alternative architectures.
Prerequisites: COMP-SCI 201R, COMP-SCI 281R.

COMP-SCI 290 Special Topics Credits: 1-3
Selected intermediate topics in the area of computing. May be repeated for credit when topic varies.

COMP-SCI 291 Discrete Structures II Credits: 3
Recurrence relations and their use in the analysis of algorithms. Graphs, trees, and network flow models. Introduction to Finite state machines, grammars, and automata.
Prerequisites: COMP-SCI 191 (or E&C-ENGR 226), E&C-ENGR 227 (for EC-ENGR students).

COMP-SCI 303 Data Structures Credits: 3
Linear and hierarchical data structures, including stacks, queues, lists, trees, priority queues, advanced tree structures, hashing tables, dictionaries and disjoint-set. Abstractions and strategies for efficient implementations will be discussed. Linear and hierarchical algorithms will be studied as well as recursion and various searching and sorting algorithms. Programming concepts include Object Orientation, concurrency and parallel programming. Several in-depth projects in C++ will be required.
Prerequisites: COMP-SCI 191, (or COMP-SCI 201L, COMP-SCI 201R).

COMP-SCI 304WI Ethics and Professionalism Credits: 3
Societal and ethical obligations of computer science, information technology, and electrical/computer engineering practice. Topics include obligations of professional practice, electronic privacy, intellectual property, ethical issues in networking, computer security, computer reliability, and whistle-blowing.
Prerequisites: ENGLISH 225 (or equivalent), RooWriter.

COMP-SCI 349 Java Programming with Applications Credits: 3
The course covers the syntax and semantics of the Java programming language along with the use of essential class libraries. These topics will be taught in the context of application development. Students will learn how to write small to medium sized Java applications and applets. Specific topics covered include: essential classes in the Java API, interfaces, inheritance, exceptions, graphical user interface components, layout managers, events, I/O classes, Applets, data base access, and multithreading. Other topics will be covered as time permits.
Prerequisites: COMP-SCI 303.

COMP-SCI 352 Data Structures and Algorithms Credits: 3
Abstract data structures and analysis of associated algorithms, abstractions as separate from implementation. Structures include lists, trees, priority queues, advanced tree structures, hashing tables, and graphs. Comparison of efficiency of algorithms as implemented with various data structures. Advanced searching and sorting algorithms, shortest paths, spanning tree and flow algorithms. Introduction to the basic concepts of NP-complete problems.
Prerequisites: COMP-SCI 201R (or E&C-ENGR 216 for EC-ENGR students), COMP-SCI 291, MATH 210.

COMP-SCI 371 Database Design, Implementation and Validation Credits: 3
This course discusses in detail all aspects of ORACLE database management systems. It covers in detail database design, implementation, and validation using ORACLE. In addition to these, it briefly covers ORACLE implementation, tuning, and implementation. The course is suitable for undergraduates and professionals alike.
Prerequisites: COMP-SCI 303 (or COMP-SCI 352).

COMP-SCI 390 Special Topics Credits: 1-3
Selected topics in the area of computing at the junior level. May be repeated for credit when the topic varies.

COMP-SCI 393 Numerical Analysis and Symbolic Computation Credits: 3
Basic elements of numerical analysis: numerical solution of algebraic equations, solution of linear simultaneous algebraic equations, matrices, eigenvalues and eigenvectors, numerical integration and numerical solution of linear differential equations. Use of a symbolic manipulator on both symbolic and numerical computation, applied to the above listed basic elements of numerical analysis.
Prerequisites: COMP-SCI 201R, COMP-SCI 281R, MATH 250.

COMP-SCI 394R Applied Probability Credits: 3
Basic concepts of probability theory. Counting and measuring. Probability, conditional probability and independence. Discrete, continuous, joint random variables. Functions of random variables. Sums of independent random variables and transform methods. Random number generation and random event generation. Law of large numbers, central limit theorem, inequalities. Their applications to COMP-SCI and EC-ENGR areas are stressed.
Prerequisites: COMP-SCI 201R (or E&C-ENGR 216), MATH 220, STAT 235 (or E&C-ENGR 241).

COMP-SCI 396 Fundamentals of Communication and Network Security Credits: 3
Techniques learned in this course provide security solutions for a variety of security threats across the spectrum of communications and network applications. This course covers both fundamental cryptology and applications, including conventional encryption, modular arithmetic, data encryption standard, public-key cryptography, RSA, wireless communication security, secure email, Internet payment and secure web applications.
Prerequisites: MATH 300.

COMP-SCI 404 Introduction to Algorithms and Complexity Credits: 3
A rigorous review of asymptotic analysis techniques and algorithms: from design strategy (such as greedy, divide-and-conquer, and dynamic programming) to problem areas (such as searching, sorting, shortest path, spanning trees, transitive closures, and other graph algorithms, string algorithms) arriving at classical algorithms with supporting data structures for efficient implementation. Throughout, the asymptotic complexity is studied in worst case, best case, and average case for time and/or space, using appropriate analysis techniques (recurrence relations, amortization). Introduction to the basic concepts of computability and NP-complete theory.
Prerequisites: COMP-SCI 291, COMP-SCI 303 (or COMP-SCI 352).

Co-requisites: COMP-SCI 394R, MATH 300.

COMP-SCI 411 Introduction to Telecommunications Systems Credits: 3
Representation of signals and systems, Fourier Series, Fourier Transform, transmission of signal through linear system, amplitude modulation systems, frequency and pulse modulation systems, sampling, time division multiplexing, digital modulation and noise in modulation systems.
Prerequisites: COMP-SCI 394R, MATH 250.

COMP-SCI 416 Telecommunications Systems: A Survey Credits: 3
Review of Telecommunications techniques; wire, radio, microwave, satellite and optical fiber communications systems; mobile phones, ISDN and broadband ISDN, Signaling System No. 7, CCITT telecommunications standards.

COMP-SCI 420 Introductory Networking and Applications Credits: 3
This introductory course examines the systems aspects of the different LAN/MAN/WAN models, including topics such as protocols, network operating systems, applications, management and wireless communication systems. It also examines how the different models are interconnected using bridges and routers. NOTE: NOT FOR GRADUATE CREDIT.
Prerequisites: Senior standing.

COMP-SCI 421A Foundations of Data Networks Credits: 3
This introductory course examines the analytical aspects of data communications and computer networking. Topics cover protocol concepts and performance analysis that arise in physical. data link layer, MAC sub layer, and network layer.
Prerequisites: COMP-SCI 291, COMP-SCI 303, COMP-SCI 394R.

COMP-SCI 423 Client/Server Programming and Applications Credits: 3
Fundamentals of Client/Server programming using socket interface; features of network programming including connection oriented and connectionless communication in multiple environments (Windows, UNIX, and Java); other client/server mechanisms, such as RPC and RMI) and formal object environments designed to facilitate network programming (CORBA, COM and Beans).
Prerequisites: COMP-SCI 352 (or COMP-SCI 303, COMP-SCI 431).

COMP-SCI 431 Introduction to Operating Systems Credits: 3
Concurrency and control of asynchronous processes, deadlocks, memory management, processor and disk scheduling, parallel processing, file system organization.
Prerequisites: COMP-SCI 352 (or COMP-SCI 303), COMP-SCI 281R (or E&C-ENGR 226, E&C-ENGR 227 for EC-ENGR students).

COMP-SCI 441 Programming Languages: Design and Implementation Credits: 3
Programming language paradigms (Object oriented programming, functional programming, declarative programming, and scripting) and design tradeoffs in terms of binding, visibility, scope, lifetime, type-checking and abstraction. Programming language specification, grammar, lexical analysis, exception handling, and runtime considerations.
Prerequisites: COMP-SCI 352.

COMP-SCI 444 Compiler/Translator Design Credits: 3
This course will teach modern compiler techniques applied to both general-purpose and domain-specific languages. The examples chosen will also convey a detailed knowledge of state-of-the art based WWW technology. The fundamental goal of programming is to provide instructions to the computer hardware. The primary purpose of the compiler/translator is to facilitate communication from the programmer via some high level language to ultimately the computer hardware. Understanding how compiler/translators are built and operate is important to understanding efficiency of operation and storage.
Prerequisites: COMP-SCI 303 (or COMP-SCI 352).

COMP-SCI 449 Foundations of Software Engineering Credits: 3
The course introduces concepts of Software Engineering (definitions, context) and the Software Development Process (life cycle). Students will get a solid foundation in Agile methodology, SW requirements, Exceptions and Assertions, Verification and Validation, SW Models and modeling, and User Interface Design. Various SW Architectures will be discussed.
Prerequisites: COMP-SCI 303 (or COMP-SCI 352).

COMP-SCI 451R Software Engineering Capstone Credits: 3
The course will focus on the requirements and project planning and managing of medium sized projects with deliverables of each phase of the software life cycle. Additional studies of software modeling, requirements specifications, configuration management, verification, validation, software evolution and quality and finally measurement, estimation and economics of the software process.
Prerequisites: COMP-SCI 303 (or COMP-SCI 352), COMP-SCI 449.

COMP-SCI 456 Human Computer Interface Credits: 3
Design of human-computer interfaces considering the psychological and physical abilities of the user. User interface design from a functional and ergonomic perspective. Contents organization, visual organization, navigation. Use of graphical interface (GUI) and the development of high quality user interfaces.
Prerequisites: COMP-SCI 449.

COMP-SCI 457 Software Architecture: Requirements & Design Credits: 3
Introduction to requirements and design engineering with emphasis on organization and presentation of system requirements and designs for customers, users and engineers; validation of requirements and design with needs of system customer; examination of requirement and design changes during the lifetime of a system; transformation of informal ideas into formal detailed descriptions; examination of the different stages in the design process including architectural design, interface design and data structure design, database design, program and transaction design; examination of domain modeling criteria and examination of design quality attributes. Also discusses non-functional attributes and project resource allocation.
Prerequisites: COMP-SCI 303 (or COMP-SCI 352).

COMP-SCI 458 Software Architecture: Testing & Maintenance Credits: 3
Introduction of software system testing (including verification), software process, software reuse, software maintenance, and software re-engineering.
Prerequisites: COMP-SCI 303 (or COMP-SCI 352).

COMP-SCI 461 Introduction to Artificial Intelligence Credits: 3
Search space generation, pruning and searching, employment of heuristics in simulation of the cognitive process, an overview of predicate calculus, automatic theorem proving.
Prerequisites: COMP-SCI 441.

COMP-SCI 464 Applied Artificial Intelligence Credits: 3
Intelligent agents. Solving problems by search. Game playing. Logical reasoning systems. Planning agents. Decision making. Learning methods. Neural networks and learning. Neural language processing. Perception Expert systems.
Prerequisites: COMP-SCI 461.

COMP-SCI 470 Introduction to Database Management Systems Credits: 3
Database architecture, Data independence, Schema, E-R and Relational Database modeling, Relational algebra and calculus, SQL, File organizations, Relational database design, Physical database organization, Query processing and optimization, Transaction structure and execution, Concurrency control mechanism, Database recovery, database security.
Prerequisites: COMP-SCI 303 (or COMP-SCI 352).

Co-requisites: COMP-SCI 431.

COMP-SCI 475 Introduction to Computer Graphics Credits: 3
Interactive Computer Graphics, Hardware Interaction, 3D transformations, Shading, Lighting and Texturing.
Prerequisites: COMP-SCI 303.

COMP-SCI 490 Special Topics Credits: 1-3
Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

COMP-SCI 490CI Special Topics Credits: 1-3

COMP-SCI 490CR Special Topics Credits: 1-3

COMP-SCI 490IS Special Topics Credits: 1-3

COMP-SCI 490JU Special Topics Credits: 1-3

COMP-SCI 490MT Special Topics Credits: 1-3

COMP-SCI 490NN Special Topics Credits: 1-3

COMP-SCI 490SA Special Topics Credits: 1-3
Special Topics

COMP-SCI 490SI Special Topics Credits: 1-3

COMP-SCI 490SM Special Topics Credits: 1-3

COMP-SCI 491 Internship Credits: 6
Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/no credit only and students must be in good standing with at least 18 credit hours of CS/IT counting towards the degree. Registration by consent number only: petition forms for CS/IT491 Internships are available in the office of CSEE Division and on the web.
Prerequisites: Junior standing.

COMP-SCI 494R Applied Stochastic Models Credits: 3
Review of basic probability including properties of joint random variables and functions of random variables. Discrete and continuous random processes, such as the Poisson process, Brownian motion, and white Gaussian noise. Linear filtering of random processes. Markovian birth and death processes and elementary queuing theory.
Prerequisites: COMP-SCI 394R.

COMP-SCI 497 Directed Readings Credits: 1-3
Readings in an area selected by an undergraduate student in consultation with a faculty member. Arrangements must be made prior to registration.

COMP-SCI 498 Research Seminar Credits: 1-3
Undergraduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

COMP-SCI 499 Undergraduate Research Credits: 1-3
Completion of project, including a final written report, under the direction of a faculty member. A prospectus must be accepted prior to registration.

Computing & Engineering (SCE)

Courses

SCE 101 Computing Engineering and Society Credits: 3
This course provides a broad and general introduction to the practice and history of engineering and computing fields; their impact on humanity and society and their relationship to the ecosystem, professionalism and ethics. The course introduces important concepts relevant to the fields of engineering and computing, including the engineering approach to solving problems, communications and computations, ethics, environmental responsibility and teamwork. Particular attention will be paid to how technology, engineering and pervasive computing impacts society. The course also introduces academic skills and strategies for success as a student and in a professional career.

SCE 201 The Technology Enterprise Credits: 3
This course focuses on the complexity of the decision making process in guiding the implementation of technology. Based on economic, environmental, social, and diversity aspects, cultural and technical issues are balanced on both a qualitative and quantitative basis to make good decisions.
Prerequisites: Anchor I, MATH 110.

Co-requisites: DISC 200.

Conservatory (CONSVTY)

Courses

CONSVTY 101C Voice Class I Credits: 2
A course in the fundamentals of correct voice productions; breathing, breath control, study of vowel forms and consonants. Elementary songs. Poise, posture, and stage presence. This course covers two points of view: development of the student's own voice and the pedagogy of voice-class instruction. A voice audition is required before registration.

CONSVTY 103 Fundamentals of Music Theory for Musicians Credits: 2
An introduction to the rudiments of music theory and aural skills. Designed primarily as a review course for Conservatory students. Non-music majors who desire an accelerated theory fundamentals class may also enroll in this course with the approval of the instructor.

CONSVTY 103N Fundamentals of Music Credits: 3
An introduction to the basic elements of music and music notation, including the study of melody, rhythm, scales and keys, triads, 7th chords, the piano keyboard and the musical staff. Designed primarily for those interested in learning about music but with little or no formal study of music theory.

CONSVTY 104 Jazz Improvisation I Credits: 2
A systematic approach to the art of jazz improvisation. Emphasis upon performance as well as analysis.
Prerequisites: CONSVTY 122.

CONSVTY 108 Beginning Piano for Non-Music Majors Credits: 2
A class for non-music majors to acquire basic piano skills. Popular arrangements and group techniques designed to encourage students to play the piano for pleasure.

CONSVTY 110 Keyboard Skills I Credit: 1
Group instruction focused on developing basic keyboard skills in sight-reading, transposition, harmonization, accompanying, improvisation, technique, and repertoire. Music theory concepts will be reinforced through keyboard applications.

CONSVTY 114 Keyboard Skills I for Piano Majors Credit: 1
Techniques of sight reading , transposition, improvisation and open-score reading.

CONSVTY 115 Keyboard Skills II for Piano Majors Credit: 1
Continuation of CONSVTY 114.

CONSVTY 118 Electronica Credits: 3
An overview of the vast body of music that falls under the label "electronica". Course consists of a historical survey as students acquire language to talk about music, learn how technology informs the creation of the music, and summarize musical trends and cultural influences on the music. Final project is the creation of a piece of electronica using a musical app on a mobile device or a computer.

CONSVTY 120 Music Appreciation Credits: 3
Designed for the general University student with little or no music background and required for Dance Majors (no credit for music majors). An emphasis on the basic elements of music and the historical and stylistic periods, illustrated by examples from different genre, such as instrumental and vocal ensembles, large and small, solo literature for voice and instruments, and dance. Three class sessions a week with frequent live performance and guest speakers.
Prerequisites: Non-music major.

CONSVTY 120N Music Appreciation Credits: 3
A distance learning class designed for the general University student with little or no music background. Video lectures, interviews, performances, and discussion threads, are all delivered online. Course emphasizes historical and stylistic periods, genres, and music listening. Interviews with guest professors and performances of Conservatory faculty and students are included. Students may access the course at any time of the day or night, but exams must be taken on campus unless otherwise arranged.
Prerequisites: Non-music major.

CONSVTY 121 Music Theory I Credits: 3
A course presenting the elementary melodic, rhythmic, and harmonic elements of music through part-writing and analysis. The vocabulary for the first semester includes traditional usage and analysis of triads and their inversions, nonharmonic tones, introduction to chords of the seventh, and elementary modulation.

CONSVTY 122 Music Theory II Credits: 3
Continuation of CONSVTY 121.
Prerequisites: CONSVTY 121 (or equivalent).

CONSVTY 123 Keyboard Skills II Credit: 1
Continued group instruction focused on developing basic keyboard skills in sight-reading, transposition, harmonization, accompanying, improvisation, technique, and repertoire. Music theory concepts will be reinforced through keyboard applications.
Prerequisites: CONSVTY 110.

CONSVTY 125 History and Development of Rock and Roll Credits: 3
Designed for students with little or no music background, the course is an exploration of American popular music from early Rhythm and Blues and Country Western through Woodstock. Examines in detail the social/racial issues most important to the music and the cultural history of twentieth-century America. The course features online video lectures and numerous interviews with professors and scholars from other disciplines, presenting a perspective of the influence of this music on nearly every area of American life. Students are required to participate in online discussion groups as part of the class. Music majors may enroll for music elective credit.

CONSVTY 126 Introduction to World Music Credits: 3
Introduction to World Music provides tools and paths for you to see the world differently and to enhance diversity by exploring musical traditions from around the world, many of which exist in Kansas City. Through lectures, videos, and live performances, Introduction to World Music will provide insight into the musical cultures of Africa, North America, the Caribbean, India, East Asia, Korea and Latin America and transform your view of our rapidly changing society. Open to all students.

CONSVTY 128 Introduction to Music Education/Music Therapy Credit: 1
An introductory course for all BME Choral and Instrumental majors, all music therapy majors, and all students who want general information about the field of music education and music therapy. Includes information on the profession and the role of music education in a school curriculum, as well as the roll of music therapy in various settings.

CONSVTY 129A Ear Training And Solfege Credit: 1
Study of tonal aural problems and rhythms. Introduction to movable do solfege.

CONSVTY 129B Ear Training And Solfege Credit: 1
Continuation of CONSVTY 129A.
Prerequisites: CONSVTY 129A.

CONSVTY 130 Music Therapy Techniques: Adults Credits: 3
Class demonstration and participation in use of materials for psychiatric and geriatric clients. Required of all BME Therapy majors.

CONSVTY 133 Beginning Composition I Credits: 3
Introduction to the compositional process, including notation, calligraphy and score preparation, styles and forms, and related topics. A weekly one-hour lab is required.

CONSVTY 133A Beginning Composition For Non-Composition Majors I Credits: 2
An introductory course in music composition, with exercises in instrumentation, notation, orchestration, form, melodic construction, harmony, counterpoint, and rhythm. Disscussion and analysis of current works, trends and techniques in music composition. Final project is an original composition. A weekly one-hour lab is required.

CONSVTY 133B Beginning Composition for Prospective Composition Majors Credits: 3
A class for students wishing to work toward major status in the music composition program. Exercises and projects as in 133A, with an extra hour per-week of in-depth, guided exercises and portfolio development. A weekly one-hour lab is required.

CONSVTY 134 Beginning Composition II Credits: 3
Continuation of CONSVTY 133.
Prerequisites: CONSVTY 121, CONSVTY 133.

CONSVTY 134A Beginning Composition for Non-Composition Majors II Credits: 2
A weekly one-hour lab is required.
Prerequisites: CONSVTY 133A.

CONSVTY 134B Beginning Composition for Prospective Composition Majors II Credits: 3
Continuation of CONSVTY 133B. Exercises and projects as in CONSVTY 134A., with an extra hour per-week of in-depth, guided exercises and portfolio development. A weekly one-hour lab is required.
Prerequisites: CONSVTY 133B.

CONSVTY 138 Music Therapy Foundations Credits: 2
This course provides students with foundations information pertaining to the music therapy profession. Course topics include the history of music therapy, populations that music therapists serve, and an introduction to the use of music in therapeutic settings.
Prerequisites: Music Therapy Student.

CONSVTY 141 Musicianship I Credits: 4
The core curriculum in Musicianship uses an integrated approach of written theory, aural skills, and singing to foster competency in the essential skills and ideas necessary to attain fluency in Western music. It is taught as a hybrid lecture/lab course, and requires basic knowledge of music fundamentals.
Co-requisites: CONSVTY 110.

CONSVTY 142 Musicianship II Credits: 4
The core curriculum in Musicianship uses an integrated approach of written theory, aural skills, and singing to foster competency in the essential skills and ideas necessary to attain fluency in Western music. It is taught as a hybrid lecture/lab course, and requires basic knowledge of music fundamentals.
Prerequisites: CONSVTY 141.

Co-requisites: CONSVTY 123.

CONSVTY 150 Introduction to Music Literature Credits: 3
An introduction to the major composers, literature, and forms of the various historical periods. Bibliographical sources and library procedures as well as extensive listening requirements are included.

CONSVTY 151 Muse Credits: 3
This course merges a variety of academic platforms and student activities so that collaboration among disciplines becomes a natural, logical solution to academic, professional, and performing arts challenges. Course content is derived from music history as it relates to Kansas City in the 21st century through examining the ethics of creating the canon. Activities are drawn directly from music history to achieve understanding in Human Values and Ethical Reasoning as they relate to our community.

CONSVTY 154 Music Listening Laboratory Credit: 1
Listening includes works of all major periods and styles in live performance. May be repeated for credit. Required for all Conservatory music majors. Non-music majors encouraged to enroll.

CONSVTY 154A Music Listening Laboratory: Non-Western Cultures Credit: 1
The course is a study of music in culture and introduces undergraduate students to living music, musical instruments, and dance of oral traditions and music of high cultures outside the limits of urban European art music through discussion, performance, and observation. Required for all Conservatory music majors. Non-music majors are encouraged to enroll.

CONSVTY 171 Foreign Language for Singing I Credits: 2
A course for Italian and German diction. Emphasis is placed on oratorio rather than conversational pronunciation. Required for BME Choral and BM voice.

CONSVTY 172 Foreign Language for Singing II Credits: 2
A course for French and Latin diction. Emphasis is placed on oratorio rather than conversational pronunciation. Required for BME Choral and BM voice.

CONSVTY 180 Music in Special Education Credits: 3
Class demonstration and participation in the use of music materials for handicapped children.

CONSVTY 185A Foreign Language For Singing I Credits: 2
A course for English and Latin diction for oratorio performance with detailed study of the International Phonetic Alphabet. Required for BM voice.

CONSVTY 185B Foreign Language For Singing II Credits: 2
A course for Italian diction. Emphasis is placed on sung rather than conversational pronunciation. Required for BM voice.

CONSVTY 185C Foreign Language For Singing III Credits: 2
A course for German diction. Emphasis is placed on sung rather than conversational pronunciation. Required for BM voice.

CONSVTY 185D Foreign Language For Singing Iv Credits: 2
A course for French diction. Emphasis is placed on sung rather than conversational pronunciation. Required for BM voice.

CONSVTY 202 Basic Techniques of Audio Recording I Credits: 3
A study of the philosophy, history, and development of audio recording. Practical application of recording techniques and development of recording skills.

CONSVTY 203 Basic Techniques of Audio Recording II Credits: 3
Continuation of study of recording techniques and development of recording skills.
Prerequisites: CONSVTY 202.

CONSVTY 204 Jazz Improvisation II Credits: 2
Prerequisites: CONSVTY 104.

CONSVTY 205 Applied Jazz Studies Credits: 2
Unlimited repeatability. This weekly private lesson includes the study of advanced concepts used to compose spontaneously. Includes the analyses of harmonic progressions, applications of scales and rhythmic interpretation. Only open to Jazz majors.

CONSVTY 210A Clinical Experience: I Credit: 1
Clinical Experience I.
Co-requisites: CONSVTY 260.

CONSVTY 210B Clinical Experience: II Credit: 1
Primarily assists the site coordinator with some leadership responsibilities.

CONSVTY 210C Clinical Experience: III Credit: 1
Equal assisting and leading responsibilities on-site

CONSVTY 210D Clinical Experience: Iv Credit: 1
Some assisting and primarily leading responsibilities on-site.

CONSVTY 210E Clinical Experience: V Credit: 1
Clinical Experience V.
Co-requisites: CONSVTY 408.

CONSVTY 210F Clinical Experience VI Credit: 1
Clinical Experience VI.
Co-requisites: CONSVTY 409.

CONSVTY 214 Keyboard Skills III for Piano Majors Credit: 1
Techniques of sight reading, transposition, improvisation and open-score reading.
Prerequisites: CONSVTY 115.

CONSVTY 215 Keyboard Skills IV for Piano Majors Credit: 1
Continuation of CONSVTY 214.
Prerequisites: CONSVTY 214.

CONSVTY 221 Music Theory III Credits: 3
Continuation of CONSVTY 122. Introduction to nineteenth century harmony.
Prerequisites: CONSVTY 122.

CONSVTY 222A Music Theory IV Credits: 3
Continuation of CONSVTY 221. An introduction to 20th century analysis and techniques, focusing on popular music and jazz styles. Study in performing, compositional skills, and related ear-training.
Prerequisites: CONSVTY 221.

CONSVTY 223 Keyboard Skills III Credit: 1
Group instruction focused on developing intermediate keyboard skills in sight-reading, transposition, harmonization, accompanying, improvisation, technique, and repertoire. Music theory concepts will be reinforced through keyboard applications.
Prerequisites: CONSVTY 123.

CONSVTY 229A Ear Training and Solfege Credit: 1
Continuation of CONSVTY 129B.
Prerequisites: CONSVTY 129B.

CONSVTY 229B Ear Training and Solfege Credit: 1
Continuation of CONSVTY 229A.
Prerequisites: CONSVTY 229A.

CONSVTY 233 Intermediate Composition I Credits: 3
Continuation of CONSVTY 134. A weekly one-hour lab is required.
Prerequisites: CONSVTY 122, CONSVTY 134.

CONSVTY 233A Beginning Composition for Non-Composition Majors I Credits: 2
Continuation of CONSVTY 134A. A weekly on-hour lab is required.
Prerequisites: CONSVTY 122, CONSVTY 134A.

CONSVTY 234 Intermediate Composition II Credits: 3
Continuation of CONSVTY 233.
Prerequisites: CONSVTY 221, CONSVTY 233.

CONSVTY 234A Beginning Compostion for Non-Composition MajorsII Credits: 2
Continuation of CONSVTY 233A. A weekly one-hour lab is required.
Prerequisites: CONSVTY 221, CONSVTY 233A.

CONSVTY 235 Techniques of Electronic Music I: Digital Audio Credits: 3
This course is designed to give students a thorough grasp of studio hardware and software used in composing music with digital audio. Studio configuration, sampling/recording, mixing, effects processing, synthesis, multi-tracking, wave editor and digital audio work station software, basic MIDI and electroacoustic literature and ear training will be discussed in the process of creating a short original composition. Focus will also be on fostering independent creativity and problem solving in a music studio. In addition to three 50-minute lecture/demo sessions per week, 3-5 hours minimum of in-studio work time is expected. Open to anyone regardless of musical training.

CONSVTY 236 Techniques of Electronic Music II: MIDI Credits: 3
This course is designed to give students a grasp of studio hardware and software used in composing music with MIDI. Studio configuration, sampling, mixing, effects processing, multi-tracking, MIDI, and basic digital audio work station software will be taught along with electroacoustic literature and ear training. The course focuses on creating a short composition using MIDI technology. Focus will also be on fostering independent creativity and problem solving in a music studio. In addition to three 50-minute lecture/demo sessions per week, 3-5 hours minimum of in-studio time is expected. Open to anyone regardless of musical training.

CONSVTY 237 American Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of the United States. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 200, HISTORY 200, PHILOS 231.

CONSVTY 238 Woodwind Techniques and Pedagogy Credit: 1
This course will discuss the fundamentals of playing and teaching woodwind instruments in an authentic setting. In order to achieve this, students are required to develop some performance ability as ewll as teaching techniques and strategies fo reach particular woodwind instrument. Basic principles, such as embouchure formation and development, fingerings, transposition, intonation, teaching materials, and teaching techniques will be covered. Flute, Clarinet, Saxophone, Oboe and Bassoon will be discussed during this course.

CONSVTY 239 Brass Techniques and Pedagogy Credit: 1
This course will discuss the fundamentals of playing and teaching brass instruments in and authentic setting. In order to achieve this, students are required to develop some performance ability as well as teaching techniques and strategies for each particular brass instrument. Basic principles, such as embouchure formation and development, fingerings, transposition, intonation, teaching materials, and teaching techniques, will be covered. Trumpet, French Horn, Trombone, Baritone, and Tuba will be discussed during the course.

CONSVTY 241 Musicianship III Credits: 4
The core curriculum in Musicianship uses an integrated approach of written theory, aural skills, and singing to foster competency in the essential skills and ideas necessary to attain fluency in Western music fundamentals.
Prerequisites: CONSVTY 142.

Co-requisites: CONSVTY 223.

CONSVTY 242 Musicianship IV Credits: 4
The core curriculum in Musicianship uses an integrated approach of written theory, aural skills, and singing to foster competency in the essential skills and ideas necessary to attain fluency in Western music. It is taught as a hybrid lecture/lab course, and requires basic knowledge of music fundamentals.
Prerequisites: CONSVTY 241.

Co-requisites: CONSVTY 310.

CONSVTY 258 European Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 240, FRENCH 295, GERMAN 295, HISTORY 240, PHILOS 212, SPANISH 295.

CONSVTY 259 World Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of one or more regions of the world as well as dynamics of interaction between them. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 260, FRENCH 285, HISTORY 260, PHILOS 232, SPANISH 285.

CONSVTY 260 Clinical Foundations of Music Therapy Credits: 3
This course is intended to prepare students majoring in music therapy for clinical experiences in the community. Students learn and develop skills related to the treatment process.
Co-requisites: CONSVTY 210A.

CONSVTY 270 Marching Band & Jazz EnsembleTechniques Credits: 2
This course is designed to prepare pre-service teachers with pedagogical and organizational techniques for marching band and jazz ensembles in the schools. The course will include developing practical rehearsal techniques for teaching body manipulation in space, designing and evaluating marching band field design and maneuvers, jazz ensemble pedagogy, jazz improvisation pedagogy, and the use of appropriate materials. A field experience component will further student interaction with an active band program that will allow continued examination and development of a philosophy on the role of marching band and jazz ensembles within the school curriculum.

CONSVTY 285 Elementary Music Methods Credits: 3
Laboratory course for classroom teachers in which principles of instructional design will be applied to music teaching. Students who have extensive music background may elect CONSVTY 385 in place of CONSVTY 285.

CONSVTY 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

CONSVTY 301B Men’s Chorus Credit: 1

CONSVTY 301C Bella Voce Credit: 1

CONSVTY 301E Opera/Musical Theatre Ensemble Credit: 1
An introduction to opera/musical theatre performance techniques for chorus. Major literature for opera choruses will also be surveyed. Members of this class will be required to perform in an Opera or Musical Comedy chorus.

CONSVTY 301G Ensemble for Composers Credit: 1
Observation, score analysis, non-performance participating during a semester’s rehearsals and performance by a participating Conservatory ensemble. Students a.) keep journals that are periodically reviewed and graded by the composition faculty, and b.) meet with composition faculty periodically to review and discuss issues raised in the ensemble settings.
Prerequisites: CONSVTY 234, Four semesters of major ensemble participation as a performer.

CONSVTY 301H Musica Nova Credit: 1

CONSVTY 302 Orchestra Credits: 2
Required of all qualified music majors and open to all interested students by audition.

CONSVTY 303B Jazz Band Credits: 2
The Jazz Ensemble comprises saxophone, trombone, trumpets and rhythm section students of the highest level in the Conservatory and performs repertoire of the highest caliber available to the medium. The curriculum is well balanced between traditional, modern, and original music and requires advanced musical and technical facility amongst its members. The class is open to all UMKC students by audition.

CONSVTY 303C Percussion Ensemble Credit: 1

CONSVTY 303E Jazz Workshop Credit: 1
Jazz Workshop

CONSVTY 303G Jazz Orchestra Credits: 2
The Jazz ensemble comprises saxophone, trombone, trumpets and rhythm section students of the highest level in the Conservatory and performs repertoire of the highest caliber available to the medium. The curriculum is well balanced between traditional, modern, and original music and requires advanced musical and technical facility amongst its members. The class is open to all UMKC students by audition.

CONSVTY 303J Large Ensemble Rhythm Section Workshop Credits: 2
This weekly private lesson includes the study of advanced concepts used to compose spontaneously. Includes the analyses of harmonic progressions, applications of scales and rhythmic interpretation.

CONSVTY 303MP Improvisational Music/Media Performance Ensemble Credits: 2
IMP Ensemble explores improvisation in the broadest definition, where listening and responding become a way of real-time creation. IMP is a think-tank of people willing to risk and fail quickly, so a show can go on, using any new individual media to explore the boundaries of the medium and improvisation. No particular instrumental skill is needed, only an open mind. Non Conservatory students by instructor approval.

CONSVTY 304 Jazz Improvisation III Credits: 2
Prerequisites: CONSVTY 204.

CONSVTY 305A Principles Of Chamber Music Credit: 1
Collaborative music-making in groups of like-instruments (piano ensembles, flute quartets, sax quartets, etc., plus beginning experiences in string quartets, woodwind and brass quintets, etc.). Weekly coaching.

CONSVTY 305B Principles Of Chamber Music Credit: 1
Collaborative music-making in groups of like-instruments (piano ensembles, flute quartets, sax quartets, etc., plus beginning experiences in string quartets, woodwind and brass quintets, etc.). Weekly coaching.

CONSVTY 305C Principles Of Chamber Music Credit: 1
Collaborative music-making in groups of like-instruments (piano ensembles, flute quartets, sax quartets, etc., plus beginning experiences in string quartets, woodwind and brass quintets, etc.). Weekly coaching.

CONSVTY 305E Principles Of Chamber Music Credit: 1
Collaborative music-making in groups of like-instruments (piano ensembles, flute quartets, sax quartets, etc., plus beginning experiences in string quartets, woodwind and brass quintets, etc.). Weekly coaching.

CONSVTY 305G Principles Of Chamber Music Credit: 1
Collaborative music-making in groups of like-instruments (piano ensembles, flute quartets, sax quartets, sax quartets, etc., plus beginning experiences in string quartets, woodwind and brass quintets, etc.). Weekly coachings.

CONSVTY 305H Chamber Orchestra Credit: 1

CONSVTY 305J Chamber Music Guitar Credit: 1

CONSVTY 306A Conservatory Wind Ensemble Credits: 2

CONSVTY 306C Wind Symphony Credits: 2
The Wind Symphony comprises wind, brass and percussion students of the highest level in the Conservatory and performs repertoire of the highest caliber available to the medium. The curriculum is well balanced between traditional, modern, and chamber music and requires advanced musical and technical facility amongst its members. The class is open to all UMKC students by audition.

CONSVTY 307A Canticum Novum Credit: 1

CONSVTY 307B University Singers Credit: 1
Mixed chorus specializing in choral-orchestral literature. May be repeated for credit. Open by audition to University students, regardless of major.

CONSVTY 307C Conservatory Singers Credit: 1

CONSVTY 308A Conservatory Concert Choir Credit: 1

CONSVTY 309 Audio Recording III Credits: 3
Continuation of study of recording techniques and music production skills.
Prerequisites: CONSVTY 203.

CONSVTY 310 Keyboard Skills IV Credit: 1
Group instruction focused on developing intermediate keyboard skills in sight-reading, transposition, harmonization, accompanying, improvisation, technique, and repertoire. Music theory concepts will be reinforced through keyboard applications. The Piano Proficiency Exam is administered as part of this course.
Prerequisites: CONSVTY 223.

CONSVTY 311 Jazz Theory Credits: 2
The basics of written jazz harmony and its nomenclature will be addressed. Topics covered will include but not be limited to jazz scales and modes: chords, i.e. from the 7 through the 13 with all of their frequent jazz alterations; harmonic progressions, reharmonization;voice leading, dissonance; melody, transcription, analysis and the study of form(s). Notation will be addressed throughout. Students will acquire the fundamentals to pursue jazz improvisation, arranging and composition on a more informed level. This class is a prerequisite to Jazz Arranging.

CONSVTY 314 Seminar in Chamber Music Credits: 2
Potential enrollees must audition. Those accepted from a pool of players from which chamber groups are drawn each semester. Groups must rehearse four hours a week, and will receive a one-hour coaching each week. All enrollees will also take part in a periodic chamber music master class. This class, two hours in length, will be taught by various members of the core chamber music faculty and by guest artists.

CONSVTY 315 Music Therapy Piano Techniques Credit: 1
Course covers techniques of leading piano stylists from early ragtime to the present. Includes listening, analysis, arranging, and performing.
Prerequisites: Piano Proficiency Exam.

CONSVTY 316 Music Therapy Guitar Techniques Credits: 2
Course covers techniques of leading guitar styles from the 1920’s to present. Includes listening, analysis, transcription, and performing.
Prerequisites: CONSVTY 373G.

CONSVTY 317 Music Therapy Ensemble Techniques Credits: 3
Techniques of music therapy group ensemble playing from a variety of popular genres from Swing to present day.
Prerequisites: CONSVTY 316, Music Therapy Student.

CONSVTY 318 Jazz Ear Training and Listening Credits: 2
This course offers the student basic fundamental techniques needed to improve aural perceptions in both the translation of hearing into writing and the performance of reading into singing and playing in the jazz idiom. Introduction and practice in singing, aural recognition and writing of intervals and short, simple melodies. Also including rhythm, memory and improvisational drills.
Prerequisites: CONSVTY 329.

CONSVTY 319 Opera Role Performance Credit: 1
Preparation, rehearsal and performance of a role in an opera or music theatre production at UMKC. Credit for performance as part of the ensemble/chorus may be received from this course after the two chorus requirements are completed as part of the choral requirements. Credit for non-performing duties such as assistant directing or assistant stage managing may be available with approval of opera/music theatre staff. Audition required.

CONSVTY 320 Music Theatre Role Performance Credit: 1
Preparation, rehearsal and performance of a role in an opera or music theatre production at UMKC. Credit for performance as part of the ensemble/chorus may be received from this course after the two chorus requirements are completed as part of the choral requirements. Credit for non-performing duties such as assistant direction or assistant stage managing may be available with approval of opera/music theatre staff. Audition required.

CONSVTY 323 Form and Analysis I Credits: 2
Application of theoretical principles of analysis to Western Art music.
Prerequisites: CONSVTY 221.

CONSVTY 325 Piano Pedagogy I Credits: 2
Instructional strategies for teaching the beginning piano student including methods, materials, repertoire, technique and the use of music technology. Various aspects of establishing and managing a piano studio will also be addressed.

CONSVTY 325A Piano Pedagogy - Supervised Teaching I Credit: 1
Supervised practicum designed to demonstrate lesson planning and activities for beginning students through the observation of experienced teachers and various supervised teaching experiences.
Co-requisites: CONSVTY 325.

CONSVTY 326 Piano Pedagogy II Credits: 2
Instructional strategies for teaching the intermediate and advanced piano student, including methods, materials, repertoire, technique, and the use of music technology.
Prerequisites: CONSVTY 325.

CONSVTY 326A Piano Pedagogy - Supervised Teaching II Credit: 1
Supervised practicum designed to demonstrate lesson planning and activities for students of various levels through observation of experienced teachers and various supervised teaching experiences.
Prerequisites: CONSVTY 325A.

Co-requisites: CONSVTY 326.

CONSVTY 329 Advanced Ear Training Credits: 2
Study of atonal and highly chromatic tonal aural problems, complex rhythms, and recognition of instruments. May be repeated for credit.
Prerequisites: CONSVTY 242.

CONSVTY 331 Orchestration I Credits: 2
An introduction to the instruments of the symphony orchestra and rudiments of scoring. Classification of instruments and learning to write for all transposing instruments.
Prerequisites: CONSVTY 242.

CONSVTY 331A Orchestration I Credits: 3
An introduction to the instruments of the symphony orchestra and rudiments of scoring. Meets concurrently with CONSVTY 331; the third credit hour is required for music composition and music theory majors.
Prerequisites: CONSVTY 242.

CONSVTY 333 Advanced Composition Credits: 3
May be repeated for credit.
Prerequisites: CONSVTY 222A, CONSVTY 234.

CONSVTY 335 Electronic Music Composition Credits: 3
This course focuses on creating an original music composition in any style utilizing the full range of digital audio or MIDI hardware, software ad techniques available to the student. In addition to weekly meetings arranged with the instructor, 5-8 hours per week of studio time is required. May be repeated for credit.
Prerequisites: CONSVTY 235 (or CONSVTY 236).

CONSVTY 341 Principles of Music Business Credits: 3
This Music Business course is in an online format and will provide an overview of the many different careers and business practices in the music industry. The course content will highlight the variables considered when creating, selling and marketing a variety of items in different mediums.

CONSVTY 342 This is Your Brain on Music Credits: 3
This is an introductory course on the connections among music, the brain, and learning. The course provides a basic understanding of the relationship between the brain, music, and human behavior in the physiological, motor, social, emotional, and cognitive domains.

CONSVTY 351 History of Music in Western Civilization I Credits: 3
A chronological study of music in Western civilization with emphasis on periods and styles from early times to the death of Bach. Outside listening required.
Prerequisites: CONSVTY 150.

CONSVTY 351WI History of Music in Western Civilization I - Writing Intensive Credits: 3
George Santayana once reasoned that if you cannot remember the past, you are condemned to repeat it. If that is the case, then as music students you all must ask how the music of the past can inform and change the music you make and make you better musicians. This class examines selected works from Western musical history and explores the biographical, stylistic, and aesthetic issues they raise. It seeks to home your analytical skills through knowledge of stylistic features while introducing you to musical debates that still rage today.
Prerequisites: CONSVTY 150, ENGLISH 110, ENGLISH 225, RooWriter.

CONSVTY 352 History of Music in Western Civilization II Credits: 3
A chronological study of music in Western civilization from 1750 to the present. Outside listening required.
Prerequisites: CONSVTY 351.

CONSVTY 352WI History of Music in Western Civilization II-Writing Intensive Credits: 3
A chronological study of music in Western Civilization from 1750 to the present. Outside listening and writing projects required.
Prerequisites: CONSVTY 150, RooWriter.

CONSVTY 353A History And Development Of Jazz I Credits: 3
History of Jazz from its beginning through the present, using recordings, films and musical examples. Emphasis on the major historical trends in Jazz, including Early Jazz, Ragtime, Dixieland, Swing, Bebob, Cool Jazz, Hard Bop, Free Jazz, Jazz-Rock Fusion and modern developments. This course makes use of the Marr Sound Archive, and is appropriate for all students throughout the UMKC Campus.

CONSVTY 353WI History and Development of Jazz II (WI) Credits: 3
This course aims to contextualize jazz within the musical culture of the twentieth century. It is designed to develop the students understanding of jazz from a writing and research perspective. This course concentrates on the lives, bands, and works of people who have been instrumental in the development of the various jazz styles. In-depth analysis of major jazz figures including Louis Armstrong. Duke Ellington, Count Basie. Charlie Parker. Dizzy Gillespie. Thelonious Monk, Clifford Brown, Sonny Rollins, John Coltrane, Miles Davis, Wayne Shorter, and many others. This course is most appropriate for Jazz Studies majors, and other conservatory students with some jazz background and knowledge of the fundamentals of music. This course makes use of the Marr sound Archive.
Prerequisites: CONSVTY 353A, RooWriter.

CONSVTY 357 Choral Literature Credits: 2
Includes listening and analysis as they relate to programming and educational issues in choral ensemble setting. May be repeated for credit.
Prerequisites: CONSVTY 380.

CONSVTY 358 Wind Band Literature and Lab Credits: 3
Designed for the student working with beginning and intermediate levels of wind/percussion instruments. Includes critical analysis and evaluation of literature selection as it relates to educational issues and programming in wind/percussion ensemble settings. Includes an off-campus course meeting with a community wind band rehearsal/performance setting providing opportunities realistic opportunities for observation and teaching.
Co-requisites: CONSVTY 381.

CONSVTY 359 String Literature Credits: 2
Includes listening and analysis as they relate to programming and educational issues in string ensemble settings. May be repeated for credit.
Prerequisites: CONSVTY 381.

CONSVTY 361 Piano Literature I Credits: 3
A survey of study through analysis, reading, listening and performance of literature for stringed keyboard instruments from the Renaissance period to 1850. Special attention given to the development of instruments, forms, techniques, performance practices and idiomatic styles.

CONSVTY 362 Piano Literature II Credits: 3
A study through analysis, reading, listening, and performance of piano repertoire from 1850-present day. Special attention given to the development of instruments, forms, techniques, performance practices and idiomatic styles.

CONSVTY 363 Music Therapy in Wellness and Intergenerational Settings Credits: 3
This course provides students with foundational information pertaining to the music therapy profession. course topics include the history of music therapy, populations that music therapists serve and an introduction to the use of music in therapeutic settings.
Prerequisites: Music Therapy Student.

CONSVTY 365 The Artist in Society Credits: 3
This interdisciplinary anchor III course explores the various roles of artists in society. Using historical examples and building on current best practices, students will engage critically with the interplay between artistic pursuits, social justice, and community engagement.
Prerequisites: Anchor II, DISC 200.

CONSVTY 366 Clinical Foundations II Credits: 3
This course focuses on the following aspects of the music therapy treatment process: data collection, documentation and evaluation of music therapy services.
Prerequisites: CONSVTY 210A and CONSVTY 260, Music Therapy Student.

Co-requisites: CONSVTY 210B.

CONSVTY 367 Music Therapy Capstone Credit: 1
This seminar course assists students in creating a research or clinical-based capstone project.
Prerequisites: CONSVTY 435, Music Therapy Student.

CONSVTY 368 Orchestral Literature for Trumpet Credit: 1
Intended to introduce students to the standard repertoire for orchestral trumpet;class meets once weekly for an hour. Students will be expected to prepare and play approximately a dozen works per semester,rotating parts in a full trumpet section.

CONSVTY 370 Choral/Vocal Techniques Credits: 2
Laboratory applications of vocal pedagogy, ensemble rehearsal technique, literature selection, and performance practice. Students will participate in singing and observation activities in a large ensemble setting with an emphasis on critical analysis of technical and pedagogical issues.
Prerequisites: CONSVTY 380.

CONSVTY 373C Instrumental Techniques Flute And Clarinet Credit: 1

CONSVTY 373D Instrumental Techniques Trumpet-Horn Credit: 1

CONSVTY 373E Instrumental Techniques Percussion Credit: 1

CONSVTY 373F Instrumental Techniques Oboe-Bassoon Credit: 1

CONSVTY 373G Instrumental Techniques Guitar Credit: 1

CONSVTY 373H Instrumental Techniques Trombone-Tuba Credit: 1

CONSVTY 373N Survey Of Wind And Percussion Instruments Credit: 1
An overview of basic wind and percussion instruments used in public school settings. Includes embouchre formation, hand position, sound production, and pedagogical issues encountered in beginning situations.

CONSVTY 373P Survey Of String Instruments Credit: 1
An overview of basic string instruments used in public school settings. Includes hand position, bowing, sound production, and pedagogical issues encountered in beginning situations.

CONSVTY 373R Strings Techniques Lab (for BME String Majors) Credit: 1
Designed for the student working with beginning and intermediate level string instrumentalists. The course will focus on the pedagogy of teaching strings in a lab setting. Includes critical analysis and evaluation of literature selection as it relates to educational issues string ensemble settings. This course is a lab setting. Students will be playing daily on secondary instruments,

CONSVTY 375B Special Percussion Methods for Dance Students Credit: 1
A class of percussion techniques which stresses hand drumming skills and advanced rhythmic counting and analysis.

CONSVTY 376 Collaborative Piano I Credits: 2
Study of collaborative techniques and vocal literature.

CONSVTY 377 Collaborative Piano II Credits: 2
Continuation of CONSVTY 376.
Prerequisites: CONSVTY 376.

CONSVTY 378 Instrumental Ensemble Rehearsal Techniques & Lab Credits: 2
Laboratory applications of large instrumental ensemble (strings, winds, percussion) pedagogy, ensemble rehearsal technique, and performance practice. Students will participate in playing, observation, rehearsal activities in a large ensemble setting with an emphasis on critical analysis of technical pedagogical issues and ensemble performance preparation. Includes an off-campus course meeting.
Prerequisites: CONSVTY 358, CONSVTY 381 and large ensemble requirement.

Co-requisites: CONSVTY 383.

CONSVTY 378L Instrumental Ensemble Rehearsal Lab Credit: 1
Laboratory applications of wind/percussion pedagogy, ensemble rehearsal technique, literature selection, and performance practice. Students will participate in playing, observation, and rehearsal activities in a large ensemble setting with an emphasis on critical analysis of technical pedagogical issues and ensemble performance preparation. This course may meet off-campus.
Prerequisites: CONSVTY 358, CONSVTY 381, large ensemble requirement.

Co-requisites: CONSVTY 378, CONSVTY 383.

CONSVTY 380 Basic Conducting - Choral Credits: 2
A study of the basic techniques of all rhythms, patterns, subdivision of beats, dynamics, starting, stopping, and giving cues through conducting in class. Elementary study of the score as to form and harmonic content will be discussed.
Prerequisites: CONSVTY 242.

CONSVTY 381 Basic Conducting - Instrumental Credits: 2
A study of the basic techniques of all rhythms, patterns, subdivision of beats, dynamics, starting, stopping, and giving cues through conducting in class. Elementary study of the score as to form and harmonic intent will be discussed.
Prerequisites: CONSVTY 242.

CONSVTY 382 Choral Conducting Credits: 2
A study of choral techniques including voice tryouts, placement, attack, release, blend, vocal development, diction, and rehearsal techniques through actual experience of conducting in class.
Prerequisites: CONSVTY 380.

Co-requisites: CONSVTY 387.

CONSVTY 383 Instrumental Conducting Credits: 2
A study of instrumental conducting techniques through actual conducting situations in instrumental groups. Primary objective will be the study of instrumental rehearsal techniques.
Prerequisites: CONSVTY 381.

Co-requisites: CONSVTY 386.

CONSVTY 385 Elementary Music Methods Credits: 3
Basic principles of curriculum planning for music education, investigation of current methods and approaches, and practical teaching experience in laboratory setting. For music majors and non-majors who have extensive musical backgrounds.
Prerequisites: CONSVTY 242, CONSVTY 411C.

Co-requisites: CONSVTY 411C.

CONSVTY 386 Secondary Music Methods - Instrumental Credits: 2
The organization, scheduling and feeder-system techniques of beginning band and orchestral programs through high-school level instruction. Areas of study will include curriculum, pedagogical techniques, library facilities, bidding procedures, basic instrument techniques.
Co-requisites: CONSVTY 383, CONSVTY 411B.

CONSVTY 387 Secondary Music Methods - Choral Credits: 2
The organization of junior and senior high school choral classes to include methods, materials and program building.
Co-requisites: CONSVTY 382, CONSVTY 411B.

CONSVTY 391 Basic Piano Technology Credits: 3
Introduces the art of tuning by ear, including the discussion of historical temperaments that preceded equal temperament: explores the action mechanism and its influence on the production of musical tone.
Prerequisites: CONSVTY 122.

CONSVTY 404 Jazz Improvisation IV Credits: 2
This class is a continuation of Jazz Improvisation III. This course features in-depth analyses of the blues and free improvisation foucusing on rhythm changes and bi-tonal/polytonal chords. Course includes an in-depth analysis of styles from Dixieland to contemporary jazz. A strong emphasis is places on solo construction and development of individual styles.
Prerequisites: CONSVTY 304.

CONSVTY 405 Introductory Foundations in the Arts Credits: 3
The course will concentrate on the development of a philosophical, historical and social model to assist in understanding the complexities, strengths and problems of the arts in the context of present day education.

CONSVTY 406 Influence of Music on Behavior Credits: 3
Explores the physiological, psychological and social influences of music on behavior. Although for music therapy practice it may also be of interest to other music majors and/or allied health professionals.
Prerequisites: CONSVTY 202 (music majors), CONSVTY 128 (music therapy majors), CONSVTY 130 (music therapy majors),CONSVTY 180 (music therapy majors).

CONSVTY 407 Audio Intern Program Credits: 1-3
Practical recording experience interning with Conservatory recording and music production labs with one lecture weekly.

CONSVTY 408 Music in Therapy:Adults Credits: 3
Lecture and clinical demonstration of theory and practice of music therapy with adult clients.
Co-requisites: CONSVTY 210E.

CONSVTY 409 Music in Therapy: Children Credits: 3
Lecture and clinical demonstrations of theory and practice of music therapy with children.
Co-requisites: CONSVTY 210F.

CONSVTY 410 Internship Credits: 1-4
1040 hours of supervised clinical experience at a site approved by the American Music Therapy Association, to be taken after all other course work for the music therapy degree is completed.

CONSVTY 411A Field Experience in Music Credit: 1
To introduce music students to a critical examination of the complex nature of teaching, learning, children, and the music classroom/ensemble setting. Students will be expected to spend 30 hours observing, participating, planning and teaching in an assigned music classroom environment during the semester.
Co-requisites: CONSVTY 405.

CONSVTY 411B Field Experience in Music Credit: 1
To introduce music students to secondary school settings and further develop obserevation, planning and teaching skills. Students will be expected to spend 30 hours in a middle/ junior high school music classroom and 30 hours in a high school music classroom for a total of 60 hours during the semester.
Prerequisites: CONSVTY 411A.

Co-requisites: CONSVTY 386 (or CONSVTY 387).

CONSVTY 411C Field Experience in Music Credit: 1
To introduce music students to elementary school music settings and continue to refine observation, planning and teaching skills in secondary school music settings. Students will be expected to spend 30 hours in an elementary school music classroom and 30 hours in either a middle school/junior high or high school music classroom.
Prerequisites: CONSVTY 411B.

Co-requisites: CONSVTY 385.

CONSVTY 412A Student Teaching Music in Elementary School Credits: 4-12
Observation, planning and teaching in an elementary music classroom setting. Students will be expected to spend a minimum of seven weeks teaching full-time under supervision.
Prerequisites: CONSVTY 411C.

CONSVTY 412B Student Teaching Music in Secondary School Credits: 4-12
Observation, planning and teaching in a middle school/junior high or high school music classroom setting. Students will be expected to spend a minimum of seven weeks teaching full-time under supervision.
Prerequisites: CONSVTY 411C.

CONSVTY 417 Opera Workshop Credit: 1
Introduction to opera and opera performance techniques. Class will include performance of opera scenes.

CONSVTY 417A Singing/Acting Training for Music Theatre Credits: 2
Specific training especially tailored for incoming undergraduate BA in Music/Theatre Concentration students and others interested in Introductory acting and singing/acting techniques. Recommended for Freshman or Sophomore performance track students. An audition may be required.

CONSVTY 417B Singing/Acting Training for Opera Credits: 2
Specific training especially tailored for undergraduate Vocal Performance majors and others interested in introduction Singing/Acting techniques for opera. An audition may be required.
Prerequisites: Sophomore standing.

CONSVTY 417C Community Engagement Opera Credits: 2
Preparation, rehearsal and performance of an outreach opera. Offerings range from a work specifically for children, a cut-down version of a full-length opera, and occasional full-length operas in areas of repertoire not featured in the main-stage opera season. Performed off campus in conjunction with the student opera-lovers organization, Bravi. Audition required.

CONSVTY 417D Music Theatre Review/Scenes Credits: 2
Preparation, rehearsal and performance of an existing or original review and/or scene work. Productions will vary from year to year. Existing works maybe performed if and only if the music theatre budget allows for proper licensing, rights and rentals. Performances of final production projects may occur off campus.
Prerequisites: CONSVTY 417A.

CONSVTY 417E Scene Study Credits: 2
Preparation, rehearsal and performance of scenes from opera, operetta and music theatre. Scenes will be determined and assigned based on student's needs and development. One-act operas may also occasionally be produced in this class.

CONSVTY 417F Advanced Opera Workshop Credits: 2
Singer/Actor techniques, dramatic preparation of arias, audition techniques, recitative and role study.
Prerequisites: CONSVTY 417B.

CONSVTY 421A Music Theory Review For Graduate Students Credits: 1-3
An intensive review with emphasis placed on analysis.

CONSVTY 421B Ear Training And Solfege For Graduate Students Credits: 1-3
An intensive review of ear training and sight singing.

CONSVTY 422A Music History Review (early) Credits: 1-3
Graduate-level review of music in Western civilization from antiquity to 1750. Outside listening is required.

CONSVTY 422B Music History Review (Late) Credits: 1-3
Graduate-level review of music in Western civilization from 1750 to the present. Outside listening is required.

CONSVTY 422C Music History Review Credits: 1-3
Graduate-level review of music in Western civilization from antiquity to the present. Outside listening is required.

CONSVTY 423 Business Jazz And Commercial Music Credits: 3
An introduction to the various elements of the music industry, including production, marketing, unions, contracts, broadcasting, licensing agreements and copyrights.

CONSVTY 424 Acoustics Credits: 3
Study of the propagation of sound, the psychology and physiology of hearing, the acoustics of instruments, and of rooms, and tuning systems. Available for graduate credit.

CONSVTY 425A Arranging for Choral Groups Credits: 2
Practice in transcribing vocal music of the current pop idiom. Analysis and writing in contemporary harmonic idioms. Stylistic analysis of solo and choral writing in operettas and musical plays. Scoring for mixed voices, men's voices, and women's voices.
Prerequisites: CONSVTY 242.

CONSVTY 425B Arranging Instrumental Credits: 2
Arranging Instrumental.
Prerequisites: CONSVTY 242.

CONSVTY 426B Jazz Arranging for Small Ensembles Credits: 2
This course will teach the art of Calligraphy as well as the techniques of arranging and orchestration for small jazz ensembles for up to five horns. The course will also include an in-dept study of basic voicings, instrumental sonorities, and some extended forms using intensive listening and score study. UMKC combos, or top Kansas City professionals, will perform final assignments.
Prerequisites: CONSVTY 242.

CONSVTY 426D Jazz Arranging for Big Bands Credits: 2
This course is a continuation of Jazz Arranging for small ensembles. It will cover the basics of arranging and orchestration techniques for big bands. It includes an in-depth study of basic voicing and instrumental sonorities using intensive listening and score study. The students will have a chance to hear their final arrangements performed at the end of the semester by the Concert Jazz Band.
Prerequisites: CONSVTY 426B.

CONSVTY 427 18th Century Counterpoint I Credits: 2
Analysis and writing in 18th century style and forms including canon, invention and fugue.
Prerequisites: CONSVTY 242.

CONSVTY 428 Contemporary Harmonic/Contrapuntal Style Credits: 3
Analysis and writing in contemporary styles.
Prerequisites: CONSVTY 242.

CONSVTY 431 Orchestration II Credits: 2
A detailed study of the scores of major orchestral and wind ensemble works, plus the application of orchestrational concepts in the creation or orchestration of an original piece of music.
Prerequisites: CONSVTY 331A.

CONSVTY 433 Composition Recital Credits: 3
Preparation and performance of the student's original compositions at one or more concerts sponsored by UMKC Conservatory of Music, with a total of 50 to 60 minutes performance time.
Prerequisites: CONSVTY 333.

CONSVTY 434CC The Practice and Study of Creativity Credits: 3
A team-taught, multidisciplinary cluster course for undergraduate students that fosters awareness of the nature and power of students' creativity. Approximately one third of the class covers current literature on the creative process in general and in the arts. The remainder of the class utilizes the arts as a catalyst for students to design and implement creative group and individual projects that foster communication, remove barriers to creativity and combine creativity with discipline toward a common result. There are neither prerequisites nor expectations of arts-related abilities. The ideal class consists of 4-6 students from each of 3 areas - Arts;Science/Social Science/Business/Law; and Humanities/Education/General Studies.

CONSVTY 435 Psychological Foundations of Music Credits: 3
The study of the psychological aspects of music including perception, cognition, affect, and preference. An introduction measurement and experimental research including statistical techniques.
Prerequisites: CONSVTY 260.

CONSVTY 437 Computer Literacy for Musicians Credits: 3
Computing skills for the music teacher. Study of the computer as a tool for music majors who will teach in public school music classes, direct ensembles, or teach at the college or university level. Hands-on practice with file creation and editing, graphics and character set generation, data analysis, preparation of computer based instruction, and data retrieval. For upper level undergraduate and graduate students.
Prerequisites: CONSVTY 110.

CONSVTY 438 Creative Collaboration: Ideas and Strategies Credits: 3
Creative Collaboration: Ideas and Strategies investigates the history of collaboration in the arts since the turn of the 20th century. While case studies are drawn from the arts, students from any discipline and field will explore creative collaboration together. The goal of the class is to create a large-scale work in multidiscipline groups. Groups will vary depending on enrollments, but thinking outside the box and full participation regardless of individual discipline is required. course is open to students in any field and discipline.

CONSVTY 441 Jazz Keyboard Techniques II Credits: 2
Jazz Keyboard Techniques II

CONSVTY 449 Introduction to Arts Administration Credits: 2
This course is designed to be an overview of topics of importance to arts organizations including organizational culture,leadership,marketing,media relations,fundraising, facilities management,and audience building. Students will review current literature in this area and develop a project related to their particular area of interest.

CONSVTY 449A Arts Administration Practicum Credit: 1
This course is designed to give practical experience for students in the Introduction to Arts Administration class. The student will receive a placement with an arts organization to be determined by the instructor.

CONSVTY 450 Music and Film Credits: 3
Designed for the general university student, this course will survey the use of music in cinema. It will include sections on music, technology, the film medium and the various ways in which music adds to the cinematic experience. Music majors may enroll for elective credit.

CONSVTY 457 Vocal Literature I Credits: 2
Literature for the solo voice. A course covering the literature from 1600 to present times, illustrated by recordings and members of the class and the instructor. Required for B.M. voice majors.

CONSVTY 458 Vocal Literature II Credits: 2
A continuation of CONSVTY 457.

CONSVTY 460 Organ Literature I Credits: 2
A survey of organ music from the 15th century through 1750.

CONSVTY 461 Piano Literature III (Romantic) Credits: 2
A survey through analysis, reading, listening, and performance of piano repertoire from the Romantic Period to the early 20th Century. .

CONSVTY 462 Piano Literature IV (Post-Romantic) Credits: 2
A survey through analysis, reading, listening, and performance of piano repertoire from the early 20th Century to the present day.

CONSVTY 464A Wind And Percussion Literature Percussion Credits: 2
A study of solo and ensemble literature for percussion.

CONSVTY 469 Organ Literature II Credits: 2
A survey of organ music from 1750 to the present.

CONSVTY 470A Introduction to Pedagogy and Literature Woodwinds Credits: 3
A study of teaching techniques and materials and of solo and ensemble literature.
Prerequisites: Senior status.

CONSVTY 470B Introduction to Pedagogy and Literature Brass Credits: 3
A study of teaching techniques and materials and of solo and ensemble literature.
Prerequisites: Senior status.

CONSVTY 470D Introduction to String Literature and Pedagogy Credits: 3
A study of teaching techniques and materials and solo and ensemble literature.
Prerequisites: Senior status.

CONSVTY 471 Jazz/Commercial Music Pedagogy Credits: 2
This course is designed to develop skills in the teaching of jazz and commercial music. Students will be exposed to a variety of materials, techniques and philosophies and trained in various techniques of rehearsing and conducting jazz ensembles, including the study of scores and recordings of different styles and rehearsal of the Conservatory's jazz ensembles. Includes an emphasis on structuring jazz and studio music curriculum at the College level.
Prerequisites: CONSVTY 381.

CONSVTY 476 Collaborative Piano III Credit: 1
Study of collaborative techniques and instrumental literature.
Prerequisites: CONSVTY 377.

CONSVTY 477 Collaborative Piano IV Credit: 1
Continuation of CONSVTY 476.
Prerequisites: CONSVTY 476.

CONSVTY 483 Advanced Instrumental Conducting Credits: 2
A review of techniques and musical styles of literature for all levels and all media through conducting in class.

CONSVTY 490 Independent Study Credits: 1-3
Intensive reading, research projects, creative work, or special performance in the student's major field, selected by the student in consultation with the appropriate faculty.

CONSVTY 491B Pedagogical Practices I Voice Credits: 2

CONSVTY 491C Pedagogical Practices I Organ Credits: 2

CONSVTY 491D Pedagogical Practices I Strings Credits: 2

CONSVTY 491K Pedagogical Practices I Theory Credits: 3

CONSVTY 491M Pedagogical Practices I General Credits: 3
The course will address a variety of aspects of the human relationships in music teaching/learning settings. Topics will include teacher/student relationships, large group dynamics (ensemble), one-on-one interaction (studio), time management, performance anxiety, productive practice, and the observation and assessment of musical behavior. A field observation component is included.

CONSVTY 492B Pedagogical Practices II Voice Credits: 2
A laboratory experience that includes teaching applied voice in preparation for an end of semester concert experience. The course content includes introduction to skill sets required for teaching applied voice and applied voice studio budget and organization.
Prerequisites: CONSVTY 491B.

CONSVTY 492D Pedagogical Practices II Strings Credit: 1

CONSVTY 494 Performance Styles Credits: 2
A practical approach to the music of the Medieval, Renaissance, Baroque, Early Classical and Contemporary eras through performance. May be repeated for credit. Audition required.
Prerequisites: CONSVTY 122.

CONSVTY 497 Seminar-Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497AI Seminar-Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497AM American Music Company Choral Reading Sessions Credits: 1-4

CONSVTY 497AR Seminar-Workshop In Music Credits: 1-4

CONSVTY 497BR Seminar-Workshop In Music Credits: 1-4

CONSVTY 497CE Seminar-Workshop In Music Credits: 1-4

CONSVTY 497CP Seminar - Workshop in Music Credits: 1-4

CONSVTY 497CR Seminar - Workshop in Music Credits: 1-4

CONSVTY 497ECM Seminar-Workshop In Music Credits: 1-4

CONSVTY 497EFT Seminar-Workshop In Music Credits: 1-4

CONSVTY 497EP Seminar-Workshop In Music Credits: 1-4

CONSVTY 497FF Seminar-Workshop In Music Credits: 1-4

CONSVTY 497GA Seminar-Workshop In Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497GC Seminar-Workshop In Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497GM Seminar - Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497HB Seminar Workshop in Music Credits: 1-4

CONSVTY 497HT Seminar Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497IN Seminar-Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497JB Seminar-Workshop In Music: Music History Review (Late) Credits: 1-4

CONSVTY 497JI Seminar-Workshop In Music Credits: 1-4

CONSVTY 497JIM Seminar-Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497JK Seminar-Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497JKI Seminar-Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497JP Seminar Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497JPP Seminar-Workshop In Music Credits: 1-4
Seminar-Workshop In Music

CONSVTY 497JZA Seminar-Workshop In Music Credits: 1-4

CONSVTY 497JZE Seminar-Workshop In Music Credits: 1-4

CONSVTY 497JZS Seminar-Workshop In Music Credits: 1-4

CONSVTY 497MTS Seminar Workshop in Music Credits: 1-4

CONSVTY 497MU Seminar Workshop in Music Credits: 1-4

CONSVTY 497NG Seminar-Workshop in Music Credits: 1-4

CONSVTY 497OB Seminar-Workshop in Music Credits: 1-4

CONSVTY 497OL Seminar-Workshop in Music Credits: 1-4

CONSVTY 497OU Seminar-Workshop In Music Credits: 1-4

CONSVTY 497PC Seminar-Workshop In Music Credits: 1-4

CONSVTY 497PH Seminar Workshop In Music Credits: 1-4

CONSVTY 497PL Seminar Workshop In Music Credits: 1-4

CONSVTY 497PO Seminar Workshop In Music Credits: 1-4

CONSVTY 497PP Seminar Workshop In Music Credits: 1-4

CONSVTY 497RE Seminar-Workshop In Music Credits: 1-4

CONSVTY 497RT Seminar/Workshop In Music Credits: 1-3

CONSVTY 497RX Seminar - Workshop in Music Credits: 1-4

CONSVTY 497SA Seminar-Workshop In Music Credits: 1-4

CONSVTY 497SI Seminar-Workshop In Music Credits: 1-4

CONSVTY 497ST Seminar Workshop in Music Credits: 1-4
Special courses in techniques, theory, and repertoire taught by the Conservatory staff and visiting specialists.

CONSVTY 497SU Seminar-Workshop In Music Credits: 1-4

CONSVTY 497SV Seminar-Workshop In Music Credits: 1-4

CONSVTY 497TE Orff Schulwerk Level I & II Credits: 1-4

CONSVTY 497WE Seminar-Workshop In Music Credits: 1-4

CONSVTY 497WLR Seminar Workshop in Music Credits: 1-4

CONSVTY 497XCC Seminar Workshop in Music Credits: 1-4

CONSVTY 498 Research Problems Credits: 2
Individual study under the direction of a faculty adviser, leading to the writing of a formal paper. A public, non-graded presentation of the paper with performance examples is required.

Counseling Psychology and Counselor Education (CPCE)

Courses

CPCE 220 Self in a Multicultural Society Credits: 3
This course will focus on what it means for the individual to live in a multicultural, urban, and increasingly global society. Students ill examine their own cultural identity, including values and worldviews as well as assumptions and biases regarding others' diversity. In addition, the course will focus on learning about different cultures and issues associated urbanism, globalization, cultural conflicts and social advocacy.

CPCE 230 Effective Interpersonal Communication Credits: 3
Theory, and research on interpersonal relationships; students will learn effective communication skills, including understanding verbal and nonverbal behavior, listening, and empathy.

CPCE 400 Intro to Counseling Psychology Credits: 3
This course will provide an overview of the profession of counseling psychology. Presentations and assignments with the origins and history of counseling psychology, research and intervention strategies used by counseling psychologists, and current trends in the field. It is important to note that although counseling strategies will be reviewed, this course will not focus on developing or practicing counseling skills.
Prerequisites: 6 hours in psychology, including PSYCH 210, or be advanced students in Education.

CPCE 420 Effective Interpersonal Communication Credits: 3
Theory and research on interpersonal relationships; students will learn effective communication skills, including understanding verbal and nonverbal behavior, listening, and empathy.

CPCE 425 Positive Psychology Credits: 3
Introduction to current theory and empirical research in positive psychology. Topics explored include happiness, self-esteem, empathy, friendship, optimism, love, achievement, strengths, mindfulness, spirituality, and hope.

Criminal Justice and Criminology (CJC)

Courses

CJC 101 Introduction To Criminal Justice Credits: 3
This introductory overview course is designed to familiarize students with the three main components of the adult criminal justice system: police, courts, and corrections. The course will investigate the viewpoints of offenders, victims, social scientists, the general public, and workers in the system on diverse issues of social control, criminal behavior, treatment and punishment.

CJC 101P Introduction To Criminal Justice Credits: 3
This introductory overview course is designed to familiarize students with the three main components of the adult criminal justice system: police, courts, and corrections. The course will investigate the viewpoints of offenders, victims, and social scientists, the general public, and workers in the system on diverse issues of social control, criminal behavior, treatment and punishment.

CJC 210 Introduction To Statistics In Sociology/Criminal Justice Credits: 3
A first course in the statistical analysis of quantitative data. Course emphasizes descriptive statistics, probability theory, parameter estimation, bivariate hypothesis testing, and computer applications.
Prerequisites: MATH 110, MATH 116 (or equivalent).

Cross Listings: SOCIOL 263.

CJC 215 Methods Of Criminological Research Credits: 3
A seminar which explores the interrelationships between sociology theory, research methods and statistics. May focus on major contemporary issues building on and integrating knowledge obtained in previous courses.

CJC 220 Theoretical Criminology Credits: 3
A comprehensive examination of the major criminology theories, their philosophical assumptions, and the socio-historical context in which they were articulated.

CJC 240 Delinquency And Juvenile Justice Credits: 3
This course focuses on the nature, extent and theoretical explanations of delinquency and the history and philosophy behind the juvenile justice system in terms of the roles played by law enforcement, juvenile courts, and corrections. Juvenile groups such as status offenders, delinquents, gang members, victims, and juveniles adjudicated as adult criminals will also be examined.

CJC 250 Introduction To Policing Credits: 3
A comparison of law enforcement and peace-keeping functions of the police provides a basic theme for the course, with examination of several topics related to police accomplishing these functions. Some of the topics covered include police discretion, police professionalism, the police officer as a bureaucratic agent, and police-community relations.

CJC 260 Principles & Practices of Criminal Courts Credits: 3
The course examines the American criminal judicial system, including the history, philosophy, and changing nature of criminal courts. The activities of lawyers, judges, and related professionals are emphasized, and current topics involving the criminal court are discussed.

CJC 265 Delinquency And Juvenile Justice Credits: 3
This course focuses on the nature, extent and theoretical explanations of delinquency and the history and philosophy behind the juvenile justice system in terms of the roles played by law enforcement, juvenile courts, and corrections. Juvenile groups such as status offenders, delinquents, gang members, victims, and juveniles adjudicated as adult criminals will also be examined.

CJC 270 Principles Of Corrections Credits: 3
This course explores adult institutional and community-based corrections in the United States. Major areas examined include the evolution of corrections, the process of correctional reform, adult offenders and prison culture, treatment and rehabilitation of offenders, intermediate sanctions, and correctional workers.

CJC 280 Gangs and Crime Credits: 3
This course will provide students with an overview of what is known about street gangs. Specifically, the course will cover definitional issues, gang organization and structure, gang culture, gang member onset and desistance, among other issues related to criminal street gangs. This course will also encourage students to think critically about communities, crime, and group formation.

CJC 282 Criminal Justice & Criminology in Popular Media Credits: 3
This course examines criminology and criminal justice as it is represented in popular film to explore critically the impact media has on the public’s perception of the criminal justice system, the origin of criminal behavior, and the broad sociological constructs of criminology. A key focus is the media’s power to shape criminal justice policy and practice.

CJC 315 Crime, Criminals And Victims Credits: 3
This course addresses the study of crime, criminals and victims. It examines the relationship between victims and offenders. Special treatment is given to criminological as well as victimological theories. A segment of the course will address the sporadic nature of juvenile crime. The course will examine viable strategies to reduce levels of victimization. In the final analysis the course will offer crime prevention strategies.

CJC 316 Race, Class and Justice Credits: 3
This course examines the intersection of race and class as it relates to crime and justice. Specifically, the course focuses on race and class in relation to criminological theory and the application of justice system practices and policies.

CJC 317 Policies Of Drug Use And Control Credits: 3
Utilizing both historical and contemporary information, this course provides an assessment of the "drug problem" in the U.S. and policies of control developed in response to the problem. Drug use criminalization, legalization, medical treatment, and prevention strategies and related issues are considered in regard to scientific knowledge related to the patterns, causes, and impact of substance abuse.
Cross Listings: SOCIOL 317.

CJC 319 Theoretical Criminology Credits: 3
A comprehensive examination of the major criminology theories, their philosophical assumptions, and the socio-historical context in which they were articulated.
Cross Listings: SOCIOL 319.

CJC 320 The Supreme Court And The Criminal Process Credits: 3
Course examines recent Supreme Court decisions on the constitutional aspects of the administration of justice. Topics include the nationalization of the Bill of Rights and jurisdiction with an emphasis on problems involving the Fourth, Fifth, Sixth, Eighth, and 14th Amendments.

CJC 332 Race, Class and Justice Credits: 3
This course examines the intersection of race and class as it relates to crime and justice. Specifically, the course focuses on race and class in relation to criminological theory and the application of justice system practices and policies.
Cross Listings: BLKS 480.

CJC 350 Social Deviance Credits: 3
The dominant sociological perspectives on deviance will be discussed with special attention given to the processes that define behavior and persons as deviant and the impact of such definitions on social relationships and identity.
Cross Listings: SOCIOL 320.

CJC 351 Policing In The Community Credits: 3
The purpose of this class is to introduce the student to police operations and the effectiveness of different police programs. The material discussed in class focuses on empirical evaluations of police effectiveness, and the role of the police in today's society. This class is divided into four broad areas: the nature and effectiveness of patrol; criminal investigations; special operations including crackdowns, responses to domestic assaults, and hot spot policing; and the latest crime prevention strategies, such as community oriented policing and problem solving.

CJC 353 Ethical And Controversial Issues In Policing Credits: 3
This course covers various ethical and controversial issues confronting law enforcement agencies and examines ethical dilemmas involved in police decision-making with an emphasis on current controversial issues. Topics to be addressed include police misconduct; stop and frisk practices; search and seizure; racial profiling; use of excessive and deadly force; and vehicle pursuits.

CJC 354 Policing in America Credits: 3
A comparison of law enforcement and peace-keeping functions of the police provides a basic theme for the course, with examination of several topics related to police accomplishing these functions. Some of the topics covered include police discretion, police professionalism, the police officer as a bureaucratic agent, and police-community relations.

CJC 361 Principles & Practices of Criminal Courts Credits: 3
The course examines the American criminal judicial system, including the history, philosophy, and changing nature of criminal courts. The activities of lawyers, judges, and related professionals are emphasized, and current topics involving the criminal court are discussed.

CJC 363 Introduction To Statistics In Sociology/Criminal Justice Credits: 3
A first course in the statistical analysis of quantitative data. Course emphasizes descriptive statistics, probability theory, parameter estimation, bivariate hypothesis testing, and computer applications.
Prerequisites: MATH 110, MATH 116 or equivalent.

CJC 364 The Supreme Court And The Criminal Process Credits: 3
Course examines recent Supreme Court decisions on the constitutional aspects of the administration of justice. Topics include the nationalization of the Bill of Rights and jurisdiction with an emphasis on problems involving the Fourth, Fifth, Sixth, Eighth, and 14th Amendments.

CJC 365 Comparative Legislatures Credits: 3
The objective of this course is to examine the election and behavior of legislators and legislatures in a comparative context.

CJC 370 Principles Of Corrections Credits: 3
This course explores adult institutional and community-based corrections in the United States. Major areas examined include the evolution of corrections, the process of correctional reform, adult offenders and prison culture, treatment and rehabilitation of offenders, intermediate sanctions, and correctional workers.

CJC 371 Community Corrections Credits: 3
This course will examine intermediate sanctions in the United States, such as probation, halfway houses, boot camps, among others. Specifically, the origin and proliferation of the use of corrections in the community will be explored in depth. The effectiveness of several major community correctional strategies will be explored through a review of the research literature base. Several issues will be highlighted including (but not limited to) ethical constraints, political problems, and treatment effectiveness in light of the use of community sanctions.

CJC 373 Institutional Corrections Credits: 3
This course will examine several aspects of the American Prison, specifically, current issues in the management and growth of the prison industry will be reviewed. These issues will include major constitutional applications, the management of special populations within the prison environment, and a general review of several aspects of day-to-day prison life. These issues and others will be explored through a review of the research literature base germane to prisons and institutions.

CJC 380 Psycho-Social Determinants of Crime & Delinquency Credits: 3
This course offers an interdisciplinary approach to the study of crime and delinquency outlining biological, developmental, psychological, social-psychological, and societal factors associated with criminal behavior. The course also focuses on ways in which these factors may be integrated to solve, explain, and prevent crimes.

CJC 383 Policies Of Drug Use And Control Credits: 3
Utilizing both historical and contemporary information, this course provides an assessment of the "drug problem" in the U.S. and policies of control developed in response to the problem. Drug use criminalization, legalization, medical treatment, and prevention strategies and related issues are considered in regard to scientific knowledge related to the patterns, causes, and impact of substance abuse.

CJC 385 Victimology Credits: 3
This course addresses the study of crime, criminals and victims. It examines the relationship between victims and offenders. Special treatment is given to criminological as well as victimological theories. A segment of the course will address the sporadic nature of juvenile crime. The course will examine viable strategies to reduce levels of victimization. In the final analysis the course will offer crime prevention strategies.

CJC 390 New Dimensions In Criminal Justice Credits: 3
Examination of contemporary topics, issues or problems related to the development of justice and/or operations in response to criminal and related behaviors addressed by the justice system. May be repeated for credit.

CJC 401 Criminal Justice & Criminology in Popular Media Credits: 3
This course examines criminology and criminal justice as it is represented in popular film to explore critically the impact media has on the public's perception of the criminal justice system, the origin of criminal behavior, and the broad sociological constructs of criminology. A key focus is the media's power to shape criminal justice policy and practice.

CJC 424 The Death Penalty In America Credits: 3
This course takes a sociological look at the most extreme punishment currently in use in the United States. Society debates its value without giving much weight to the research which social science conducts. Indeed, the political domain frequently misrepresents the data that is available. The course evaluates the adequacy of the research and separates the strands of the debates in order to understand the role of the death penalty in our society.
Prerequisites: CJC 101.

CJC 429 Restorative Justice Credits: 3
This course is an introduction to the concept of restorative justice. The course examines the roots of the concept, its theoretical perspective, and its applications in juvenile justice, mediation and correctional settings.

CJC 430 Women, Crime And Criminal Justice Credits: 3
This course will focus on the experiences of women and girls with crime in America. The primary areas studied will be females as victims, offenders, and professionals in the criminal justice system. Various criminological theories and research will also be examined in light of gender.

CJC 431 Hate & Bias Crimes Credits: 3
The purpose of this course is to examine the development and enforcement of hate crime law within our legal system. Discussion focuses on the causes and consequences of hate crimes, the constitutional issues associated with bias crime statutes, and the effectiveness of formal and informal social controls for eliminating hate and bias crimes.

CJC 435WI Gender And Law Credits: 3
This course examines the contemporary legal rights and obligations of women in light of the historical relationships between the social status of women and their legal status. Topics investigated include proprietary and contractual rights, family law, employment practices, educational opportunities, and women as victims and perpetrators of crime.
Prerequisites: RooWriter.

CJC 440 Hate & Bias Crimes Credits: 3
The purpose of this course is to examine the development and enforcement of hate crime law within our legal system. Discussion focuses on the causes and consequences of hate crimes, the constitutional issues associated with bias crime statutes, and the effectiveness of formal and informal social controls for eliminating hate and bias crimes.

CJC 450 Women, Crime And Criminal Justice Credits: 3
This course will focus on the experiences of women and girls with crime in America. The primary areas studied will be females as victims, offenders, and professionals in the criminal justice system. Various criminological theories and research will also be examined in light of gender.

CJC 470WI Capstone: Criminal Justice And Criminology Credits: 3
This course is designed to integrate student's program of study in the major of criminal justice and criminology. The class examines current conditions of the justice system with respect of race, gender and social class. This course satisfies the writing intensive requirement for the General Degree Requirements of the College.
Prerequisites: RooWriter.

CJC 475 White Collar Crime Credits: 3
This course examines activities variously called white-collar crimes, crimes of privilege, corporate and government crimes, and upperworld crimes. The purposes of the course are (1) to describe, analyze, and assess social impact of these offenses, (2) to examine the capacity of existing theories in criminology and social deviance to account for those activities, (3) to describe the responsibilities, powers, and activities of those agencies which have jurisdiction over them, and (4) to assess the effectiveness of various legal sanctions in controlling such activities and to review the problems involved in legislation intended to achieve that control.

CJC 475P White Collar Crime Credits: 3
This course examines activities variously called white-collar crimes, crimes of privilege, corporate and government crimes, and upperworld crimes. The purpose of the course are (1) to describe, analyze, and assess social impact of these offenses, (2) to examine the capacity of existing theories in criminology and social deviance to account for those activities, (3) to describe the responsibilities, powers, and activities of those agencies which have jurisdiction over them, and (4) to assess the effectiveness of various legal sanctions in controlling such activities and to review the problems involved in legislation intended to achieve that control.

CJC 476 Seminar In Criminal Justice And Criminology Issues Credits: 3
This course is an advanced exploration of the relationship between the criminal justice system and criminal behavior from at least one of the following perspectives: psychological, sociological, economic, legal, political or administration/ management. Will include discussions and analysis of contemporary readings and on-going research in the selected perspective.

CJC 481 Restorative Justice Credits: 3
This course is an introduction to the concept of restorative justice. The course examines the roots of the concept, its theoretical perspective, and its applications in juvenile justice, mediation and correctional settings.

CJC 482 The Death Penalty In America Credits: 3
This course takes a sociological look at the most extreme punishment currently in use in the United States. Society debates its value without giving much weight to the research which social science conducts. Indeed, the political domain frequently misrepresents the data that is available. The course evaluates the adequacy of the research and separates the strands of the debates in order to understand the role of the death penalty in our society.

CJC 483 Methods Of Sociological Research Credits: 3
A seminar which explores the interrelationships between sociology theory, research methods and statistics. May focus on major contemporary issues building on and integrating knowledge obtained in previous courses.
Cross Listings: SOCIOL 362.

CJC 484 White Collar Crime Credits: 3
This course examines activities variously called white-collar crimes, crimes of privilege, corporate and government crimes, and upperworld crimes. The purposes of the course are (1) to describe, analyze, and assess social impact of these offenses, (2) to examine the capacity of existing theories in criminology and social deviance to account for those activities, (3) to describe the responsibilities, powers, and activities of those agencies which have jurisdiction over them, and (4) to assess the effectiveness of various legal sanctions in controlling such activities and to review the problems involved in legislation intended to achieve that control.

CJC 488 Mentoring Juvenile Justice System-Involved Youth Credits: 3
Youth mentoring experience in a juvenile justice setting with required training and classroom study.
Prerequisites: successful background check completion.

CJC 490 Directed Studies In Criminal Justice And Criminology Credits: 1-3
Individual research and study in the student's field of interest as approved and directed by major professors. The work involves examination and reporting of selected problems affecting the various agencies of our legal system. Only two of the 490 sequence courses can be applied to the major. A. Law Enforcement B. Court Operations and Administration C. Corrections D. Legal Theory and Philosophy E. Criminological Theory F. Sociology of Law.

CJC 491 Internship In Criminal Justice Credits: 3-6
Intern experience under faculty supervision in local, state, federal or private agencies working with justice system involved offenders.
Prerequisites: CJC 101, junior standing.

CJC 492 Topics In Criminal Justice Credit: 1
Specialized, short courses with focused examination of particular topics germane to the study of the justice system. May be repeated for credit.

CJC 495WI Capstone: Criminal Justice And Criminology Credits: 3
This course is designed to integrate student's program of study in the major of criminal justice and criminology. The class examines current conditions of the justice system with respect of race, gender and social class.
Prerequisites: RooWriter.

Curriculum and Instruction (EDUC-C&I)

Courses

EDUC-C&I 497 Individual Study Credits: 1-6
Guided study of a selected topic in curriculum and instruction.

Dance (DANCE)

Courses

DANCE 106 Computer Technology for Dance Credits: 3
This course will not only give basic computer knowledge but will give students the tools to conceptualize movement which is then integrated into choreographic motifs and sequences in as easy-to-use 3D environment. The students will use these tools to create choreography and to experiment with interdisciplinary arts and dance technology projects that will be implemented into the Advanced Composition course.
Prerequisites: DANCE 218A.

DANCE 107 Dance Production I Credit: 1
A study of the fundamentals of dance production including sound design and recording techniques, video and video editing, lighting design for dance, stage make-up, and costume design and construction. Laboratory projects will be coordinated with actual dance productions.

DANCE 108 Dance Production II Credit: 1
Continuation of DANCE 107.

DANCE 140A Analysis Of Movement For The Dance I Credit: 1
A study of the structure of classical ballet steps and movements including basic anatomy, vocabulary and aesthetics of ballet. This course will also present a comparison of ballet training systems. Restricted to dance majors.

DANCE 140B Analysis Of Movement For The Dance II Credit: 1
Continuation of DANCE 140A, exploring and analyzing the fundamental structure of modern dance technique. The techniques of Lester Horton and Martha Graham will be examined.

DANCE 141B Ballet Technique and Theory I Credits: 3
Fundamentals of technique of classical ballet at the intermediate level with attention given to strengthening, stretching, anatomical alignment, and developing the ballet aesthetic. This course includes pointe work. Non-Majors by audition.

DANCE 141M Modern Dance Technique and Theory I Credits: 3
This intermediate level dance course is based on the technique and theory of Lester Horton and fundamental elements of Martha Graham. Designed to fortify, stretch, and strengthen the body, the technique is codified into a series of studies designed to cover a wide range of movement vocabulary. Non-Majors by audition.

DANCE 142B Ballet Technique And Theory II Credits: 3
Continuation of DANCE 141B.

DANCE 142M Modern Dance Technique and Theory II Credits: 3
Continuation of DANCE 141M.

DANCE 213C Men’s Class I Credit: 1
This course is designed to meet the needs of the male dancer and will focus on developing the technique, strength, and agility needed for a professional career.

DANCE 213D Men’s Class II Credit: 1
Continuation of DANCE 213C.

DANCE 217A Improvisation I Credit: 1
An introduction to the use of improvisation as a method of discovery. Through structured choreographic problem-solving and creative responses to given movement problems, dancers will explore the elemrnts of time, space, energy, and force learning the basic skills neaded for dance composition. Restricted to Dance majors.

DANCE 217B Composition I Credits: 2
Continuation of DANCE 217A with a further exploration of improvisation as a learned skill, developing pre-compositional movement materials used in making dances.
Prerequisites: DANCE 217A.

DANCE 218A Composition II Credits: 2
Continuation of Composition I, further exploring of the fundamentals of choreography including locomotion studies, categories of motion, axial movement and sequential and non-sequeter movement. Focusing on the development of solo works and developing choreographic process.
Prerequisites: DANCE 217B.

DANCE 218B Composition III Credits: 2
An introduction to the fundamentals of choreography, including the development of dance compositions through the exploration and definition of specific studies, including floor design, shape design, motion design, and time design. Restricted to dance majors.
Prerequisites: DANCE 217A.

DANCE 241B Ballet Technique And Theory III Credits: 3
Continuation of DANCE 142B at the intermediate/advanced level including pointe. Restricted to dance majors.

DANCE 241M Modern Dance Technique And Theory III Credits: 3
Continuation of DANCE 142M, on the intermediate/advanced level. Restricted to dance majors.

DANCE 242B Ballet Technique And Theory Iv Credits: 3
Continuation of DANCE 241B, at the intermediate/advanced level including pointe work.

DANCE 242M Modern Technique And Theory Iv Credits: 3
Continuation of DANCE 142M, on the intermediate/advanced level.

DANCE 250 Labanotation I Credits: 2
An introduction to basic theory and elementary skills of labanotation.

DANCE 260 Jazz I Credit: 1
A study of Western Theatrical Dance focusing on Jazz and Afrp-Caribbean based forms.

DANCE 261 Jazz II Credit: 1
Continuation of DANCE 260 with a more in deapth study of Western Theatrical Dance focusing on Jazz and Afro-Caribbean based dance forms.

DANCE 301 Advanced Movement Analysis for Dancers Credits: 3
A study of the body which relates specifically to the needs of dancers. Emphasis is placed upon an understanding of the skeletal system, the muscular system, their specific importance to dance technique, and dance injuries and prevention.

DANCE 302 Fundamentals of Body Alignment Credit: 1
An introduction to the fundamentals of body alignment, including therapeutic exercises which focus on muscular imbalances and injury prevention. Emphasis is placed upon developing total body strength and flexibility. Required for dance majors.
Prerequisites: DANCE 301.

DANCE 303 Pilates Credit: 1
A non-impact body conditioning method based on principles of abdominal and scapular stabilization. Introduction to the essential and intermediate mat work, which consists of non-weight bearing exercises. Designed to give the student an understanding of the principles and muscular emphasis behind the Pilates method. Proper alignment, full range of motion, and patterned breathing will be emphasized.
Prerequisites: DANCE 301, DANCE 302.

DANCE 305 History Of Dance I Credits: 3
A study of the development of Western theatrical dance forms, from its roots in the European court through the 20th century. Beginning with a brief overview of "early dance," emphasis will be placed on the study of Renaissance theatre spectacles to the rise of the professional dancer culminating with the 20th century contemporary ballet. This course includes outside reading and writing intensive requirements.

DANCE 306 History Of Dance II Credits: 3
Continuation of DANCE 305 exploring the development of dance as a 20th century Western theatre dance form. Development of modern dance, modern dance pioneers, modern dance development in Europe, African-American contribution to modern dance, modern dance influence on the ballet and the Avant-Garde and Post Modern movements will be studied. Outside reading and writing intensive requirements included.

DANCE 307 Every Body Dances Credits: 3
From Dancing with the Stars and So You Think You Can Dance to Dancing in One World. This classroom---based lecture course will explore what dance is and why people dance from a cultural and historical perspective. The course will include reading, video viewing, lectures, discussions, and participation in dance experiences.

DANCE 309B Company Credit: 1
A repertory company comprised of dance majors, selected guest artists and dance faculty for the preparation and public performance of choreographic works, concerts and lecture/ demonstrations, and Great Works projects directed by dance faculty. Restricted to dance majors.

DANCE 313A Partnering/Pas De Deux I Credit: 1
This course is designed to meet the needs of the 300/400 level ballet student and will teach the elementary skills of partnering such as turns, lifts, promenades, and balances.
Prerequisites: DANCE 341B (or higher).

DANCE 313B Partnering/Pas De Deux II Credit: 1
Continuation of DANCE 313A.
Prerequisites: DANCE 341B (or higher).

DANCE 319A Composition IV Credits: 2
An intermediate course in Dance Composition focusing on choreographic clarity and intent. Topics such as abstraction, motif and development, and prop and costumes will be explored.
Prerequisites: DANCE 218B.

DANCE 319B Advanced Choreographic Design Credits: 2
An intermediate course in Dance Composition focusing on choreographic clarity and intent. Topics such as abstraction. motif and development, and prop and costumes will be explored.
Prerequisites: DANCE 319A.

DANCE 341B Ballet Technique And Theory V Credits: 3
Continuation of DANCE 242B, at the advanced level including pointe work. Restricted to dance majors.

DANCE 341M Modern Dance Technique And Theory V Credits: 3
Continuation of DANCE 242M on the advanced level. Restricted to dance majors.

DANCE 342B Ballet Technique And Theory Vi Credits: 3
Continuation of DANCE 341B.

DANCE 342M Modern Dance Technique And Theory Vi Credits: 3
Continuation of DANCE 341M.

DANCE 403A Modern Technique For Non-Majors Credit: 1

DANCE 404A Ballet Technique Non-Majors I Credit: 1
The applied and theoretical study of ballet including traditional ballet vocabulary. Written assignments required.

DANCE 405A Modern Dance Repertory I Credit: 1
Modern Dance Repertory is an advanced course for modern dance majors to study and perform the repertoire and works of renowned contemporary choreographers. It is a parallel to the Ballet Variations course which teaches the repertoire of ballet master works.
Prerequisites: DANCE 341M (or higher).

DANCE 405B Modern Dance Repertory II Credit: 1
Continuation of DANCE 405A.
Prerequisites: DANCE 341M (or higher).

DANCE 405C Modern Dance Repertory III Credit: 1
Continuation of DANCE 405B.
Prerequisites: DANCE 341M (or higher).

DANCE 405D Modern Dance Repertory IV Credit: 1
Continuation of DANCE 405C.
Prerequisites: DANCE 341M (or higher).

DANCE 413A Advanced Pas De Deux I Credit: 1
Advanced pas de deux is designed to meet the needs of the 400 level ballet student with emphasis placed on perfecting advanced partnering skills. Students will have opportunity to learn pas de deux from great ballets giving students the experience and stamina of dancing entire pas de deuxs. The course provides coaching on both a stylistic approach and a technical approach to the performance of materials presented in class.
Prerequisites: DANCE 441B (or higher).

DANCE 413B Advanced Pas De Deux II Credit: 1
Continuation of DANCE 413A.
Prerequisites: DANCE 441B (or higher).

DANCE 414A Men’s Variations I Credit: 1
Men’s Variations is designed for the male ballet dancer. Students will have the opportunity to learn and perform renowned variations from the Romantic, Classical, and Neo-Classical periods of ballet. This class will give the male student a true professional coaching experience in their training as they prepare for stage.
Prerequisites: DANCE 341B.

DANCE 414B Men’s Variations II Credit: 1
Continuation of DANCE 414A.
Prerequisites: DANCE 341B.

DANCE 415A Variations I Credit: 1
Variations is designed for the 400 level ballet student. The course will teach female variations to the pre-professional student. Students will have the opportunity to learn and perform renowned variations from Romantic, Classical and Neo-Classical periods of ballet. Students will also work in traditional practice tutus/costumes in order to give them a true professional experience in their training as they prepare for the stage.
Prerequisites: DANCE 342B.

DANCE 415B Variations II Credit: 1
Continuation of DANCE 415A.
Prerequisites: DANCE 342B.

DANCE 415C Variations III Credit: 1
Continuation of DANCE 415B.
Prerequisites: DANCE 342B.

DANCE 415D Variations IV Credit: 1
Continuation of DANCE 415C.
Prerequisites: DANCE 342B.

DANCE 416A Performance Techniques I Credit: 1
A two-semester class rotation focusing on performance techniques of folk and character dances of various countries, traditional vocabulary of pantomime gestures, and theatrical dance forms including tap, ballroom, and jazz styles.

DANCE 416B Performance Techniques II Credit: 1
A two-semester class rotation focusing on performance techniques of folk and character dances of various countries, traditional vocabulary of pantomime gestures, and theatrical dance forms including tap, ballroom, and jazz styles.

DANCE 441B Ballet Technique And Theory Vii Credits: 3
Continuation of DANCE 342B at the pre-professional level including pre-professional pointe work. Restricted to dance majors.

DANCE 441M Modern Dance Technique And Theory Vii Credits: 3
Continuation of DANCE 342M at the pre-professional level. Additionally, this course is designed to prepare the student for auditioning and acquiring a performing career. Longer combinations with an emphasis on quick retention of material presented in class will be stressed. Restricted to dance majors.

DANCE 442B Ballet Technique And Theory Viii Credits: 3
Continuation of DANCE 441B, on the pre-professional level including pre-professional pointe work.

DANCE 442M Modern Dance Technique And Theory Viii Credits: 3
Continuation of DANCE 441M on the pre-professional level.

DANCE 493 Senior Recital I Credit: 1
The planning, organization and preparation to fulfill the requirements for Senior Recital including selection of repertoire, preparation for utilization of production techniques, creation or restaging of a solo work, and beginning the creation of original choreographic work in group form utilizing the tools previously developed from the student’s work in composition.

DANCE 494 Senior Recital II Credit: 1
A continuation of DANCE 493, this second semester course is the culmination and juried public performance of a fully produced concert on the main stage. The student will present an original choreographic group work. In addition, the student will perform in two different dance idioms; including a self choreographed solo or an approved master work.

DANCE 497CD Modern Dance Technique and Theory Credits: 3

Decision Science and Operations Management (DSOM)

Courses

DSOM 309 Intermediate Business Statistics Credits: 3
This course emphasizes statistical applications in business, and students will complete research projects using one or more multivariate statistical
This course emphasizes statistical applications in business, and students will complete research projects using one or more multivariate statistical
techniques. Topics covered will include statistical software (such as SAS or SPSS), multiple regression, Chi-Square, analysis of variance, non-parametric methods, multidiscriminant analysis, factor analysis, and a brief introduction to structural equation models.
Prerequisites: MATH 206 and STAT 235.

DSOM 326 Production/Operations Management Credits: 3
This course presents an introduction to the concepts, models, and methods of operations management. Students will study approaches to planning, scheduling, and controlling product and service facilities, processes, cost, quality, quantity, production, capacity, inventory, and distribution requirements. Computer applications and computer-based operations control systems will be introduced as a means to effectively manage the operations functions of both product and service organizations.
Prerequisites: ECON 202 and STAT 235.

DSOM 346 Management Analysis Credits: 3
This course examines the application of various scientific and mathematical methods to decision making in management, and makes use of spreadsheets and other software to construct and analyze practical methods of real-world systems. Applications will be based on topics such as project management, decision analysis, scheduling, queuing systems, simulation, optimization/allocation models, forecasting, and profitability analysis.
Prerequisites: DSOM 326 and MIS 202.

DSOM 431 Quality and Process Improvement Credits: 3
A study of planning and managing effective quality and processes in organizations. Students are expected to master important quality management and process improvement tools including Six Sigma, Statistical Process Control, TQM, Theory of Constraints, and other contemporary tools via appropriate software, case studies, and projects.
Prerequisites: DSOM 309 and DSOM 326.

DSOM 496 Internship: Decision Science and Operations Management Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

DSOM 497 Special Topics: Decision Science and Operations Management Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

Dental Hygiene (DENT-HYG)

Courses

DENT-HYG 3000 Dental Morphology And Occlusion Credits: 2
This course is designed to provide the dental hygiene student with a sound knowledge base in dental morphology and occlusion through discussion and laboratory experiences. Students will learn to identify anatomical structures of each tooth and be able to communicate these findings effectively with colleagues and patients in both verbal and written forms. Throughout the course, the clinical application and relevance of dental morphology in the practice of dental hygiene will be emphasized. Special consideration will be given to root morphology as it relates to periodontal instrumentation. Activities will include: identification of extracted teeth, terminology exercises, dental charting experiences and identifying classifications of occlusion.

DENT-HYG 3020 Dental Radiology Credits: 2
Lecture and clinical practice of dental radiographic procedures. Topics included are radiation hygiene, taking and developing radiographs, processing and mounting films, and radiographic interpretation. Clinical experience is required throughout the remaining semesters.

DENT-HYG 3030 Introduction to Histopathology of Oral Tissues Credits: 2
A comparison of the microscopic anatomy of healthy and diseased oral tissues. The major goal of this course is to integrate basic sciences (embryology, descriptive histology, and cell biology of oral tissues) with clinical sciences. The gap between the basic and clinical sciences is not always easy to bridge; this course is designed to bridge the "gap." This course provides students with an introduction to oro-facial histology and embryology and pathology that may arise from the tissues of the head, neck, and oral cavity.
Prerequisites: Dental hygiene student.

DENT-HYG 3080 Introduction to the Preventive Practice of Dental Hygiene Credits: 4
This course will introduce theories and rationales for basic clinical dental hygiene care (infection control, oral examination and fundamentals of instrumentation) in diverse populations. Practical application of specific clinical skills will be introduced in the classroom and applied in the clinical setting.

DENT-HYG 3080L Preclinical Dental Hygiene Credits: 2
This course emphasizes the practical application of the fundamental concepts and principles of patient care in a diverse society discussed in DENT-HYG 3080. Emphasis is placed on patient assessment and techniques of instrumentation for examination and dental hygiene treatment. After the student has mastered basic skills, he/she will begin to provide direct dental hygiene services.

DENT-HYG 3200 General and Oral Pathology Credits: 2-3
An introduction to the principles of general pathology and organ system pathology including inflammation, immunity and diseases of immune origin, genetic diseases, neoplasia with emphasis on oral cancer, and diseases of selected organ systems including pulmonary, cardiovascular, hematopoietic, endocrine, skeletal, gastrointestinal,hepatic, pancreatic and other systems as time permits.

DENT-HYG 3210 Applied Biochemistry Credits: 2
This course is designed to build upon previous knowledge of chemistry, biology, and physiology as a basis for understanding principles in biochemistry. Presented through a self-paced online format, course content is selected to provide the foundation knowledge in biochemistry needed for subsequent courses in nutrition, pathology, and other health related topics.

DENT-HYG 3220 Dental Biomaterials Credits: 2
This course is designed to provide the dental hygiene student with a sound knowledge base in the science and manipulation of dental biomaterials. Through lectures and laboratory session, the student’s ability to make clinical judgments regarding the application of dental biomaterials and the ways in which materials react to the oral environment will be enhanced.

DENT-HYG 3260 Principles Of Periodontics Credits: 3
This course in Periodontics will cover the biological and clinical aspects of periodontal health and pathology. An introduction to the supporting structures of the teeth will provide the foundation of understanding pathogenesis, histopathology and subsequent therapeutic treatment of periodontal diseases. The dental hygienist’s role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is examined.

DENT-HYG 3280C Dental Hygiene Clinic I Credits: 3
Students will further develop clinical skills and techniques learned in DENT-HYG 3080L and previous courses by providing services to patients.

DENT-HYG 3285 Seminar In Dental Hygiene I Credits: 2-3
This course expands on theory and background presented in DENT-HYG 3080. Topics include expanding dental hygiene skills required for the care of patients and continued development of problem solving abilities and critical thinking skills as they relate to the provision of dental hygiene care. Provide students with a more insightful view of the role of the dental hygienist in the delivery of comprehensive patient care.

DENT-HYG 3300 Radiographic Interpretation Credits: 0.5
The purpose of the course is to introduce interpretation of radiographic anomalies and pathology just prior to the clinical experience. Since there was little time for an emphasis on radiographic interpretation during your second year radiology course, this lecture and participation course supplement clinic instruction in diagnosis of the patient's oral needs and formulation of a treatment plan. Upon completion of this course, the student should be able to recognize simple pathology and radiographic anomalies.

DENT-HYG 3320 Oral Health Behavior Change Credits: 3
The purpose of this hybrid course is to prepare the junior dental hygiene student to effectively assess and individualize preventive oral health care through the use of brief motivational interviewing. The course will include evidenced based information in dental caries and caries risk assessment, caries preventive measures, introduction to periodontal disease, dental stains, and management of xerostomia, halitosis, and dentinal sensitivity, oral healthcare products and how to care for an oral appliance. The student will subsequently apply course concepts to facilitate patient behavior change in the clinical setting.
Prerequisites: a course in General Psychology.

DENT-HYG 3340 Principles Of Public Health Credits: 2
This course introduces the student to principles of public health, the field of epidemiology, health care delivery systems, public health terminology and teaching methodologies to use in culturally diverse community settings. Students will have the opportunity to assess a target population, plan, implement and evaluate appropriate programs. Students will also apply theories and skills of communication and education while preparing and presenting oral health education programs for various population groups. The material presented in this course will extend to the subsequent course DENT-HYG 4220.

DENT-HYG 4017 International Outreach Credit: 1
Students in dental hygiene education in the dental school will have the opportunity to apply knowledge and skills while delivering care in an international setting. The long range goal is a practitioner who is sensitive to diverse community needs.

DENT-HYG 4020 Local Anesthesia And Pain Control Credits: 3
This course is designed to prepare dental hygiene students for the safe, effective administration of local anesthesia and nitrous oxide sedation. Included are content areas in anatomy, physiology, pharmacology, and emergency management as they relate to the administration of local anesthetics, nitrous oxide, and pain control. Laboratory sessions are structured to develop actual experiences in administration of local anesthetics and nitrous oxide. Various mechanisms for pain control are also covered. Methods of presentation include lecture, large group discussion, laboratory and clinical participation.

DENT-HYG 4040 Foundations of Teaching Credits: 2
This course provides an introduction to the evidence-based best practices in course design for students who are preparing for a career in teaching and for those who simply wish to learn more about classroom instruction. Students will explore outcomes centered course design and practical and effective instructional strategies. Content application activities include syllabus development, writing objectives, constructing lesson plans, preparing presentations and developing course management sites.

DENT-HYG 4050 Periodontics II Credits: 2
This course in Periodontics will provide and introduction to Phase II and III therapy. Periodontal decision making will be emphasized. The dental hygienists' role in recognition, prevention and treatment of periodontal diseases and maintenance of periodontal health is further examined.
Prerequisites: DENT-HYG 3260.

DENT-HYG 4060C Dental Hygiene Clinic II Credits: 2
The student will continue to develop competency in basic dental hygiene skills. Principles of periodontal techniques, such as non-surgical periodontal therapy, supportive treatment procedures and comprehensive patient care in a diverse society will be emphasized. The student will be asked to demonstrate professional management skills and productivity.

DENT-HYG 4065 Seminar in Dental Hygiene II Credit: 1
This seminar course is offered in conjunction with DENT-HYG 4060C and is part of the clinical education continuum. Emphasis will be placed on developing advanced clinical techniques, instrument sharpening, intra-oral imaging, adjunctive dental hygiene treatment, and increased problem-solving in the clinical setting.

DENT-HYG 4080 Introduction to Research and Evidence Based Descision Making Credits: 2
This is a lecture/discussion course with assigned exercises in the research process and evaluating scientific studies. Students will apply basic principles of research design and methodology to the critical analysis of contemporary oral health related literature focusing on the review and evaluation of literature as it relates to the practice and profession of dentistry and dental hygiene with the intent of utilizing an evidence-based approach to care.

DENT-HYG 4100 Pharmacology Credits: 3
An overview and introduction to the major drug groups and common drugs taken by dental outpatients. Course includes the basic principles and general theories of drug action, basic pharmacokinetics, their mechanisms of action and therapeutic uses and the relative dental significance of each.

DENT-HYG 4110 Introduction to Research Methodologies Credits: 2
This is a lecture/discussion course with assigned exercises in the research process and evaluating scientific studies. Students will learn the basic principles involved in research design and methodology and will apply those principles to the critical analysis of contemporary health related literature. Focus on the review and evaluation of literature as it relates to the practice and profession of dentistry with the intent of utilizing an evidence-based approach to care will be stressed.

DENT-HYG 4115 Practicing in the Dental Hygiene Public Health Safety Net Credits: 3
The course is designed to increase the knowledge base of the practicing dental hygienist in the area of public health dentistry, including health promotion, disease prevention, current legislation, evidence based treatment, school based portable dentistry, coalitions, treating the geriatric and disabled populations, as well as how to write and secure.

DENT-HYG 4120 Seminar in Dental Hygiene Credits: 2
This course is offered in conjunction with DENT-HYG 4120C Preventive Dentistry Clinic III, and is a part of the clinical education continuum. Major content emphasis includes developing problem solving abilities, managing patients with special needs and diverse backgrounds (oncology, gerontology and physical disabilities), and managing emergencies in the dental office. Skills in preventive treatment program planning and evaluation of patient care will be reinforced through community experiences and self reflection.

DENT-HYG 4120C Dental Hygiene Clinic III Credits: 4
The student will continue to develop competency in intermediate dental hygiene skills. Principles of periodontal techniques, such as root planning, pain control and supportive techniques will be stressed. Comprehensive treatment planning and implementation of comprehensive care to a diverse patient population will be the focus of this course. Continued development of professionalism, management and critical thinking skills will be emphasized.

DENT-HYG 4130 Introduction to Instructional Technologies and Online Learning Credit: 1
The web-based multimedia course will examine the mediated communication process using Internet tools and is designed to help the incoming student become prepared to succeed in their degree program using online technologies. Students will exam the changes and challenges associated with mediated synchronous and asynchronous technologies. The course will be delivered in four different modules.

DENT-HYG 4150 Portfolio Capstone Credit: 1
The capstone course serves as the culminating experience for students in the BSDH Degree Completion Program. During the Capstone course, students will create a coherent and cohesive body of work reflective of attainment of the competencies for the BSDHDC program—in the form of an e-Portfolio.

DENT-HYG 4210 Practice Management Credits: 3
Current relevant issues impacting dental hygiene practice are discussed. Dental practice economics, communicating and management in a diverse society are included. Also included in this course is the study of jurisprudence as it relates to the practice of dental hygiene.

DENT-HYG 4220 Community Oral Health Field Experiences Credits: 2
In this course the student will participate in service learning activities which require application of dental public health principles. Students will have the opportunity to work with a variety of diverse populations. Projects will engage the students in assessing a target population, planning, implementing and evaluating appropriate programs. Students will also apply theories and skills of communication and education while preparing and presenting oral health education programs for various diverse population groups.

DENT-HYG 4230 Principles of Public Health Credits: 2
This course introduces the student to principles of public health, the field of epidemiology, health care delivery systems, public health terminology and teaching methodologies to use in culturally diverse community settings. Students will have the opportunity to assess a target population, plan, implement and evaluate appropriate programs. Students will also apply theories and skills of communication and education while preparing and presenting oral health education programs for various population groups. The material presented in this course will extend to the subsequent course DENT-HYG 4220.

DENT-HYG 4240 Ethics In Professional Practice Credit: 1
Study of ethics and ethical issue related to the practice of dental hygiene within a diverse society. Includes application of ethical principles to real-life situations.

DENT-HYG 4260 Senior Seminar Credits: 2
This course serves as a means of synthesizing information from all courses in the dental hygiene curriculum and applying content to patient cases and practice management issues. Case-based learning (CBL) will be utilized to review significant content areas as well as to introduce subjects not previously encountered during previous clinical experiences. Case based/problems based learning (PBL) with faculty facilitation will assist students in managing patient cases. This course is also designed to assist in preparing senior dental hygiene students for the written and clinical examinations required for licensure.

DENT-HYG 4260C Dental Hygiene Clinic IV Credits: 4
The student will have the opportunity to reach competency in all clinical skills. Emphasis will be placed on decision-making, problem-solving, critical thinking, appointment and time management. The course will focus on comprehensive dental hygiene care to a diverse population.

DENT-HYG 4320 Special Patient Care Practicum Credits: 2-4
Through outside agency affiliation, students will have the opportunity of applying the course content from Principles of Public Health, Dental Health Education and DHE-Practicum. Sites for participation include hospitals, nursing homes, and residential and day activity centers for developmentally disabled.

DENT-HYG 4330 Introduction To Oncology And Practicum Credits: 2-4
Field experience designed to provide the student with personal observation of oncology patients undergoing therapy; chemotherapy for various cancers and surgical treatment and/or radiation therapy for head and neck cancers. A limited opportunity will be provided to assist in treatment planning for oral/ dental needs, oral hygiene education, and observation of a head and neck cancer surgery. Laboratory experience will include construction of custom fluoride carriers, demonstration of oral hygiene products and an overview of hospital administration, procedures and in-patient charts, basic oncologic principles and the psychological ramifications of cancer, therapy and rehabilitation.

DENT-HYG 4340 Community Dentistry Practicum Credits: 2-4
The community dentistry practicum provides the student with an opportunity for personal exploration of the many settings of community dentistry. These experiences may lead the students into clinical activities or design and implementation of dental health educational programs. The student will have the opportunity to work with carious community health professionals in the Kansas City area. The student will need reliable transportation and should expect some experiences to require travel. Possibilities for practicum experiences are broad and will be defined after an initial assessment of the student?s interest and goals. An individual learning contract will be written following the assessment. The student will be required to meet as a group periodically throughout the semester.

DENT-HYG 4350 Periodontal Therapy Practicum Credits: 1-4
This course is designed for the dental hygiene student who desires increased experience with periodontal skills. The course involves practical experience in the graduate periodontics clinic working with a periodontology resident. Two clinic sessions per week; one seminar scheduled weekly.

DENT-HYG 4360 Practice Management Practicum Credits: 3
Current relevant issues impacting dental hygiene practice are discussed. Dental practices, economics, communication and management are included. Practical application of course would include the development of a dental office operating manual.

DENT-HYG 4380 Research Practicum Credits: 2-4
This course provides an opportunity to apply the content in the previous course Introduction to Research Design. The protocol identified may be a basic science, clinical or community dental hygiene problem. The field experience may deal with a basic or applied, descriptive or explanatory research question.

DENT-HYG 4400 Nutrition and Oral Health Credits: 3
This course will cover the sources and use of nutrients associated with general nutrition with an emphasis on applied concepts in oral health and nutrition. The dental hygienists' role in recognition, prevention and treatment of nutrition related oral disease(s) and maintenance of oral health is examined. Students will be introduced to and practice individualized nutritional counseling utilizing previously learned brief motivational interviewing strategies for encouraging diet change. Nutritional counseling principles will be utilized in later clinical courses and practicums.
Prerequisites: DENT-HYG 3210, DENT-HYG 3220.

DENT-HYG 4500 Seminar on Issues in Higher Education for Health Professionals Credits: 2-4
This course is designed to introduce the student to matters encountered in higher education. specific to dental hygiene education. Weekly readings, assignments, and sessions will familiarize the student in topics such as: writing resumes and cvs, case-based learning, accreditation, promotion and tenure, and assessment.

DENT-HYG 4600 Evidence Based Decision Making in the Clinical Practice of Dental Hygiene Credits: 2-4
This course is designed for the graduate and degree completion dental hygiene student and expand on the student's basic knowledge of the dental hygiene process of care. Utilization of evidence based decision making skills will be explored in an effort to incorporate current scientific literature, personal clinical experience and patient preferences as it relates to the delivery of comprehensive patient care. Skills taught in this course will enhance background knowledge related to the dental hygiene process of care and help to foster an attitude of critical analysis and lifelong learning.

DENT-HYG 4620 Introduction to Educational Methodology Credits: 3
This course is designed to introduce the student to basic educational methodologies and to provide participants with a better understanding of the teaching/learning process. The course includes units on instructor/student relationships, educational approaches, educational ethics and professionalism, the scholarship of teaching and learning and curriculum theory.

DENT-HYG 4625 Dental Hygiene Administration Credits: 2
This course is designed for the post-certificate dental hygiene student. Major topic areas include accreditation of dental hygiene programs, the impact of National and State Board examinations on curriculum planning, selective admissions policies and procedures, faculty evaluation, promotion and tenure and students' rights.

DENT-HYG 4630 Practicum in Dental Hygiene Administration Credits: 2-4
Under the supervision of the Director of Dental Hygiene, the student will gain actual experiences in the daily administration of a dental hygiene program. The student may contract for responsibilities such as admissions, budget preparations, course scheduling, report writing and student academic counseling.

DENT-HYG 4635 Practicum In Clinical Supervision Credits: 2-4
Under the supervision and permission of the Dental Hygiene Clinical Supervisor, the student will gain actual experience in the duties involved in coordinating the clinical education of a dental hygiene student. The student may contract for responsibilities such as, coordinating mock board examinations, maintaining student clinical records, developing faculty and student clinic schedules and report writing.

DENT-HYG 4640 Student Teaching and Conference I Credits: 2-4
Under the direction of a supervising professor, the student may select teaching experience in the classroom areas of their choice. The student develops behavioral course objectives, comprehensive lesson plans, test and examination items, classroom presentations, and prepares student evaluations in the selected classroom teaching areas. The student may select teaching assignments in one of the developed externship student teaching programs. Conferences will be held in conjunction with the course.
Prerequisites: DENT-HYG 4040, DENT-HYG 4620.

DENT-HYG 4650 Student Teaching and Conference II Credits: 2-4
The student will continue to develop teaching skills in laboratory and/or classroom areas as selected by the student under the direction of a supervising professor.
Prerequisites: DENT-HYG 4640.

DENT-HYG 4660 Independent Study in Dental Hygiene Credits: 1-4
This course is designed for the dental hygiene student who desires independent study of a particular problem or area of interest in dental hygiene education.

DENT-HYG 4680 Dental Hygiene Clinical Instruction I Credits: 2-4
Continued development of competency as a clinical instructor under the supervision of the dental hygiene faculty. Requires a half-day in clinic student instructor.
Prerequisites: DENT-HYG 4640.

DENT-HYG 4685 Dental Hygiene Clinical Instruction II Credits: 1-4
A continuation of DENT-HYG 4680. Under the supervision of the dental hygiene faculty, students may continue to develop skills as a dental hygiene clinical instructor.
Prerequisites: DENT-HYG 4680.

DENT-HYG 4750 Geriatric Oral Health Promotion And Education Credits: 1-5
This course is designed to enhance knowledge, attitudes, behavior and clinical care directed at geriatric oral health promotion and education. It is designed for dental hygienists and other health care providers who work with the older adult. Teaching methods include seminar, self-instructional modules and a community-based practicum.

Dentistry-Biological Sciences (BIO-SCI)

Courses

BIO-SCI 3210 Applied Biochemistry Credits: 2
This course is designed to build upon previous knowledge of chemistry, biology, and physiology as a basis for understanding principles in biochemistry. Presented through a self-paced online format, course content is selected to provide the foundation knowledge in biochemistry needed for subsequent courses in nutrition, pathology, and other health related topics.

Discourse (DISC)

Courses

DISC 100 Discourse I: Reasoning and Values (Speech and Writing) Credits: 3
“Discourse” refers to the language, images, styles, genres, behaviors and other forms of communication used by specific social and professional groups. The techniques of discourse analysis and language awareness taught in this course will enable you to position yourself socially and professionally, helping you understand the discourse conventions, reasoning, and "commonsense" assumptions that create and define academic, political, professional, and other discourse formations and communities. Students will produce, perform, and analyze college-level, oral and written texts; and they will learn how written and oral performances function together in specific discourse communities.
Co-requisites: Anchor I.

DISC 200 Discourse II: Culture and Diversity (Writing and Speech) Credits: 3
Students will produce, perform, and analyze college-level, oral and written texts that are based on sustained academic research. Students will continue to develop their understanding of discourse analysis and language awareness in the context of a range of discursive forms. Students will interpret and synthesize college-level scholarship that addresses how diverse discourse communities define, evaluate, and transform individual, institutional, and cultural identities. This course is associated with the anchor course Culture and Diversity and prepares students for DISC 300.
Prerequisites: DISC 100.

Co-requisites: Anchor II.

DISC 300 Discourse III: Civic and Community Engagement (Speech and Writing) Credits: 3
Students will put the knowledge and skills learned in Discourse I and II into practical use by engaging in a service-learning project that is interdisciplinary and intercultural. Students will use strategies of critical discourse analysis and critical language awareness to target the appropriate audience/recipients for their service project, to develop innovative and rhetorically effective texts, and to reflect on their project's purpose, methods, and consequences. This course is taught in close connection with the anchor course Civic and Community Engagement.
Prerequisites: DISC 200.

Co-requisites: Anchor III.

Economics (ECON)

Courses

ECON 100 Economics Explained Credits: 3
Everything you need to know about how the economy works and where it's going. This course simplifies and clarifies the vocabularies and concepts used to describe all the important economic phenomenon in our society today: unemployment, trade deficits, government budget deficits or surpluses, inflation, investments, and customer debt. It describes where we've been (economically) and assess the future of the economic system we call capitalism.

ECON 101 Essentials Of American Capitalism Credits: 3
This course represents an overview of the principles of economics and their relation to current economic events. It is designed to meet state requirements for elementary education certification as well as to provide a general introduction to economics for non-business, non-engineering, and non-economics majors. Both macroeconomic and microeconomic issues will be covered.

ECON 150 Introduction To Labor Studies Credits: 3
This interdisciplinary course offered by The Institute for Labor Studies, covers the role of workers and the labor movement in society and the American political and economic system. Students will gain an overview, from a labor viewpoint, of the organization of work and workers, collective bargaining and representation, and labor's rights, roles, and strategies in a democracy and in the global economy. A particular focus will be the image of the working class and organized labor in the media and among public perception.

ECON 151 Money, Medicine and Morals Credits: 3
This course will improve the student's understanding of and ability to critically evaluate complex moral dilemmas in medicine, business, law and other professions. Students will learn critical thinking, arguing, writing and presentation skills through examining moral issues for professionals. Guest speakers will introduce students to practical aspects of professional life.
Cross Listings: PHILOS 190.

ECON 158 Introduction to Urban Studies Credits: 3
Introduction to Urban Studies is a lecture and discussion course that provides the undergraduate student with an overview of the interdisciplinary field of urban social science. The student who successfully completes this course will have a broad understanding of the major issues, vocabulary, basic methods, and prominent scholars in urban studies. We will explore current events of relevance, including the opportunities and problems facing major cities in the United States including Kansas City.
Cross Listings: BLKS 101, UPD 101, URBAN ST 101.

ECON 201 Introduction To Economics I Credits: 3
Economics I deals primarily with macroeconomic or national economic concepts, the economics of the determination of recession, inflation, maintenance of full employment and economic growth, with an emphasis upon the economics of modern Keynesian analyses. It further introduces the economics of Marx and Ayres and discusses relevant and current economic issues. ECON 201 and ECON 202 are prerequisites for most other economics courses.

ECON 201P Introduction To Economics I Credits: 3
Economics I deals primarily with macroeconomic or national economic concepts, the economics of the determination of recession, inflation, maintenance of full employment and economic growth, with an emphasis upon the economics of modern Keynesian analyses. It further introduces the economics of Marx and Ayres and discusses relevant and current economic issues. ECON 201 and ECON 202 are prerequisites for most other economics courses.

ECON 202 Introduction To Economics II Credits: 3
Economics II deals primarily with microeconomics, firm analysis, the principles of demand, supply, elasticity, price determination, costs, income distribution, market structures, trade, and other related social, economic issues. ECON 201 and ECON 202 are prerequisites for most other economics courses.

ECON 202P Introduction To Economics II Credits: 3
Economics II deals primarily with microeconomics, firm analysis, the principles of demand, supply, elasticity, price determination, costs, income distribution, market structures, trade, and other related social, economic issues. ECON 201 and ECON 202 are prerequisites for most other economics courses.

ECON 204P Principles Of Economics Credits: 5
The course will combine macro and micro principles of economics. Credit will not be given for both macro (ECON 201 and ECON 204P) or for both micro (ECON 202 and ECON 204P) towards a degree.
Prerequisites: ECON 201, ECON 202.

ECON 210 Crossing Boundaries: The Latina/o Immigrant Experience Credits: 3
This course examines the Latina/o immigrant experience from the immigrants' diverse origins in the Americas to the communities they shape. Students will examine how empire, war, and economic integration have pushed people to migrate and how work, family, and immigration policy have shaped patterns of migration and settlement as well as integration and exclusion.
Prerequisites: ECON 201, ECON 202, DISC 100 and Anchor I.

Co-requisites: DISC 200.

Cross Listings: LLS 210, ENGLISH 212, SOCIOL 210.

ECON 300CM Cluster Course: Mexico, Central America And The Human Condition Credits: 3
Faculty from at least two different departments (one of which must be a department in the Division of Humanities, including History) may determine the topic and syllabus, subject to the approval of the director of Integrated Studies and the program's advisory committee in addition to the approval of the departments involved. This special topics course will satisfy the interdisciplinary course requirement for the B.A.
Prerequisites: ECON 201, ECON 202.

ECON 300CS Cluster Course Credits: 3
Faculty from at least two different departments (one of which must be a department in the Division of Humanities, including History) may determine the topic and syllabus, subject to the approval of the director of Integrated Studies and the program's advisory committee in addition to the approval of the departments involved. This special topics course will satisfy the interdisciplinary course requirement for the B.A.
Prerequisites: ECON 201, ECON 202.

ECON 301 Macroeconomic Analysis Credits: 3
The economic system as a whole and the ways in which its functioning is affected by the behavior of the interdependent sectors of which it is composed. Major factors affecting national income; use of sectoral accounts in analyzing economic prospects.
Prerequisites: ECON 201.

ECON 301P Macroeconomic Analysis Credits: 3
The economic system as a whole and the ways in which its functioning is affected by the behavior of the interdependent sectors of which it is composed. Major factors affecting national income; use of sectoral accounts in analyzing general economic prospects.
Prerequisites: ECON 201.

ECON 302 Microeconomic Analysis Credits: 3
Functioning of the individual enterprise and households. Problems confronting business enterprises operating under different types of market situations; influence of the prices factors of production on methods of production; effects that changes in income levels and in relative prices have on sales of different types of goods and services.
Prerequisites: ECON 201, ECON 202.

ECON 302P Microeconomic Analysis Credits: 3
Functioning of the individual enterprise and households. Problems confronting business enterprises operating under different types of market situations; influence of the prices factors of production on methods of production; effects that changes in income levels and in relative prices have on sales of different types of goods and services.
Prerequisites: ECON 202.

ECON 303H Special Issues In Economic Credits: 3
Readings and discussions of selected economic topics. Content varies over time as economic conditions change. Designed for outstanding students in Principles of Economics.
Prerequisites: ECON 201, ECON 202.

ECON 308 Challenges Facing The US Economy Credits: 3
This course provides an introduction to challenges facing the US economy, such as growing inequality and poverty in the midst of plenty, persistent unemployment in the central cities, the threat of recession or inflation, the problems and opportunities created by an aging society, implementation of welfare-to-work plans, and other topics of interest to students.
Prerequisites: ECON 201, ECON 202.

ECON 310 The United Nations: Politics And Economics Credits: 3
This interdisciplinary course covers many facets of the United Nations, acquainting students with its structure, its operations and its involvement in international events, past and present. It merges politics, economic issues and the history of the UN in an effort to understand more fully the UN's role in the international diplomacy. Students in this course will have an opportunity to participate in various Model UN conferences during the year.
Prerequisites: ECON 201, ECON 202.

ECON 311 Economics for Nonprofit Managers Credits: 3
This course introduces microeconomics to aspiring nonprofit managers. After reviewing the nonprofit organization's role in the U.S. economy, students will learn a variety of tools they can use to weigh alternatives, examine risk, and make organizational decisions. With these tools and a solid introduction to microeconomics, students will be prepared to analyze economic events, predict outcomes, and make sound decisions.
Prerequisites: ECON 201, ECON 202.

ECON 312 Theory Of Economic Development Credits: 3
Controversial problems affecting the nature, sources and process of development of industrial technology and the economy of private enterprise.
Prerequisites: ECON 201, ECON 202.

ECON 314 Race, Class And Gender: Theory, History, And Policy Credits: 3
Analyzes the ways in which race and gender discrimination result in differences in opportunities and outcomes in society. Begins with a historical overview of the origins of modern racism and patriarchy, and their relation to the rise and development of capitalism. Discursive and nondiscursive factors are investigated. Alternative theoretical approaches to understanding the intersections of race, class, and gender are evaluated. Policy debates on issues related to affirmative action, education, welfare, employment, and others are considered.
Prerequisites: ECON 201, ECON 202.

ECON 331 Money And Banking Credits: 3
A study of the structure, operations and problems of banks and other financial institutions with emphasis on their macroeconomic performance. The importance of banking in the financial system and the influence of Federal Reserve monetary policies are also studied.
Prerequisites: ECON 201, ECON 202, ECON 301(or equivalent).

ECON 331P Money And Banking Credits: 3
A study of the structure, operations and problems of banks and other financial institutions with emphasis on their macroeconomic performance. The importance of banking in the financial system and the influence of Federal Reserve monetary policies are also studied.
Prerequisites: ECON 201, ECON 202.

ECON 336 The Kansas City Economy Credits: 3
This course explores the Kansas City economy in depth from both a micro and macro perspective. The macro approach details how important the Kansas City economy is to the state of Missouri, to the US economy, and in the international arena. The micro approach details the contribution of the many different sectors of the KC area to the overall local economy.
Prerequisites: ECON 100, ECON 201 or ECON 202.

ECON 340 Collective Bargaining Credits: 3
This course involves a study of the economics and process of collective bargaining in the labor sphere, including contract negotiations, contract enforcement, and methods to resolve bargaining disputes. Both theoretical and applied issues in collective bargaining will be addressed. Students will participate in a contract bargaining simulation.
Prerequisites: ECON 201, ECON 202.

ECON 341 Union Leadership and Administration Credits: 3
This course focuses on the roles and challenges of union leadership in a changing environment. Topics include the union leaders' role as a representative, organizer and educator as well as administrative responsibilities within the union and the relationship with enterprise management in both adversarial and participatory situations. Options for leadership styles and organizational models will be discussed and explored in both theory and practice. Leaders will develop their skills of motivation, speaking, strategic planning and managing complex campaigns and diverse organizations.
Prerequisites: ECON 201, ECON 202.

ECON 343P Resource Acquisition And Distribution In The Hospitality Industry Credits: 4
This course will examine economic policy that is the basis for materials acquisition policies and practices within the hospitality industry. Additionally, students will study materials flow from source to final user. Special emphasis will be placed on policies and procedures that maximize resource usage. this course may not be used by students to fulfill requirements for the major in Economics or a Concentration in Commercial Economics.
Prerequisites: ECON 201, ECON 202.

ECON 353 Financial Analysis And The Economy Credits: 3
This course examines techniques of financial evaluation used by individuals, corporate managers, and portfolio analysts. Focus of the course will be on the interaction of the mechanics of analytical methods and economic activity. Topics covered will include individual portfolio building, asset evaluation, and financial market theory.
Prerequisites: ECON 201 and ECON 202.

ECON 366 Art Markets Credits: 3
An economic analysis of the development of art markets and the issue of government involvement in the arts.
Prerequisites: ECON 201, ECON 202.

ECON 395 Current Economic Issues Credit: 1
Each of these one-hour courses will deal with one selected topic. Students enrolled should have some background in the social sciences. A maximum of three Economics 395 courses will apply towards the department's graduation requirements for a major.
Prerequisites: ECON 201, ECON 202.

ECON 395A Economic Issues Credit: 1

ECON 395B The Economics Of Law Credit: 1

ECON 395C The Economics Of Energy Credit: 1

ECON 395D Economic Issues Credit: 1

ECON 395E The Economics Of Aging Credit: 1

ECON 395F The Economics Of Minorities Credit: 1

ECON 395G The Economics Of Poverty Credit: 1

ECON 395H The Economics Of The Arts Credit: 1
An analysis of the past and present policies regarding the financing of the Arts.
Prerequisites: ECON 201, ECON 202.

ECON 395I Views Of A Good Society Credit: 1
This course looks at different views of a good society from the perspective of Utopian economics. The materials dealt with in the course will be drawn from Utopian books, supplemented with material drawn from cartoons, art, literature, poetry, film, and music.
Prerequisites: ECON 201, ECON 202.

ECON 397A The Economics Of Public Process And Private Choice I Credit: 1
This film/tape course and ECON 397B are specifically designed in the format of the PACE program. Regular majors in economics may count one of these two courses as meeting he 27 minimum required departmental hours. The J.K. Galbraith film series and text, The Age of Uncertainty, provide the central theme for this course.
Prerequisites: ECON 201, ECON 202.

ECON 397B The Economics Of Public Process And Private Choice II Credit: 1
This film/tape course and ECON 397A are specifically designed in the format of the PACE program. Regular majors in economics may count one of these two courses as meeting the 27 minimum required departmental hours. The Milton Friedman film series, Free to Choose, provides the central theme for this course.
Prerequisites: ECON 201, ECON 202.

ECON 397CP Current Macroeconomic Issues Credits: 3
This is an independent studies course which addresses such macroeconomic issues as courses and remedies of inflation, recession and economic growth. This course is part of a Macro Pace Block.
Prerequisites: ECON 201, ECON 202.

ECON 402 Labor and the Global Political Economy Credits: 3
This course will examine current issues, trends, and developments which are shaping labor in today's global economy. Students will analyze the shifting balance of power between labor and capital, the role of government, and evaluate the strategic options for workers and unions operating in a global environment.
Prerequisites: ECON 201, ECON 202.

ECON 404R American Economic History Since 1865 Credits: 3
The course deals with the emergence of Industrial American since 1865. It covers the rise to dominance of the large modern corporation, the problem of economic and social instability and stability, the rise of trade associations, cartels, and government regulation in an unstable economy, and the evolution of American economic policy and national economic planning.
Prerequisites: ECON 201 and ECON 202.

ECON 404RR American Labor History Credits: 3
This course examines history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement , the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.
Prerequisites: ECON 201 and ECON 202.

Cross Listings: HISTORY 366RR.

ECON 405 European Economic Systems Credits: 3
A general study of the economic systems of Germany, France, Sweden, the United Kingdom, Russia, and other countries: and the European Economic Union. The course will study the economic-business organization, economic and social policies, trade policies, and the on-going political, economic, and business changes within the area, and their relation to other areas of the world in terms of economics, business and trade.
Prerequisites: ECON 201, ECON 202.

ECON 406WI History Of Economic Thought Credits: 3
Analysis of basic concepts of economic thought, their historical sources and significance.
Prerequisites: RooWriter.

ECON 408 The Twentieth Cntry: Crisis In Eco History/Changing Eco Analysis Credits: 3
The course will deal with selected major historical crisis in the Twentieth Century that changed Economic Theory and our lives, such as the post World War I period; the Depression of the 1930's; the international payments crisis and the development of Bretton Woods; the oil crisis of the 1970's; and the effect of the above upon changing economic analysis such as the Keynesian Revolution and its "counter revolution", and the economic and policy consequences.
Prerequisites: ECON 201 and ECON 202; Senior or Graduate standing.

ECON 411 Geographic Information Systems (GIS) for Urban Economic Development Credits: 3
An advanced quantitative methods course featuring the application of Geographic Information Systems (GIS) to the problems of urban economic development. Surveys federal, state, and local geospatial and attribute data resources, including Census Bureau TIGER files, and provides training in geodatabase construction and management. Geospatial processing, editing, and address geocoding are also covered. Formal analytical methods (cartographic aesthetics and visualization, spatial analysis, exploratory data analysis, network analysis, crime analysis, etc.) are all applied in the context of the problematics of urban and regional economic development.
Prerequisites: GEOG 203 or UPD 203

ECON 412 International Trade And Development Credits: 3
This course emphasizes the global allocation of resources and distribution of income in the analysis of economic development and international trade. Major topics include various theories of economic development, comparative advantage, terms of trade, tariffs, quotas, economic integration and the use of trade to foster economic development.
Prerequisites: ECON 201, ECON 202.

ECON 414 Problems In Latin American Development Credits: 3
Analysis of those historical, geographic, political, social and economic factors which have served to impede the development of the Latin American countries and discussion of development planning as it applies to these problems.
Prerequisites: ECON 201, ECON 202, ECON 412.

ECON 416 Law And Economics Credits: 3
This course will examine the use of economic principles in the analysis and application of public and private law. Emphasis will be given to the efficiencies of laws in meeting social objectives, how laws can be modified to become more economically efficient, and the uses of economics in the actual practice of the law. Issues covered will include proofs of liability in antitrust, contracts and employment law using statistical and economic analysis, and the calculation of economic damages in commercial, employment and personal injury/death litigation. Graduate students will be assigned a specific research paper.
Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 420 Environment, Resources And Economic Growth Credits: 3
This course focuses on the theory and policy issues involved in resource receation and depletion; environmental destruction, preservation and receation; and the interrelation of these problems of and prospects for economic growth.
Prerequisites: ECON 201, ECON 202.

ECON 421 Mathematical Economics Credits: 3
An introduction to mathematical methods as applied to the questions addressed by economists. The principal methods to be applied are matrix algebra and differential calculus in the context of optimization. Other topics may include integral calculus, differential equations, difference equations, or linear and non-linear programming.
Prerequisites: ECON 201, ECON 202, ECON 301, ECON 302 and MATH 210.

ECON 425 Intermediate Economic Statistics Credits: 3
An introduction to the empirical side of economics. Estimation theory and the properties of commonly used estimators are covered. Some of the more important topics dealt with are: multiple regression, heteroscedasticity and autocorrelation in regression analysis, analysis of variance and the use of qualitative variables in regression analysis. Hands-on work with computer software designed for econometrics is stressed. No experience with computers necessary.
Prerequisites: ECON 201, ECON 202, ECON 301, ECON 302 and STAT 235 (or its equivalent).

ECON 429 Environment, Resources And Economic Growth Credits: 3
This course focuses on the theory and policy issues involved in resource creation and depletion; environmental destruction, preservation and recreation; and the interrelation of these problems of and prospects for economic growth.
Prerequisites: ECON 201, ECON 202.

ECON 431 Monetary Theory And Policy Credits: 3
A study of the nature and functions of money and the financial system, with emphasis on monetary theory and its application to current banking and financial problems. Recent contributions to monetary theory and current literature.
Prerequisites: ECON 201, ECON 202, ECON 301.

ECON 435 Public Finance Credits: 3
Problems of public and private sector decision making of revenue-expenditure policies and an examination of the actual legal, political and economic policies for revenues and expenditures of federal, state and local governments.
Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 437 State And Local Government Finance Credits: 3
This course investigates the role, problems and relative importance of municipal governments in the United States. Such areas as the demand for public services, tax and expenditure policies, and intergovernmental fiscal relations will be explored in detail. Case studies of state and local governments will be introduced to emphasize the problems and proposed solutions arising in modern municipal governments.
Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 438 Economic Policy Credits: 3
Analysis of the confluence of political and economic behavior, the economics of collective action.
Prerequisites: ECON 201, ECON 202, ECON 301 and ECON 302.

ECON 442 International Finance Credits: 3
This course emphasizes the global activity and balance of payments implications of government taxation, expenditure and monetary policies under various capital market conditions. Major topics include: exchange rates and the balance of payments; national income determination in an open economy; integrated and non-integrated capital markets; economic growth stabilization policies and the quest for global economic stability.
Prerequisites: ECON 201, ECON 202, ECON 301.

ECON 448 Socialist Economic Systems Credits: 3

ECON 450R Regional Economics Credits: 3
Contemporary policy approaches to regional growth and decline are analyzed in this course.
Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 451 Institutional Economic Theory Credits: 3
Analysis of impact of modern philosophy and developments in social sciences on economic theory.
Prerequisites: ECON 201, ECON 202, ECON 301, ECON 302.

ECON 458 Urban Economics Credits: 3
An inquiry into the economics of location decisions and the influence of these on urban growth and on the real estate market; the evaluation of urban transportation and other public services; an examination of economic development of ghetto neighborhoods.
Prerequisites: ECON 201, ECON 202, ECON 302 (or equivalent).

ECON 460 Industrial Organization Credits: 3
The structure, conduct, and performance of American industry. Historical evolution of American industry; alternative industrial systems. Antitrust policies and their alternatives. Technological change and industrial performance.
Prerequisites: ECON 201, ECON 202, ECON 301, ECON 302.

ECON 461 Public Utility Economics Credits: 3
This course is designed to examine the theory and practice of public utility economics. It includes study of the public utility concept and how it has evolved and is evolving, the operation of public utilities in the U.S. economy, the methods and practice of regulating utilities, industry by industry case studies and current issues in public utility economics.
Prerequisites: ECON 201, ECON 202.

ECON 465 The Economics Of Health And Medicine Credits: 3
An economic analysis of the development of the medical market; organized medicine and the structure of existing health delivery systems. The problems of the medical market will be analyzed; the role of insurance will be investigated and alternative public policies will be studied.
Prerequisites: ECON 201, ECON 202, Advanced standing.

ECON 475 Economics Institutions and Policies Credits: 3
This course focuses on the economic system analysis of labor market phenomena in the context of historical-institutional development and labor market policies, this course is offered winter semester only.
Prerequisites: ECON 201 and ECON 202.

ECON 480 Managerial Economics And Operations Analysis Credits: 3
This course focuses on the application of microeconomic theory to a variety of contemporary business and government problems. Through case studies, students are introduced to the full complexity of actual industrial and government decisions and the diversity of microeconomic tools and concepts that can be brought to bear on these decisions.
Prerequisites: ECON 201, ECON 202, ECON 301 and ECON 302.

ECON 486 Labor Economics Credits: 3
An examination of the theories of wage determination, the economic effects of wage determination upon the wage structure, the distribution of national income, employment, and an introduction to collective bargaining.
Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 487 History Of Labor Movements Credits: 3
This course is concerned with the early formation and the transformation of labor unions given the changing American industrial climate. Study will include early union structures, forerunners of modern unions, such as the Knights of Labor, development of the current unions and the potential for union survival in the post-industrial era.
Prerequisites: ECON 302.

ECON 487H Human Resource Economics Credits: 3
An analysis of the factors determining the productivity of human resources: education, nutrition, job training and work environment. An analysis of work patterns, wage patterns and the impact of automation.
Prerequisites: ECON 201, ECON 202, ECON 302.

ECON 488 Radical Political Economy Credits: 3
This course will cover the ideas that constitute radical political economy. It will show how radical political economy can be used to examine current economics and social problems and will outline possible economic structures of utopian visions.
Prerequisites: ECON 201, ECON 202.

ECON 490 Readings In Economics Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the professor in any of the following fields: (a) economic theory, (b) history of economic thought, (c) labor economics, (d) urban economics, (e) monetary and fiscal policy and theory, (f) international economics, (g) economic development. (h) comparative economic systems, (i) public finance, (j) public policy toward business, (k) quantitative economics.
Prerequisites: ECON 201, ECON 202.

ECON 495 Colloquium In Economics Credits: 3
Each course will deal with a particular topic in economics: A) Manpower Economics; B) Political Economy; C) Area Studies in Economics-Europe; D) Area studies in Economics-Africa; and E) Area studies in Economics-Asia.
Prerequisites: ECON 201, ECON 202.

ECON 496 Practicum in Urban Economic Development Credits: 3
The Practicum in Urban Economic Development provides students with the opportunity to integrate and apply the knowledge and skills developed through previous coursework to real-world problems of urban economic development. Working on collaborative, service-learning projects in partnership with both community and metropolitan-level organizations, students will engage with the process of applied urban economic development in a team-structured context. Student teams will be each be responsible for one term project over the course of the semester. The course will culminate with the public presentation of project outcomes.
Prerequisites: ECON 336, ECON 458.

ECON 497 Internship Credits: 1-6
The course allows the student to participate in cognate, approved internships of a professional nature.
Prerequisites: The completion of 75 credit hours and undergraduate major or graduate student in Economics, ECON 201, ECON 202.

ECON 499WI Capstone Colloquium Credits: 3
This course provides a common intellectual experience for all economics majors while recognizing the diversity of experiences students bring with them to their final semester before graduation. A series of lectures, reading assignments, and writing assignments help students to synthesize their knowledge of the broad areas of study within (and outside) the field of economics. Guest lecturers provide a critical summary of and synthesis of major areas of study. Each student will also assess their own development by critically examining their individual portfolio of work (containing papers, essay exams, and term papers written during their undergraduate career), and of the department’s program.
Prerequisites: RooWriter.

Education (EDUC)

Courses

EDUC 149 Economics In The K-8 Classroom Credits: 3
This course is designed to help students develop an understanding of economic concepts and principles and to raise their level of comfort for infusing these concepts throughout the K-8 curriculum. Special attention will be given to both national and state economic standards.

EDUC 160 Career And Life Planning Credits: 2
Skill development in career planning through processes of self-assessment and self-development and analyzing the structure of the world of work and occupational information, values, clarification and decision making, vocational exploration and preparation for employment.

EDUC 180 Introduction To Education Credits: 2
The course will present an overview of education today for those who have a general interest in education or are considering becoming educators. The curriculum provides students with an introduction to current issues in education while incorporating skills needed for academic success. Students will also have the opportunity to gain experience in a K-12 classroom setting (2 credit hours).

EDUC 189 Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 189CD Special Topics Credits: 1-6

EDUC 189CM Special Topics Credits: 1-6

EDUC 289 Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 289FD Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 289FE Special Topics Credits: 1-6

EDUC 289FL Special Topics Credits: 1-6

EDUC 289IA Special Topics Credits: 1-6

EDUC 289IU Special Topics Credits: 1-6

EDUC 289KT Special Topics Credits: 1-6

EDUC 289MA Special Topics Credits: 1-6

EDUC 289MM Special Topics Credits: 1-6

EDUC 289MT Special Topics Credits: 1-6

EDUC 289PS Special Topics Credits: 1-6

EDUC 289SE Special Topics Credits: 1-6

EDUC 289TE Special Topics Credits: 1-6

EDUC 289UE Special Topics Credits: 1-6

EDUC 289US Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 389 Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings.

EDUC 389CA Special Topics Credits: 1-6

EDUC 389CI Special Topics Credits: 1-6

EDUC 389ES Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 389FD Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 389FE Special Topics Credits: 1-6

EDUC 389FL Special Topics Credits: 1-6

EDUC 389IA Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 389LI Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 389LL Special Topics Credits: 1-6

EDUC 389LM Special Topics Credits: 1-6

EDUC 389LT Special Topics Credits: 1-6

EDUC 389ME Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics,instructors and prerequisites to be listed in the semester bulletin.

EDUC 389MM Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics,instructors and prerequisites to be listed in the semester bulletin.

EDUC 389TI Special Topics Credits: 1-6

EDUC 389UE Special Topics Credits: 1-6
An undergraduate course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

EDUC 389US Special Topics Credits: 1-6

EDUC 402R Algebra For Teachers Credits: 3
This course is designed for secondary school mathematics teachers and teacher candidates. The content of secondary school algebra is analyzed and rationalized from a deep conceptual base with particular attention to those areas within algebra experiencing the greatest amount of change.

EDUC 414 English Language Study In Elementary And Secondary Schools Credits: 3
Designed as a review of traditional as well as descriptive and historical approaches to grammar, usage and syntax - focusing upon teaching strategies for elementary, junior high, middle school, and senior high English/language arts classrooms.

EDUC 428 Cultural Diversity And American Education Credits: 3
An examination of educational needs and strategies in a culturally diverse society based on a study of several major ethnic and nationality groups in America from historical, anthropological and sociological perspectives. This course may be team-taught.

EDUC 434 Classroom Diagnosis And Correction Of Reading Problems Credits: 3
Procedures for the diagnosis and correction of reading problems which are appropriate for classroom teachers.
Prerequisites: TCH-ED 415.

EDUC 440 Literature For Adolescents Credits: 3
Focus upon literature for adolescents and ethnic literature, specifically, and upon the special reading interests of the adolescent in relation to the methods and materials of reading in grades 7-12, generally. Attention to literature selection standards, censorship, individualized instruction, and reader response.

EDUC 489 Special Topics Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in each semester’s bulletin.

EDUC 489A Special Topics Credits: 1-6

EDUC 489AR Special Topics Credits: 1-6

EDUC 489BP Special Topics Credits: 1-6

EDUC 489CA Special Topics Credits: 1-6

EDUC 489CI Special Topics Credits: 1-6

EDUC 489LO Special Topics Credits: 1-6

EDUC 489LT Special Topics Credits: 1-6

EDUC 489Q Special Topics Credits: 1-6

EDUC 489QT Special Topics Credits: 1-6

EDUC 489TA Special Topics Credits: 1-6

EDUC 497 Individual Study Credits: 1-6
Guided study of a selected topic in education.

Education Research and Psychology (EDUC-R&P)

Courses

EDUC-R&P 255 Understanding Data Through Sports: Sabermetrics Credits: 3
Non-theoretical approach to data analysis using applications and examples from the world of sports.

EDUC-R&P 455 Understanding Data Through Sports: Sabermetrics Credits: 3
Non-theoretical approach to data analysis using applications and examples from the world of sports.

Electrical and Computer Engineering (E&C-ENGR)

Courses

E&C-ENGR 110 Introduction to Electrical and Computer Engineering Credit: 1
Introduction to the profession of electrical and computer engineering, other engineering disciplines, ethics, environmental responsibility, student success strategies, and teamwork.

E&C-ENGR 130 Engineering Graphics Credits: 3
Introduction to Engineering Graphics with the use of the Computer Aided Design tools AutoCAD and SolidWorks. Introduction to 2D design with AutoCAD and introduction to 3D design with SolidWorks. Also an introduction to electrical circuit diagrams. No previous 2D or 3D CAD experience is necessary to take this class.

E&C-ENGR 216 Engineering Computation Credits: 4
Development, analysis and synthesis of structured computer programs for solving engineering problems in the Python, MATLAB, and C languages. Introduction to algorithms and data structures.
Prerequisites: MATH 110 (or equivalent).

E&C-ENGR 226 Logic Design Credits: 3
Design of combinational logic circuits, logic minimization techniques, design of RAM, ROM, PLA, PAL, design of sequential logic circuits, state machine design techniques, digital system design.
Co-requisites: E&C-ENGR 227.

E&C-ENGR 227 Logic Design Laboratory Credit: 1
Laboratory for E&C-ENGR 226. Experimental topics related to the design of combinational and sequential logic systems and small digital systems.
Co-requisites: E&C-ENGR 226.

E&C-ENGR 228 Introduction to Computer Design Credits: 3
This course covers computer organizations and fundamental computer design techniques. It also discusses design of computer data unit, control unit, input-output, microprogramming. Memory systems (RAM memory, Cache memory, interrupts, secondary memory) and direct memory access design is also discussed. Verilog HDL design is introduced and applied to small digital systems.
Prerequisites: E&C-ENGR 226, E&C-ENGR 227.

Co-requisites: E&C-ENGR 229.

E&C-ENGR 229 Introduction to Computer Design Laboratory Credit: 1
This laboratory course covers experimental topics related to the design of digital computer systems and arithmetic circuits which students study in the E&C-ENGR 228.
Prerequisites: E&C-ENGR 226, E&C-ENGR 227.

Co-requisites: E&C-ENGR 228.

E&C-ENGR 241 Applied Engineering Analysis I Credits: 3
Partial differentiation, multiple integrals, first and second order ordinary differential equations, partial fractions, and Laplace transform solution of Ordinary Differential Equations.
Prerequisites: MATH 220, PHYSICS 240.

Co-requisites: PHYSICS 250.

E&C-ENGR 250 Engineering Mechanics and Thermodynamics Credits: 3
This course concentrates on practical concepts in mechanics and thermodynamics for EC-ENGR majors, such as the practical use of forces, moments, couples, centroids, and moment of inertia, friction, manipulating systems of rigid bodies in motion and applying conservation of energy to gases, liquids, and solids. Materials will also be addressed.
Prerequisites: MATH 220, PHYSICS 240.

E&C-ENGR 276 Circuit Theory I Credits: 3
Kirchoff's circuit laws, Ohm's Law, nodal and mesh analyses, source transformations, superposition, Thevenin and Norton equivalents, transient analysis of 1st and 2nd order systems. AC circuit analysis, phasors, impedance, sinusoidal steady-state responses, operational amplifiers and PSpice.
Prerequisites: PHYSICS 250.

Co-requisites: E&C-ENGR 341R.

E&C-ENGR 277 Circuit Theory I Lab Credit: 1
Introduction to the use and limitations of basic instruments used in electrical testing and measurement. Experimental techniques and laboratory safety. Data gathering, interpretation and presentation. Preparation of laboratory reports. Experimental work supporting theoretical concepts developed in E&C-ENGR 276.
Co-requisites: E&C-ENGR 276.

E&C-ENGR 301 Fundamental Topics in Electrical and Computer Engineering Credits: 1-4
Undergraduate topics in electrical or computer engineering.

E&C-ENGR 301EA Topics in Electrical Engineering Credits: 1-4

E&C-ENGR 301ES Topics in Electrical Engineering Credits: 1-4

E&C-ENGR 301G Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 302 Electromagnetic Waves and Fields Credits: 4
Maxwell's equations plane waves in lossless and lossy media transmission line theory and Smith Chart - single stub matching rectangular waveguides - TE and TM modes rectangular cavity resonators electromagnetic radiation from Hertzian point sources, dipole and look antennas simple linear arrays Friis formula for radar and wireless systems.
Prerequisites: E&C-ENGR 341R, E&C-ENGR 376, PHYSICS 250.

E&C-ENGR 330 Electronic Circuits Credits: 3
Application of operational amplifiers, semiconductors device physics, elementary analysis and design of analog electronic circuits that utilize diodes, BJT's, and MOSFET's in single and multistage amplifiers with passive loads and power amplifiers; DC biasing, small signal analysis and calculation of frequency responses. The use of CAD (Spice) in the analysis and design of electronic circuits.
Prerequisites: E&C-ENGR 276.

Co-requisites: E&C-ENGR 331.

E&C-ENGR 331 Electronic Circuits Laboratory Credit: 1
Laboratory experiments in the application of operational amplifiers, the analysis, design, and testing of single and multistage amplifiers with passive loads, and the measurement of frequency response.
Prerequisites: E&C-ENGR 276, E&C-ENGR 277.

Co-requisites: E&C-ENGR 330.

E&C-ENGR 341R Applied Engineering Analysis II Credits: 3
Complex number; Euler's formulas, analytic functions, Taylor and Laurent series; Cauchy residue theorem and application to evaluation of integrals; linear algebra, eigenvalue and eigenvectors; Fourier series and transforms.
Prerequisites: E&C-ENGR 241, PHYSICS 250.

E&C-ENGR 358 Introduction to Control Systems Credits: 3
Study of feedback techniques, with applications to control systems. Includes modeling, applications of Bode plot, root locus, state-variable, and Nyquist methods.
Prerequisites: E&C-ENGR 380.

E&C-ENGR 376 Circuit Theory II Credits: 2
Power, three-phase circuits, complex s-plane methods, resonance, frequency response, and two-port networks for circuit analysis.
Prerequisites: E&C-ENGR 276.

Co-requisites: E&C-ENGR 377.

E&C-ENGR 377 Circuit Theory II Lab Credit: 1
Continuation of E&C-ENGR 277 introducing the use of additional instruments used in electrical testing and measurements. Statistical data evaluation methods. Experimental work supporting concepts developed in E&C-ENGR 376.
Prerequisites: E&C-ENGR 277.

Co-requisites: E&C-ENGR 376.

E&C-ENGR 380 Signals and Systems Credits: 4
Continuous and discrete-time signals and systems, linearity and time-invariance, impulse response and convolution. Fourier analysis of discrete and continuous signals and systems and the application of Laplace, z, and Fourier transforms.
Prerequisites: E&C-ENGR 341R.

Co-requisites: E&C-ENGR 381.

E&C-ENGR 381 Signals and Systems Lab Credit: 1
Computer Laboratory for E&C-ENGR 380. Various signal processing software programs (MATLAB and DSP) are used to investigate properties and applications of continuous and discrete time signals and systems.
Co-requisites: E&C-ENGR 380.

E&C-ENGR 400 Problems in Electrical and Computer Engineering Credits: 1-4
Analytic or experimental problems pertaining to electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401 Topics In Electrical And Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401AC Topics in Electrical Engineering Credits: 1-4

E&C-ENGR 401AN Topics in Electrical Engineering Credits: 1-4

E&C-ENGR 401AS Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 401AV Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 401BE Topics in Electrical Engineering Credits: 1-4
Topics in Electrical Engineering

E&C-ENGR 401BI Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 401CA Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 401CI Topics in Electrical Engineering Credits: 1-4

E&C-ENGR 401CO Topics in Electrical Engineering Credits: 1-4
Topics in Electrical Engineering

E&C-ENGR 401DE Special Topics ECE Credits: 1-4

E&C-ENGR 401EC Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 401EN Topics in Electrical Engineering Credits: 1-4

E&C-ENGR 401EP Topics in ECE Credits: 1-4

E&C-ENGR 401ES Topics in Electrical Engineering Credits: 1-4
Topics in Electrical Engineering

E&C-ENGR 401FE Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 401H Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 401IR Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 401KI Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401NM Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 401NN Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401PE Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401PG Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401PL Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401PQ Topics in Electrical Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401PV Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 401RB Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401RD Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401RS Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401SC Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 401VL Topics in Electrical Engineering Credits: 1-4

E&C-ENGR 401WN Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 401XX Topics in Electrical and Computer Engineering Credits: 1-4
Topics covering current and new technical developments in electrical or computer engineering.
Prerequisites: Senior standing.

E&C-ENGR 402WI Senior Design I Credits: 2
First capstone design course in electrical and computer engineering. Provides and accounts for laboratory, library, research and other work needed for the development of the project proposal. Stresses written and oral presentations and ethics.
Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 430, E&C-ENGR 428R, RooWriter.

E&C-ENGR 403 Senior Design II Credits: 3
Second capstone design course in electrical and computer engineering. Project management, professional engineering practice, economic, environmental and safety considerations in project design, the development of written and oral presentation skills and working in teams. Provides laboratory experiences in prototyping, fabrication and troubleshooting of a design project.
Prerequisites: E&C-ENGR 402WI.

E&C-ENGR 403WI Senior Design II Credits: 3
Second capstone design course in electrical and computer engineering. Project management, professional practice, ethical and engineering economic considerations and development of written and oral presentation skills. Provides laboratory experience in prototyping, fabrication, and troubleshooting of the design project. Stresses written and oral presentation.
Prerequisites: E&C-ENGR 402WI, RooWriter.

E&C-ENGR 412 Principles of RF/Microwave Engineering Credits: 3
General aspects of TE, TM and TEM mode propagation in waveguides; circular waveguides; optical waveguides; wave propagation on dielectric backed conductors; wire antennas; equivalence principle and aperture antennas; antenna impedance and mutual coupling in arrays; array beamforming; scattering matrix representations; impedance matching; resonators; filters, couplers and power-dividers; microstriplines and striplines; r.f. propagation in wireless and radar systems; conformal mapping techniques and applications (optional).
Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381, MATLAB proficiency.

E&C-ENGR 414 Microwave Engineering for Wireless Systems Credits: 3
Microwave networks; s-, z-, y- and abcd matrices; signal flow graphs; circular waveguides; stripline microstrip characteristics; impedance transformers; power dividers and directional couplers; microwave filters; microwave resonators; active microwave circuits.
Prerequisites: E&C-ENGR 302, E&C-ENGR 380, MATLAB proficiency.

E&C-ENGR 415 Microwave Engineering for Wireless Systems Lab Credit: 1
Design performance simulation of microwave filters and active microwave circuits; comparative analysis of impedance transformers; use of CAD tools in microwave circuit design.
Prerequisites: E&C-ENGR 414.

E&C-ENGR 416 Neural and Adaptive Systems Credits: 3
A hands-on introduction to the theory and applications of neurocomputing. Includes classification, function approximation, supervised and unsupervised learning, time series analysis, and adaptive filtering using different feed-forward and recurrent artificial neural networks.
Prerequisites: COMP-SCI 394R, E&C-ENGR 341R.

E&C-ENGR 418 Introduction to Radar Systems Credits: 3
Radar equation; MT, Pulsed Doppler and Tracking Radars; detection of and information from radar signals; radar antennas; transmitters and receivers; radar propagation and clutter.
Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381.

E&C-ENGR 420 Advanced Engineering Computation Credits: 3
Programming and computational analysis principles and techniques for various problems in embedded programming, applied computation, and signal processing.

E&C-ENGR 424 Computer Design Credits: 3
Design of general purpose computers including arithmetic and control units, input/output, memory systems, microprogramming and introduction to parallel structures and processing.
Prerequisites: E&C-ENGR 226.

E&C-ENGR 426 Microcomputer Architecture and Interfacing Credits: 3
Advanced microprocessor architecture and programming; interfacing and programming of peripherals. Parallel and serial communication, interrupts, direct memory access, coprocessors.
Prerequisites: E&C-ENGR 226.

E&C-ENGR 427 Microcomputer Laboratory Credit: 1
Laboratory for E&C-ENGR 426. Microprocessor hardware and software involving interfacing of peripherals to 8-bit and 16-bit microprocessor. Simple D/A conversion, music composition, and various programmable controllers.
Prerequisites: E&C-ENGR 227.

Co-requisites: E&C-ENGR 426.

E&C-ENGR 428R Embedded Systems Credits: 3
This course examines the hardware/software aspects associated with developing microcontroller-based computer systems. The students learn about the architecture and assembly language for popular microcontrollers and how to take advantage of a variety of input/output options that include binary ports, A/D and D/A converters, communication ports, and interfacing techniques for various applications.
Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

Co-requisites: E&C-ENGR 429.

E&C-ENGR 429 Embedded Systems Laboratory Credit: 1
The laboratory introduces the students to a variety of challenging design projects using microcontroller interfacing techniques to develop real world applications, such as digital thermometer and digital pressure monitoring systems. Students must produce an individual design project.
Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

Co-requisites: E&C-ENGR 428R.

E&C-ENGR 430 Microelectronic Circuits Credits: 3
The analysis and design of feedback amplifiers, oscillators and of microelectronic circuits that employ diodes, MOSFETs and BJTs in current mirrors, amplifiers with active loads, differential amplifiers, operational amplifiers, and CMOS Logic gates. The use of CAD (Spice) in the analysis and design of feedback amplifiers and microelectronic circuits.
Prerequisites: E&C-ENGR 330, E&C-ENGR 331.

Co-requisites: E&C-ENGR 431.

E&C-ENGR 431 Microelectronic Circuits Laboratory Credit: 1
Laboratory experiments in the analysis, design and testing of feedback amplifiers; microelectronic circuits that employ diodes, MOSFETs and BJTs in feedback amplifiers, oscillators, current mirrors, amplifiers with active loads, differential amplifiers, operational amplifiers, and CMOS logic gates.
Prerequisites: E&C-ENGR 330, E&C-ENGR 331.

Co-requisites: E&C-ENGR 430.

E&C-ENGR 433 Analog Integrated Circuit Design Credits: 3
Principles of the design and analysis of analog integrated circuits. Study of MOS device physics and second order effects, device fabrication and layout, noise, single-stage and differential amplifiers, current mirrors, reference circuits, op amps and frequency compensation. Introduction to CAS circuit design and Cadence design tools.
Prerequisites: E&C-ENGR 276.

E&C-ENGR 436 Power Electronics I Credits: 3
Power electronic device characteristics, important circuit and component concepts, phase controlled rectifiers, line communicated inverters and AC phase control. Includes laboratory projects.
Prerequisites: E&C-ENGR 430.

E&C-ENGR 454 Robotic Control and Intelligence Credits: 3
Introduces robotics; robot system characteristics; robot motive power systems; geometric structure of robots; sensors and feedback; control applications and algorithms; data acquisition and output actuation functions; robots and Artificial Intelligence; microprocessor applications in robotics.
Prerequisites: E&C-ENGR 226 (or E&C-ENGR 426), E&C-ENGR 358.

E&C-ENGR 458 Automatic Control System Design Credits: 3
Techniques for feedback system design analysis: compensator design examples, state variable methods, non-linear systems, and sampled-data control systems.
Prerequisites: E&C-ENGR 380, E&C-ENGR 358.

E&C-ENGR 460 Electromechanical Conversion I Credits: 3
Magnetic circuitry in general and in machinery; DC machine theory, operation, applications; transformer circuits, synchronous machine theory, operation applications; basic principles of energy conversion; introduction to power electronics; and basic principles of power transmission and control are covered.
Prerequisites: E&C-ENGR 276 (or E&C-ENGR 302).

E&C-ENGR 461 Electric Power Lab Credits: 3
Application of fundamentals and concepts of power systems to practical power plan and industrial applications. Operational limitations of all components of power system equipment. Single and Three Phase Circuits, Generators/Alternators, Transformers, Motors, and specialty items (Coronal mass Ejection, Ferroresonance, System Protection).
Prerequisites: E&C-ENGR 466.

E&C-ENGR 462 Symmetrical Components Analysis of Power Systems Credits: 3
Short circuit analysis using symmetrical components. Simultaneous faults and open conductors.
Prerequisites: E&C-ENGR 466.

E&C-ENGR 463 Advanced Sustainable Energy Systems Engineering Credits: 3
Sustainable Energy Systems Engineering focuses on understanding the theory and application of emerging energy technologies, including solar, wind, biomass, oceanic, geothermal, hydropower, fuel cell (hydrogen), nuclear, and other more exotic energy sources. A premise of the course is that a sustainable energy technology must both be technically feasible and economically viable. Renewable energy sources will be highlighted with a focus on projections for a sustainable energy future. Graduate students will be assigned an additional project to work.
Prerequisites: E&C-ENGR 466.

E&C-ENGR 466 Power Systems I Credits: 3
Power System fundamentals; Methods of power system analysis and design; Modeling of power systems components such as transmission lines, transformers and generators; Analysis of steady state operation of power system and unbalanced conditions.
Prerequisites: E&C-ENGR 341R, E&C-ENGR 376.

E&C-ENGR 467 Power Systems II Credits: 3
Power system matrices. Power flow analysis. Gauss-Seidel and Newton-Raphson techniques. Fast-decoupled load flow. Economic dispatch. Voltage control system. Power system control.
Prerequisites: E&C-ENGR 358, E&C-ENGR 466.

E&C-ENGR 468 Electric Power Distribution Systems Credits: 3
Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems; application of capacitors; voltage regulation and reliability.
Prerequisites: E&C-ENGR 460.

E&C-ENGR 470 Reliability of Electric Power Systems Credits: 3
Principles of reliability as applied to Power Systems with an overview of current methods to measure reliability of Power Systems are introduced. Analytical and Monte Carlo models for component state and system state duration, with contingency analysis and linear programming for optimal power flow are also covered. Restoration times and cost assessment after component or system failures due to internal or external problems provide focus to practical operating principles.
Prerequisites: COMP-SCI 394R (or equivalent), E&C-ENGR 466.

E&C-ENGR 472 Power Generation Systems Credits: 3
Multi discipline survey of power generation systems and subsystems, including coal-fired steam, co-generation and combined cycle, and combustion turbines. With a goal of reviewing all the major subsystems, this course exposes the electrical engineer to all the mechanical, thermodynamic, and chemical processes of power generation systems.
Prerequisites: E&C-ENGR 466.

E&C-ENGR 474 Introduction to Communication Systems Credits: 3
Introduction to principles and fundamentals of communication systems. Signal representation and analysis, Fourier transform and applications, probability and random variables, analog and digital modulation techniques.
Prerequisites: COMP-SCI 394R, E&C-ENGR 380, E&C-ENGR 474.

E&C-ENGR 476 Introduction to Wireless Communication Systems Credits: 3
Principles of wireless communication analysis and design. Digital communication basics, cellular radio, wireless PCS communications, multiple access techniques, channel coding and equalization, and standards of digital cellular/PCS systems.
Prerequisites: E&C-ENGR 474.

E&C-ENGR 477 Introduction to Wireless Networking Credits: 3
Principles of the design and analysis of wireless networks. Study of medium access control, administration routing and adaptation to the complexities of the wireless environment. Investigation of networking issues in the IEEE 802.11 family of standards, IEEE 802.15 (Bluetooth), Long Term Evolution, cellular, satellite, ad hoc, and sensor networks.
Prerequisites: COMP-SCI 394R.

E&C-ENGR 480 Digital Signal Processing Credits: 3
Concepts, analytic tools, design techniques used in computer processing of signals: signal representation, sampling, discrete-time system analysis, recursive/non-recursive filters, design/implementation of digital filters.
Prerequisites: E&C-ENGR 380.

E&C-ENGR 484 Digital Image Processing Credits: 3
Fundamentals of digital image processing hardware and software, including digital image acquisition, display, compression, transforms and segmentation.
Prerequisites: E&C-ENGR 380, experience in a high-level programming language.

E&C-ENGR 486 Pattern Recognition Credits: 3
Pattern recognition techniques of applications such as automatic recognition for speech, visual inspection systems, clinical medicine, automatic photographic recognition systems and advanced automation systems.
Prerequisites: Senior standing.

E&C-ENGR 490 Digital Computer Applications in Engineering Credits: 3
Use of digital computers for the solution of engineering problems involving roots of equations, simultaneous equations, curve fitting, integration, differentiation, and differential equations.
Prerequisites: E&C-ENGR 216, MATH 250, Junior standing.

E&C-ENGR 491 Internship Credits: 6
Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/nocredit only and students must be in good standing with at least 18 credit hours of EC-ENGR courses counting towards the degree. Registration by consent number only: petition forms for E&C-ENGR 491 internships are available in the office of CSEE Division and on the web.
Prerequisites: At least 18 hours of EC-ENGR courses toward the degree.

E&C-ENGR 497 Directed Readings Credits: 1-4
Readings in an area selected by an undergraduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 499 Undergraduate Research Credits: 1-3
Completion of a project, including a final written report, under the direction of a faculty member. A prospectus must be accepted prior to registration.

English Language & Literature (ENGLISH)

Courses

ENGLISH 100 Introduction to Reading and Writing Credits: 3
The study and practice of rhetorical principles and strategies of academic reading and writing. Frequent reading and writing exercises develop critical engagement with texts, with an emphasis on thesis, organization and grammar. This optional course prepares students to take ENGLISH 110.

ENGLISH 100B Basic Speaking and Listening For Non-Native Speakers Credits: 1-3
The study and practice of speaking and listening for survival-level social functions in English. Frequent exercises focus on the production of isolated words and phrases in areas of need, and on the development of survival level oral/aural skills for beginning ESL students. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 100C Basic Reading for Non-Native Speakers Credits: 1-3
The study and practice of survival-level reading English vocabulary in context. Frequent exercises focus on basic reading comprehension related to familiar topics and situations, and the introduction of dictionary skills. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 100D Basic Writing For Non-Native Speakers Credits: 1-3
The study and practice of survival level writing skills including spelling, capitalization and some punctuation. Introduction of basic sentence structures and completion of simple standard forms of written English. Frequent exercises focus on survival level writing such as words and basic phrases in the present tense. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 100G Basic Grammar For Non-Native Speakers Credits: 1-3
The study and practice of survival level sentence structures and words. Frequent exercises focus on basic level sentences, questions, directions, and descriptions in the present tense that relate to students' immediate surroundings and some life skills areas. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 100S Special Topics In English As A Second Language Credits: 1-6
A course designed to address the specific needs of an individual student or group of students studying English as a Second Language. In addition to targeting English skills, the course may address topics or skills which are not covered in the standard Academic English curriculum of the Applied Language Institute. This course will accommodate individual students or groups of students studying at the Institute for periods of time other than the standard semester length. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 100T TOEFL Preparation Credits: 1-3
This course will prepare students to take the TOEFL (Test of English as a Foreign Language), in either the paper-based (PBT) or internet-based (iBT) form, and/or to improve their scores from previous attempts. Exercises focus on developing the skills and strategies necessary for navigating TOEFL questions while continuing to develop the general English language skills that support success on the TOEFL. The course will provide students with a personal awareness of strengths and weaknesses so they may focus their test preparation work in and outside of class. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 101B Academic Speaking & Listening For Non-Native Speakers I Credits: 1-3
The study and practice of speaking and listening for basic social functions in English. Exercises include the practice of basic descriptions and the development of oral/aural skills for beginning ESL students. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 101C Academic Reading & Vocabulary For Non-Native Speakers I Credits: 1-3
The study and practice of reading with basic English vocabulary in context. Exercises focus on reading comprehension, identifying the topics of short readings, and the introduction of basic dictionary skills. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 101D Academic Writing For Non-Native Speakers I Credits: 1-3
The study and practice of basic writing skills including handwriting, spelling, capitalization and punctuation. Frequent short exercises emphasize basic sentence structure, biographical description, and completion of standard forms. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 101G Academic Grammar For Non-Native Speakers I Credits: 1-3
The study and practical application of basic sentence structure and word parts. Frequent exercises emphasize use and understanding of simple sentences, questions, directions, and descriptions in the present and past tenses. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 102B Academic Speaking & Listening For Non-Native Speakers II Credits: 1-3
The study and practice of speech in environments such as the classroom, work, and simple social occasions. Exercises focus on student's ability to distinguish sounds and to produce them correctly in the context of a sentence and to listen for specific information. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 102C Academic Reading & Vocabulary For Non-Native Speakers II Credits: 1-3
The study and practice of reading narrative and expository texts and standard forms. Exercises focus on the development of vocabulary and introduction of reading techniques such as identification of topics and main ideas, skimming, scanning, prediction, and inference. This course carries no credit toward graduation in the College of Arts and Science.

ENGLISH 102D Academic Writing For Non-Native Speakers II Credits: 1-3
The study and practice of techniques for writing short paragraphs in English. Frequent exercises emphasize various forms of paragraph organization and the improvement of punctuation and mechanical skills in writing. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 102G Academic Grammar For Non-Native Speakers II Credits: 1-3
The study and practical application of basic sentence structures, including future and irregular past tense constructions. Frequent exercises emphasize use and understanding of comparatives, questions, and compound nouns and verbs. This course carried no credit toward graduation in the College of Arts and Sciences.

ENGLISH 103B Academic Speaking & Listening For Non-Native Speakers III Credits: 1-3
The study and practice of listening for and producing speech in the past, present and future tenses. Exercises introduce note-taking techniques and focus on the ability to hear and express abstract ideas. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 103C Academic Reading & Vocabulary For Non-Native Speakers III Credits: 1-3
The study and practice of longer reading passages of various rhetorical styles. Exercises focus on improvement of reading speed and the development of vocabulary and comprehension through complex inferences. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 103D Academic Writing For Non-Native Speakers III Credits: 1-3
The study and practice of writing multi-paragraph academic essays. Frequent exercises emphasize point-of-view, process writing, and a variety of rhetorical styles. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 103G Academic Grammar For Non-Native Speakers III Credits: 1-3
The study and practical application of complex sentence structures, including perfect and perfect progressive tenses. Frequent exercises emphasize use and understanding of passive voice, gerunds and infinitives, articles, conditionals, and modals. The course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 104B Academic Speaking & Listening For Non-Native Speakers IV Credits: 1-3
The study and practice of standard English, particularly in the college classroom. Exercises include training in academic lecture comprehension and note-taking as well as formal (classroom presentation) and informal (conversation) English speaking. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 104C Advanced Academic English Reading For Non-Native Speakers IV Credits: 1-3
This course focuses on preparing students to deal effectively with sophisticated academic reading materials by guiding them in the development of a conscious and reflective approach toward reading. It emphasizes advanced reading skills of interpretation, inference, critical analysis, evaluation and application. There will be frequent exercises addressing the acquisition and practice of study skills and collaborative academic work.
Prerequisites: Completion of ENGLISH 103C with a grade of B or better.

ENGLISH 104D Academic Writing For Non-Native Speakers IV Credits: 1-3
The study and practice of rhetorical principles in standard English prose. Frequent writing exercises emphasize critical thinking and research skills as well as fluency and accuracy in academic writing. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 104G Advanced Academic English Grammar For Non-Native Speakers IV Credits: 1-3
This course focuses on the analytical understanding and application of English grammar. Students will be expected to observe usage patterns of the English language in a combination of both normative and prescriptive grammars appropriate for academic English application. There will be frequent exercises emphasizing mastery of complex grammar structures including all verb tenses, dependent clauses, modals, and unreal conditionals, and of the relationship between ideas and the construction of sentences in academic discourse.
Prerequisites: Completion of ENGLISH 103G with a grade of B or better.

ENGLISH 105A Advanced Academic English (Multiskills) For Non-Native Speakers V Credits: 1-3
The comprehensive study and practice of standard English skills for advanced students of English as a second language. level readings focusing on current issues serve as the basis for frequent writing exercises and for classroom discussions and presentations. This course carries no credit toward graduation in the College of Arts and Sciences.

ENGLISH 105B Advance Speaking and Listening Topics for Non-Native Speakers Credits: 1-3
This course focuses on developing high-level fluency in English listening and speaking through critical awareness of social language use. Students will work toward greater speaking and listening fluency and adaptability through the practice of skills involving purpose, audience, speech norms and context.

ENGLISH 105C Advanced Reading Topics for Non-Native Speakers Credits: 1-3
In this course, advanced ESL readers will develop the core critical reading skills required for success in academics by examining and applying those skills in the context of authentic college-level readings representing a wide variety of genres and modes. Readings will include extensive college textbook passages, newspaper articles, opinion sections, academic essays and interpretive reading of literature.

ENGLISH 105D Advanced Writing Topics for Non-Native Speakers Credits: 1-3
This course engages advanced ESL and EFL writers to develop greater dexterity of expression in composition. In addition to reinforcing core rhetorical skills, grammar and writing mechanics, students will explore new rhetorical styles such as personal responses, autobiographical essays, and writing about literature. Extensive reading complements the writing discussion and practice with pieces including personal and academic essays, narrative, magazine journalism and fiction.

ENGLISH 105G Advanced Grammar Topics for Non-Native Speakers Credits: 1-3
In this course, students will pursue an in-depth comprehension of English grammar, with a strong focus on increasing fluency in the English language through a critical analysis of connotation and pragmatics and their role in language fluency. Contextual readings, film and native conversation passages will complement the grammar discussions and practice, engaging students to move beyond a literal understanding based on syntax and semantics to a more contextual awareness of English form and function.

ENGLISH 110 English I: Introduction To Academic Prose Credits: 3
This course introduces students to college-level reading, writing, and discourse analysis: it engages students in the analysis and creation of texts that reveal multiple perspectives about specific rhetorical situations and cultural issues. In addition to learning how to revise by analyzing their own writing, students will learn to edit their own work and use proper academic documentation.

ENGLISH 110A Freshman English I For Non-Native Speakers Credits: 3
The study and practice of analytical and critical reading. The study of basic rhetorical principles and the practice of those principles in frequent short papers; close reading of prose.

ENGLISH 119 Myth and Literature Credits: 3
A study of classical myth including readings from Homer to Ovid, analysis of selected myths in later literature, art, and music, and a study of contemporary definitions and approaches to myth.
Cross Listings: CLASSICS 119.

ENGLISH 120 Literary Monstrosities Credits: 3
This course explores representations of monsters in literature. Students are introduced to different ways of thinking about monstrosities from a range of cultural and historical perspectives, as well as through a variety of materials in order to approach this question from an interdisciplinary perspective.
Co-requisites: DISC 100.

Cross Listings: CLASSICS 120.

ENGLISH 123 True Lives: Autobiographical Arts and Acts Credits: 3
This course explores life writing and other autobiographical practices. Students will read and analyze a variety of life writing forms and think critically about life writing in various cultural, historical, and social contexts. They will also examine autobiography as a form of self-expression, as an articulation of personal and social values, as a public art, and as a way to study human experience in different contexts. Genres may include memoir, autobiography, diaries, etc., at the discretion of the instructor.

ENGLISH 124 Writing About Literature Credits: 3
This course is designed to be taken either prior to or concurrent with a student's first literature course. It introduces students to literary criticism in its broadest, most generic sense, as a stylized response to reading. Students in the course will be introduced to different approaches to writing about literature, to methods of generating ideas, and focusing and developing a topic.
Prerequisites: ENGLISH 110 or equivalent.

ENGLISH 126 Popular Literature Credits: 3
This course is designed to help students develop a fuller understanding of the human condition by exploring a range of accessible, bestselling fiction and non-fiction from a variety of periods and places, historic and contemporary. The course may include popular stories, songs and ballads, the scripts of blockbuster plays and films, best-selling novels, and widely distributed nonfictional prose.

ENGLISH 130 Introduction to Human Language Credits: 3
This course examines the biological and cultural properties of human language and it provides a foundation for understanding the role language plays in personal lives, in social institutions, and in the literary arts.

ENGLISH 141 Women and Literary Culture/The Heroine in Literature Credits: 3
This course explores the role of the heroine in literature. Students will examine how the heroine is crafted by a variety of writers and think critically about the role of the heroine in various cultural, historical, and social contexts. Genres may include science fiction/fantasy, mystery, romance, etc. at the discretion of the instructor.

ENGLISH 182 The Countercultural Experience Credits: 3
This interdisciplinary course examines countercultures, groups whose shared values and practices set them apart from mainstream culture. Students will explore how and why countercultures form, transform and decline; how they reason out, articulate and practice their shared cultural values; their function as distinctive discourse communities; and how individual members negotiate their identities and values within and between cultural groups.
Co-requisites: DISC 100.

Cross Listings: SOCIOL 182.

ENGLISH 186 The Value of Beauty Credits: 3
This class surveys European aesthetics, defining what counts as beautiful and the roles art plays in society.
Co-requisites: DISC 100.

Cross Listings: PHILOS 186 and FRN-LNG 186.

ENGLISH 200 Introduction To Undergraduate Study In English Credits: 3
An investigation of reading, writing, and research practices associated with studies in English. Students will learn about multiple forms, genres, and critical approaches, as well as encounter texts from various historical periods and places. Required of all English majors before enrolling in 400-level ENGLISH courses.

ENGLISH 205 Popular Literature Credits: 3
The course focuses on writing in English by a range of popular authors from a variety of periods and places, historic and contemporary. The course may include popular stories, songs and ballads, the scripts of blockbuster plays and films, best-selling novels, and widely distributed nonfictional prose.

ENGLISH 207 World Literature in English Credits: 3
This course helps students develop a fuller understanding of the human condition by exploring accessible literary texts in English by non Euro-American writers. The course provides historical, economic and political contexts and is designed for students who enjoy learning about global cultures by reading and discussing a diverse range of bestselling literature.

ENGLISH 212 Crossing Boundaries: The Latina/o Immigrant Experience Credits: 3
This course examines the Latina/o immigrant experience from the immigrants' diverse origins in the Americas to the communities they shape. Students will examine how empire, war, and economic integration have pushed people to migrate and how work, family, and immigration policy have shaped patterns of migration and settlement as well as integration and exclusion.
Prerequisites: DISC 100 and Anchor I.

Co-requisites: DISC 200.

Cross Listings: LLS 210, ECON 210, SOCIOL 210.

ENGLISH 213 Introduction To Drama Credits: 2-3
Beginning with an intensive study of a few plays analyzed to elicit general principles, the course moves on to consider several representative examples of each of the major periods and types of Western drama, from the Greeks to the present.

ENGLISH 214 Introduction To Fiction Credits: 3
Students will be introduced to the study of fiction as a literary art form. Students will continue to develop their understanding of fiction-writing in preparation for more advanced courses in literature and creative writing. Coursework will focus on close reading of short and long forms of fiction selected from a range of literary periods and world literature. Students are expected to interpret and analyze various forms of fiction and write critically about the role of fiction as a form of cultural discourse.

ENGLISH 215 Introduction To Poetry Credits: 3
An introduction to the study of poetry for students desiring a basic course either to develop a greater appreciation of poetry or to prepare for more advanced courses in literature or creative writing. Class discussions will focus on close readings of poems and analysis of poetic techniques. Writing assignments will complement reading and class discussion and will enable students to develop their own critical and creative skills.

ENGLISH 216 The Craft of Creative Writing Credits: 3
This course introduces students to the key techniques that writers of imaginative literature use. Students will develop skills at writing and reading in multiple genres.
Prerequisites: DISC 100.

ENGLISH 225 English II: Intermediate Academic Prose Credits: 3
This course extends the work of ENGLISH 110 with an additional emphasis on research. Each section of ENGLISH 225 uses a combination of book-length and shorter texts on focus on specific historical and/or cultural issues. As they learn to participate in scholarly conversations, students will find and evaluate library and internet sources. As with ENGLISH 110, this course emphasizes revision, editing, and proper academic documentation. ENGLISH 225 or equivalent is a prerequisite for all 300 and 400 level ENGLISH courses.
Prerequisites: ENGLISH 110 and sophomore standing.

ENGLISH 225A English II For Non-Native Speakers Credits: 3
The study and practice of expository writing and analytical and critical reading geared to the needs of students for whom English is not the first language. The course emphasizes the development and integration of all areas of language comprehension and production. The writing focus is on kinds of organization, diction, style, etc. used in academic writing in the United States. Frequent research papers.
Prerequisites: ENGLISH 110 or ENGLISH 110A and sophomore standing.

ENGLISH 241 Women And Literary Culture: Introduction Credits: 3
The course offers an introduction to women as producers and consumers of literature. Students will become acquainted with women writers, explore women's reading practices, and interrogate the issues that have surrounded women's participation in cultural arenas.

ENGLISH 242 Women Writing/Women Reading Credits: 3
This course investigates women as producers and consumers of literature. Students will become acquainted with diverse women writers, explore women's reading practices, and interrogate the cultural, historical, and social contexts that influence women's writing and reading.
Prerequisites: Anchor I and DISC 100 or equivalents.

ENGLISH 245 Advanced English Pronunciation for Non-Native Speakers Credits: 3
This course will help students recognize, understand, and produce features of the American English sound system that result in comprehensible and meaningful communication. Course attendees will reconsider what they understand about the language, expand their awareness of what they hear and what they say, and explore how certain sounds in certain environments appear, disappear, combine, or modify to create predictable patterns in American English.

ENGLISH 250 Introduction To Language Acquisition And Diversity Credits: 3
Investigation of the basic principles of first and second language acquisition. Topics addressed include language competency, socio-cultural factors in language, dialects, acquisitional principles, and language diversity. Students will take part in monitored classroom observations in public schools, and will critically analyze how the topics addressed in class apply to real life and to teaching situations.

ENGLISH 270 Writing Tutor Training Seminar Credits: 3
This course covers the basics of serving as a tutor for writers. Students acquire hands-on experience in consulting with writers at all stages of the writing process, including invention work, drafting, revising, documenting, and editing. Students will also become conversant in theories of peer tutoring and research on Writing Centers.
Prerequisites: ENGLISH 110.

ENGLISH 273 Science Fiction Credits: 3
This course focuses on a range of science fiction texts from a variety of periods and traditions. Students will examine the relationship between different types of science fiction from various periods and the related social, economic, and political contexts.
Prerequisites: DISC 100.

ENGLISH 278 Asian American Literature Credits: 3
This course examines literary and cultural texts produced by Asian Americans from the nineteenth century to the present. Texts will be drawn from a variety of genres and from several Asian American groups in order to examine how Asian American literature engages, challenges, revises, and reinvents American literary traditions. The course will identify and explore specific cultural and political issues that have shaped the writings, including trans-nationalism, immigration, racial identity, group identity, and community. Authors may include Carlos Bulosan, Maxine Hong Kingston, John Okada, Bienvendo Santos, and Hisaye Yamamoto.
Prerequisites: DISC 100.

Co-requisites: DISC 200.

ENGLISH 280 Empire Credits: 3
This is an interdisciplinary, team-taught course designed to teach students ways to think about the complexities of human cultures, past and present, helping them examine how imperialism continues to shape contemporary understandings of personal, institutional, and cultural identities (both of selves and others). The course analyzes global cultures with a focus on the economic, environmental, political and social consequences of specific imperial regimes and the ongoing impact of these regimes on particular groups that continue to live with the legacies of empire.
Prerequisites: Anchor I, DISC 100 or equivalent.

ENGLISH 282 Race in American Film Credits: 3
This course examines representations of race and ethnicity in American film from the silent era onward in mainstream and counter-cultural traditions. It explores how social, political, and economic conditions contribute to constructions of race and ethnicity.
Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

Cross Listings: COMM-ST 286, HISTORY 282.

ENGLISH 283 Women in the Ancient World Credits: 3
This course focuses on the history, representation, literature, social lives, and political roles of women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.
Cross Listings: CLASSICS 283, HISTORY 230

ENGLISH 284 Women in the Medieval World Credits: 3
This course offers an interdisciplinary approach to the study of women during the Middle ages (ca. 600-1500), focusing on the different cultures of Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate the ways in which women experienced agency, were depicted and imagined, and acted within the social and cultural contexts of the era.
Prerequisites: DISC 100 or equivalent.

Cross Listings: HISTORY 231.

ENGLISH 285 The Classical Mediterranean World Credits: 3
This course examines the history, literature, and culture of Ancient Greece and Rome in the context of the Mediterranean world, from its origin until the Barbarian invasion. Students will read poetry, philosophy, history, rhetoric, and letters from primary text sources and they will study material evidence such as architecture, graffiti, and physical objects as representative survivals of these cultures.
Cross Listings: CLASSICS 285, HISTORY 220.

ENGLISH 286 Critical Issues in Women's and Gender Studies Credits: 3
This class is an interdisciplinary course that will examine critical issues in women's and gender studies by focusing on the intersections of gender, race, class, sexuality, and social context. Through their study of these intersections, students will become more sensitive to the impact of social structures on gender and the experiences of women and men.
Prerequisites: DISC 100, Anchor I.

Co-requisites: DISC 200.

Cross Listings: WGS 286, FRN-LNG 285.

ENGLISH 299 Form And Structure Of Writing Credits: 3
This course offers students the opportunity to improve their reading and writing abilities before enrolling in a junior-level writing-intensive class. This class will cover the basic conventions of successful expository and academic prose. Emphasis will be placed on methods of development and organization and strategies of analysis and critique.

ENGLISH 300CB Cluster Course: Women In The Ancient World Credits: 3
This course focuses on the history, representation, literature, social lives, and political roles of women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: CLASSICS 300CB.

ENGLISH 300CD Cluster Course: American Social Film:Silver Screen&American Dream Credits: 3
This course will combine American social history and film history in the sound era. Using Hollywood entertainment films, the course will look at Hollywood as an indicator of social, political and economic conditions in the United States since the 1930s. The main topics are representations of the American dream and nightmare, poverty and affluence, success and failure. This course is offered as a cluster with COMM-ST 402CD, HISTORY 400CP, and AMER-ST 300CD.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: HISTORY 5583.

ENGLISH 300CE Cluster Course: Radical Changes Since 1945 Credits: 3
This cluster will focus on modernism, post-modernism and expressionism in the visual arts and literature since World War II. Common lectures will address intellectual movements-such as existentialism and formalism--and cultural development--such as the increased impact of technology and mass media--in contemporary society. By focusing on these movements, the cluster course hopes to provide an integrated view of the literature and visual arts of the period and to draw upon analogous developments in contemporary architecture, music, philosophy and film.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 300CN Cluster Course: Terrorism, Civil War And Trauma Credits: 3
This interdisciplinary course examines the modern experience of terrorism and civil war in the light of art, film, history, literature, and philosophy. It explores a number of traumatic events, historic and contemporary, challenging us to think about such contemporary issues as violence and identity formation, civil rights and state-sponsored terrorism, pacifism and patriotism, resistance and collaboration, fundamentalism and fascism, neo-colonialism and anti-imperialism.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 300CQ Cluster Course: Race in American Film Credits: 3
This course examines representations of race and ethnicity in American film from the silent era onward in mainstream and countercultural traditions. It explores how social, political, and economic conditions contribute to constructions of race and ethnicity. This course is offered as a cluster course with COMM-ST 405CD and HISTORY 300CF.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 300CR CC:Roman Revolution:History&Culture From The Gracchi To Augustus Credits: 3
The period of Roman history from the revolution initiated by the Gracchi to the demise of the Republic the establishment of the Principate under Augustus will be studied. The course begins with the Scipionic Circle under whose leadership foreign imperialism, domestic factionalism, and the influx of Greek culture increased. Political, social and cultural developments which culminated in the violent death of the old system will be traced. We will also show how Augustus kept the past alive to make his new government acceptable to the tradition-loving Romans. Students will read the words of such writers as Terence, Cato, Polybius, Cicero, Caesar, Sullust, Catullus, Horace, Virgil, and Ovid, whose works cover the important genres of Roman literature--new comedy, rhetoric, satire, history, epic, pastoral, and lyric poetry.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 300CS Cluster Course: Clio And The Other Muses Credits: 3
This course focuses on the history, art, architecture, literature, and culture of Athens in the 5th Century BCE. Course readings will include primary literary and historical sources such as lyric poetry, comedy and tragedy, philosophy, and historical writings.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: CLASSICS 300CS.

ENGLISH 300CW Cluster Course: Critical Issues in Women's & Gender Studies Credits: 3
This class is an interdisciplinary upper-level course that will examine critical issues in women's and gender studies by focusing on the intersections of gender, race, class, sexuality, and social context. Through their study of these intersections, students will be more sensitive to the impact of social structures on gender and the experiences of women and men.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 300CX Empire (Cluster Course) Credits: 3
This is an interdisciplinary, team-taught course designed to teach students ways to think about the complexities of human cultures, past and present, helping them examine how imperialism continues to shape contemporary understandings of personal, institutional, and cultural identities (both of selves and others). The course engages students in the analysis of global cultures with a focus on the economic, environmental, political and social consequences of specific imperial regimes and the ongoing impact of these regimes on particular groups that continue to live with the legacies of empire.
Prerequisites: ENGLISH 225 OR DISC 200.

ENGLISH 300CY Cluster Course: Ancient World/Cinema Credits: 3
This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.
Cross Listings: CLASSICS 300CY, COMM-ST 300CY, HISTORY 400CY.

ENGLISH 300F SS:Academic English/International Grad Teaching Assistants Credits: 3
The study and practice of standard spoken English combined with the study and practice of classroom teaching techniques. Exercises focusing on improvement of pronunciation, and formal (classroom presentation) and informal (conversation) English speaking are combined with techniques for lecture organization, strategies for clear content presentation, and with analysis of the American post-secondary educational culture. This course is designed for prospective International Graduate Teaching Assistants who need to improve their English communication skills and obtain an understanding of American educational culture.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 301WI Writing And The Academy Credits: 3
This course examines social and ethical issues raised by academic reading and writing. While some attention is paid to the formal aspects of academic prose within specific disciplines, the main emphasis of the course is on the cultural consequences of the different ways that academic knowledge is created and taught. In addition to studying the language and structure of academic reading and writing, the course explores the various rhetorics of the academy in terms of a broad range of subjects including economics, gender, education, history, and myth. This course satisfies the junior-level writing requirement and counts towards the writing minor.
Prerequisites: ENGLISH 110, ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 303WI Introduction To Journalism Credits: 3
Introduction to the styles and techniques of reporting and writing basic news through assignments in straight news, features and in-depth stories. Exposure to the history and principles of American journalism. Practical application in writing news and news feature articles.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

Cross Listings: COMM-ST 303WI.

ENGLISH 304WI Workplace Writing Credits: 3
This writing intensive course focuses on the rhetorical principles of workplace communication, providing students with opportunities to analyze complex rhetorical situations, to study various workplace genres, and to compose texts that meet the needs of diverse stakeholders.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 305WI Theory And Practice Of Composition Credits: 3
A course in expository writing that will include reading on composition theory and the nature of literacy. Frequent short essays and a long paper.
Prerequisites: ENGLISH 110, ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 306WI Advanced Composition Credits: 3
(Formerly English 202). Further study of writing for those who wish to continue the study beyond the two semesters of composition. Emphasis will be placed on translating critical thinking into effective writing. (NOTE: Students may not receive credit for more than one of the following: 305, 306, 403). Required of business and public administration majors.
Prerequisites: ENGLISH 110, ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 307WI Language, Literacy, Power Credits: 3
This course uses discourse analysis to investigate language and literacy. Students will explore how the discourses of institutional and cultural identities act as instruments of power and legitimacy.
Prerequisites: ENGLISH 110, ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 308 Rhetorics of New Media Credits: 3
This course will focus on the rhetorical study of new media texts (such as hypertext, networked multimedia, multimedia art and performance, virtual spaces, and so on) and theories of new media. The course will consider the rhetorical possibilities and constraints of new media and critically examine their impact on democratic discourse and literacy in the public sphere. Specialized knowledge of multimedia equipment and software is neither expected nor required.
Prerequisites: ENGLISH 110, ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 309WI Rhetorics of Public Memory Credits: 3
This course explores how museums and other cultural institutions function as rhetorical agents in creating and preserving public memory. Students will explore how processes of collection, arrangement, and visual display operate as modes of persuasion and make arguments about civic identities and community values.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 310 Introduction To Linguistics/Language Science Credits: 3
This course is a comprehensive introduction to the theory, methodology, and applications of the science of language. It examines properties of human language, covers all branches of language science, and provides a foundation for a critical understanding of language issues. Required for ENGLISH 470; recommended for ENGLISH 320 and ENGLISH 330.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 311 American Literature I Credits: 3
A survey of American literature and culture from its beginnings to 1865. This course will cover a range of authors, several genres, and culture forms, which may include fiction, poetry, drama, autobiography, oral, contact and/or slave narratives, folklore, and songs.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 312 Creative Writing I Fiction Credits: 3
A course centered on the short story. Emphasis is placed on three areas: general principles governing the writing of fiction; practice in short fiction (primarily the short story, but including the novella); criticism; and technical skills (including editing and rewriting).
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Co-requisites: ENGLISH 213 or ENGLISH 214.

ENGLISH 313WI Reporting Credits: 3
A seminar of practical application in advanced reporting. Assignments to cover news events and to pursue in-depth news reports on the campus and off. Work is turned in on deadline and critiqued by the instructor.
Prerequisites: ENGLISH 110, ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 315 Creative Writing Poetry Credits: 3
Writing and rewriting poems, with discussion of techniques needed to produce desired effects. Analysis and evaluation of student work. Examination of technical means utilized in selected poems by accomplished poets.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Co-requisites: ENGLISH 215.

ENGLISH 316WI Literary Nonfiction Credits: 3
Literary Nonfiction is a writing intensive course in the reading and writing of nonfiction prose as a literary art. We'll survey the historical development of literary nonfiction (especially the essay), sample contemporary authors of the genre, write critical commentary on works we read, and compose personal essays of our own. The course is not exclusively a literary seminar nor a creative writing workshop, but seeks to mix and make connections between these modes, in the tradition of the essay itself.
Prerequisites: ENGLISH 110, ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 317 British Literature I Credits: 3
A survey of British Literature and culture from its beginnings to the 18th century, including works by Chaucer and Milton.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 318 Bible As Literature Credits: 3
A critical study of the major portions of the Old and New Testaments and the Apocrypha, with special attention to the development of literature from oral tradition, the literary genres, themes and archetypes represented in the collection, and the diction and style which have influenced later literature. Consideration also of the relation of Biblical literature to the historical, religious, and cultural milieu of the ancient Near East.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 319 Myth And Literature Credits: 3-4
A study of classical myth including readings from Homer to Ovid, analysis of selected myths in later literature, art and music, and a study of contemporary definitions and approaches to myth.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 320 Structure Of English Credits: 3
Not a remedial grammar course. Methods of linguistic inquiry and grammatical description. Study of traditional and modern schools of syntax, especially transformational grammar. Practice describing the structure of sentences. Application to the teaching of grammar in high schools.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 321 American Literature II Credits: 3
A survey of American literature and culture from 1865 to the present. This course will cover a range of authors, several genres, and culture forms, which may include fiction, poetry, drama, autobiography, essay, lyrics, and film.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 323 Shakespeare Credits: 3
An intensive critical study of William Shakespeare's writings in various contexts (historical, social, political, literary, contemporary, for example). Readings will encompass at least eight plays and will include at least one comedy, history, tragedy, and romance. Required of all English majors.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 324 Introduction To British Literature II Credits: 3
A survey of British literature and culture of the Romantic, Victorian, and Modernist periods, this course will cover several genres including at least one novel from each period. Required of all English majors.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 325 Arthurian Legends Credits: 3
Focusing on writers such as Marie de France, Chretien de Troyes, Sir Thomas Malory, Alfred, Lord Tennyson, Sara Teasdale, Bernard Malamud, and Marion Zimmer Bradley, this course examines the legend of King Arthur and his Round Table as a recurring myth, repeatedly manifested in time through literature, art, history, music, and film.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 326 Modern And Contemporary Irish Literature Credits: 3
This course examines a range of texts written by Irish-born writers from the end of the nineteenth century on. While it is likely the course will include texts by the most famous Irish writers, such as Yeats, Joyce, Beckett, O'Brien, Heaney, and Friel, course materials will vary from semester to semester and may focus on a specific genre, historical period, or area of interest.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 327 British Literature II Credits: 3
A survey of British Literature and culture from the late 18th century to the present. This course will cover a range of authors and genres, including at least one novel.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 329 Film As Art Credits: 3
An application and formulation of critical approaches to the major artistic achievements of the important creators of this modern aesthetic form -- D.W. Griffith, Chaplin, Hitchcock, Bergman, Einstein, Kubrick.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 330 History Of The English Language Credits: 3
The study of English beginning with the Indo-European language family up to and including varieties of English spoken around the world today. Both outer history and the inner history of phonology, morphology, syntax, and lexicon will be addressed.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 331 African American Literature I Credits: 3
This course provides a survey of African American literature from its beginnings to the Harlem Renaissance of the 1920's and 1930's. Areas of interest will include abolitionist literature (especially Slave Narratives), turn-of-the-century literature and the Harlem Renaissance. This course will examine any or all of the following literary forms: fiction, poetry, drama, autobiography and essay. It will view African American literature in its historical and cultural contexts.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: BLKS 331.

ENGLISH 332WI African American Novel Credits: 3
This course will examine the African American Novel in the 19th and 20th centuries; the emphasis will be on the period from the 1920s to the present. The novels will be examined in their historical and cultural contexts.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

Cross Listings: BLKS 332WI.

ENGLISH 333 African American Literature II Credits: 3
A survey of African American literature from the end of the Harlem Renaissance to the present, covering a range of authors, texts, and contexts.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: BLKS 333.

ENGLISH 336 Contemporary American Literature Credits: 3
This course focuses on contemporary American literature, concentrating on literary and cultural change. Topics, genres, and authors discussed will vary each semester.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 338 Film Adaptation Credits: 3
The class will explore the process of adapting both fiction and non-fiction literary works into motion pictures. Students will examine the original literary source, then the interim screenplay and finally the completed motion picture. This class will also explore the practical aspects of creating a film adaptation in Kansas City. Students will interact with Kansas City area film professionals and learn about the practical aspects of filming and exhibiting films in Kansas City.
Prerequisites: Anchor II, DISC 200.

Co-requisites: DISC 300.

Cross Listings: COMM-ST 338.

ENGLISH 339 Introduction to Screenwriting Credits: 3
An introduction to the form and language of the motion picture screenplays. Students create a blueprint for a movie and examine visual storytelling in-depth, including basic dramatic structure, scene and sequence construction and dialogue. Students will master the industry screenplay format, adapt a short story for the screen, and learn to receive feedback in small groups.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, COMM-ST 230 or COMM-ST 250.

Cross Listings: COMM-ST 354.

ENGLISH 340A Classical Literature In Translation Credits: 3-4
This course will focus on representative authors and works from the Greek and Roman Classical periods, such as Homer, Sophocles, Euripides, Aeschylus, Aristophanes, Plato, the Greek Lyrics, Virgil, Horace, Juvenal, Ovid and Plautus.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 342WI Women And Rhetoric Credits: 3
A study of the position of women within the traditions of western rhetoric. Students will examine the rhetorical practices of women as they pursue both public and private goals. Christine de Pizan, Sor Juana Ines de la Cruz, Hannah More, Maria Stewart, Frances Willard, Ida Wells-Barnett, Meridel Le Sueur, and Gloria Anzaldua are among the female rhetorians who may be studied in this course.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 344WI Women & Literary Culture: Genre Focus Credits: 3
A study of women writers that focuses on genre, i.e., texts that share a common set of conventions. The course will explore the conventions associated with a particular genre in various historical periods and consider the ways in which gender and genre intersect in shaping texts and their interpretation.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 345WI Women And Literary Culture: Historical Focus Credits: 3
A study of women's literary culture in a specific historical period either as broadly defined as Medieval or Renaissance or as narrowly defined as a decade or movement (e.g., 1960's, abolitionist movement). This course includes women writers across multiple boundaries (e.g., national, generic, racial, sexual, socio-economic). Content will change depending on the instructor.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 350 The 18th Century Novel Credits: 3
A detailed examination of the development of the novel in the 18th century. The course emphasizes the evolution of the novel from such predecessors as rogue literature, the picaresque story and the romance, due to changing social realities. The novelists studied may include Austen, Behn, Fielding, Godwin, Haywood, Richardson, Smollett, and Sterne.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 351 Special Readings Credits: 1-3
Readings in a period, genre or theme to be selected by the instructor with attention to the needs of students who are interested in literary topics not covered in regular offerings. Proposals for a course in such readings require the approval of the department.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 351A Special Readings: Detective Fiction Credits: 1-3

ENGLISH 352P Critical Approaches To The Short Story Credits: 4
In this course the student will explore the short story as a literary genre. Stories will range from the early masters such as Chekov, Kafka, and Hawthorne through contemporary offerings from Lessing, Mishima, and Achebe. Several critical approaches will be presented including formalism, New Historicism, and race/class/gender criticism. Students will keep a reading journal covering all material read for the course, and will be assessed on the basis of this journal, a mid-term and a final examination.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 354P Masterpieces Of Fiction Credits: 4
The goal of this independent study is to provide the student with time and space to read and respond to 7-9 critically acclaimed and classic novels. Students will be allowed to choose the novels they wish to read from a list of 50 that will be provided by the instructors. This course must be taken in conjunction with at least one of the other two courses in this block in order to ensure that the student has exposure to literary theory. Students will be assessed on the basis of their response journal, casual oral examination, and a critical essay.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 355 The Novel Before 1900 Credits: 3
Intensive attention to novels in English written before 1900, which may include comparative or analytical studies of genre; critical reception of novels; serialization, gender issues; authors and editors; and valuation.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 356 Studies in Poetry Credits: 3
An intensive study of poetry through the examination of a specific topic or the works of particular poets, for instance: Love, Seduction, and Betrayal; Form and Change; Death, Grief, and Consolation; Whitman, Dickinson, and the Soul; Sacred Poetry; Poetry and Metaphysics; The Long Poem; The Comic Poem; Sonnet, Sonnet Sequence and the Lyric; The Voyage; Nature, Self, and the Romantic Poet.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 360 The Modern Novel Credits: 3
A study of the 20th-century novel, American, British and Continental, with attention to the development of fiction during this century. This course deals with novelists principally active before 1930, such as Conrad, James Joyce, Kafka, Hemingway, Lawrence, Woolf, Mann, Fitzgerald, and others.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 365 Contemporary Novel Credits: 3
This course focuses on selected novelists since 1945 and is organized around particular literary themes, sub-genres, or contemporary issues.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 365WI Contemporary Novel Credits: 3
This course focuses on selected novelists since 1945 and is organized around particular literary themes, sub-genres, or contemporary issues.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 367 Introduction to Latina/o Literature Credits: 3
An introduction to the literary production by US Latinas/os, the course introduces students to writings by authors from various Latinidades—such as Chicana/Chicano, Puerto Rican, Chilean American, Cuban American, Dominican American, and Mexican American—in multiple genres, including poetry, fiction, drama, personal essay, and film.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: LLS 380.

ENGLISH 375 Colonial Literature Credits: 3
An exploration of colonialism through the study of a variety of texts, which may include literary, historical, and theoretical texts. These texts should represent the formation and elaboration of discourses surrounding colonialism. Texts will be drawn from more than one genre and from the metropole as well as multiple colonial contexts. The course will consider several definitions of colonialism and related terms such as empire, imperialism, and nationalism.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 376 Ancient Concepts of the Hero Credits: 3
This course traces the ancient concept of the hero by reading selected ancient works by authors such as Homer, Thucycides, Livy, Plutarch, Caesar, Tacitus, and Sallust. Students will also examine the impact of the ancient concept of the hero on modern literature and art.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: CLASSICS 376.

ENGLISH 378 Asian American Literature Credits: 3
This course examines literary and cultural texts produced by Asian Americans from the nineteenth century to the present. Texts will be drawn from a variety of genres and from several Asian American groups in order to examine how Asian American literature engages, challenges, revises, and reinvents American literary traditions. The course will identify and explore specific cultural and political issues that have shaped the writings, including transnationalism, immigration, racial identity, group identity, and community. Authors may include Carlos Bulosan, Maxine Hong Kingston, John Okada, Bienvendo Santos, and Hisaye Yamamoto.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 400CF Cluster Course: Courts And Culture In The Middle Ages Credits: 3
This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate not only the "high culture" of the courts but also the interactions of people from various social backgrounds in Western Europe.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: FRN-LNG 400CF, HISTORY 400CF.

ENGLISH 404 Old English Credits: 3
This course is a study of Old English, its grammar, its poetic style, and its literature, both poetry and prose.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 405 Magazine Editing Credits: 3
A course combining academic study of editorial management, publishing operations and language skills, with "hands on" experience in article evaluation, editing, magazine production, and legal matters such as copyright and libel. Class work concentrates on authentic and effective language use, with attention given to copy editing, grammar, typography, printing processes, financing and distribution for commercial and small-press publications.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 406CD CC: Film Adaptation Credits: 3
The class will explore the process of adapting both fiction and non-fiction literary works into motion pictures. Students will examine the original literary source, then the interim screenplay and finally the completed motion picture.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 408 Harlem Renaissance Credits: 3
This course examines the period from 1920 to 1940, known as the Harlem Renaissance, a time of unprecedented literary and cultural creativity by Black artists. This course explores a variety of cultural productions, not only traditional forms of literature such as novels, short stories, plays and poetry, but also nonliterary objects of study such as painting, sculpture, and music.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 410 Black Women Writers Credits: 3
This course explores the writings of African American Women Writers. The course examines how these writers have interacted with and often revised stereotypical representations of African American womanhood typically found within canonical and African American male literatures. The course will examine literature (which might include fiction, poetry, autobiography, and drama) of the nineteenth and twentieth centuries; the majority of the works will be by modern and contemporary authors such as Nella Larsen, Zora Neale Hurston, Toni Morrison, and Terry McMillan. By placing the works in this sort of cultural and historical context, it will be possible to examine the unique tradition of African American women’s writing as well as individual texts.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 412 Chaucer Credits: 3
Readings from Chaucer’s most important works, especially "The Canterbury Tales" and "Troilus and Criseyde" with emphasis on them as types of medieval genres and on the Middle English language.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317.

ENGLISH 413 Renaissance Literature I Credits: 3
English literature from the time of Wyatt and Surrey to the beginning of the 17th century, including the works of Spenser, Marlowe, Sidney, Shakespeare and others.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317.

ENGLISH 414 Milton Credits: 3
A study of Milton's prose and poetry, with special attention to "Paradise Lost".
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317.

ENGLISH 415 Restoration And Early 18th-Century British Literature Credits: 3
British literature from the late 17th century to the mid 18th century. Selected writers may include Addison and Steele, Behn, Congreve, Defoe, Dryden, Finch, Milton, Pope, Rochester, Swift, and Wortley Montagu.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317.

ENGLISH 416 The Romantic Period Credits: 3
An extensive study of selected writers (such as Austen, Barbauld, Byron, Coleridge, Hazlitt, Hemans, Keats, Gilpin, the Shelleys, Wollstonecraft, and Wordsworth) organized around literary themes and/or cultural issues important to the Romantic period.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 327.

ENGLISH 417 Modern Poetry Credits: 3
Study of works by modernist poets such as Hopkins, Yeats, Frost, Stevens, Williams, Moore, Pound, H.D., Eliot, Millay, Hughes.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 418 19th-Century American Literature Credits: 3
An intensive study of either selected major American writers in the 19th century or of 19th -century literary movements.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 311.

ENGLISH 422 Medieval Literature Credits: 3
Western religious and secular verse and prose to the 15th century. Late Middle English works are read in the original; all other selections in translation.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317.

ENGLISH 423 Renaissance Literature II Credits: 3
English literature from 1600 to the beginning of the Restoration, including the works of Donne, Jonson, Milton and other contemporaries.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317.

ENGLISH 425 18th-Century British Literature II Credits: 3
British literature in its critical and historical context from 1750 to 1798. The writers studied may include Blake, Burney, Collins, Johnson, and Gray.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317.

ENGLISH 426 The Victorian Period Credits: 3
An intensive study of selected writers (such as Arnold, Braddon, the Brontes, the Brownings, Dickens, Darwin, Eliot, Gaskell, Hardy, Ruskin, and the Rossettis) organized around literary themes and/or cultural issues important to the Victorian period.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 327.

ENGLISH 427 Contemporary Poetry Credits: 3
Study of works by contemporary poets (post World War II), such as Auden, Bishop, Hayden, Berryman, Rukeyser, Larkin, Rich, Plath, Heaney, Boland, Komunyakaa.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 428 20th-Century American Literature Credits: 3
An intensive study of either selected major American writers in the 20th century or of 20th-century literary movements.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 321.

ENGLISH 429B Advanced Screenwriting Credits: 3
A course in advanced theory in narrative screenwriting, industry script analysis (called "coverage") and story editing. Students complete the first act of a feature screenplay and a detailed beat sheet for the whole film. In addition, students will write and revise a short-film screenplay to be produced in the advanced production class. Or they will write a television series bible with episode springboards and a pilot episode.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 339 or COMM-ST 354.

Cross Listings: COMM-ST 454.

ENGLISH 430WI Advanced Technical Writing Credits: 3
This course is designed for those who plan to do or teach professional, business, or technical writing. Beginning with a brief background in the history of technical writing, the course will deal with current theories and methods of teaching technical and professional writing, and will cover such areas as business usage; technical linguistic problems and theories; the language of contracts, specifications, and other binding documents; and computer-oriented problems.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 431 18th-Century British Literature Credits: 3
British literature from the mid to late 18th century. Selected writers may include Blake, Burney, Collins, Equiano, Fielding, Gray, Johnson, Sheridan, and Wollstonecraft.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 432WI Advanced Creative Writing Prose Credits: 3
A course for advanced students of fiction writing. Open to students who have taken ENGLISH 312 or its equivalent. The class will proceed through analysis of models, discussion of general principles, critique of student work. Students will simultaneously be encouraged to experiment and to refine the form and subjects best suited to their talents. Emphasis will remain on the short story, though there may be units in other forms--novella, film script, the non-fiction essay.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, RooWriter.

ENGLISH 433 Histories Of Writing, Reading, And Publishing Credits: 3
A study of selected topics concerning the material practices of writing, reading, and publishing within specific cultural and historical contexts. Issues examined may include authorship, education, information technologies, libraries, literacy, periodicals, popular literature, publishers, and communities of readers.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, one appropriate introductory course at the 300 level.

ENGLISH 434 Postcolonial Literature Credits: 3
An exploration of postcolonialism through the study of literary and theoretical texts created by or representing peoples whose historical experience has been decisively shaped by the experience or legacies of colonialism. Texts will be drawn from a variety of genres and from several countries. The course will consider several definitions of postcolonialism and related terms such as cosmopolitanism, hybridity, diaspora, and nationalism.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Cross Listings: ENGLISH 5534.

ENGLISH 435WI Advanced Creative Writing Poetry Credits: 3
An advanced poetry workshop that includes intensive reading of contemporary poetry and aims at each student creating a portfolio of publishable poems. The focus of the course will vary to address a variety of topics such as metaphor and closure; imitation and the line; form and voice. May be repeated once for credit.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 315 (or equivalent), RooWriter.

ENGLISH 436WI Poetic Forms Credits: 3
An advanced creative writing course that focuses on intensive study of and practice in metrics and traditional and nonce forms. May be repeated once for credit.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 315 (or equivalent), RooWriter.

ENGLISH 437WI Prose Forms Credits: 3
The making of a work of prose requires expertise with the structure of the chosen form, and an understanding of the relationship of form to content. This class teaches the techniques for planning and drafting major prose forms which could include the very-short story, the story, novella, novel, linked-story collection, episodic novel, essay novel, the play, the creative nonfiction book, and others. Students will learn how to create particular prose forms and how to use content as a guide to inventing new forms. We will examine some of the best examples of both traditional and newly invented forms by writers such as Anton Chekhov, Katherine Anne Porter, Tim O'Brien, and Sandra Cisneros.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 312, RooWriter.

ENGLISH 438 The "New Letters" Writing Conference Credits: 1-3
An intensive weekend conference for creative writers of varying genres and levels of experience, published and unpublished -- fiction, poetry, nonfiction, stage and screen. The conference includes creative and interdisciplinary sessions on writing and publishing, genre-specific workshops, socializing and networking opportunities, and private manuscript consultations. The course of study for two-and three-credit students includes selected reading and post-weekend tutorial time conducted by accomplished, working writers. The conference may be repeated once for credit. Two- and three-credit students need the instructor's consent and must have taken a 300-level creative-writing course in the focus genre prior to enrolling.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 439 Shakespeare and Film Credits: 3
Grounded in the close analysis of texts, this course examines film adaptations of Shakespeare's plays across the range of dramatic genres (history plays, tragedy, comedy, and romance). This course is open to seniors and graduate students only. Graduate students will be responsible for supplemental critical readings.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 323.

ENGLISH 440 American Culture Credits: 3
Texts that offer perspectives on key historical themes of American culture. Texts may be grouped around any culturally significant principle (e.g. region, race, gender, class, ethnicity, religion) or theme (e.g. the mythology of the frontier, marriage and domesticity, the American Dream). The course may be taken twice for credit, provided substantive changes in topic.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 311 and ENGLISH 321.

ENGLISH 441 Girls And Print Culture Credits: 3
This course deals with girls' relationships to the continually evolving print culture. Students will examine various literary representations of girlhood by adult writers, explore texts directed at girls (e.g., conduct books, periodicals, textbooks), and study the writing and reading practices of girls themselves.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 442 Playwriting I Credits: 3
Theory and practice of writing for the theatre with emphasis on the basic techniques.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 443 Playwriting II Credits: 3
Theory and practice of writing for the theatre with emphasis on advanced techniques.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 445 History And Principles Of Rhetoric Credits: 3
A study of selected writings of ancient, and modern rhetoricians illustrating key issues in the development of Western discourse theory and practice. Issues examined include the relationships between rhetoric and knowledge, orality and literacy, and rhetoric and poetics. Attention will also be given to the implications of rhetorical theory for modern language instruction.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 447 Introduction To Literary Criticism Credits: 3
An introduction to major schools or methods of literary criticism. The first third of the course is an historical overview of criticism from Aristotle to Northrop Frye. The remainder of the semester is devoted to a study of genetic, formalist, mimetic, affective, intertextual, and deconstructionist approaches.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, junior or senior standing and six hours of literature.

ENGLISH 448 External Internship Credits: 1-3
Students may complete an external internship involving writing and editing with a publishing company, trade magazine, literary or academic journal, other print or electronic media organization, or with advertising, public relations, or non-profit firms. Internships are granted on a competitive basis. Students will compile a portfolio of their work under the direction of the internship supervisor to be submitted for evaluation by their chosen faculty mentor.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 449A Publication Practicum Credits: 1-3
This course provides practical experience with New Letters magazine, New Letters on the Air, and BkMk Press in business analysis/reporting, copy-editing, manuscript evaluation, promotion/grant development, library research, market research, and other skills. The practicum is limited to three students per semester, to be chosen on the basis of demonstrated writing and organizational skills. References are required. May be taken for no more than three credit hours over a maximum of two semesters. Permission of the instructors required.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 449B Publication Practicum Credits: 1-3
This course covers the basics of producing an issue of an academic journal. Students acquire hands-on experience at all stages of production. In addition to production work on essays for the journal, each student prepares a manuscript of his/her own (e.g. critical essay, creative piece, review or review essay) for submission to an appropriate journal or other venue.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 450 Special Readings Credits: 1-3
Intensive individual readings in a field, genre, or individual figure to be selected by a student or a group of students in consultation with an instructor willing to direct the project. Generally limited to graduating seniors who have completed the majority of the work for their major. Not open to students in their first semester at UMKC. May be repeated for credit.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 450A Special Readings Credits: 1-3

ENGLISH 450B Special Reading Science Fiction Credits: 1-3

ENGLISH 450F Special Readings African Literature Credits: 1-3

ENGLISH 450H Special Readings Black Drama Credits: 1-3

ENGLISH 450I Special Reading Short Story Cycles Credits: 1-2

ENGLISH 451 Shakespeare Comedies And Histories Credits: 3
A study of Shakespeare's major comedies and history plays with special emphasis on his dramatic works before 1600.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317 and ENGLISH 323.

ENGLISH 452 Early English Drama Credits: 3
English religious and secular drama prior to Shakespeare. Mystery and morality plays are studied, with emphasis on their literary and social backgrounds. Close reading of such works as "Everyman," "The Wakefield Second Shepherd's Play," and "The Spanish Tragedy."
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317 and ENGLISH 323.

ENGLISH 453 Modern Drama, 1880-1945 Credits: 3
A study of modern drama: Continental, British, and American, including history and development, critical theory, and literary evaluation. This course will focus on the earlier modern playwrights from Ibsen and Shaw, with special attention to naturalism.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 455 Studies In The Novel 1740-1900 Credits: 3
An intensive study of no more than three major novelists of the eighteenth or nineteenth century. The content of the course will change, depending on the instructor.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, completion of six hours of literature.

ENGLISH 460 Special Offerings Credits: 1-4
The visiting professor who gives this course determines what its content shall be. All aspects of literature and linguistics are within its possible range.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200. .

ENGLISH 460A Special Offerings Credits: 1-4

ENGLISH 460PW Written Discourse: Speaking, Writing, Composing Credits: 4
Written Discourse - Speaking, Writing, Composing.
Prerequisites: RooWriter.

ENGLISH 461 Shakespeare Tragedies And Romances Credits: 3
A study of Shakespeare's major tragedies and late romances with special emphasis on his dramatic literature after 1600.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317 and ENGLISH 323.

ENGLISH 462 Restoration And 18th-Century Drama Credits: 3
The drama after the restoration of the monarchy and the reopening of the theaters through the 18th century. Special emphasis is placed on the comedy of manners and the heroic drama in the Restoration and the sentimental comedy in the 18th century. Includes such playwrights as Dryden, Congreve, Etherege, Wycherley, Steele, Lillo, Cumberland, Sheridan, and Goldsmith.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 317.

ENGLISH 463 Contemporary Drama II Credits: 3
A study of contemporary drama: Continental, British, and American, including history and development, critical theory and literary evaluation. This course will focus on the more recent writers, including the absurdists, with special attention to experimental drama.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 453.

ENGLISH 464 Medieval Methods & Paleography Credits: 3
This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textural transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal and notarial sources, students will be exposed to methods for practical archival work in various European nations.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, First Year Latin.

Cross Listings: HISTORY 464.

ENGLISH 465 Studies In The Modern Novel Credits: 3
An intensive study of no more than three major 20th-century novelists. The content of the course will change, depending on the instructor.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, completion of six hours of literature.

ENGLISH 470 Introduction To Descriptive Linguistics Credits: 3
General introduction to linguistics science. Linguistic analysis, structures and change. Language families. Historical reconstruction. Generative grammar.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 310.

ENGLISH 475 Creative Nonfiction Credits: 3
This course emphasizes the study and crafting of creative nonfiction. special attention is given to developing the writing techniques required to shape publishable narratives out of experience.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, ENGLISH 312, ENGLISH 315, ENGLISH 316WI..

ENGLISH 482 European Literature: 18th Century Credits: 3
The 18th-century course will focus on a representative sampling from authors such as Corneille, Racine, Moliere, Voltaire, Prevost, La Bruyere, La Rochefoucauld, Montesquieu, Diderot, Rousseu, Schiller, Goethe, and Grimmelshausen.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, completion of six hours of literature.

ENGLISH 483 European Literature: 19th Century Credits: 3
The 19th century course will focus on representative works from authors such as Stendhal, Balzac, Flaubert, Zola, Lermontov, Gogol, Tolstoy, Dostoyevsky, Kleist, Hoffman, Hugo, and Monzoni.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200, completion of six hours of literature.

ENGLISH 498 Senior Seminar On Writing In The Secondary Classroom Credits: 3
This course is intended to help students move from discussions of education composition theory to classroom research and practice. Students will examine their own language uses, study current composition pedagogy, and undertake action research projects in cooperation with teachers affiliated with the Greater Kansas City Writing Project. In a culminating study, students will compile their action research data and prepare classroom resources based on their findings. ENGLISH 498 is designed for English Secondary Education majors. Other education majors may enroll with instructor's permission.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

ENGLISH 499 Senior Tutorial Credits: 3
A comprehensive tutorial for students who have a faculty-approved research project. The project will culminate in a critical study of 20-25 pages or a creative writing portfolio of similar length. This course is appropriate for students who intend to continue their studies at the graduate level.
Prerequisites: ENGLISH 225 (or equivalent) or DISC 200.

Entrepreneurship (ENT)

Courses

ENT 201 Entrepreneurship Immersion Credits: 3
This course will inspire and nurture the entrepreneurial spirit as students gain an appreciation for the entrepreneurial process and the characteristics of successful entrepreneurs. Students will also learn how to identify entrepreneurial opportunities, how to turn those opportunities into start-up businesses, and whether entrepreneurship might be a potential career path. The course includes case studies and interactions with successful entrepreneurs.

ENT 215 Introduction to Entrepreneurship Credits: 3
This course introduces students to the excitement and challenges of building their own businesses. It focuses on identifying and evaluating entrepreneurial opportunities, as well as identifying what it takes to get a new venture off the ground. The course is enriched with real-life examples, including case studies of start-ups and personal stories from local entrepreneurs. The instructor emphasizes active, hands-on learning; additionally, student teams will get a taste for starting and running a company through a computerized business simulation.

ENT 301 Entrepreneurship Immersion Credits: 3
This course will inspire and nurture the entrepreneurial spirit as students gain an appreciation for the entrepreneurial process and the characteristics of successful entrepreneurs. Students will also learn how to identify entrepreneurial opportunities, how to turn those opportunities into start-up businesses, and whether entrepreneurship might be a potential career path. The course includes case studies and interactions with successful entrepreneurs.

ENT 315 Introduction to Entrepreneurship Credits: 3
This course introduces students to the excitement and challenges of building their own businesses. It focuses on identifying and evaluating entrepreneurial opportunities, as well as identifying what it takes to get a new venture off the ground. The course is enriched with real-life examples, including case studies of start-ups and personal stories from local entrepreneurs. The instructor emphasizes active, hands-on learning; additionally, student teams will get a taste for starting and running a company through a computerized business simulation.

ENT 321 Real Estate Principles Credits: 3
Starting with the basics of real estate terminology, students learn real estate's role in the economy, it's legal foundations, government controls, appraisal processes, valuation processes, brokering and closing transactions, time value of money, basic management issues and lease clauses, and basic standard form purchase contracts.

ENT 325 Creativity for Innovation, Problem Solving and Entrepreneurship Credits: 3
This course explores creativity and the creative organization and uses the knowledge of and experience with creative methods to generate ideas with commercial potential. In addition to a deep knowledge of the creative process in the service of corporate innovation, new-product development, and venture creation, students will leave this course in possession of a number of ideas of sufficient quality to support the development of a new product or venture.

ENT 326 Creativity, Innovation, and Problem Solving Credits: 3
This course examines creativity and innovation, and their application to problem solving and developing new initiatives. Students will develop the ability to understand and solve problems and initiate opportunities by thinking new things. They will understand the concepts, skills, information, attitudes, and resources that leaders need to create valuable ideas, products, or initiatives.

ENT 327 Creating the New Venture: Experiential Learning Credits: 3
This course guides students through the process, experiences, and requirements for creating a new venture and planning for operations up to the point of securing customers and generating first revenues. Key course actions include developing a business plan for the new venture, examining the initial steps for start-up and operational launch, and preparing for securing of customers/revenues.
Prerequisites: ENT 201, ENT 215, ENT 301, or ENT 315.

ENT 328 Creating the E-Business Experiential Learning Credits: 3
This course guides students through the process, experiences, and requirements for creating a new online e-venture and planning for operations up to the point of securing customers and generating first revenues. Key course actions include developing a business plan for the new venture, examining the initial steps for start-up and operational launch, and preparing for securing of customers revenues.
Prerequisites: ENT 201, ENT 215, ENT 301, or ENT 315.

ENT 332 Managing the New Venture: Experiential Learning Credits: 3
In this course, students will acquire the skill sets needed to manage and grow a successful new venture, and will actually manage a new enterprise.

ENT 341 Technology Entrepreneurship Credits: 3
This course is designed to familiarize students with the creation of successful, high-value enterprises, with an emphasis on markets for technology and venture capital. Students identify a business opportunity, create a technology-based solution, and assess the commercial and technological viability of the business opportunity. Case studies will emphasize life sciences, engineering, and information technologies.

ENT 361 New Product Development Credits: 3
This course introduces students to a formal process used to develop new products and services. Throughout the process, students learn how an abstract idea can be transformed into concrete product concepts that will in turn be translated into tangible working prototypes.

ENT 364 Entrepreneurial Management and Innovation Credits: 3
Students are exposed to the unique entrepreneurial experience of conceiving, evaluating, creating, managing, and eventually selling a business. The goal is to provide a comprehensive background with practical application of important concepts applicable to an entrepreneurial environment. Key business areas of finance, accounting, marketing, and management will be addressed from an entrepreneurial perspective.

ENT 412 Entrepreneurial Finance and Venture Capital Investment Credits: 3
This course examines the financing and valuation of new ventures from the perspectives of entrepreneurs and venture capitalists. The focus is on financial thinking, tools, and techniques that are relevant for seeking new venture financing and making investment decisions. The course is suitable for anyone with an interest in startup companies, venture capital, or private equity firms.

ENT 421 Real Estate Finance Fundamentals Credits: 3
This course will provide a fundamental understanding of basic financial concepts of real estate including compounding and discounting, construction of amortization tables and after-tax yield analysis for a simple real estate investment. It also touches on the basics of title insurance, ownership issues, fixed rate verses variable rate mortgages in residential real estate, understanding housing bubbles, and trends in valuation of residential real estate. In addition, the student will complete mathematical comparisons of leasing versus owning a home.

ENT 425 Corporate Entrepreneurship Credits: 3
Students receive an introduction to the field of corporate entrepreneurship, including the effectiveness of different models of corporate entrepreneurship. Specific topics include the creation of an entrepreneurial culture within the organization, the translation of opportunities into attractive corporate investments, corporate venturing, and the role of venture champions.

ENT 432 Entrepreneurial Marketing and Selling Credits: 3
This course exposes students to the objectives, challenges, and requirements for effective, results-oriented marketing activities and sales efforts for the entrepreneur/new venture. Key topics include the selection, design, and budgeting of entrepreneurial marketing and advertising programs, along with effective selling, customer acquisition, and service/retention efforts.

ENT 446 Entrepreneurial Selling and Sales Force Management Credits: 3
This course assists students in developing a successful sales plan for a new venture. The first half of the course deals with sales techniques; the second half addresses important sales force management topics such as recruitment, training, deployment, motivation, compensation, and evaluation.

ENT 460 Creating the Enterprise Credits: 3
This course looks at the processes and skills individuals require in order to create their own enterprise, manage a new business, or work within an entrepreneurial organization. Students will learn how to take a good idea, assess that idea, and develop an appropriate business model, and will work in teams to develop a full-length business plan.
Prerequisites: (or concurrent) ACCTNG 211, FIN 325, MKT 324, MGT 330, DSOM 326.

ENT 491 Entrepreneurial Consulting Credits: 3
Working in teams, students will consult with small business client firms. This will require the identification of problems, the proposal of solutions, and the responsibility for implementing those solutions in the enterprise.

ENT 496 Internship: Entrepreneurship Credits: 1-3
This course provides an opportunity for students to integrate their academic studies via employment with a business or organization in the community.

ENT 497 Special Topics: Entrepreneurship Credits: 1-3
Study and research in areas of special interest under individually faculty direction.

ENT 497A Special Topics: Entrepreneurship Credits: 1-3
Study and research in areas of special interest under individually faculty direction.

ENT 497B Special Topics: Entrepreneurship Credits: 1-3
Study and research in areas of special interest under individually faculty direction.

Environmental Sciences (ENV-SCI)

Courses

ENV-SCI 110L Understanding the Earth Laboratory Credits: 2
Laboratory and field demonstration and exercises in environmental science. Weekly exercises or field trips.
Co-requisites: ENV-SCI 110R.

ENV-SCI 110R Understanding the Earth: Introduction to Environmental Science and Laboratory Credits: 3
This introductory course surveys the processes that shape our planet. Topics include: plate tectonics and mountain-building, rivers and oceans, atmospheric circulation, weather and climate, and the amazingly complex relationships between life on Earth and the physical environment.
Co-requisites: ENV-SCI 110.

ENV-SCI 210 Issues in Environmental Science Credits: 3
Explores important environmental issues such as air and water pollution, water supply, climate change, agriculture and food supply, environmental health, ecosystem disruption, environmental management, environmental ethics, and energy resources. Topics may vary depending on current events.

ENV-SCI 220 Ecosystem Science for Decision Makers Credits: 3
This course addresses the fundamentals of ecosystem science with an emphasis on human-induced change in natural systems. Course content characterizes the biological patterns found in nature emphasizing application of underlying principles. Scientific tools are provided to evaluate ecosystem concerns and make informed decisions.

ENV-SCI 310 Field Experience in Waste Management Credits: 2-3
This course provides an overview of waste management issues, including nature, classification and disposal of various wastes, and U.S. laws governing the management of solid, hazardous, biologic and nuclear waste. Lectures and discussions will be supplemented by visits to waste management facilities to study methods and technologies used for treatment and disposal of wastewater, solid, hazardous, and biologic wastes. This field-intensive course includes travel to neighboring states and includes an overnight out-of-town stay. Final report required.

ENV-SCI 332CZ Environmental Sustainability Credits: 3
This course will introduce the concept of sustainability and review how sustainability might work at the individual, neighborhood, state, nation and global scales. Students will participate in some form of community engagement on sustainability as well as reflect upon how their own practices impact the environment.

ENV-SCI 449 Global Water and Sustainability Credits: 3
This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in an era of rapidly-changing climate are explored.
Cross Listings: GEOG 449.

ENV-SCI 496 Environmental Internship Credits: 1-4
Students obtain practical experience working for local engineering and environmental firms, or governmental agencies. Specific duties and application requirements will vary depending on the funding organization’s needs. Junior or senior standing required for undergraduates.

Environmental Studies (ENV-STDY)

Courses

ENV-STDY 325 Cultural Perspectives on the Environment Credits: 3
This course explores the history of conservation practices in American agriculture from the 1700s through the present. Additionally, the course examines the past and present legal implications of environmental statutes for minority farmers from a social and environmental justice perspective.
Cross Listings: GEOG 325.

ENV-STDY 334 Gender and the Environment Credits: 3
This course provides a survey of different ways women relate to nature. The objectives of the course are: to understand historical relationships between women and nature in the western world, to understand different theoretical approaches to studying women and nature, to explore the geography of women's activism on behalf of the environment, and to understand how women's health is linked to the environment.
Cross Listings: GEOG 334.

ENV-STDY 345 Animals and Society Credits: 3
This course explores the wide variety of cultural and ecological interactions that exist between people and animals whether wild or domesticated, aquatic, terrestrial, or avian. Utilitarian and ethical perspectives are used to study current patterns of use and abuse in animal keeping.
Cross Listings: GEOG 345.

ENV-STDY 411 Politics of Wildlife Credits: 3
This course addresses the history of wildlife conservation and management in the modern era, human-wildlife conflicts globally and locally, the illegal trade in wildlife, policies addressing wildlife, and the social importance of wildlife to human cultures.

ENV-STDY 412 Global Tourism Credits: 3
This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies.
Prerequisites: GEOG 105 (or GEOG 200 or GEOG 202).

Cross Listings: GEOG 412.

ENV-STDY 430 Soil and Groundwater Remediation Credits: 3
Review of basic geoenvironmental concepts. Nature, cause, and occurence of contaminated soil and groundwater. Principles of remediation, discussion of cleanup goals and various remediation alternatives and technologies. Design a remediation system: Project planning, data requirements, cost considerations, and implementation. A class project is required.
Prerequisites: GEOG 335 (or GEOLOGY 335).

ENV-STDY 450 Ecotoxicology Credits: 3
This course addresses the fundamentals of ecotoxicology, integrating the sciences of ecology and toxicology. Students will learn the biological basis for pollutant effects on individuals and populations of plants and animals, how pollutant intensity varies as a function of bioavailability, the basics of risk assessment, and how pollutant effects are modified by ecological interactions within communities and ecosystems. The ultimate goal of ecotoxicology is to predict the effects of pollution within an ecological context.
Prerequisites: BIOLOGY 108, CHEM 211, CHEM 212R.

ENV-STDY 499WI Environmental Studies Practicum Credits: 3
Students conduct research, participate in discussions, and prepare written reports on selected topics concerning the environment.
Prerequisites: Senior standing, RooWriter.

Euphonium (EUPHNM)

Courses

EUPHNM 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit towards the major.

EUPHNM 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

EUPHNM 100C Applied Study for the Non-Music Major. Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

EUPHNM 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

EUPHNM 101 Freshman Euphonium I Credits: 2-4

EUPHNM 102 Freshman Euphonium II Credits: 2-4

EUPHNM 201 Sophomore Euphonium I Credits: 2-4

EUPHNM 202 Sophomore Euphonium II Credits: 2-4

EUPHNM 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: EUPHNM 5300.

EUPHNM 301 Junior Euphonium I Credits: 2-4

EUPHNM 302 Junior Euphonium II Credits: 2-4

EUPHNM 401 Senior Euphonium I Credits: 2-4

EUPHNM 402 Senior Euphonium II Credits: 2-4

Finance (FIN)

Courses

FIN 325 Financial Management Credits: 3
This course provides an overview of the relationship between business decisions and the value of the firm, as determined by the marketplace. Students will study the composition of capital structure, capital budgeting, and cost of capital theory, including incremental analysis of investment situations.
Prerequisites: ACCTNG 210.

FIN 326 Financial Management 2 Credits: 3
Explores leverage and capital structure, dividend policy, raising capital, short-term financial planning, working capital management and international financial management. FIN 326 builds on the content of FIN 325. A cursory knowledge of accounting principles is assumed, as well as fluency with simple algebra and arithmetic skills.
Prerequisites: ACCTNG 210, FIN 325.

FIN 340 Global Financial Markets and Institutions Credits: 3
Students are introduced to global financial markets and institutions as well as the regulators. Topics include financial instruments, past and current global financial crises, financial restructuring and reforms, and the interrelationships between financial and real economies.
Prerequisites: FIN 325.

FIN 345 Investments Credits: 3
The course develops the theoretical framework necessary for a systematic approach to portfolio management. Content includes consideration of investment objectives, measurement of risk and returns, alternative uses of invested funds, analysis of securities markets, and the techniques of security analysis. Students will have an opportunity for the creation and management of an investment portfolio.
Prerequisites: FIN 325.

FIN 350 Introduction to Risk Management and Insurance Credits: 3
This course introduces students to the principles of personal and corporate risk management. Personal risk management topics include: personal insurance planning, annuity investing and personal liability management. Corporate risk management topics include: managing corporate risk, reducing risk through hedging, and legal liability risk.

FIN 351 International Financial Management Credits: 3
The world’s business activities and economics are becoming more integrated. This course provides an introduction, appreciation and understanding of how this process impacts financial decisions for global business. Students should expect to develop an integrated analytical and decision making perspective that will enable them to extend financial concepts such as capital budgeting and risk management, and instruments such as forwards, swaps, fixed income analysis, arbitrage, etc. to their international analogs.
Prerequisites: FIN 325 (or equivalent).

FIN 369 Payment Systems Credits: 3
The payment system is central to virtually all economic transactions. The payment system also has been undergoing fundamental changes over the past two decades. Yet, the payment system is one of the least understood parts of the economic system. The purpose of this course is to examine the payment system from economic, business, and regulatory standpoints.

FIN 419 Financial Statement Analysis Credits: 3
Students will take an in-depth look at the external financial statements that are prepared by corporations, including the tools needed to organize, summarize, and understand corporate financial data for use in decision making. Ratio analysis, trend analysis, earnings forecasting, bankruptcy predictors, statistical methods important to finance, and financial data bases are among the topics that will be covered.
Prerequisites: FIN 325 and must have junior standing with a major or minor within the Bloch School of Management.

FIN 427 Debt Instruments And Markets Credits: 3
An overall view of the financing process and the role of financial markets. The course will cover the characteristics of instruments traded in money and capital markets; determinants of and the relationships between different asset prices; and international aspects of financial markets. In particular, topics that will be covered include: Interest rate theory, valuing fixed income securities, managing interest rate risk, derivative financial instruments, capital market equilibrium, managing currency risk and applications of structured fixed income products.
Prerequisites: ECON 202, FIN 325.

FIN 428 Commercial Bank Management Credits: 3
This course presents an overview of financial management of the interest spreads, credit risk, liquidity, and capital positions of commercial banks. Topics to be covered include analysis of bank profitability, lending functions and policy, securities investment strategies, fund attraction, regulatory examination, capital adequacy, and integrated asset/liability management. Instructional media includes cases and computerized bank management simulation.
Prerequisites: ECON 202, FIN 325.

FIN 435 Advanced Corporate Finance Credits: 3
The course focuses on the finance function of the firm from the managerial perspective. Topics include working capital management, capital budgeting, financial structure, merger and reorganization, capital rationing, and analysis of risk. Students will use cases and computer techniques.
Prerequisites: FIN 325.

FIN 445 Advanced Investments Credits: 3
Students take an in depth look at some of the advanced investment analysis tools used by practicing portfolio managers. This course covers the valuation of both derivative securities and fixed-income securities. There is also a strong focus on managing price risk, interest rate risk, and exchange rate risk. In addition there is an emphasis on bond portfolio management and derivative security applications.
Prerequisites: FIN 345.

FIN 496 Internship: Finance Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

FIN 497 Special Topics: Finance Credits: 1-3
Study and research in areas of special interest under individual faculty direction.
Prerequisites: senior standing.

Flute (FLUTE)

Courses

FLUTE 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit towards the major.

FLUTE 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

FLUTE 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

FLUTE 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

FLUTE 101 Freshman Flute I Credits: 2-4

FLUTE 102 Freshman Flute II Credits: 2-4

FLUTE 201 Sophomore Flute I Credits: 2-4

FLUTE 202 Sophomore Flute II Credits: 2-4

FLUTE 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: FLUTE 5300.

FLUTE 301 Junior Flute I Credits: 2-4

FLUTE 302 Junior Flute II Credits: 2-4

FLUTE 401 Senior Flute I Credits: 2-4

FLUTE 402 Senior Flute II Credits: 2-4

Foreign Language (FRN-LNG)

Courses

FRN-LNG 180 Special Elementary Foreign Languages Topics I Credits: 2-5
Instruction in foreign languages at the elementary level. Essentials of grammar, basic conversation and reading, practical vocabulary. May include introduction of new methods of foreign language teaching, special texts, and languages not offered through regular courses.

FRN-LNG 180D Special Elementary Foreign Languages Topics I Credits: 2-5
Instruction in foreign languages at the elementary level. Essentials of grammar, basic conversation and reading, practical vocabulary. May include introduction of new methods of foreign language teaching, special texts, and languages not offered through regular courses.

FRN-LNG 186 The Value of Beauty Credits: 3
This class surveys European aesthetics, defining what counts as beautiful and the roles art plays in society.
Cross Listings: PHILOS 186 and ENGLISH 186.

FRN-LNG 190 Special Elementary Foreign Languages Topics II Credits: 2-5
Continuation of Foreign Languages and Literature 180.
Prerequisites: FRN-LNG 180 (or equivalent).

FRN-LNG 280 Special Intermediate Foreign Languages Topics I Credits: 2-4
Instruction in foreign languages at the second-year intermediate level. Further development of comprehension and communicative skills. Readings of moderate difficulty and grammar review. May include introduction of new methods of foreign language teaching, special texts and topics, and new languages not offered through regular courses.
Prerequisites: FRN-LNG 180, FRN-LNG 190.

FRN-LNG 285 Critical Issues in Women’s and Gender Studies Credits: 3
This class is an interdisciplinary course that will examine critical issues in women’s and gender studies by focusing on the intersections of gender, race, class, sexuality, and social context. Through their study of these intersections, students will become more sensitive to the impact of social structures on gender and the experiences of women and men.
Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

Cross Listings: ENGLISH 286, WGS 286.

FRN-LNG 290 Special Intermediate Foreign Languages Topics II Credits: 2-4
Continuation of FRN-LNG 280.
Prerequisites: Third semester college level-courses.

FRN-LNG 300CM Cluster Course: Mexico, Central America And The Human Condition Credits: 3
Faculty from at least two different departments (one of which must be a department in the Division of Humanities including history) may determine the topic and syllabus, subject to the approval of the director of Integrated Studies and the departments involved. This special topics course will satisfy the interdisciplinary course requirement for the B.A.

FRN-LNG 300CS Cluster Course: History Of Russian Culture Credits: 3
Faculty from at least two different departments (one of which must be a department in the Division of Humanities including history) may determine the topic and syllabus, subject to the approval of the director of Integrated Studies and the program’s advisory committee in addition to the approval of the departments involved. This special topics course will satisfy the interdisciplinary course requirement for the B.A.

FRN-LNG 302 Love and Death in European Medieval Literature Credits: 3
This course explores the intertwined themes of love and death in medieval European literature. Students will read key works from the medieval European traditions in English and will also be introduced to key concepts in the comparative study of medieval culture.

FRN-LNG 380 Special Topics Credits: 1-3
Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

FRN-LNG 400CF Courts and Culture in the Middle Ages Credits: 3
This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate not only the "high culture" of the courts but also the interactions of people from various social backgrounds in Western Europe. May be taken for French major.
Cross Listings: ENGLISH 400CF, HISTORY 400CF.

FRN-LNG 400CI Cc:Culture,Kultur,Civilisation:Identity Formation In the Middle Classes Credits: 3
This cluster course will explore the dynamics of bourgeois class formation in Western Europe in the "long" 19th century (1750-1920) from historical, thematic, and theoretical perspectives. It will focus on how this class-based identity developed and functioned in the context of historical and cultural changes and how the bourgeoisie defined themselves vis a vis nobles, peasants, workers, "primitives," and criminals. Class assignments will include historical, literary, theatrical, anthropological, and cinemagraphic sources.

FRN-LNG 400CM Nazi-Occupied Europe & The Holocaust Credits: 3
With the collaboration of many other nations, Nazi Germany attempted a genocidal war to systematically colonize, relocate and annihilate entire social groups, most notably the Jews. Employing an intentionally cosmopolitan perspective, this interdisciplinary cluster-course will explore how ordinary Europeans behaved in these circumstances and the different ways that scholars have attempted to comprehend, analyze and represent those choices.

FRN-LNG 401 Linguistics and Language Teaching Credits: 3
A survey of issues in linguistics with particular emphasis on areas and applications pertaining to the teaching of foreign languages. Contrastive analysis of the history and structure of Germanic and Romance languages. Examination of social, cultural and biological aspects of language.
Prerequisites: Two years of a college-level foreign language, junior/senior standing.

FRN-LNG 402CC CC: Making the Modern in France: Dance, Art, Music, and Literature Credits: 3
This cluster course will take an interdisciplinary approach to understand the way modernism developed within the arts, with a focus on late-19th, early 20th-century France. Developments in literature, art, dance, and music and their interconnectedness to cultural and historical events will be highlighted and explored.
Cross Listings: ART-HIST 402CC.

FRN-LNG 408 Gender, Health, and Development in Senegal Credits: 3
This course examines women’s economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.
Prerequisites: Junior or Senior level standing – must meet requirements established by study abroad office

Cross Listings: HISTORY 408, HLSC 408, WGS 408.

FRN-LNG 470A Internship in Foreign Languages Credits: 1-3
Intern experience under faculty supervision involving the use of the appropriate foreign language with a local firm, non-profit organization, etc. students will compile a portfolio of their work under the direction of the internship supervisor to be submitted for evaluation by their chosen faculty mentor.
Prerequisites: at least 9 hours prior FRN-LNG coursework in the appropriate language, junior standing.

FRN-LNG 470B School/Education Related Internship in Foreign Languages Credits: 1-3
Intern experience under faculty supervision involving the use of the appropriate foreign language at a local school. Students will keep a journal in the foreign language.
Prerequisites: at least 9 hours of prior FRN-LNG coursework in the appropriate language.

FRN-LNG 480 Special Topics Credits: 1-3
Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

FRN-LNG 480A Special Topics Credits: 1-3
Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

FRN-LNG 480B Special Topics Credits: 1-3
Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

FRN-LNG 494 Methods of Teaching Foreign Languages Credits: 3
Teaching methods and materials for beginning and advanced classes in French, German, and Spanish. Modern language teaching methodology and material will be evaluated and demonstrated, together with effective use of the Language Resource Center, tapes, slides, film strips, and other audio-visual materials. Does not count toward a major in foreign language.
Prerequisites: 3.0 GPA in the foreign language.

FRN-LNG H400CM (HONORS) Nazi-Occupied Europe & The Holocaust Credits: 3
With the collaboration of many other nations, Nazi Germany attempted a genocidal war to systematically colonize, relocate and annihilate entire social groups, most notably the Jews. Employing an intentionally cosmopolitan perspective, this interdisciplinary cluster-course will explore how ordinary Europeans behaved in these circumstances and the different ways that scholars have attempted to comprehend, analyze and represent those choices.

French (FRENCH)

Courses

FRENCH 110 Elementary French I Credits: 3
The goals of this course are an ability to speak and to understand simple (spoken) French as well as to read and write simple prose.

FRENCH 120 Elementary French II Credits: 3
Continuation of FRENCH 110.
Prerequisites: FRENCH 110 (or equivalent).

FRENCH 211 Second Year French I Credits: 3
Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.
Prerequisites: FRENCH 120.

FRENCH 221 Second Year French II Credits: 3
Continuation of FRENCH 211.
Prerequisites: FRENCH 211.

FRENCH 280 Special Intermediate French Topics I Credits: 2-4
Instruction of French on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: FRENCH 110, FRENCH 120.

FRENCH 285 World Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of one or more regions of the world as well as dynamics of interaction between them. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 260, CONSVTY 239, HISTORY 260, PHILOS 232, SPANISH 285.

FRENCH 290 Special Intermediate French Topics II Credits: 2-4
Continuation of FRENCH 280. May not be repeated for credit.
Prerequisites: FRENCH 280.

FRENCH 295 European Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 240, CONSVTY 238, GERMAN 295, HISTORY 240, PHILOS 212, SPANISH 295.

FRENCH 301 Introduction to French Literature Credits: 3
An introduction to the study of different genres of French literature and techniques of criticism. Readings include representative works of major authors from various periods. Strongly recommended for all majors, to be taken before or concurrently with other literature courses. Taught in French.

FRENCH 303 Masterpieces of French Literature I Credits: 3
An introduction to the history of French literature from the Middle Ages to 1800, stressing the historical context, the major literary movements, and the development of the various genres. Selected readings of the works of the major authors of the period. Taught in French.

FRENCH 304 Masterpieces Of French Literature II Credits: 3
An introduction to the history of French literature from 1800 to the present stressing historical context, the major literary movements and the developments of the various genres. Selected readings of the works of major authors of the period. Taught in French.

FRENCH 315 Intermediate Conversation and Composition I Credits: 3
Grammar review, practice in speaking and writing French, emphasis on idiomatic usage and practical vocabulary. Required for major.
Prerequisites: FRENCH 221 (or equivalent).

FRENCH 325 Intermediate Conversation and Composition II Credits: 3
Continuation of FRENCH 315. Required for major.
Prerequisites: FRENCH 315.

FRENCH 340WI French Texts in Translation Credits: 3
Seminar on French texts in translation. Class will be conducted in English and no knowledge of French is necessary. May be taken for major credit.
Prerequisites: ENGLISH 110, ENGLISH 225, RooWriter.

FRENCH 350 French Civilization I Credits: 3
An historical introduction to French civilization and culture with emphasis on historical, social and cultural development.
Prerequisites: FRENCH 221 (or equivalent).

FRENCH 351 Introduction to French Phonetics Credits: 3
Drill and practice in pronunciation in class and in language laboratory.
Prerequisite: FRENCH 221 (or equivalent).

FRENCH 352 French Civilization II: Contemporary French Civilization Credits: 3
An in-depth survey of contemporary French culture, including major historical events and movements that have shaped modern France, as well as geography, the political system, family life and education, economics, etc.
Prerequisites: FRENCH 221 (or equivalent).

FRENCH 354 French Civilization III: Lyon, Crossroads of France and Europe Credits: 3
An introduction to French culture and civilization through the history, geography, culture and arts of Lyon and its region. Offered during the Study Abroad Program in Lyon.

FRENCH 380 Special Topics Credits: 1-3
Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

FRENCH 400CF Courts and Culture in the Middle Ages Credits: 3
This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes,the cluster will read a variety of documentary and literary texts in investigate not only the "high culture" of the courts but also the interactions of people from various social backgrounds in Western Europe. May be taken for French major.
Cross Listings: ENGLISH 400CF, HISTORY 400CF.

FRENCH 412 17th Century French Literature Credits: 3
Selected readings in the literature of the 17th century, with an emphasis on non-dramatic works.
Cross Listings: FRENCH 5512.

FRENCH 413 18th-Century French Literature Credits: 3
Emphasis on philosophical and social significance. Authors may include Marivaux, Beaumarchais, Le Sage, L’Abbe Prevost, Montesquieu, Rousseau, Diderot.
Cross Listings: FRENCH 5513.

FRENCH 414 Medieval Literature Credits: 3
Selected readings in various genres including epic, romance, theater and lyric. Emphasis will be placed on the intertextual relations and the cultural and historical context surrounding text production in the Middle Ages.
Cross Listings: FRENCH 5514.

FRENCH 415 Advanced Conversation and Composition I Credits: 3
Practice in speaking and writing French, with attention to the elements of style. Continued in FRENCH 425. First semester required of all majors and second semester recommended. Both semesters required of prospective high school teachers. Either or both semesters may be repeated. No more than six hours of credit may be applied toward a degree.
Prerequisites: FRENCH 325.

FRENCH 417 16th-Century French Literature Credits: 3
Selected readings in prose and poetry from Marot through Astree. Authors may include Rabelais, Ronsard, du Bellay, Montaigne, Marguerite de Navarre.
Cross Listings: FRENCH 5517.

FRENCH 425 Advanced Conversation and Composition II Credits: 3
Continuation of FRENCH 415. Required for teacher certification in French.
Prerequisites: FRENCH 415.

FRENCH 426 20th-Century French Literature Credits: 3
Selected readings from the Belle Epoque to the contemporary period.
Cross Listings: FRENCH 5526.

FRENCH 434 Diderot Credits: 3
Seminar on Diderot and the Encyclopedie and their contributions to the French Enlightenment.

FRENCH 435 Directed Discussions In Advanced French Credits: 3
Directed discussion on contemporary French culture. The discussions cover a wide range of topics on modern France: social, intellectual and cultural aspects. Students will participate and have the opportunity to observe and react within a cultural frame of reference. Open to advanced students of French and to teachers of the language for in-service training.

FRENCH 440 Medieval Romance Credits: 3
The various movements of French medieval romance from the 12th through 15th centuries with an emphasis on the 12th and 13th centuries. Analysis of literary technique and socio-historical context will be stressed. No knowledge of Old French is assumed.
Cross Listings: FRENCH 5540.

FRENCH 443 Early French Theater Credits: 3
An examination of the development of French theater from Late Antiquity through the Renaissance, including religious and secular drama. The focus is on literary analysis of the dramatic texts, with some consideration of theater history and dramaturgy.
Prerequisites: FRENCH 221 (or equivalent).

Cross Listings: FRENCH 5543.

FRENCH 444 Renaissance Poetry Credits: 3
French poetry from the Grand Rhetoriqueurs through the Pleiade. Study of poetic forms, major poets and schools, and different approaches to analyzing poetry.
Prerequisites: FRENCH 221 (or equivalent).

Cross Listings: FRENCH 5544..

FRENCH 445 Epistolarity and the Novel Credits: 3
Explorations of the genre through the analysis of 17th-and 18-century French novels. Introduced by a theoretical review.
Cross Listings: FRENCH 5545.

FRENCH 446 17th-Century French Drama Credits: 3
The classical period: Emphasis on Corneille, Racine and Moliere.
Cross Listings: FRENCH 5546.

FRENCH 448 20th Century French Theater Credits: 3
Analysis of major currents of French theater of the 20th-Century, with emphasis upon the postwar period and its movements.
Cross Listings: FRENCH 5548.

FRENCH 449 Survey of French Theater Credits: 3
A survey of the major French playwrights and their plays from the 17th through the 21st centuries. Historical and cultural influences will be covered as well as the specificities of the genre from the perspective of how the plays are performed and how we read them.
Cross Listings: FRENCH 5589.

FRENCH 452 Medieval Poetry Credits: 3
A study of medieval poetry including religious and secular poetry, Provencal and Old French lyric, the influence of poetry in other genres such as romance and theater, later medieval poetry of the 14th and 15th centuries, as well as a discussion of the origins of the lyric.
Prerequisites: FRENCH 221 (or equivalent).

Cross Listings: FRENCH 5552.

FRENCH 455 Fin-De-Siecle and Belle Epoque Credits: 3
Study of the literary, cultural and historical context of this time period in French history, for example: Symbolism, Decadence, and the years 1900-1914.
Cross Listings: FRENCH 5555.

FRENCH 456 20th Century French Poetry Credits: 3
The study of 20th-century poetry with special consideration given to different approaches to its analysis.
Cross Listings: FRENCH 5556.

FRENCH 457 20th Century French Narrative Credits: 3
The analysis of major currents in French 20th century narrative, especially fiction and film. Courses will be organized around narrative themes or historical events and will include social and cultural components.
Cross Listings: FRENCH 5561.

FRENCH 463 19th-Century French Fiction Credits: 3
Studies in the birth, development and variation of French Romanticism. Readings include de Stael, Senancour, Constant, Hugo, Stendhal and Merimee. The advent of realism and naturalism in France. Readings include Balzac, Flaubert, Daudet, De Maupassant, and Zola.
Cross Listings: FRENCH 5563.

FRENCH 471 Autobiography Credits: 3
Analysis of autobiographies and autobiographical texts such as diaries and memoirs together with theoretical texts on the genre. The concentration on different periods or issues may change from semester to semester, i.e. the art of autobiography as practiced by 20th-century writers, especially women.
Cross Listings: FRENCH 5571.

FRENCH 472 Francophone Studies Credits: 3
Study of different national Francophone literatures. Reading may include writers from Quebec, Haiti, Africa, Louisiana, Vietnam, the French Indies, etc.
Cross Listings: FRENCH 5572.

FRENCH 480 Special Topics Credits: 1-3
Each time this course is offered a particular author, genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

FRENCH 490 Special Readings Credits: 1-3
Intensive readings in field or literary figure to be selected by the student in consultation with the instructor. Available to advanced students of French; available only when student cannot take regularly scheduled courses.
Prerequisites: 3.0 GPA.

FRENCH 499 Senior Seminar (Capstone) Credits: 3
Required for major. Covers seminal works of French literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music.
Prerequisites: 21 hours beyond first year.

General Enrollment - MSSU/DENT-HYG (GEN-ENRL)

Courses

GEN-ENRL 105 Thinking Critically: Problem Solving and Decision Making Credits: 3
This course is designed for students who have mastered the skills taught in a first-year seminar. This course is aimed to help students become more aware of critical thinking and to practice some of the basic skills needed within various disciplinary and multidisciplinary contexts. It includes practice in inductive and deductive reasoning, presentation of arguments in oral and written form, and analysis of the use of language to influence thought.
Prerequisites: A&S 100 or equivalent.

Geography (GEOG)

Courses

GEOG 105 Introduction to the Elements of Geography Credits: 3
A survey of major elements of physical and human geography, with a concise overview of the world’s regions. Emphasis on global relationships and distributions, both environmental and cultural. Climates, natural vegetation, land forms, cultural origins and diffusions, economic patterns.

GEOG 150 Introduction to Physical Geography Credits: 3
This course is an introduction to the study of the natural environmental systems of earth--the atmosphere, the hydrosphere, the biosphere, and the lithosphere. The primary objective of the course is to provide a broad overview of these systems at a global scale. This overview will entail descriptions of natural systems and the variations they exhibit both from place to place and through time. It will also entail explaining how natural systems operate and interact with each other, thereby providing a necessary foundation for understanding the tremendously diverse physical geography of earth. Applies to natural science requirement.

GEOG 200 World Geography I Credits: 3
A survey of the physical and human geography of the regions and nations of Europe and the Americas, with Australia and New Zealand. The approach is strongly historical, emphasizing interconnections, shared colonial backgrounds and broader global contexts in the modern world. The course is aimed at non-specialists.

GEOG 202 World Geography II Credits: 3
A survey of the physical and human geography of the regions and nations of Russia and the other former Soviet republics, the Middle East, Africa, South Asia, East Asia Southeast Asia and the Pacific Realm. The approach is strongly historical emphasizing interconnections shared colonial backgrounds, and broader global contexts in the modern world. The course is aimed at non-specialists.

GEOG 203 Introduction to Geographic Information Systems Credits: 4
An introductory course covering the basic principles of geographic information systems focusing on such software programs as ARC-INFO and ARC-VIEW.

GEOG 210 Human Geography Credits: 3
A study of the geographical underpinnings and distribution of the main elements of culture, including population patterns, language, religion, political territorial organization, settlement, and economic livelihood. The environmental settings, geographic origins, diffusion, and geographic interrelationships of these culture traits are emphasized.

GEOG 215 Introduction to Weather and Climate Credits: 4
Overview of the basic components of the climate system. Emphasis is on the basic physical processes that determine global and regional climate and the linkages between components of the climate system. The theme throughout the course will be importance of climate as one of the major forcing mechanisms in environmental change. Both human-induced and natural climate variability will be covered.

GEOG 300 Interdisciplinary Studies:Cluster Courses Credits: 3

GEOG 309 Urban Geography Credits: 3
Historical development, morphology and functions of urban places, including intercity relationships and the relationship between cities and their hinterlands; emphasis on American cities.

GEOG 311 Economic Geography Credits: 3
A systematic study of the modern world economy that includes discussion of the location of production and consumption, the nature and role of multinational enterprises in trade, resource limitations to growth, and cultural responses to globalization.

GEOG 314 Principles of Geomorphology Credits: 4
Explores the processes that shape the earth's surface. Focuses on the development and description of fluvial, glacial, eolian, and coastal landforms. Studies the influence of tectonic and climatic factors. Field trip.
Prerequisites: ENV-SCI 110R (or GEOLOGY 220).

GEOG 317 Cartography Credits: 4
Design and preparation, by hand and computer, of informative, effective, and attractive maps and other graphics for various geographical purposes, especially term papers, thesis, and public presentations. Lectures, discussion, and laboratory.

GEOG 319 Descriptive and Synoptic Meteorology Credits: 4
Synoptic weather observations, air mass analysis, analysis of frontal systems, weather disturbances, preparation of weather charts and diagrams used in synoptic meteorology and forecasting.
Prerequisites: ENV-SCI 110R (or GEOG 215).

GEOG 325 Cultural Perspectives on the Environment Credits: 3
This course explores the history of conservation practices in American agriculture from the 1700s through the present. Additionally, the course examines the past and present legal implications of environmental statutes for minority farmers from a social and environmental justice perspective.
Cross Listings: ENV-STDY 325.

GEOG 329 World Political Geography Credits: 3
An analysis of the influence of geographic factors (both physical and human) on the economic and political relationships of the nations of the world. Emphasis will be placed on population size and political viability of states, boundaries and frontiers as limits of national space, problems related to the spatial integration of states, and the independence and interdependence of states within the larger world political system.

GEOG 332 Cultural Geography Credits: 3
A study of the distribution and interpretation of cultural patterns throughout the world. Examined are material and non-material elements of culture such as settlement, land use, technology and belief systems. The geographic origins and diffusion of culture traits are emphasized.

GEOG 333 Geographic Elements of Urban Planning Credits: 3
Analysis of the changing form and structure of urban places from a planning viewpoint. The focus will be on land-use trends on both the intraurban and interurban levels. Covered will be such topics as planning for urban transportation, new towns, land-use planning, urban renewal, and environmental planning.

GEOG 334 Gender and the Environment Credits: 3
This course provides a survey of different ways women relate to nature. The objectives of the course are: to understand historical relationships between women and nature in the western world, to understand different theoretical approaches to studying women and nature, to explore the geography of women's activism on behalf of the environment, and to understand how women's health is linked to the environment.
Cross Listings: ENV-STDY 334.

GEOG 335 Introduction to Waste Management Credits: 3
Overview of issues in waste management. Nature and classification of waste. Municipal solid waste: disposal methods, design, construction and maintenance of sanitary landfills. Nature and sources of hazardous waste, storage, transportation, treatment and disposal of hazardous waste. Types and sources of nuclear waste; disposal of high level and low level nuclear wastes. Sources, nature, handling and disposal of biologic waste. Pollution prevention, recycling and resource conservation.
Prerequisites: ENV-SCI 110R, GEOG 150, GEOLOGY 220.

GEOG 336 Principles of Soil Science Credits: 3
Study of genesis, evolution, distribution and classification of soils. Analysis of soil-forming materials and processes. Lecture, discussion and laboratory.
Prerequisites: ENV-SCI 110R, GEOLOGY 220.

GEOG 340 Geography of the United States and Canada Credits: 3
A survey of the physical and human geography of the United States and Canada. The approach is strongly historical emphasizing interconnections, shared colonial backgrounds, and broader international contexts in the Americas and around the globe. This course is aimed at non-specalists.

GEOG 341 Geography of South America Credits: 3
A study of the physical and human geography of South America, with an emphasis on cultural processes and the historical record. Contemporary issues such as economic development, trade, urbanization, and geopolitical conflicts are discussed.

GEOG 342 Geography of Mexico, Central America and the Caribbean Credits: 3
A study of the physical and human geography of Middle America, with an emphasis on cultural processes and the historical record. Contemporary issues such as economic development, trade urbanization, and geopolitical conflicts are discussed.

GEOG 345 Animals and Society Credits: 3
This course explores the wide variety of cultural and ecological interactions that exist between people and animals whether wild or domesticated, aquatic, terrestrial, or avian. Utilitarian and ethical perspectives are used to study current patterns of use and abuse in animal keeping.
Cross Listings: ENV-STDY 345.

GEOG 350 Geography of Europe Credits: 3
A survey of the physical and human geography of the regions and nations of Europe. The approach is strongly historical, emphasizing international interconnections and broad global contexts. The course is aimed at non-specialists.

GEOG 351 Regional Geography of the Middle East Credits: 3
A study of human imprint upon the land through settlement patterns, institutions of land organization, and types of economy. Strategies for the economic development of various regions in the Middle East are discussed.

GEOG 352 Geography of Southeast Asia Credits: 3
A study of human imprint on the land through settlement patterns, institutions of land organization, and types of economy. Strategies for the economic development of various regions in Southeast Asia are discussed.

GEOG 355 Geography of Africa Credits: 3
A study of human imprint on the land through settlement patterns, institutions of land organization, and types of economy. Strategies for the economic development of various regions in Africa are discussed.

GEOG 360 Principles of Biogeography Credits: 4
This course is an introduction to biogeography that explores the patterns of plant and animal distributions from both ecological and historical perspectives. We examine past geologic and climatic conditions, as well as interactions between organisms and their environment to explain modern distributions of flora and fauna. Human interactions with plants and animals have increasingly profound consequences on distributions of flora and fauna from destruction to management. We explore the increasing importance of issues and strategies in conservation. The laboratory portion of the course builds on core ecological concepts and provides experiences of field observation, data collecting and data analysis.
Prerequisites: ENV-SCI 110R.

GEOG 398 Field Trip Credit: 1
Three-day field trip in March or April (at student’s expense) for department majors. An opportunity to observe and study physical and cultural features and collect materials. Brief descriptive report of trip required.
Prerequisites: 6-9 hours of upper-level geography.

GEOG 401 Advanced Geographic Information Science Credits: 4
This course is designed for the students knowledgeable in the fundamentals of geographic information systems, who wish to gain expertise in advanced topics and applications in geographic information systems, remote sensing, and related environmental informatics. Classes are organized to encourage active learning. Students are encouraged and guided to develop their research projects by integrating related techniques of geographic information science.
Prerequisites: GEOG 203.

GEOG 402 Environmental Remote Sensing and Digital Image Analysis Credits: 4
This course will provide students with innovative techniques for landscape-level environmental analysis, geographic and geological studies, earth science research, and environmental resources management using remotely sensed data including satellite images. Students will be taught basic remote sensing concepts and technical skills, including energy radiative transfer processes in remote sensing, sensors and resolutions, computer-based image processing and classification, and remote sensing/GIS integration.
Prerequisites: GEOG 203.

GEOG 403WI History and Philosophy of Geoscience Credits: 3
A survey of geoscientific thought since antiquity. The substance of geography, geology, and environmental studies will be sought primarily in scholarly treatise and formal analytical systems including cartography, but the course also addresses geoscientific principles emerging from the history of environment, government, law, economy, religion, literature, and material culture. Readings, lectures, discussions, research, writing.
Prerequisites: RooWriter.

Cross Listings: GEOG 5503WI.

GEOG 404 Biogeography and Landscape Ecology Credits: 3
Principles and applications of biogeography and landscape ecology, emphasizing distribution of major ecosystems and related plants and animal species on earth, biodiversity, landscape patterns and processes, and physical, biological, and human interactions. The course explores ecosystem and landscape analyses using advanced GIS, remote sensing, and spatial modeling methods for real problem solving in environmental and biological research, ecosystem conservation, and urban planning and studies.
Prerequisites: GEOG 203, GEOG 402 (or GEOG 5502).

GEOG 406 Global Environmental Change Credits: 3
This course will examine the current rates of global environmental change and potential causes in the context of Earth's natural climate variability. The course will follow a seminar format. Students will read and discuss published articles on current and emerging theories of forcing mechanisms in the Earth's systems.

GEOG 410 Landscape, Language, Literature, and Law Credits: 3
An examination of the geographic underpinnings and implications of languages, literatures, and jurisprudence. The course explores languages' historic rootedness in the interactions between human beings and their surroundings; the varying geographic expressiveness and discrimination of languages; the effect and significance of literary evocations of landscapes; and the cultural and environmental geographic content of the language of law. Readings, lectures, discussions, writing.
Cross Listings: GEOG 5510.

GEOG 412 Global Tourism Credits: 3
This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies.
Prerequisites: GEOG 105 (or GEOG 200, or GEOG 202).

Cross Listings: ENV-STDY 412.

GEOG 415 History and Philosophy of Cartography Credits: 3
An examination of the techniques, assumptions, psychology, and cultural implications of mapping from the Stone Age to the age of satellites and the computerized Geographic Information System. Readings, lectures, discussions, writing.
Cross Listings: GEOG 5515.

GEOG 417 Special Topics Credits: 1-3
Individual research and study of a selected topic in geography, meteorology or earth science.

GEOG 426 Paleoecology: Microfossils and Climate Change Credits: 3
Paleoecology will focus on questions addressing past environments and past climates based on the ecology of microfossils. Micro-organisms are very sensitive to a wide variety of environmental conditions including temperature, precipitation, hydrology, water chemistry, salinity, habitat, and pollution. The fossil remains of these organisms are used as proxy indicators for reconstructing past environmental conditions, climate change, vegetation dynamics, and human impacts. Students will have the opportunity to process microfossils and make interpretations based on analysis data.

GEOG 430 Energy Resources Credits: 3
This course covers the distribution, origin, and utilization of all types of energy. Topics include exploration, production, storage, transportation and conservation of carbon-based fuels, hydrologic, nuclear energy, and alternate energy sources such as solar, wind, geothermal, and hydrogen.
Prerequisites: ENV-SCI 110R (or GEOLOGY 220).

GEOG 435 Geoarchaeology Credits: 3
This course examines geomorphological and archaeological methods used in reconstructing sites, settlement patterns, and paleoenvironments. Explores dating methods, soils, and stratigraphy as tools for studying landscape evolution and human occupation.
Prerequisites: GEOG 314 (or GEOLOGY 314).

GEOG 437 Population Geography Credits: 3
This course analyzes human populations: how they grow, how their compositions change, and how and why people migrate from one place to another. Students will study basic demographic processes- mortality, fertility, and migration- and underline theory and techniques. Students will also examine relationships between population growth and population planning, immigration, urbanization and cities, and the environment.

GEOG 442 Quaternary Environments Credits: 3
This course reviews earth climatic history and focuses on major mechanisms for global and regional climate change. Methods of paleoclimatic reconstruction are examined, including analysis of proxy data and climate modeling. Application of these methods toward prediction of future climate change is also explored.
Prerequisites: GEOG 314 (or GEOLOGY 314), GEOG 215.

Cross Listings: GEOG 5542.

GEOG 444 Spatial Data Analysis Credits: 3
Quantitative techniques and applications of spatial data analysis. The course will cover basic geospatial analysis techniques including hypothesis testing, kriging, variagram analysis, multivariate analysis and reliability analysis. Emphasis is on practical applications rather than theories. Intended for Geology, Geography, Environmental Studies, and relevant fields. Three hours lecture and computer lab per week.
Prerequisites: Elementary statistics.

GEOG 448 Satellite Climatology Credits: 4
Use of satellite observations to study the climate system. Discussions consider the development of satellite climatology, sensors, platforms and methodologies used to estimate climate variables from radiance measurements. Aspects of climate that are emphasized include could climatologies, cloud systems, atmospheric moisture, radiation budget, and land-surface conditions. Three hours lecture and one hour lab per week.
Prerequisites: GEOG 215.

GEOG 449 Global Water and Sustainability Credits: 3
This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in as era of rapidly changing climate are explored.
Cross Listings: ENV-SCI 449.

GEOG 450 Gis Fundamentals for Research Applications Credits: 4
This course will address the needs of upper level undergraduate and graduate students who desire to learn and apply fundamental Geographic Information Systems concepts and techniques for their research projects. This course will draw on the content of the Introductory GIS course offered by the department but will also be flexible such that the individual needs or interest of students can be met through guided reading and/or tailored laboratory sessions. The Department of Geosciences GIS computer laboratory, with a variety of GIS and Remote Sensing software, will be available for this course. Only for upper-level undergraduate and graduate students.

GEOG 457 North American Prehistory Credits: 3
This class offers instruction in the archaeological survey of prehistoric North America from the Arctic to northern Mexico. The course outlines cultural developments within this region form the peopling of the Americas near the end of the last Ice Age to the arrival of Europeans more than 10,000 years later. The diversification of Native American societies across this time span is examined in relation to social and environmental challenges, including the transformation of hunter-gatherer groups into chiefdoms and complex agricultural societies.
Cross Listings: ANTHRO 384.

GEOG 460 Transportation Geography Credits: 3
Relation between transportation and spatial organization, selected analytical models dealing with traffic demand, network configuration, and allocation of transport facilities; application to specific problem areas including commuting. Seminar with discussions of briefs and term paper.

GEOG 489 Tutoring in Geography Credits: 1-3
Geography majors in their senior year may enroll for 1-3 hours tutoring for credit. This will entail working as a tutor, under the direction of the faculty, to students in the 100 to 200-level courses in the department who either have inadequate background preparation in environment studies and geography or are identified by the instructor as needing tutorial help. Tutoring will be on a credit/non-credit basis.

GEOG 496 Geography Internship Credits: 1-6
Students obtain directed practical experience working with non-profits, governments, or private enterprises. Duties will vary based on contractual agreement between the student, host organization, and the professor.
Prerequisites: Junior standing or higher.

GEOG 499WI Geography Seminar Credits: 3
Students critique geographic research and prepare a paper and an oral presentation on an approved topic.
Prerequisites: Senior standing, RooWriter.

Geology (GEOLOGY)

Courses

GEOLOGY 120 Energy Science Credits: 3
An introductory foundation course on energy in all its guises, the physical laws and factors which control it and the availability of energy for human use. Includes consideration of resources, reserves, conversion efficiencies, conservation, and other relevant factors. Conventional sources and nonconventional alternatives such as solar, wind, water, geothermal, biomass and fusion will be addressed. Lecture and discussions.

GEOLOGY 220 General Geology Credits: 3
Geology is the study of Earth, the materials that make up the Earth, and the forces and processes that build and shape the continents, oceans, and life on Earth. The goal of this course is for students to gain an understanding of the fundamental concepts and scientific principles that underlie the physical, chemical, and biological processes that shape our Earth and to learn to think critically about scientific information and how geologic processes affect us every day.

GEOLOGY 220L General Geology Laboratory Credits: 2
Laboratory and field investigations of principles of the geology designed to complement the topics covered in GEOLOGY 220 through the use of inquiry-based investigations in the laboratory and field.
Co-requisites: GEOLOGY 220.

GEOLOGY 230 Historical Geology Credits: 4
An interpretation of the biological and physical history of the earth. Three hours lecture, discussion and two hours laboratory a week. Field trips.
Prerequisites: GEOLOGY 220.

GEOLOGY 250L Field Methods in Earth and Environmental Science Credits: 3
A field-based course covering basic methods used by earth scientists for environmental, geographic, and geologic investigations. Students will collect field data at off-campus sites, conduct periodic monitoring, and analyze samples using departmental and personal instrumentation. Students will work on collaborative projects and will present their results. Class will meet weekly for four hours in the field.
Prerequisites: ENV-SCI 110R (or GEOLOGY 220), ENV-SCI 110L (or GEOLOGY 220L).

GEOLOGY 251 Field Methods in Earth and Environmental Science: Off-Campus Credits: 3
This course will provide students with an introductory, inquiry-based learning experience that focuses on the application of field methods for understanding surface and subsurface earth processes and environmental issues. Students will collect field data at off-campus sites, conduct periodic monitoring, and analyze samples using departmental Instrumentation. Students will work on collaborative projects and will present their results. Class will meet at an off campus location during break (added cost) plus have four on campus meetings.
Prerequisites: GEOLOGY 220 (or ENV-SCI 110R), GEOLOGY 220L (or ENV-SCI 110L).

GEOLOGY 302 Environmental Geology Credits: 3
An introduction to the role and scope of geological processes in the light of contemporary urban society. Lecture and discussion periods include topics such as air and water pollution, earth movements, waste disposal, mineral, energy and water resources, construction engineering, and effects caused by human activities. Three hours lecture, discussion per week.

GEOLOGY 312 Mineralogy Credits: 4
Introduction to crystallography, mineral chemistry and the systematic classification and identification of minerals. Three hour lecture and discussion with two hours laboratory a week.
Prerequisites: CHEM 212R, GEOLOGY 220.

GEOLOGY 313 Evolution and the Geologic Record Credits: 4
An introduction to the history of life by studying the geologic record. Students will examine major features of the fossil record including: invertebrates, vertebrates, and plants. Students explore what the fossil record tells us about geologic time, evolution, past environments and distributions of organisms. Three hours of lecture and two hours of laboratory a week. The course will include field trips to collect and interpret fossils and paleoenvironments.

GEOLOGY 314 Principles of Geomorphology Credits: 4
Explores the processes that shape the earth's surface. Focuses on the development and description of fluvial, glacial, eolian, and coastal landforms. Studies the influence of tectonic and climatic factors. Three hours lecture and two hours lab per week. Field trip.
Prerequisites: ENV-SCI 110R (or GEOLOGY 220).

GEOLOGY 325 Sedimentology/Stratigraphy Credits: 4
Study of sedimentary rocks with special emphasis given to hand specimen identification based on mineral composition and textural features. Characteristics of sediments, transportation and environment of sediment deposition. Principles of stratigraphy, facies analysis and interpretation. Measurement and description of stratified rocks. Three hours lecture and two hours lab per week. Field trips.
Prerequisites: GEOLOGY 220.

GEOLOGY 326CZ Cc:Archaeology of Ancient Disasters Credits: 3
Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe. We begin with the geological context of disaster, including earthquakes, volcanic eruptions, climate change, and soil depletion. Next, we examine how ancient societies responded to disease, an ever present threat from the biological environment. Finally, we look at how ancient human groups were changed by stresses of cultural origin, including overpopulation, depletion of vital resources, and warfare. The study of ancient disasters not only gives us a wider understanding of human history, it may offer lessons for coping with future catastrophes.
Cross Listings: CLASSICS 300CZ.

GEOLOGY 327 Archaeology of Ancient Disasters Credits: 3
Remarkable human achievements are revealed by archaeological research, but the human past was frequently shaped as well by disasters of natural and human origin. Drawing on case studies that include data from the geosciences, archaeological excavations, and historical sources, this class examines how earth processes, the biosphere, and human cultural behavior were all sources of catastrophe.
Cross Listings: CLASSICS 327.

GEOLOGY 334 Medical Geology Credits: 3
This course explores the role of geologic materials and processes on human and ecological health. Occurrence, mobility, and concentration or deficiency of hazardous contaminants and their influence on environmental health are covered. GIS application in health science is included.
Prerequisites: CHEM 160 (or CHEM 211), ENV-SCI 110R (or GEOLOGY 220).

GEOLOGY 335 Introduction to Waste Management Credits: 3
Overview of issues in waste management. Nature and classification of waste. Municipal solid waste: disposal methods, design, construction and maintenance of sanitary landfills. Nature and sources of hazardous waste, storage, transportation, treatment and disposal of hazardous waste. Types and sources of nuclear waste; disposal of high level and low level nuclear wastes. Sources, nature, handling and disposal of biologic waste. Pollution prevention, recycling and resource conservation.
Prerequisites: ENV-SCI 110R, GEOG 150, GEOLOGY 220.

GEOLOGY 342 Igneous and Metamorphic Petrology Credits: 4
Introduction to the principles governing the classification, occurrence and origins of igneous and metamorphic rocks. Three hours lecture and discussion with two hours laboratory a week.
Prerequisites: GEOLOGY 312.

GEOLOGY 342R Electrical Methods in Near Surface Geophysics Credits: 3
Fundamental theory and near-surface applications of the "electrical" geophysical methods; (1) electrical resistivity, (2) electromagnetics, (3) ground penetrating radar, and (4) induced polarization. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaeological protection. Course will include a field component illustrating application of selected technique to a local environmental problem.

GEOLOGY 350 Earth Structures and Tectonics Credits: 4
This course is designed to teach students the basic techniques and approaches for problem solving in structural geology. The course will cover the fundamentals of crustal deformation and discuss joints, faulted and folded rocks in their plate tectonic context. Two hours of lectures and three hours of laboratory a week. Course will include local field trips and one weekend field trip.
Prerequisites: GEOLOGY 220, PHYSICS 210 (or PHYSICS 240).

GEOLOGY 370R Hydrogeology Credits: 3
Geology and hydrologic factors controlling the occurence, movement, quality, recovery and development of water supply and distribution. Problems relating to urbanization of flood plains.

GEOLOGY 398 Geology Midcontinent Field Trip Credit: 1
A study of a selected area of the midcontinent U.S. with emphasis on locations to be visited during a three-day field trip (at the student’s expense). An opportunity to observe and study physical features and collect materials. Several scheduled one-hour meetings in addition to field trip. Lectures, discussion and reading assignments provide a background to place the area covered by the field trip into the overall geologic framework of the Midcontinent U.S. Descriptive report or written examination. Limited enrollment.
Prerequisites: Junior or senior level.

GEOLOGY 404 Fluid Transport in Geologic Media Credits: 3
This course examines the processes governing the fate and transport of solutes and contaminants in the subsurface environment. This course will provide computational modeling skills, laboratory tests, and case studies of subsurface transport. Three hours lecture, discussion and laboratory a week.
Prerequisites: GEOLOGY 370R.

GEOLOGY 407 Archaeological Resources Management Credits: 3
This class examines contemporary issues managing archaeological resources. This class is intended for students seeking work in Cultural Resources Management (CRM); those already working CRM, or student anthropology, environmental studies, geology, geography, public administration and other fields likely to deal with archaeological and historical resources in a research or employment setting. This class does not require a background in archaeology.

GEOLOGY 408 Archaeological Field Survey Methods Credits: 3
This class offers instruction in the basic skills required to conduct field surveys in archaeology and other geosciences disciplines. In the classroom, students learn about the development of archaeology as a scientific discipline and how to recognize some of the basic field data sought by archaeologists. Students learn about mapping and land navigation techniques, The field phase of instruction includes visits to archaeological sites in the region.

GEOLOGY 409 Field School in Archaeology Credits: 1-5
This class offers students an opportunity to attend a field school in archaeology. Students will be taught how to: design archaeological research, set-up excavation, keep a wide range of excavation records, make maps and drawings, take photographs related to excavation problems, identify and receiver a broad spectrum if artifact and faunal remains, collect samples for specialized analysis and use a wide range of excavation tools. This course will also introduce students to recording and analyzing excavated materials in the archaeological laboratory. Class size limited to 20 students.

GEOLOGY 411 Mineral Deposits Credits: 3
Distribution, origin and environmental implications of extractable resources including non-metallic deposits, ores, and selected energy resources.

GEOLOGY 412 Geology and Hazardous Waste Management Credits: 3
Nature sources and characterization of hazardous waste; collection, transportation and disposal of hazardous wastes. Fundamentals of toxicology and risk assessment. Application of geologic principles and methods in the assessments and remediation of abandoned hazardous waste sites and contaminated aquifers. Review of selected case histories. Experts from government and private organizations will be invited to deliver guest lectures. An out-of-town field trip to a hazardous waste site is required.
Prerequisites: GEOLOGY 325, GEOLOGY 342, GEOLOGY 350.

GEOLOGY 417 Special Topics Credits: 1-3
Individual research and study of a selected topic in geology or earth science.

GEOLOGY 417A Special Topics: Common Rocks, Minerals & Fossils Of The K C Area Credits: 1-3

GEOLOGY 417C Special Topics Credits: 1-3

GEOLOGY 425 Engineering Geology Credits: 3
Review of engineering properties of rock and soils. Evaluation of geologic materials for civil engineering construction projects. Techniques of engineering geologic investigations; special problems in urban areas. Data evaluation, analyses, and preparation of engineering geologic reports. Application of geologic factors in design and construction of dams, tunnels, power plants, highways and waste disposal facilities. Review of engineering geologic case histories. A field trip is required.
Prerequisites: GEOLOGY 325, GEOLOGY 342, GEOLOGY 350.

GEOLOGY 434 Hazardous Waste Operations Management Credits: 2
Overview of federal regulations dealing with hazardous waste management, toxicology, hazard communication, site management, air monitoring, operating procedures, and health and safety. The course includes hands-on training on spill control, equipment use and emergency response. Practical training involves physical stress and participants must be in good physical health. This course satisfies OSHA's 40 hour training requirement for hazardous waste personnel.

GEOLOGY 435 Hazardous Waste Operation Management Credits: 2
Review of federal regulations governing hazardous waste management, operations procedures, and health and safety issues. Hands-on training on spill control, equipment use, and emergency response will be included. The course satisfies OSHA's 40-hour training requirement for hazardous waste personnel. Practical training involves physical stress and participants must be in good health. Must be in good health to withstand physical stress during training.
Prerequisites: GEOG 335 (or GEOLOGY 335), GEOLOGY 302, GEOLOGY 412.

GEOLOGY 441 Environmental Geophysics Credits: 3
Fundamental theory and near-surface applications of the geophysical methods; (1) seismic refraction, (2) seismic reflection, (3) gravity, and (4) magnetics. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaeological protection. Course will include a field component illustrating application of selected techniques to local environmental problem.

GEOLOGY 442R Optical Crystallography Credits: 3
Theory and practical application of polarized light microscopy in the identification and characterization of crstalline and non-crystalline materials. Special emphasis is given to use of refractive index oils and thin sections. Two hours of lecture and discussion, one 2-hour lab per week.
Prerequisites: GEOLOGY 312.

GEOLOGY 446 Petroleum Geology Credits: 3
Study of the origin, concentration, exploration for and recovery of petroleum.
Prerequisites: GEOLOGY 220.

GEOLOGY 451 Geology's Role in Land Use Planning Credits: 3
Examination of principles and techniques of geology as related to land use planning. Lecture and discussion periods devoted to topics such as physical features of soils in an urban setting, geophysical surveying, photo interpretation, engineering geology, mineral and water resources, and multiple-tier planning. Lecture, discussion and laboratory.
Prerequisites: ENV-SCI 110R (or GEOLOGY 220).

GEOLOGY 460 Introduction to Geochemistry Credits: 3
Basic principles governing the origin, distribution and migration of the elements and the geochemical cycles operating in the earth's atmosphere, hydrosphere and lithosphere.
Prerequisites: CHEM 212R, GEOLOGY 312.

GEOLOGY 470 Geological Development of North America Credits: 3
A detailed inquiry into the stratigraphic framework of North America with special emphasis on orogenic and epirogenic events reflected in Phanerozoic rock associations. Through lectures, discussion and outside readings, the student is afforded a working knowledge of the continent's major tectonic provinces and their evolution.
Prerequisites: GEOLOGY 325, GEOLOGY 342, GEOLOGY 350.

GEOLOGY 471 Tectonics Credits: 3
A detailed inquiry into plate tectonics and the geophysical and geological data that define the motion of lithospheric plates. Global examples of divergent, convergent, and transform plate boundaries will be studied through lectures, discussions, problem sets, and term papers.
Prerequisites: GEOLOGY 325, GEOLOGY 350.

GEOLOGY 472 Earthquake Geology Credits: 3
A detailed inquiry into the study of present and past earthquakes as they are preserved in the seismological, geophysical, and geologic record. Global examples of earthquakes will be studied through lectures, discussions, problem sets, term papers, field trips and field projects.

GEOLOGY 489 Tutoring in Geology Credits: 1-3
Geology majors in their senior years may enroll for 1-3 hours tutoring for credit. This will entail working as a tutor, under the direction of the faculty, to students in the 100 to 200-level courses in the department who either have inadequate background preparation in environmental studies and geology or are identified by the instructor as needing tutorial help. Tutoring will be on a credit/non-credit basis.

GEOLOGY 490 Geology Field Camp Credits: 6
Study and practical involvement in the methods of geological mapping. The six-week course is conducted during the summer, partially in a field camp away from the Kansas City area. Students pay their own travel expenses to and from the field. Participation in the course involves individual mapping in the field area and field reports.

GEOLOGY 496 Geology Internship Credits: 1-6
Students gain directed practical experience working with non-profits, governments, or private enterprises. Duties will vary based on contractual agreement between the student, host organization, and the professor.
Prerequisites: Junior standing or higher.

GEOLOGY 498 Undergraduate Field Research Credits: 1-5
The student will collaborate with fellow students and instructors in collection of original field geologic data at a location remote from campus. Field research will be carried out during semester intersessions or summer semesters.

GEOLOGY 499WI Geology Seminar Credits: 3
Students participate in discussions; present formal talks; and prepare written papers on selected topics.
Prerequisites: Senior standing, RooWriter.

German (GERMAN)

Courses

GERMAN 110 Elementary German I Credits: 3
The goals of this course are an ability to speak and to understand simple (spoken) German as well as to read and write simple prose.

GERMAN 120 Elementary German II Credits: 3
Continuation of GERMAN 110.
Prerequisites: GERMAN 110 (or equivalent).

GERMAN 211 Second-Year German I Credits: 3
Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.
Prerequisites: GERMAN 120.

GERMAN 221 Second-Year German II Credits: 3
Continuation of GERMAN 211.
Prerequisites: GERMAN 211.

GERMAN 280 Special Intermediate German Topics I Credits: 2-4
Instruction of German on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: GERMAN 110, GERMAN 120.

GERMAN 290 Special Intermediate German Topics II Credits: 2-4
Continuation of GERMAN 280. May not be repeated for credit.
Prerequisites: GERMAN 280.

GERMAN 295 European Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 240, CONSVTY 238, FRENCH 295, HISTORY 240, PHILOS 212, SPANISH 295.

GERMAN 300CZ CC: The Other Europe Credits: 3
This cluster course addresses a crucial, if often overlooked arena of history and culture: East-Central Europe. Open to all undergraduates, this course will explore the challenges of geopolitics, modernization, Western influences, multiethnic societies, and collective memory.
Cross Listings: HISTORY 400CZ.

GERMAN 301 Introduction to Literary Studies Credits: 3
An introduction to the study of the different genres of German literature and techniques of criticism. Readings include representative works of major authors from various periods. Strongly recommended for all majors. To be taken before or concurrently with other literature courses. Taught in German.

GERMAN 305 Current Events in Germany Credits: 3
This course focuses on contemporary issues in Germany such as politics, the economy, foreign affairs, culture, science, education, etc. Various television news programs, news magazines, and newspapers will be the primary sources of information in this course.
Prerequisites: GERMAN 221 (or equivalent).

GERMAN 306 Aspects Of Contemporary German Culture (Conducted In German) Credits: 3
The goal of the course is to familiarize the student with various aspects of contemporary culture in the German-speaking countries (Germany, Switzerland, Austria). The class will be structured around lectures, guest lectures, audiovisual presentations and discussions, emphasizing crosscultural comparisons.

GERMAN 307 From the Middle Ages to the Baroque Credits: 3
The goal of this course is to introduce students to the history of German literature from the Middle Ages to the Baroque, emphasizing the historical and social context and the development of various genres.
Prerequisites: GERMAN 221 (or equivalent).

GERMAN 308 From the Enlightenment Through the 19th Century Credits: 3
The goal of this course is to introduce students to the history of German literature from the Enlightenment through the 19th century, emphasizing the historical and social context and the development of various genres.
Prerequisites: GERMAN 221 (or equivalent).

GERMAN 310 Classical Period Of German Literature Credits: 3
Readings in the late 18th and 19th centuries with emphasis on Goethe and Schiller.

GERMAN 313 CC: Intro to German Studies Credits: 3
This cluster course explores major themes in German culture, history, and philosophy from the medieval period to the present. Concentrating on primary sources in English translation also introduces students to the methodologies of German Studies. German language ability not required, but class can count toward German major for students who do the written work in German.
Prerequisites: ENGLISH 110 (or HISTORY 206).

Cross Listings: HISTORY 400GS.

GERMAN 314CC Weimar Culture: Gender and Modernity in Central Europe Credits: 3
A cluster course concerned with the culture of Weimar Germany (1919-1933), a period of crucial importance not only for German history but also for European and world history. Examines how film, advertising, theater set design, painting, photography and other media sought to re-imagine gender identities, foster new cultural forms, and transform economic relations during the Roaring Twenties in Germany.
Cross Listings: WGS 314CC.

GERMAN 315 Intermediate Conversation and Composition I Credits: 3
Practice in speaking and writing German; emphasis on idiomatic usage. Required for major.
Prerequisites: GERMAN 221 (or equivalent).

GERMAN 325 Intermediate Conversation and Composition II Credits: 3
Continuation of GERMAN 315. Required for major.
Prerequisites: GERMAN 315.

GERMAN 335 Commercial German Credits: 3
The class covers business practices and correspondence in the German language; special vocabulary of business, economics, banking, and their contextualization in the European Union. It will also include refinement of grammatical and stylistic skills.
Prerequisites: GERMAN 221 (or equivalent).

GERMAN 340 Society and Literature in 20th-Century Germany Credits: 3
Conducted in English with English translations. Literary currents and figures in 20th-century Germany against their social and political background, from the turn of the century to the postwar period. Reading and discussion of major works by such authors as Thomas Mann, Hesse, Kafka, Rilke, Brecht, Boll, Grass, Hochhuth and Weiss. Open to students of all disciplines. Not for major credit in German.

GERMAN 341 German Film Credits: 3
This course introduces students to the important contributions of German films to the development of movies as a unique literary art form. The class will cover important terms and concepts in film theory, the specifically German context of film, and important themes and periods in German film history. Taught in English with subtitled films.
Cross Listings: COMM-ST 345.

GERMAN 342 Contemporary German Film 1980 Credits: 3
This course will introduce students to the important role film has played in the public discourse about German society immediately prior to reunification in the 1980s and during the turbulent social adjustments in unified Germany after 1990. Lectures and readings in the first week will cover important terms and concepts in film theory as well as provide background for the specific German context of film history. The class will treat film in the 1980s in terms of continuations of and liberations from the New German Cinema of the 1970s in West Germany, and in the context of state censorship and sponsorship of film in East Germany. We will approach movies from the 1990s and 2000s by accessing their depiction of historical and contemporary Germany through the lens of reunification, and we will examine issues of German identity especially as contextualized by reunification and multiculturalism. The course will be taught in English with subtitled films.
Prerequisites: GERMAN 315.

GERMAN 345 The Antifascist Tradition In Germany Credits: 3
This course examines the political and cultural roots of German fascism. It then discusses varieties of resistance to fascism as exemplified in works of fiction, drama, poetry and auto-biography, as well as in music and the visual arts.

GERMAN 360 Ingolstadt Study Abroad Credits: 3
Academic support and inquiry for GERMAN 361, Ingolstadt Internship. Provides cultural and language training as well as extended research into specific field of service learning internship during 4-week stay in the German city of Ingolstadt. Only 2 students are guaranteed participation per summer.
Prerequisites: GERMAN 221 (or equivalent).

Co-requisites: GERMAN 361.

GERMAN 361 Ingolstadt Practicum and Internship Credits: 3
Students will choose a service learning assignment from available internships during 4-week stay in the German city of Ingolstadt. Progress checks and support provided for in GERMAN 360, Ingolstadt Study Abroad. Students will also turn in a portfolio and/or journal and final report about their activities in German to the program director. Only 2 students per summer are guaranteed participation.
Prerequisites: GERMAN 221 (or equivalent).

Co-requisites: GERMAN 360.

GERMAN 400 Rainer Maria Rilke Credits: 3
The course examines the works of the Austrian poet Rainer Maria Rilke, emphasizing close readings of texts in their historical, cultural, biographical and psychological contexts. It examines Rilke both as a representative of his epoch, and as the poet who revolutionized German poetic language.

GERMAN 401 Bertolt Brecht Credits: 3
Covers major works by Brecht in their social and historical context. May focus on a specific genre or survey parts or all of Brecht's career. Discussions and readings in German.
Prerequisites: GERMAN 315.

GERMAN 410 Music in German Culture Credits: 3
This course examines the role of music in German national self-definition from late 18th century to the present. The political and ideological role of music will be examined from 1789 to National Socialism, the GDR and reunification, including the gendering of music as feminine in Romanticism, and modernism. Music as it relates to the public and private, as well as collective and individual experiences will also be explored. Different genres and media will be discussed, from opera, art song, and cabaret to ballads and film; literary works thematizing music will be read.
Prerequisites: GERMAN 315.

GERMAN 410A Music in German Culture Credits: 3
This course examines the role of music in German national self-definition from late 18th century to the present. The political and ideological role of music will be examined from 1789 to National Socialism, the GDR and reunification, including the gendering of music as feminine in Romanticism, and modernism. Music as it relates to the public and private, as well as collective and individual experiences will also be explored. Different genres and media will be discussed, from opera, art song, and cabaret to ballads and film; literary works thematizing music will be read. All works available in English: no German required.

GERMAN 411 Romanticism Credits: 3
Main currents and authors from the Romantic school, 1780-1820.

GERMAN 412 The German Novelle Credits: 3
An examination of representative novellen of the 19th and 20th centuries. Special emphasis on the study of form.

GERMAN 414 German Lyric Poetry Credits: 3
Lyric poetry from its beginnings to the present. Emphasis on 19th and 20th centuries.

GERMAN 415 Advanced Conversation and Composition I Credits: 3
Practice in speaking and writing German, with attention to the elements of style. Continued in GERMAN 425. First semester required of all majors and second semester recommended. Both semesters required of prospective high school teachers. Either or both semesters may be repeated. No more than six hours of credit may be applied toward a degree.
Prerequisites: GERMAN 325.

GERMAN 420 German Enlightenment Drama Credits: 3
This course covers plays, dramatic theories and theater history in the German-speaking countries 1730-1780. Emphasis will be placed on the theater as a bourgeois instrument of public discourse.
Prerequisites: GERMAN 315 (or equivalent).

GERMAN 421 19Th-Century Drama Credits: 3
Kleist through Hauptmann.

GERMAN 422 Contemporary Drama Credits: 3
This course will provide students with a survey of the most important dramatic movements of the 20th century. It will proceed chronologically through Expressionism, the Brechtian theatre of alienation, documentary theater and post-modernist theater.
Prerequisites: GERMAN 221.

GERMAN 425 Advanced Conversation and Composition II Credits: 3
Continuation of GERMAN 415. Required for teacher certification in German.
Prerequisites: GERMAN 415.

GERMAN 426 20th-Century German Literature Credits: 3
Selected readings from Neo-Romanticism to the present.

GERMAN 453 Women’s Voices in Germany and Austria Credits: 3
The course focuses on the role of women in German and Austrian society from the Roman era to the present, primarily through the examination of literary texts by women.
Prerequisites: GERMAN 221.

GERMAN 480 Special Topics Credits: 1-3
Each time this course is offered a particular author, genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

GERMAN 480B Special Topics Credits: 1-3

GERMAN 490 Special Readings Credits: 1-3
Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available only to advanced students of German when students cannot take regularly scheduled courses.
Prerequisites: 3.0 GPA.

GERMAN 499 Senior Seminar (Capstone) Credits: 3
Required for major. Covers seminal works of German literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music.
Prerequisites: 21 hours beyond first year.

Greek (GREEK)

Courses

GREEK 110 Elementary Ancient Greek I Credits: 3
The goal of this course is an ability to read classical Greek. The student will be introduced to the fundamentals of grammar and the basic vocabulary of the language and will do exercises in the reading and writing of sentences. Continuous passages of Greek will be presented by the end of the semester.

GREEK 120 Elementary Ancient Greek II Credits: 3
A continuation of the study of the grammar and vocabulary of classical Greek, with an increasing emphasis on developing skills in translation. By the middle of the semester students will be introduced to selections from Plato, Herodotus or Homer.
Prerequisites: GREEK 110.

GREEK 211 Intermediate Ancient Greek I Credits: 3
Instruction of Greek on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: GREEK 120.

GREEK 221 Intermediate Ancient Greek II Credits: 3
Continuation of GREEK 211. May not be repeated for credit.
Prerequisites: GREEK 211.

GREEK 301 Herodotus Credits: 3
Selected readings in Ancient Greek from Herodotus' Histories.
Prerequisites: GREEK 211.

GREEK 302 Homer Credits: 3
Selected readings in Ancient Greek from Homer's Iliad or Odyssey.
Prerequisites: GREEK 211.

GREEK 310 Selected Readings in Ancient Greek and Rhetoric Credits: 3
Selected readings in Ancient Greek from works by Plato, Aristole, or the Attic Orators.
Prerequisites: GREEK 211.

GREEK 311 Drama and Lyric Poetry Credits: 3
Selected readings in Ancient Greek from plays by Aeschylus, Sophocles, Euripides, or the Lyric Poets.
Prerequisites: GREEK 211.

GREEK 312 Greek Narrative Prose Credits: 3
Selected readings in Ancient Greek from Herodotus, Thucydides, Xenophon, Lucian, etc.
Prerequisites: GREEK 211.

GREEK 490 Special Readings in Greek Credits: 1-3
Intensive readings in period or genre or literary figure to be selected by the student in consultation with the instructor. Available only to advanced Greek students.

Guitar (GUITAR)

Courses

GUITAR 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

GUITAR 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

GUITAR 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

GUITAR 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

GUITAR 101 Freshman Guitar I Credits: 2-4

GUITAR 101J Freshman Guitar I (Jazz) Credits: 2-4

GUITAR 102 Freshman Guitar II Credits: 2-4

GUITAR 102J Freshman Guitar II (Jazz) Credits: 2-4

GUITAR 201 Sophomore Guitar I Credits: 2-4

GUITAR 201J Sophomore Guitar I (Jazz) Credits: 2-4

GUITAR 202 Sophomore Guitar II Credits: 2-4

GUITAR 202J Sophomore Guitar II (Jazz) Credits: 2-4

GUITAR 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: GUITAR 5300.

GUITAR 301 Junior Guitar I Credits: 2-4

GUITAR 301J Junior Guitar I (Jazz) Credits: 4

GUITAR 302 Junior Guitar II Credits: 2-4

GUITAR 302J Junior Guitar II (Jazz) Credits: 4

GUITAR 401 Senior Guitar I Credits: 2-4

GUITAR 401J Senior Guitar I (Jazz) Credits: 4

GUITAR 402 Senior Guitar II Credits: 2-4

GUITAR 402J Senior Guitar II (Jazz) Credits: 4

Harp (HARP)

Courses

HARP 302 Junior Harp II Credits: 1-4

Harpsichord (HRPCHD)

Courses

HRPCHD 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

HRPCHD 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

HRPCHD 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

HRPCHD 101 Freshman Harpsichord I Credits: 2-4

HRPCHD 102 Freshman Harpsichord II Credits: 2-4

HRPCHD 201 Sophomore Harpsichord I Credits: 2-4

HRPCHD 301 Junior Harpsichord I Credits: 2-4

HRPCHD 302 Junior Harpsichord II Credits: 2-4

HRPCHD 401 Senior Harpsichord I Credits: 2-4

HRPCHD 402 Senior Harpsichord II Credits: 2-4

Health Sciences (HLSC)

Courses

HLSC 100 Student Success Strategies Credit: 1
Topics will include setting goals for academic success, anticipating obstacles, problem solving solutions, and time management. Students will focus on improving their current academic commitment through a variety of activities and practice sessions. Self-evaluation strategies will be introduced in an effort to learn more about their motivation for successfully completing their academic program.
Prerequisites: HLSC 101.

HLSC 101 Introduction to Health Sciences Credits: 3
This course is designed as an introduction to the field in health science. Students will explore the basic concepts related to this field including understanding one's role in health careers, protection against communicable diseases, facilities related to the healthcare profession, health insurance, ethics in healthcare, and workplace injuries. The course will also introduce the student to a wide array of health sciences professions, including, but not limited to, environmental health science, occupational health, ergonomics, radiological health, toxicology, clinical medicine, dental and nursing practice, drug discovery and safety assessment in the pharmaceutical/chemical industry, biotechnology, and careers in government agencies.

HLSC 110 Personal Wellness Credits: 3
This course presents an overview of health behaviors and actions needed to achieve a combination of physical, mental, and social well-being through intelligent lifestyle choices. Effective strategies for staying healthy and improving one's health will be explored. Elements of stress management, preservation of physical and mental well-being, personal hygiene and strong social relationships will be discussed.

HLSC 120 Anatomy & Physiology I Credits: 4
This course examines the structure and function of the human body from the molecular to the organismal level as they interact among all body systems across the life span. Instructors also attempt to correlate course materials with the clinical aspects of the application of physiological knowledge. Co-requisite laboratory exercises provide practical application of theoretical concepts. In this first term of two-term course, molecular biology, biochemistry, cellular biology, and histology are studied as well as the integumentary, musculoskeletal, and nervous systems.

HLSC 125 Medical Terminology Credit: 1
This course is designed to provide the student with a foundation in medical terminology and the components of health records. Course content will include how medical terms are formed; how medical terms are applied to organs, body systems and pathological conditions; how common medical abbreviations are used; and how health records are organized and compiled.

HLSC 160 Anatomy and Physiology II Credits: 4
This course is a continuation of HLSC 120. Co-requisite laboratory exercises provide practical application of theoretical concepts. Physiologic systems including endocrine, cardiovascular, immune, respiratory, digestive, renal, and reproductive are studied as well as embryology and genetics.
Prerequisites: HLSC 120 (or NURSE 120).

HLSC 200 First Aid / CPR Credit: 1
This course is designed to certify students with the American Heart Association (AHA) in Basic Life Saving for Healthcare Providers and bloodborne pathogens. Students will be exposed to critical concepts of high quality Cardiopulmonary Resuscitation (CPR), the AHA's Chain of Survival, and 1 and 2 rescuer CPR and Automatic External Defibrillator (AED) for adult, child and infants. Bag-mask technique, rescue breathing, relief of choking will be covered. Adult and pediatric first aid basics, medical emergencies, injury emergencies, and environmental emergencies will be covered. The course will include information on bloodborne pathogens (protection, action, proper cleaning and reporting).

HLSC 215 Health Promotion Credits: 3
The course is designed to introduce evidence-based strategies for health promotion. Health promotion is designed to improve population health outcomes, community health and individual health. This course will provide historical and future perspectives on health promotion, outline appropriate resources for planning, implementation and evaluation of health promotion programs, and review successful health promotion strategies that have changed population health outcomes. Examples will be drawn from workplace, community, school, non-profit and governmental organizations.

HLSC 225 Human Sexuality Credits: 3
This course is designed to introduce students to the field of human sexuality. Course content will include sexual anatomy and physiology, sexuality across a life-span, sexually transmitted infections, contraception, pregnancy and childbirth, sexual orientation, love and relationships, sexual therapy, sex education, gender identity and gender roles and social and legal issues related to sex.
Prerequisites: HLSC 110.

HLSC 230 Health Issues in Aging Credits: 2
This course focuses on promotion and maintenance of the health of the older adult population. The physiological and psychological domains, pharmacological, and nutritional considerations as affected by theories on aging socio-cultural influences, legal and ethical issues, and health care resources pertaining to older adults are explored. Assessments problems and strengths, interventions and outcomes specific to the older adult population are discussed. Opportunities are provided for interaction with the older adult population.

HLSC 252 Human Growth and Development Credits: 3
This course provides a basic introduction to the theory for human growth and development across the life span. Emphasis is placed upon the biological and the psychosocial aspects of growth and development. Content is organized in a modified chronological order dividing information into major stages of growth and development across the life span.

HLSC 300 Diversity in Health Credits: 3
This course explores how each individual's social, cultural, political, historical, and economic influences shape the individual's own values, beliefs, and behaviors. The course expands students' basic knowledge of culture diversity, cultural awareness of other individuals, and cultural competency as it relates to health. Students examine how their cultural background influences health needs, health consumption, and health delivery.
Prerequisites: HLSC 101.

HLSC 310 Healthcare Systems Credits: 3
The course is designed to provide a description and overview of the organization, financing, and delivery of healthcare in the United States. The historical background and the impact of socio-political, economic, and cultural influences will be explored. The purpose of the course is to provide a framework of understanding of the healthcare system through examination of public and private sectors, market competition, and government regulation. Major issues currently facing the healthcare system will be examined. Pre/
Co-requisite: HLSC 101.

HLSC 320 Motivational Interviewing and Empathetic Listening Credits: 3
This course is designed to expose future health promoters, health educators, and health practitioners to motivational interviewing and empathetic listening skills. Areas where students will engage and practice motivational interviewing techniques include smoking cessation support, dietary analysis and improvement, and exercise program adherence.
Prerequisites: PSYCH 210.

HLSC 345 Quantitative Analysis in the Health Sciences Credits: 3
This course focuses upon the skills required for the utilization of scientific findings in evidence-based care. The conceptual basis of descriptive and inferential statistics found in the properties of the normal distribution comprise the core of these skills. Using the normal distribution as a structure for understanding descriptive and inferential procedures, the course presents information necessary to the selection, computation and interpretation of basic statistics relevant to evidence-based care in the health sciences. Discussions of variables, measurement and tabular and graphic presentation of data precede the development of computation skills.

HLSC 356 Spanish for Health Care Pre-Professionals Credits: 3
This course focuses on conversational Spanish, medical terminology in Spanish, and written/read Spanish. This course will provide the student with basic knowledge that will allow communication with clients who speak/read/write Spanish. This is a fast paced course and will require practice of the language outside of the classroom in order to master the material presented.
Prerequisites: SPANISH 110.

HLSC 403A Comparative Weight Loss I Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals. This course consists of one hour if didactic work with one module per week for four weeks.

HLSC 403B Comparative Weight Loss II Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Comparison of common medically recommended diets and diet programs and their efficacy/risks; exercise requirements for weight loss and weight maintenance. This course consists of one hour if didactic education with one module per week for four weeks.
Co-requisites: HLSC 403A.

HLSC 403C Comparative Weight Loss 3 Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Comparison of pharmacologic weight loss options ad their efficacy/risks; non-prescription medications/ nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks. This course consists of one hour of didactic work with one module per week for four weeks.
Co-requisites: HLSC 403A.

HLSC 408 Gender, Health and Development in Senegal Credits: 3
This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.
Prerequisites: Junior or Senior Level standing - must meet requirements established by study abroad office.

Cross Listings: FRN-LNG 408, HISTORY 408, WGS 408.

HLSC 410 Epidemiology Credits: 3
This course is an introduction to epidemiology, with an emphasis on applications in public health. Students will learn the basic principles of epidemiology, including the relationship of biostatistics to epidemiology and public health, methods of disease investigation, epidemiological study designs and their uses and measures of effects. Through the course, students will be able to apply measures of disease incidence and prevalence, determine crude and adjusted rates, and explain the uses of screening tests and criteria for their evaluation, including measures of validity. The class will explore ways that epidemiology is used in environmental health and social sciences, as well.
Prerequisites: HLSC 101.

HLSC 430 Health Program Management Credits: 3
This course is designed to acquaint students with the range of issues raised by health finance, particularly as these affect health program management, health policy, health delivery, and population health. The course provides a broad introduction to key concepts, issues, tools, and vocabulary useful for policy makers, consumers, and potential administrators. Funding, planning, implementation, and evaluation mechanisms specific to government agencies, private insurance, and managed care will be explored.
Prerequisites: HLSC 101.

HLSC 432A Holistic Health Care: Medicinal Plants and Herbs Credit: 1
This course provides an in-depth exploration to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will cover medicinal plants and herbs and related topics.

HLSC 432B Holistic Health Care: Energy Medicine Credit: 1
This course provides an in-depth exploration to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Energy Medicine and related topics.

HLSC 432C Holistic Health Care: Relaxation Techniques Credit: 1
This course provides an in-depth exploration to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Relaxation Techniques and related topics.

HLSC 432D Holistic Health Care: Chinese Medicine and Hypnosis Credit: 1
This course provides an in depth exploration to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Chinese Medicine, Hypnosis and other related topics.

HLSC 434A History of Healthcare: beginning to 1880s Credit: 1
This course is designed to examine, in depth, the rich and unique development of healthcare as a discipline, profession, art and science from a historical perspective. Past and present healthcare issues will be identified and discussed. The social, philosophical and political forces which have impacted the course of healthcare history from Hippocrates and Florence Nightingale to the 1880's will be examined.

HLSC 434B History of Healthcare Credit: 1
This course is designed to examine, in depth, the rich and unique development of healthcare as a discipline, profession, art and science from a historical perspective. Past and present healthcare issues will be identified and discussed. The social, philosophical and political forces which have impacted the course of healthcare history from the Spanish-American War to the 1930's will be examined.

HLSC 434C History of Healthcare: 1930's to 1950's Credit: 1
This course is designed to examine, in depth, the rich and unique development of healthcare as a discipline, profession, art and science from a historical perspective. Past and present healthcare issues will be identified and discussed. The social,philosophical and political forces which have impacted the course of healthcare history from the 1930's, Public Health, WWII, to 1950 will be examined.

HLSC 434D History of Healthcare:1950 to Future Credit: 1
This course is designed to examine, in depth, the rich and unique development of healthcare as a discipline, profession, art and science from a historical perspective. Past and present healthcare issues will be identified and discussed. The social, philosophical and political forces which have impacted the course of healthcare history from 1950 to the present and into the future will be examined.

HLSC 440 Policy and Ethics in Health Credits: 3
This course is designed to present an overview of policy and professional ethics within health based organizations and includes discussion of how ethics drive policy decisions. Attention is given to the relationship between these issues and improving health delivery and outcomes. How health policy is created, including financing will be discussed.
Prerequisites: HLSC 101.

HLSC 445 Core Competencies in Health Education Credits: 3
This course is designed to enforce the core area of responsibility required to become a professional health educator. Course content will include the skills required to assess needs, assets and capacity for health education; plan, implement and evaluate health programs; administer and manage health education programs; serve as a resource person and communicate and advocate for health and health education. Students will begin preparing for the certification exam offered through the National Commission for Health Education.
Prerequisites: HLSC 430.

HLSC 450 Urban Health Credits: 3
This course focuses on the unique healthcare needs of individuals and communities located within an urban core. Also included are the specific ways in which healthcare can be delivered to this population. The course provides information on the role of urban characteristics including crowding, poverty and crime in exacerbating healthcare needs of this historically under-served community.
Prerequisites: HLSC 101, HLSC 300.

HLSC 460 Global Health Credits: 3
This course discusses the complexity of health in a global context. It is designed as an overview of the biological, social and environmental contributors to health and diseases in populations around the world. Course content will include case studies of various global organizational structures and systems relative to population health, selected infectious diseases, nutritional deficiencies and health effects of environmental change.
Prerequisites: HLSC 101 and HLSC 300.

HLSC 470 Technology, Marketing and Media in Health Credits: 3
This course will focus on current technology trends in consumer health (i.e. mobile apps), personal health data, health data storage, technology infrastructures, as well as health risk assessment tools. Course content will link marketing and media messages in the health profession with technologically advanced delivery tools. Students will discuss the philosophical, social and legal issues in the use (and abuse) of health technology, health marketing, and health in the media.
Prerequisites: HLSC 101.

Co-requisites: HLSC 440.

HLSC 476 Scientific Inquiry Credits: 3
This course focuses on the development of those skills necessary to apply research findings to the evidence-based health care. This application requires that students develop the skills to intelligently and critically read and utilize current research literature. The specific steps in the research process are presented and discussed with emphasis upon the identification of quality research through critical analysis of research reports.
Prerequisites: NURSE 345 (or HLSC 345).

HLSC 480 Leadership and Management in Health Professions Credits: 3
This course will provide the student with a theoretical foundation of leadership and management in health professions. The principles of authority, power, politics, decision making, and influence will be explored. Organizational philosophies will be examined within the context of current health issues. The leadership skills of negotiation, delegation, conflict resolution, coaching and mentoring will be discussed, as related to health professions. The role of communication will be examined across organization systems. The effect on gender and cultural diversity on communication will be discussed.
Prerequisites: HLSC 101 and HLSC 430.

HLSC 490 Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.

HLSC 490HP Special Topics Credits: 1-9
A course of study in a special area of interest in health sciences under individual faculty direction.

HLSC 492 Health Sciences Specialty Course Credits: 3
This course provides students an opportunity to develop advanced knowledge and skills in a selected practice setting. Practice hours will be spent in a variety of settings.

HLSC 494 Health Science Internship Credits: 6
This course provides an experience-based internship for the senior student. Depending upon the health professions career selected, the student will complete a service learning, research, or problem-based experience under the guidance of a site supervisor within the agency or organization that is mutually agreed upon. All students enrolled in the Health Science Internship will participate in a seminar portion of the course to share learning, information and understanding of their experience in a health related field.

History (HISTORY)

Courses

HISTORY 101 U.S. History to 1877 Credits: 3
This course offers a broad survey of American history up to 1877.

HISTORY 102 U.S. History Since 1877 Credits: 3
This course covers American history form the end of Reconstruction to the present.

HISTORY 200 American Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of the United States. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 200, CONSVTY 237, PHILOS 231.

HISTORY 201 European History to 1600 Credits: 3
This course surveys the political, social and cultural history of Europe from ancient times to 1600. Beginning with a brief description of the riverine civilizations of the ancient Near East, the course then examines the political and cultural evolution of classical Greco-Roman civilization, the medieval world, the rise of the national state, and the essential characteristics of the eras of the Renaissance and Reformation.

HISTORY 202 European History since 1600 Credits: 3
This course surveys the political, economic, social, intellectual, and cultural history of Europe from about 1600 to the present. Emphasis is given to themes of continuity and change in European culture through the experience of political, scientific and industrial revolutions, conservative reactions, liberal reforms, nation building, imperialism, two world wars, fascism, communism and the Cold War.

HISTORY 206 World History To 1450 Credits: 3
This course surveys the cultural, social, economic, and political history of the world to 1450. It studies the development of civilizations in isolation as well as the origins, nature, and consequences of global forms of interaction and exchange.

HISTORY 208 World History since 1450 Credits: 3
This course surveys the social, economic, political history of the world from 1450 to the present. It studies the development of civilizations in isolation as well as the origins, nature, and consequences of global forms of interaction and exchange.

HISTORY 220 The Classical Mediterranean World Credits: 3
This course examines the history, literature, and culture of Ancient Greece and Rome in the context of the Mediterranean world, from its origin until the Barbarian invasion. Students will read poetry, philosophy, history, rhetoric, and letters from primary text sources and they will study material evidence such as architecture, graffiti, and physical objects as representative survivals of these cultures.
Cross Listings: CLASSICS 285, ENGLISH 285.

HISTORY 230 Women in the Ancient World Credits: 3
This course focuses on the history, representation, literature, social lives, and political roles of women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.
Cross Listings: CLASSICS 283, ENGLISH 283.

HISTORY 231 Women in the Medieval World Credits: 3
This course offers an interdisciplinary approach to the study of women during the Middle ages (ca. 600-1500), focusing on the different cultures of Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate the ways in which women experienced agency, were depicted and imagined, and acted within the social and cultural contexts of the era.
Prerequisites: DISC 100 (or equivalent).

Cross Listings: ENGLISH 284.

HISTORY 240 European Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 240, CONSVTY 238, FRENCH 295, GERMAN 295, PHILOS 212, SPANISH 295.

HISTORY 250 Introduction to American Studies Credits: 3
An introduction to the American Experience through the study of selected themes and issues that stress both continuity and change in America. Topics include community, family, ethnic groups, racial conflict, science and religion, the arts, sports, mass media, technological innovation and immigration and migration. The interdisciplinary nature of American Culture will be stressed.

HISTORY 260 World Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of one or more regions of the world as well as dynamics of interaction between them. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 260, CONSVTY 239, FRENCH 285, PHILOS 232, SPANISH 285.

HISTORY 282 Race in American Film Credits: 3
This course examines representations of race and ethnicity in American film from the silent era onward in mainstream and countercultural traditions. It explores how social, political, and economic conditions contribute to constructions of race and ethnicity.
Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

Cross Listings: COMM-ST 286, ENGLISH 282.

HISTORY 300B Special Studies In History Credits: 1-3

HISTORY 300BB Special Studies in History Credits: 1-3

HISTORY 300BL Special Studies In History Credits: 1-3

HISTORY 300C Special Studies Credits: 1-3

HISTORY 300CF Cluster Course: Race in American Film Credits: 3
This course examines representations of race and ethnicity in American film from the silent era onward in mainstream and countercultural traditions. It explores how social, political, and economic conditions contribute to constructions of race and ethnicity.
Cross Listings: ENGLISH 300CQ.

HISTORY 300CO CC:Women In the Ancient World Credits: 3
This focuses on the history, representation, literature, social lives, and political roles ow women in ancient civilization including Egypt, Mesopotamia, the Biblical World, Greece, and Rome. It integrates methodologies from history, art history and archaeology, literary studies, and women's studies.

HISTORY 300D Special Studies Credits: 1-3

HISTORY 300F Special Studies Credits: 1-3

HISTORY 300G Special Studies Credits: 1-3

HISTORY 300H Special Studies Credits: 1-3

HISTORY 300J Special Studies Credits: 1-3

HISTORY 300K Special Studies History Credits: 1-3

HISTORY 300L Special Studies Credits: 1-3

HISTORY 300MC Special Studies Credits: 1-3

HISTORY 300MM Special Studies Credits: 1-3

HISTORY 300P Special Studies Credits: 1-3

HISTORY 300R Special Studies Credits: 1-3

HISTORY 300RA Special Studies Credits: 1-3

HISTORY 300RB Special Studies Credits: 1-3

HISTORY 300RH Special Studies Credits: 1-3

HISTORY 300SS Special Studies Credits: 1-3

HISTORY 300W Special Studies History Credits: 1-3

HISTORY 300WY Decade of Dissent: The 1960s Credits: 3
The social movements and conflicts that developed during the 1960s continue to define American culture. Questions of racial and gender equity, a greater willingness to challenge authority, concerns about the environment, and a new openness about issues of sexuality all developed during the sixties and remain as arenas of debate today. This course will examine the origins, contexts, and major themes of the these social and cultural movements.

HISTORY 301WI Historiography and Method Credits: 3
This basic course is required of all history majors at the beginning of the junior year. Content includes: 1) what history is; 2) its value and usefulness; 3) the diversity of our fields, approaches, and methods; and 4) the techniques of preparing and writing history papers. Texts and reading are approved by the Department (i.e.: Turabian for style). Although the emphasis is general instead of particular, the instructor will be assisted by other historians representing their main special interest areas.
Prerequisites: RooWriter.

HISTORY 302 America,1000-1763:The Formative Era Credits: 3
Early American history encompasses the formative era of many institutions and attitudes which still persist in technetronic, post-modern America. A study of how these patterns and policies emerged will enlighten us as to our current ways society seeks to adapt to change.

HISTORY 303 America, 1763-1783: The Revolutionary Heritage Credits: 3
The American Revolution created American history by creating a new nation. What the American Revolution was depends to a large extent upon what Americans think they are or ought to be. The goals of this course, therefore, are twofold: (1) to probe the nature, causes and consequences of the American Revolution; (2) to assess the intentions and behavior of both the Framers in 1763-1783 and of the inheritors of modern America.
Cross Listings: HISTORY 5503.

HISTORY 304 America, 1783-1828: The National Experience Credits: 3
The two major threads of this course are the formation and implementation of the Constitution and the cultural adolescence of the new nation. Topics considered include the political bequest of the framers' generation, the growing pains of territorial expansion and industrialism, the paradoxical development of regionalism and nationalism.
Cross Listings: HISTORY 5504.

HISTORY 305 America, 1828-1852: The Jacksonian Period Credits: 3
An analysis of the political, social, economic, and intellectual factors in American society, 1828-1852. The period featured the presidency of Andrew Jackson, the shaping of a new democratic ideology, the culmination of manifest destiny, the quickening of the antislavery impulse, the Mexican War, the growing sectional split, and the Compromise of 1850.
Cross Listings: HISTORY 5505.

HISTORY 306 America, 1850-1877: Civil War and Reconstruction Credits: 3
A survey of the political, social and economic factors leading to the dissolution of the federal union is followed by a consideration of the major features and developments of the war period. This, in turn, leads to an analysis of the major factors and relationships involved in the "reconstruction" of the federal union. The course covers the years 1850 to 1877.
Cross Listings: HISTORY 5506.

HISTORY 306A History of Christianity to the Middle Ages Credits: 3
This course examines the cultural, historical and theological development of Christianity from its origins to the High Middle Ages. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major cultural, social, institutional, and intellectual force in Western Europe with a focus on patterns of crisis and reform.

HISTORY 307 America 1877-1917: Development of Industrial America Credits: 3
This course deals with the reactions of different groups of Americans to the industrialization and urbanization of the United States from 1877 to 1917, using concepts associated with modernization upon the behavior of the business community, farmers, laborers, immigrants, professionals and major ethno-cultural groupings. Other contemporary proposals for the adjustment to industrialism are explained as well as the programs which each group eventually used to adjust to modern society.
Cross Listings: HISTORY 5507.

HISTORY 307A History of Christianity from the Middles Ages to Present Credits: 3
This course examines the cultural, historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the development of foundational Christian theological thought and practice into what are now mainstream Western Christian theologies, the institutional histories of Western Christianity, and the cultures of Western civilization.

HISTORY 308A America: 1914-1945: The Era Of The World Wars Credits: 3
This course examines United States social, intellectual, economic, political and diplomatic history from the beginning of World War I to the end of World War II. Special emphasis is placed on the coexistence of realism and idealism in American foreign policy, the evolution of power shifts within the American federal system, and the causes and consequences of rapid urban growth and increased industrial sophistication. Students examine the material and social texture of life during the two world wars, the so-called "roaring 20s", and the Great Depression through contemporary art forms (especially novels) and historical monographs.

HISTORY 308B Cold War, Conformity, and Dissent: America, 1945-1989 Credits: 3
This course examines United States social, cultural, intellectual, economic, political, and transformational history from the end of World War II in 1945 to the collapse of the Berlin Wall in 1989. Given our focus on the recent past, special emphasis is placed upon the importance of the historical perspective to an understanding of contemporary affairs. Major themes include: America's rise to the world power, the development of the Keynesian welfare state, the concentration of corporate wealth and power, the persistence of poverty amidst plenty, and the changing status of American women and racial and ethnic minority groups.

HISTORY 330PW The Works of Western Man Credits: 4
In the period 1750-1987, the nations bordering the Atlantic Ocean, largely relying on their technological advances, became world powers. This course, relying on analysis of films plus required readings, will survey the energy sources employed, the tools developed, and the regimes of the workplace which led to this dominance. Grades will be assigned to three types of exercises: frequent quizzes, a mini-project in historical research and a book critique of a piece of fiction.
Prerequisites: RooWriter.

HISTORY 331P America In The Machine Age Credits: 4
The United States has experienced repeated waves of technological advancements. This course will largely focus on industrialization in the 19th century as well as consumer society of our own era. How Americans produced goods and what were the dynamics of the market place are two central themes. Required readings will be complemented by films and presentations from resource persons throughout Kansas City. A research project and three tests are required.

HISTORY 333 Introduction to African American Studies Credits: 3
This course provides an introduction to the contexts, theories, and methodologies that undergird African American studies. In addition to substantial time spent covering particular research skills and resources, students will also be introduced to African American culture and the issues related to African American studies from several perspectives:history, literature, sociology, communication studies, and the like. Influences and perspectives from Africa, the Caribbean and South America will also be covered. The course will thus provide a broad background in African American culture and history, an introduction to the methodologies of several disciplines, and discussion of particular contemporary and historical issues such as slavery, segregation and integration, the Civil Rights Movement, Pan-Africansism, Afrocentrism, and current political debates.

HISTORY 352 Latin American History Through the Movies Credits: 3
This course explores the national cinemas and film industries of various regions in Latin America. Students analyze films both as artistic endeavors an as sociological documents that provide a window into the socio-historical context of the nation in question. this course will also examine the history of Latin American cinema from the beginnings of sound to the present.

HISTORY 354R Women in Modern America Credits: 3
This course traces the part women have played in the processes of industrialization and urbanization. It looks at the general demographic, economic and social changes affecting women of all classes, as well as the role of middle-class women in the progressive, prohibition and suffrage movements. The course will also study the impact of the two world wars and the Depression upon the roles of women.
Cross Listings: HISTORY 5554.

HISTORY 356 Rise of the City in the U.S. Credits: 3
This course treats the background and major developments of the urbanization of the United States. Includes the American urban tradition, the scope of urbanization, colonial beginnings, urban rivalries, promotion, case studies of cities, the growth of urban services, the slum, problems of government, population trends, urban planning, and suburban growth. Consideration is also given to the methods and techniques of urban research and history of the development of this field.
Cross Listings: HISTORY 5556.

HISTORY 356R Kansas City: History of a Regional Metropolis Credits: 3
This course uses Kansas City as an urban laboratory to help students better understand the dynamics of the urbanization process in America. It features lectures and discussions on such subjects as early settlement patterns, the battle for the first bridge over the Missouri River, the development of an economy based on agricultural pursuits, the City Beautiful Movement, the social fabric, the Pendergast Machine, and the impact of World War II and after. The course fits Kansas City into the larger framework of the American urban mosaic.
Cross Listings: HISTORY 5556R.

HISTORY 357 The American West Credits: 3
This course deals with the relationship of the American West to the social and economic development of the United States. Major emphasis is placed on the role of the trans-Mississippi West in the economic growth of the national economy. Related cultural and political events are evaluated in the terms of the many Western frontiers. Emphasis will be placed on the Turner thesis, the Indian heritage, frontier violence, and the cow town experience.
Cross Listings: HISTORY 5557.

HISTORY 358 History of the American South I Credits: 3
A study of the political, intellectual, cultural, economic, and social development of the American South up to and including the Civil War. Special topics discussed will be the plantation system, slavery, abolition, secession, the Confederacy, and the interaction of the region with the nation.
Cross Listings: HISTORY 5558R.

HISTORY 360R Constitutional History of the United States Credits: 3
The general question covered is: how does American society govern itself? Topics include the fusion of Anglo traditions and American environment, creation of the American republic under the Constitution of 1787, the struggle for sovereignty during the Marshall-Taney era, and the Supreme Court's utilization of the 14th Amendment to adapt the Constitution to modernity.

HISTORY 361 America and the World in the Global Age: 1900 to the Present Credits: 3
Following a rapid survey of American diplomatic and transnational affairs before 1900, this course analyzes America's increasingly complex encounters with the world - by government officials and non-state actors - since that date. Attention is given to the interrelationships of domestic and international contexts, with an attempt to discover political, geographic, technological, cultural, and economic influences that have shaped this area of American development.

HISTORY 364R Nature, Culture And The Human Experience Credits: 3
This course is an introduction to various interpretations of nature with a focus on American culture and society. We will consider ideas about nature from diverse perspectivesincluding history, literature, philosophy and religion-in order to understand how human perceptions and uses shape relations with the natural world. Specific themes include such diverse topics as the aesthetic tradition, environmental thought, and environmental justice.

HISTORY 365A American Environmental History Credits: 3
This course examines the changing relationships between human beings and the natural world through time. The main argument of this course will be that American History looks very different through an environmental lens. Nature is an important category of historical analysis-as well as a topic worthy of historical study itself-and this course will examine themes as diverse as Native American ecology to the modern environment crusade.

HISTORY 366RR American Labor History Credits: 3
This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.
Cross Listings: HISTORY 5566RR.

HISTORY 368 Children and Youth in American History Credits: 3
This course-which brings a gendered perspective to the history of childhood and the study of youth-focuses on the changing construction of girlhood and boyhood from precontact to the present. We will examine the variety of forces that have scripted the lives of children and adolescents and explore the active role they have played in shaping their lives and American culture. We will make use of the scholarly literature on childhood and youth as well as examine such primary sources as childbearing manuals, laws, literature, cartoons, and toys as material culture.

HISTORY 369 Women and Work in Early America Credits: 3
Drawing upon more than two decades of outstanding scholarship that places women and gender at the center of investigation and interpretation, this course focuses on the ways in which gender, race, region and class have shaped the historical experiences of women in north America. We will trace the lives of American women from precontact to 1865 through an examination of a wide variety of social, cultural, economic, and political forces and factors including work and leisure, family life, political activities and organizations, and education.

HISTORY 370 Introduction to Material Culture Credits: 3
This course will consider the ways in which material culture contributes to our understanding of history. Scholars have increasingly recognized the significance of "the things they left behind," particularly as they provide insights to the lives of those who did not leave extensive written records. Students will consider all aspects of material culture, drawing largely on examples from American history: architecture, domestic utensils and furnishings, clothing, tools, and good agricultural practices. The courses will emphasize the process of handicraft technology as well as the product, and will consider the impact of modernization upon both process and product.
Cross Listings: HISTORY 5570.

HISTORY 384 Telling Stories: History, Memory, and American Life Credits: 3
How we remember the past is shaped not only by academic historians but also by collectors, curators, librarians, archivists, artists, architects, urban planners and ordinary people. This course will invite students to participate in the shaping of history and memory through civic engagement in their community. Students will use resources available in local institutions to raise critical awareness about historical issues relevant to the present.
Prerequisites: Anchor II, DISC 200.

Co-requisites: DISC 300.

Cross Listings: ART-HIST 384.

HISTORY 391 Archival Methods Credits: 3
This combined discussion and research course will examine the research potential of primary-source materials in the custody of archival depositories and the methodology employed to utilize effectively these resources. An analysis of archival method, specifically in the areas of arrangement, description and preservation, will be emphasized during the discussion portion of the course. Most of the course will be devoted to independent research in various collections of the Regional Archives of the Kansas City Federal Records Center. The course will meet at such places as the Federal Records Center, 2306 Bannister Road, or the Truman Library for both the discussion and research segments.
Cross Listings: HISTORY 5591.

HISTORY 392A Archival Internship Credits: 1-3
Students work directly with professional archivists and other personnel at the Kansas City Federal Records Center, the Truman Library, Jackson County Historical Society, and similar facilities in the area. Emphasis will be given to areas of arrangement, description and preservation of archival materials. Each student must make individual arrangements through the department.
Cross Listings: HISTORY 5592.

HISTORY 392B Public History Internship Credits: 1-3
Students work directly with public history and editorial personnel at the Kansas City Museum, the Kansas City Pitch Weekly, the Truman Library, and similar facilities in the area. Depending on the institutional affiliation, emphasis will be given to museum operations and displays, editing, fund-raising, historical research and writing. Each student must make individual arrangements through the department.

HISTORY 393 Museum Studies Credits: 3
This course is designed to acquaint students with specific careers in museums and historical agencies; to introduce students to the wide range of operating issues facing those working in the museum profession on a day-to-day basis; and to familiarize students with the organizations, reference works and resources available to develop the skills and training required for those who choose to make this their profession.
Cross Listings: HISTORY 5593.

HISTORY 394 African American History Before 1877 Credits: 3
This course is a survey of the African American experience from Pre-Columbian exploration through reconstruction. The course focuses on the trans-Atlantic slave trade, slavery in the colonies as well as resistance and abolition movements.

HISTORY 395 African American History Since 1877 Credits: 3
This course is a survey of African Americans in the United States from 1877 to the present. The course explores the post-reconstruction era, civil rights and black nationalistic movements; the concepts of racism, desegregation/integration and separation. Contemporary issues facing a multiracial and pluralistic society are also addressed.

HISTORY 400 Special Studies Credits: 1-3
Courses on subjects which are not a part of the regular department offering. The courses result from one or more of the following: (1) The expressed desire of students; (2) the broadened or refocused scholarship of a member of the history faculty; (3) the temporary presence of a scholar whose specialization is not reflected in the department's regular offerings; (4) the conclusion by the department that the course meets a community need; (5) the effort of the history faculty to provide an interdisciplinary approach to an era or topic. The course is experimental in the sense that it is a one-time offering with the potential of repetition or modification--depending upon student, faculty and community response.
Cross Listings: HISTORY 5500R.

HISTORY 400B Special Studies Credits: 1-3

HISTORY 400C Special Studies Credits: 1-3

HISTORY 400CC Special Studies Credits: 3

HISTORY 400CF Cluster Course: Courts and Culture in the High Middle Ages Credits: 3
This course offers an interdisciplinary approach to the study of the High Middle Ages. In addition to the regularly scheduled meetings of this self-contained history class, there will be common sessions with students and faculty of ENGLISH 400CF to look in dept at four royal courts from the 11th, 12th, and 13th centuries. We will focus on the courts of William the Conqueror, Henry II and Eleanor of Aquitaine, Louis IX, and Frederick II Hohenstaufen.

HISTORY 400CL Special Studies Credits: 1-3

HISTORY 400CM Nazi Occupied Europe & The Holocaust Credits: 3
With the collaboration of many other nations, Nazi Germany attempted a genocidal war to systematically colonize, relocate and annihilate entire social groups, most notably the Jews. Employing an intentionally cosmopolitan perspective, this interdisciplinary cluster-course will explore how ordinary Europeans behaved in these circumstances and the different ways that scholars have attempted to comprehend, analyze and represent those choices.

HISTORY 400CP American Social Film: Silver Screen and the American Dream Credits: 3
This course will combine American social history and American film history. Using Hollywood entertainment films, the course will look at Hollywood as an indicator of social, political, and economic conditions in the U.S. from the early 1900s to the late 1950s. The main topics are war and the threat of war, poverty and affluence, racial tensions, censorship, and political zealotry. A paper is required, and a social history textbook, a film history textbook, a play by Arthur Miller and a collection of articles constitute core readings.
Cross Listings: AMER-ST 300CD, COMM-ST 402CD, ENGLISH 300CD.

HISTORY 400CR Cc:Roman Revolution:History&Culture From The Gracchi To Augustus Credits: 3
In this course, the period of Roman history from the revolution initiated by the Gracchi to the demise of the Republic and the establishment of the Principate under Augustus will be discussed. Political, social and cultural developments will be traced which culminated in the violent death of the old system and a new government established by Augustus acceptable to the tradition-loving Romans. The events will be examined through the words of participants such as Terence, Cato, Polybius, Cicero, Caesar, Sallust, Catullus, Horace, Virgil, and Ovid. The disciplines of history and English will be treated together; therefore all sessions will be held in common. Grades will be based upon two examinations and assigned papers using both historical and English perspectives.

HISTORY 400CS Cluster Course:Clio&The Other Muses:Hist&Culture 5Th Cent Athens Credits: 3

HISTORY 400CW Cluster Course: Critical Issues in Women's & Gender Studies Credits: 3
What does it mean to grow up female in America? How does being female influence the body, the mind, identity? This course is an interdisciplinary exploration of the issues that have shaped the lives of American women throughout the life cycle and across the timeline. This course examines the role that culture and society have played in shaping and defining what it means to be an American girl and woman.
Cross Listings: ENGLISH 300CW.

HISTORY 400CY Cluster Course: The Ancient World And The Cinema Credits: 3
This course will explore the tradition of depicting the ancient Mediterranean world in film from the early silent era to the present. Topics to be covered include the ways that filmmakers respond to literary and historical sources from the ancient world, interact with the artistic tradition of films about the ancient world, the relation of these films to other works by the same creative personnel (directors, actors, writers, producers, etc.), and the political and cultural contexts in which the films were released.
Cross Listings: CLASSICS 300CY, COMM-ST 300CY, ENGLISH 300CY.

HISTORY 400CZ CC: The Other Europe Credits: 3
This cluster course addresses a crucial, if often overlooked arena of history and culture: East-Central Europe. Open to all undergraduates, this course will explore the challenges of geopolitics, modernization, Western influences, multiethnic societies, and collective memory.
Cross Listings: GERMAN 300CZ.

HISTORY 400D Special Studies Credits: 1-3

HISTORY 400F Special Studies Credits: 1-3

HISTORY 400G Special Studies Credits: 1-3

HISTORY 400GN Special Studies Credits: 1-3

HISTORY 400GS CC: Intro to German Studies Credits: 3
This cluster course explores major themes in German culture, history, and philosophy from the medieval period to the present. Concentrating on primary sources in English translation also introduces students to the methodologies of German Studies. German language ability not required, but class can count toward German major for students who do the written work in German.
Prerequisites: ENGLISH 110 (or HISTORY 206).

Cross Listings: GERMAN 313.

HISTORY 400J Special Studies Credits: 1-3

HISTORY 400JCA Special Studies Credits: 1-3

HISTORY 400K Special Studies Credits: 1-3

HISTORY 400LA Special Studies Credits: 1-3

HISTORY 400M Special Studies Credits: 1-3

HISTORY 400SS Special Studies Credits: 1-3

HISTORY 400T Special Studies Credits: 1-3

HISTORY 400W Special Studies Credits: 1-3

HISTORY 400WI Special Studies Credits: 1-3

HISTORY 401A Religion in America Credits: 3
An in-depth examination of selected aspects of the history of religions in America from the colonial period to the present. Special emphasis will be given to methodological issues in the study of American religious history.

HISTORY 406 Modern Latin America Credits: 3
This course studies social, political, economic and cultural trends in Latin America in the nineteenth and twentieth centuries. Discussion topics include nation building after independence with an emphasis on gender and race in the creation of national identities and new forms of social stratification; integration of national economies into the world economic system; the expansion of political participation and citizenship; immigration (national and transnational) and the tensions caused by the forces of modernization and tradition. Although the purpose of the course is to provide a general background for a large and diverse region (more than 20 countries), case studies from Argentina, Mexico and Brazil will illustrate the above-mentioned themes and will provide the basis for a comparative regional perspective.

HISTORY 408 Gender, Health, and Development in Senegal Credits: 3
This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.
Prerequisites: Junior or Senior standing - must meet requirements established by study abroad office

Cross Listings: FRN-LNG 408, HLSC 408, WGS 408.

HISTORY 411A Medieval Civilization I Credits: 3
This course covers the period between the decline of the Roman Empire in the West and the Investiture Controversy. Topics include the rise of Christianity and early church-state relationships; the barbarian invasions and the various Germanic kingdoms; the age of Charlemagne; monasticism and feudalism. There will also be special sessions on the civilizations of Islam and Byzantium.
Cross Listings: HISTORY 5511.

HISTORY 411B Medieval Civilization II Credits: 3
Cross Listings: HISTORY 5512.

HISTORY 412A Medieval Women & Children Credits: 3
This course explores the roles of women in the social, economic, political and cultural environments of medieval and early modern Europe. We examine the lives of women in all areas of life, from the ordinary to the extraordinary, in urban and rural environments, from the centers of religious and political power to the margins of society. Focus will be on the world of work for urban and peasant women and on the social and legal institutions of marriage, kinship and the family. The course makes extensive use of primary sources by and about women during this period.

HISTORY 412B The Black Death and Late Medieval Society Credits: 3
This course examines all aspects of late medieval and early Renaissance society in Western Europe. The Black Death of 1348/1349 serves as the entry point into the historical study of the economy, demography, and culture during this transitional period.

HISTORY 413 Renaissance Credits: 3
Beginning with a definition and exploration of the Renaissance as a period of gradual transition between the Middle Ages and the beginning of modern culture, this course concerns itself primarily with the rise and spread of Humanism; the revival of interest in antiquity; the growth of individualism; and the rise of secularism, as well as with the artistic achievements of the period.
Cross Listings: HISTORY 5513.

HISTORY 414 Reformation Credits: 3
Beginning with a description and analysis of the social, intellectual and political aspects of the later Middle Ages, the course continues with an examination of those profound religious, social and political changes which mark the 16th century as the end of the Middle Ages and the beginning of the modern secular era.
Cross Listings: HISTORY 5514.

HISTORY 415B 17th and 18th Century European History Credits: 3
this course is designed to present the upper-division undergraduate with a firm grasp of the major intellectual, cultural, political and economic developments of 17th and 18th century Europe. It considers the bitter Thirty Years War in Central Europe, the rise of the Netherlands, the fall of Italy and Spain, the rise of constitutional and absolutist styles of government, the scientific revolution, the colonization by European of the Pacific and Indian Ocean Basins, Enlightenment political philosophy, the Agricultural Revolution, and the French Revolution.
Cross Listings: HISTORY 5515B.

HISTORY 416R The French Revolution and Napoleon Credits: 3
Narrative history concentrating on the explosive and colorful events and personalities in France, but also showing the European and Western context and impact of the revolution and Napoleon. Illustrated accounts cover such "great days" as the storming of the Bastille, the fall of Robespierre, and Napoleon's Coup of 18 Brumaire, and great battles. Main periods are: the origins of the revolution (economic, social, political, intellectual); revolution and reconstruction (1789-92); through terror to Thermidor (Jacobins and sans-culottes); Napoleon's wars and reconstruction (France and Europe). Cinema, slides and martial music periodically. Discussion of major authors and interpretations.
Cross Listings: HISTORY 5516.

HISTORY 417R Nations & Empires:19th Century Europe Credits: 3
This upper-division course will survey significant trends in warfare, politics, economics, social relations and culture in 19th century Europe, paying particular attention to the rise of modern ideologies and identities, world hegemony, and the social technologies of dehumanization that foreshadowed the unprecedented inhumanities of the 20th century.
Cross Listings: HISTORY 5517.

HISTORY 418R The Age of Extremes 20th Century History Credits: 3
This upper-division course traces the history of Europe in the 20th century. It will survey significant trends in warfare, politics, economics, social relations and culture, paying particular attention to the issues of modernity and post modernity, imperialism and decolonization, dehumanization and genocide as well as the role of ordinary people in these systems of mass destruction.
Cross Listings: HISTORY 5518.

HISTORY 419R Contemporary Europe: 1930-2000 Credits: 3
This upper-division course traces the history of Europe in the period of living memory. It will survey significant trends in warfare, politics, economics, social relations and culture, paying particular attention to the rise of globalization and the condition of postmodernity, decolonization and neocolonization, European unification and everyday life.
Cross Listings: HISTORY 5519.

HISTORY 420CC World War I in Film: The World made Modern Credits: 3
This cluster course examines World War I and its legacy through the lenses of international history and film studies. It explores the origins and conduct of the "Great War," as it was called at the time, as well as its transforming effects on the modern international relations and the ongoing process of globalization. It also examines how the war spurred the growth of an infant motion picture industry, and how movies produced during the decades that followed helped shaping popular memories of the conflict-reflecting and shaping cultural discourses regarding the myth or reality of modern civilizational progress; the ethics of modern weaponry; the individual's placed in mass society; constructions of class, race, and gender; and the meaning of national identify in a globalizing world. The class will draw on selected history texts and an array of films and film clips.

HISTORY 425R European Criminal Justice History, 500-1900 Credits: 3
This course will survey European crime, criminal procedure, policing and punishment between 500 and 1900. Particular attention will be given to changing methods of proof (oaths, ordeals, juries); changing type of criminal activity (banditry, vagrancy, witchcraft, professional theft) and changing penal strategies (the stocks, breaking on the wheel, the workhouse, the prison, the penitentiary). English experiences are emphasized.
Cross Listings: HISTORY 5525R.

HISTORY 426R The Scientific Revolution, 1500-1700 Credits: 3
An analysis of the intellectual and social currents which culminated in the Scientific Revolution. After presenting the Renaissance world view, the course will examine the influence of humanism, art, religion, and the voyages of discovery on science, as a prelude to understanding the achievements of Galileo, Harvey, Newton, and the scientific societies of the 17th century.
Cross Listings: HISTORY 5526R.

HISTORY 427R The Darwinian Revolution, 1650-1900 Credits: 3
An inquiry into the intellectual background of Darwin's "Origin of Species." The course will examine 18th- and 19th-century attitudes toward time, species, change, race, the age of the earth, the nature of fossils, creation, and evolution, as background to understanding the achievement of Darwin and the reception of his work.
Cross Listings: HISTORY 5527.

HISTORY 428A History Of The Body Credits: 3
This advanced course will explore the new field of the history of the body, with particular attention to sexuality and gender. Topics will include the history of sexualities, the body and society, body disciplines, medical practices and representations of illness, beauty and fashion, and the relationship between sexualities and nationalisms.

HISTORY 428B Gender & Medicine: Patients & Practitioners From Antiquity to Present Credits: 3
This course explores, in a selective fashion, the role of women in Western medicine both as health care providers and patients. The subject of the history of medicine is too broad to be covered comprehensively in a semester, and so we will focusing on diseases or physical conditions which were believed to be limited to women--childbirth, certain mental health conditions, reproductive health, breast cancer-- as well as the increasing marginalization of women within the profession of health care providers to those branches concerned primarily with "women's problems.

HISTORY 430RA 'We Are The Dead': The Great War Experience Through its Artifacts Credits: 3
World War One was the "war to end all wars"; all previous wars were indeed eclipsed by its scale of destruction. And yet, it was a war that initiated a century of continual bloodshed and crimes against humanity. This course will explore the causes, nature and consquences of the Great War of 1914-18. It will be taught on different themes each Winter semester at the National World War One Memorial Museum at Liberty Memorial.

HISTORY 431R Medieval England, 1066 To 1485 Credits: 3
Beginning with the Norman conquest of England in 1066, this course traces the history of Medieval England through the establishment of the Tudor dynasty. Covered will be such items as the rise of the Angevin Empire, the conflict between monarch nobility, the evolution of Parliament, as well as the Anglo-French rivalry which culminated in the Hundred Years' War.

HISTORY 432R Tudor England, 1485-1603 Credits: 3
This course covers England from the accession of Henry VII, the first Tudor, to the death of Elizabeth I in 1603 Topics to be covered are: transformation of England into a modern state, the Reformation, the role of Parliament, conflicts with European powers, especially Spain, etc.
Cross Listings: HISTORY 5532.

HISTORY 433R History of Britain 1603-1832 Credits: 3
This course surveys the history of Britain from the the rise of the Stuart dynasty through the Industrial Revolution, with particular emphasis on the cultural aspects of political, social, economic, and military changes. Topics include: the domination of the aristocracy; the rise of the Navy; the exploration of the Pacific; the monarchy of George III; the loss of the American colonies; the wars with Napoleon; the Agricultural and early Industrial Revolutions; and the social changes they brought in both Britain and the Empire.

HISTORY 434R History of Britain 1832-Present Credits: 3
This course surveys the history of the British Isles from the industrial revolution to the present day, with a particular emphasis on the cultural aspects of political, social, economic, and military changes. Topics include Victorian society, the rise of the class system, imperialism, the domestic impact of the two world wars, the reaction to the loss of the Empire, pop culture, and contemporary issues.

HISTORY 436R Modern German History Credits: 3
This course traces the history of Central Europe from the fall of Bismarck to the reunification of Germany one century later. It will ask students to think critically about the relationship between state and society, elites and 'ordinary' Germans, in the various German-speaking regimes that existed over the course of this era: two empires, two interwar republics, two fascist dictatorships, and three post-fascist republics. All assigned readings will be in English; a background knowledge of European history is recommended.

HISTORY 437AWI Imperial Germanies, 1848-1918 Credits: 3
This course traces the history of German-speaking Central Europe from the Revolutions of 1848 to the collapse of the Hohenzollern and Habsburg empires at the end of World War One. It will ask students to think critically about the relationship between state and society and the role played by 'elite' and 'ordinary' people in shaping German history. This reading and writing intensive course will be run as a seminar. Final grades will be based on a portfolio of assignments of which students will select what they consider to be the best examples of their work.
Prerequisites: HISTORY 202, HISTORY 208 (or equivalent).

HISTORY 437BWI First German Republics, 1917-1935 Credits: 3
This course traces the history of the two German Republics during the inter-war years-the First Austrian Republic and the so-called Weimar Republic-from the peace movements of the First World War to the solidification of fascist dictatorships. It will ask students to think critically about the relationship between state and society and the role played by "elite" and "ordinary" people in shaping German history. This reading-and writing-intensive course will be run as a seminar. Final grades will be based on a portfolio of assignment of which students will select what they consider to be the best portfolio of assignments of which students will select what they consider to bet the best examples of their work.
Prerequisites: HISTORY 202, HISTORY 208 (or equivalent), RooWriter.

HISTORY 437CWI The Third Reich, 1930-1950 Credits: 3
This course traces the history of the Third Reich--its origins, nature, and crimes against humanity--from its first electoral successes in the Great Depression to the trials of its leaders for various war crimes. At its center stand the challenging questions of the ethical and historical responsibility for the Holocaust. It will ask students to think critically about the relationship between state and society and the roles played by 'elite' and 'ordinary' people in shaping this tragic era of German and European history. This reading- and writing-intensive course will be run as a seminar. Final grades will be based on a portfolio of assignments o which students will select what they consider to be the best examples of their work.
Prerequisites: HISTORY 202, HISTORY 208 (or equivalent), RooWriter.

HISTORY 437DWI Cold War Germanies, 1941-1991 Credits: 3
This course traces the history of the three postwar German Republics-- the Second Austrian Republic, the German Democratic Republic, and the Federal Republic of Germany -- from the initial plans of the Allies for postwar reconstruction to the Reunification of Germany in 1991. It will ask students to think critically about relationship between state and society and the role played by 'elite' and ' ordinary' people in shaping, and in the remembering, of German history. This reading-and writing-intensive course will be run as a seminar. Final grades will be based on a portfolio of assignments of which students will select what they consider to be the best examples of their work.
Prerequisites: HISTORY 202, HISTORY 208 (or equivalent), RooWriter.

HISTORY 444R Islam and the Arabs: The Formative Period Credits: 3
The first semester of a three-semester sequence begins with a brief overview of the geography and topography of the Middle East. The course proceeds with a discussion of the conditions of pre-Islamic Arabia; the appearance of Muhammad and his mission; the rise and spread of Islam; the establishment and consolidation of the Arab dynasties in the Middle East, North Africa and Spain; Islamic institutions; and Islamic society and culture. The time span will be approximately 500 A.D. to the Mongol conquest of Baghdad in 1258.
Cross Listings: HISTORY 5544.

HISTORY 445 The Ottoman Empire in the Middle East to World War I Credits: 3
The second semester of a three-semester sequence covers the transition from Arab to Turkish hegemony in most of the Middle East as well as the restoration of native Persian dynasties in Iran and their subsequent development. The emphasis is on the rise and decline of the Ottoman Turkish Empire. Attention is given to the Ottoman provinces and to the national movements of subject peoples. The course ends with an overview of World War I and the peace treaties which marked the dissolution of the Ottoman Empire.
Cross Listings: HISTORY 5545.

HISTORY 446R The Middle East from World War I to the Present Credits: 3
The third semester of a three-semester sequence deals with the emergence of the modern countries of the Middle East after World War I and their history and course of development to the present day. There will be a general survey of the government and politics, economic situation, and social and cultural characteristics of each important country in the area. In addition, special topics will be discussed such as the modernization process, ideological alternatives, relations with the great powers, the economics and politics of oil, and the Arab-Israeli conflict.
Cross Listings: HISTORY 5546.

HISTORY 462J Japanese Civilization Credits: 3
A survey of Japanese civilization and cultural history from the prehistorical period to the present. Emphasis on the interplay between religion, the arts, politics, and social structure.

HISTORY 464 Medieval Methods and Paleography Credits: 3
This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textural transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for practical archival work in various European nations.
Prerequisites: LATIN 110.

HISTORY 468R Archaeology and the History of Antiquity Credits: 3
This course will analyze the contributions of archaeology to the understanding of ancient history. It will cover archaeological excavations and their pertinence to classical civilization in the Near East and Greece. The techniques and methodology of field archaeologists will be discussed and demonstrated. Archaeological excavations relating to the Hittite capital, to the Ugaritic tablets, to the Minoan-Mycenaean civilization and its link to the Near East will be treated.

HISTORY 469 Archeology and Biblical History Credits: 3
An examination of ancient Israel as she emerges from the ruins of the past, both lapidary and literary. Through a study of the "mute documents," artifacts man-made (storied cities, household utensils, inscribed shards from Jericho to Jerusalem) we gain an insight indispensable for Biblical studies, for ancient Near Eastern history.

HISTORY 470 Ancient Egypt Credits: 3
This course describes the political, social and cultural evolution of ancient Egypt from pre-dynastic times, with major emphasis upon the Old, Middle, and New Kingdoms (especially the 18th dynasty and the reign of Akhenaton).
Cross Listings: HISTORY 5570R.

HISTORY 470P Ancient World: The Social History Of The Ancient World Credits: 4
The optional four-credit-hour component (modified independent study) will concern the social aspects of these civilizations, i.e., their daily lives. Readings and audiovisual aids will be used to help the student who will be expected to choose one aspect of each civilization, such as women, slavery, merchants, education, medicine, etc., and write a five-page paper about that topic for each period, i.e., Mesopotamia, Egypt, Greece and Rome.

HISTORY 471 Ancient Greece Credits: 3
This course begins with a survey of the pre-classical Minoan and Mycenaean civilizations and then describes the rise of prominent Greek city-states (with particular emphasis upon the evolution of Sparta and the political, social and cultural contributions of Athens). The course concludes with the rise of Macedon and Alexander's conquests and significance.
Cross Listings: HISTORY 5571R.

HISTORY 471P Ancient World: The Political Structure Of The Ancient World Credits: 4
The four-hour lecture period on weeknights will emphasize the historical aspects of the ancient civilizations. The lectures will be chronologically organized to focus upon their evolution from their rise to their collapse.

HISTORY 472 Ancient Rome Credits: 3
This course covers Roman history from its origins (including the Etruscans) to the decline of the imperial system. Particular emphasis is placed upon the political, social and economic developments in the Republic, the death of the Republic, the early Principate, and the factors that led to Rome's decline in the ancient world.
Cross Listings: HISTORY 5572R.

HISTORY 472P Ancient World: The Cul/Intellectual Dimension Of Ancient Civi Credits: 4
The four weekend periods will provide the students with a general picture of these civilizations: society, religion, economics, and culture (w.f., arts, literature, philosophy, science, etc.). Guest lecturers, slides, films and video cassettes will be used to introduce the varied aspects of these ancient peoples.

HISTORY 475WI The History of Ancient Israel Credits: 3
Judaism has had a tremendous impact on our civilization and yet most Americans are only dimly aware of its origins and development. This course will trace the roots of the Jewish religion in its historical context from its beginnings through the formation of rabbinic culture. The rise of Christianity will be examined in its original Judaic context, and recent discoveries, particularly those pertaining to the Dead Sea Scrolls, will be interpreted.
Prerequisites: RooWriter.

HISTORY 476 Medieval Jewish History Credits: 3
This course covers the general period from the decline of the Roman Empire to the dawn of early modern times. It is concerned with Jewish centers of life and learning in the Diaspora, both East and West. The course considers the Jews under Islamic rule from the time of Mohammed through the Golden Age of Moorish Spain. The focus then shifts to the situation of the Jews in Christian Europe, from the period of Constantine to the expulsions from England, France and Christian Spain. The Jews in the Ottoman Empire are mentioned and the course ends with the episode of Sabbatai Zevi, the false Messiah.
Cross Listings: HISTORY 5576R.

HISTORY 477 Modern Jewish History Credits: 3
This course surveys modern Jewish history from the Napoleonic period to World War II. Analyzing the social status of the Jews in Medieval Europe, it proceeds towards a discussion of the growth of the national state and the breakup of the Holy Roman Empire and analyzes the growth of socialism, integral nationalism, and liberalism as they affected the Jewish communities in Europe and America. The course serves as a survey of modern political and economic trends as they affect a distinct group.
Cross Listings: HISTORY 5577R.

HISTORY 496 Historical Research Project Credits: 1-3
Working extensively with an individual faculty member actively engaged in his/her research, students practice the multiple facets of investigating the sources of history, developing a comprehensive analysis from such sources, and composing a persuasive interpretation.
Prerequisites: HISTORY 301WI.

HISTORY 497 Special Topics and Readings Credits: 1-6
Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

HISTORY 497XCA Special Topics and Readings Credits: 1-6
Special Topics and Readings

HISTORY 498WI Senior Capstone Credits: 3
This is the capstone course in the department and is required for majors in the senior year. It consists of tutorial sessions with a regular faculty member and independent research leading to a major paper using original source materials. Performance in this course will weigh heavily in the award of departmental honors.
Prerequisites: HISTORY 301WI, RooWriter.

HISTORY H497 Special Topics and Readings Credits: 1-6
Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

Honors (HONORS)

Courses

HONORS 100 First Year Seminar Credit: 1
This course is designed to assist first-year students to be exceptional fellowship and graduate/professional school applicants. Students will hone their communication and critical thinking skills and learn how to create supportive relationships with faculty members. Additionally, students will learn about the academic resources available to them at UMKC.

HONORS 101 Freshman Honors Colloquium Credit: 1
This one hour interdisciplinary course is designed to foster a shared intellectual community among the Honors Program members. Guest lecturers from UMKC and the greater Kansas City region will speak on a given theme, to change from year to year. Required for participation in the Honors Program. **Prerequisites:** Admission into the Honors Program.

HONORS 102 Freshman Honors Colloquium Credit: 1
This one hour interdisciplinary course is designed to foster a shared intellectual community among the Honors Program members. Guest lecturers from UMKC and the greater Kansas City region will speak on a given theme, to change from year to year. Required for participation in the Honors Program. **Prerequisites:** admission into the Honors Program.

HONORS 201 Sophomore Honors Colloquium Credit: 1
This one hour interdisciplinary course is designed to foster a shared intellectual community among the Honors Program members. Guest lecturers from UMKC and the greater Kansas City region will speak on a given theme, to change from year to year. Required for participation in the Honors Program. **Prerequisites:** admission into the Honors Program.

HONORS 202 Sophomore Honors Colloquium Credit: 1
This one hour interdisciplinary course is designed to foster a shared intellectual community among the Honors Program members. Guest lecturers from UMKC and the greater Kansas City region will speak on a given theme, to change from year to year. Required for participation in the Honors Program. **Prerequisites:** admission into the Honors Program.

HONORS 301 Junior Honors Colloquium Credit: 1
This one hour interdisciplinary course is designed to foster a shared intellectual community among the Honors Program members. Guest lecturers from UMKC and the greater Kansas City region will speak on a given theme, to change from year to year. Required for participation in the Honors Program. **Prerequisites:** admission into the Honors Program.

HONORS 302 Junior Honors Colloquium Credit: 1
This one hour interdisciplinary course is designed to foster a shared intellectual community among the Honors Program members. Guest lecturers from UMKC and the greater Kansas City region will speak on a given theme, to change from year to year. Required for participation in the Honors Program. **Prerequisites:** admission into the Honors Program.

HONORS 350 Honors Tutorial Credits: 1-3
Independent Study

HONORS 360 College Student Engagement Credit: 1
This course focuses on understanding and cultivating student engagement in college. Students attend campus and/or community events and design their own campus event focusing on engaging students around the Honors Colloquium's topic for spring semester. Students will none their leadership and communication skills as they design and implement this event.

HONORS 401 Senior Honors Colloquium Credit: 1
This one hour interdisciplinary course is designed to foster a shared intellectual community among the Honors Program members. Guest lecturers from UMKC and the greater Kansas Cit region will speak on a given theme, to change from year to year. Required for participation in the Honors Program. **Prerequisites:** admission into the Honors Program

HONORS 402 Senior Honors Colloquium Credit: 1
This one hour interdisciplinary course is designed to foster a shared intellectual community among the Honors Program members. Guest lecturers from UMKC and the greater Kansas City region will speak on a given theme, to change from year to year. Required for participation in the Honors Program. **Prerequisites:** admission into the Honors Program.

HONORS 495A Senior Thesis-Criminal Justice and Criminology Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495AA Senior Thesis Anthropology Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495B Senior Thesis-Art History Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495C Senior Thesis Biology Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495D Senior Thesis-Chemistry Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495E Senior Thesis-Communication Studies Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495F Senior Thesis-Economics Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495G Senior Thesis-English Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495H Senior Thesis-Foreign Languages Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495I Senior Thesis-Geosciences Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495J Senior Thesis-History Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495K Senior Thesis-Judaic Studies Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495L Senior Thesis-Mathematics Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495M Senior Thesis - Business Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495N Senior Thesis-Philosophy Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495NH Senior Thesis-Health Sciences Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495NN Senior Thesis-Nursing Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495O Senior Thesis-Political Science Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495P Senior Thesis-Psychology Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495Q Senior Thesis-Sociology Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495R Senior Thesis-Theatre Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495S Senior Thesis-Education Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495T Senior Thesis-American Culture Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495U Senior Thesis-Classics/Ancient Studies Credits: 3-6

HONORS 495V Senior Thesis-Physics Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495W Senior Thesis-Gerontology Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an honors thesis the student will then graduate as an Honors College Scholar.

HONORS 495X Senior Thesis-Music Credits: 3-6
Students who have completed the requirements for the Honors Program may choose to do independent research and then write or create a senior thesis. If the thesis is acceptable as an Honors thesis the student will then graduate as an Honors Scholar.

Horn (HORN)

Courses

HORN 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

HORN 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

HORN 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

HORN 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

HORN 101 Freshman Horn I Credits: 2-4

HORN 102 Freshman Horn II Credits: 2-4

HORN 201 Sophomore Horn I Credits: 2-4

HORN 202 Sophomore Horn II Credits: 2-4

HORN 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: HORN 5300.

HORN 301 Junior Horn I Credits: 2-4

HORN 302 Junior Horn II Credits: 2-4

HORN 401 Senior Horn I Credits: 2-4

HORN 402 Senior Horn II Credits: 2-4

Humanities (HMNTY)

Courses

HMNTY 101P The Many Lives Of Dr.Faust Credits: 4
Examination of the development, impact, and artistic forms of the Faust legend. Faust is studied by examining the search for knowledge from Byzantium to modern Europe and America. This approach allows topics such as the limits of power, the choice between good and evil, and the limits of human awareness. The course will present the Faust legend in various artistic forms by allowing the viewer to experience this "myth" through art, drama, literature, and culture.

HMNTY 104P Indep Study/Tutorial: Spec Applications: Themes Of Individuality Credits: 4
In this course students apply knowledge and skills gained in the weekend and weekday courses to four supervised and well delineated study projects relating to the major themes of Block II, and involving various art forms and presentation media.

HMNTY 105P Literature, Composition & Critical Thinking: Individual & Society Credits: 4
This course develops facility in writing, reading and critical thinking through numerous writing and critical thinking activities, papers and readings focused around the topic of the relationship of the individual and society. This course accomplishes the purposes and fulfills the requirement of the first semester of freshman English.

HMNTY 106P The Individual In Literature, Philosophy And Art Credits: 4
This weekend course acquaints students with classic works of literature, philosophy and the fine arts, as well as the methodologies of the humanities, by means of an historical and systematic analysis of the developmental stages of individuality from the classical period to the contemporary era.

HMNTY 201P The Many Lives of Dr. Faust Credits: 4
This course will involve the development, impact and artistic forms of "The Lives of Dr. Faust," a major legend in Western Culture. This course examines Faust as dealing with a search for knowledge from Byzantium to modern Europe and America. This approach covers such topics as the limits of power, the choice between good and evil, and the limits of human awareness. The course will present this Faust legend in various artistic forms, by allowing the student to experience this "myth" through art, drama, literature and culture.

HMNTY 202P The Meaning of the American Experience Credits: 4
This course meets the College requirement for ENGLISH 225. Integrated with the other courses in the block, its aim is to help students to become informed writers on the topics of American myths. The first part of the course will require students to write personal response papers; the second half will involve library research that can be synthesized into research papers.

HMNTY 203P American Dreams: Four Major American Myths Credits: 4
This course examines several meanings of four major American myths: the Puritan myth, the myth of the land, the myth of individualism and the myth of the machine. Students will examine works of literature, art, and film in order to comprehend the meaning of myth in their own culture and grasp the way in which cultural artifacts shape and express current values in American life. The course will take special note of the Faust myth’s relevance in American culture.
Co-requisites: HMNTY 202P.

HMNTY 340P The World of Advertising Credits: 4
This course will present a broad overview of advertising literature. Students will be given some idea of the issues inherent in the world of advertising, procedures for running an ad campaign, and the role of persuasive writing and graphic design. As projects to accompany the historical and theoretical aspects of advertising, students will design a commercial or an ad campaign. The course will emphasize critical thinking, ethical issues, writing and speaking.
Prerequisites: Two semesters of composition.

HMNTY 340PW The World of Advertising Credits: 4
This course will present a broad overview of advertising literature. Students will be given some idea of the issues inherent in the world of advertising, procedures for running an ad campaign, and the role of persuasive writing and graphic design. As projects to accompany the historical and theoretical aspects of advertising, students will design a commercial or an ad campaign. The course will emphasize critical thinking, ethical issues, writing and speaking.
Prerequisites: Two semesters of composition, RooWriter.

HMNTY 375P Research In Women’s Culture Credits: 4
Independent Study: Each student, with an instructor, will develop a research topic of personal or professional interest related to PACE 376P or PACE 377P and produce appropriate writing on the topic.

HMNTY 377P Growing Up Female With Mass Media Credits: 4
The purpose of this course is to examine women and women’s issues in American film, media and culture. Focusing on the construction of women’s images in the information age, the course follows the rise of feminism, backlash and "post feminism" to the position of the contemporary woman, providing a historical context for popular culture.

HMNTY 401P The Culture Of The Working Class: Independent Study Credits: 4
This course, the independent study component of the labor and economics block, will employ a variety of cultural media which illustrate some of the issues covered in the weekend and evening courses. "The Culture of the Working Class" will show how literature, art, music and film have reflected and/or influenced the labor movement. Students will read novels, short stories and poems, view movies and works of art which address problems of the working class, both in Western Europe and the United States, from the late 1800s to the present. The work done will be validated through written work by the student.

HMNTY 401PW The Culture of the Working Class: Independent Study Credits: 4
This course, the independent study component of the labor and economics block, will employ a variety of cultural media which illustrate some of the issues covered in the weekend and evening courses. "The Culture of the Working Class" will show how literature, art, music and film have reflected and/or influenced the labor movement. Students will read novels, short stories and poems, view movies and works of art which address problems of the working class, both in Western Europe and the United States, from the late 1800's to the present. The work done will be validated through written work by the student.
Prerequisites: RooWriter.

HMNTY 404P Professional Communication Credits: 4
In this course students will study formats for various types of technical reports, from resumes to completion reports, most of which will use as content research projects assigned in the independent study segment. Students will also study techniques for presenting material orally, from small group communication to formal presentations of longer technical reports, complete with audio-visual aids. In both written reports and oral communication, students will learn to consider a variety of audiences. The course will have texts and will be team-taught. The writing element will provide another option for PACE students to fulfill the new junior/ senior writing requirement.
Prerequisites: RooWriter.

HMNTY 404PW Professional Communication Credits: 4
In this course students will study formats for various types of technical reports, from resumes to completion reports, most of which will use as content research projects assigned in the independent study segment. Students will also study techniques for presenting material orally, from small group communication to formal presentations of longer technical reports, complete with audio-visual aids. In both written reports and oral communication, students will learn to consider a variety of audiences. The course will have texts and will be team-taught. The writing element will provide another option for PACE students to fulfill the new junior/senior writing requirement.
Prerequisites: RooWriter.

HMNTY 408P Images Of Aging In Literature Credit: 1
This one credit hour course will give students an opportunity to examine human attitudes towards the changes that occur in later life viewing them through fictional characters and events. It is one thing to learn the facts of the aging process and aging in society, but quite another to examine attitudes and feelings about such issues subjectively, through the eyes of one facing them. Through reading literature about older people and their concerns, discussing it and writing papers about it, students should develop a truer perspective about that portion of their own lives and alter their attitudes towards older people in their present culture. Though this is a one-credit-hour course, discussions and papers may also draw from readings done in the Independent Study portion of the block.

HMNTY 410P Turning Life into Stories Credits: 4
This course will take a factual approach to creative prose writing, including both artistic nonfiction and fiction in various forms. The instructor will describe a form, suggest ways it might be written, and illustrate the form with examples of his own work and that of other writers. Student papers will be critiqued in writing by the instructor. Students will also read much of their work to the class, which will operate as a writing workshop.
Prerequisites: ENGLISH 100, ENGLISH 225.

HMNTY 410PW Turning Life into Stories Credits: 4
This course will take a factual approach to creative prose writing, including both artistic nonfiction and fiction in various forms. The instructor will describe a form, suggest ways it might be written, and illustrate the form with examples of his own work and that of other writers. Student papers will be critiqued in writing by the instructor. Students will also read much of their work to the class, which will operate as a writing workshop.
Prerequisites: ENGLISH 110, ENGLISH 225, RooWriter.

HMNTY 452 Images Of The Family In Art And Literature Credits: 4
An application of the skills and knowledge gained from the companion weekend and/or weekday courses in this block by means of the instructor-approved and guide independent study projects of the student's own individual or small group choice, focusing on images of the family in literature and art. Each student must select and present four projects (one on each of the following faith cultures-Christianity/Judaism, Islam, and one on a topic of their choice) in written, oral and/or audio/visual media. Students meet in groups and individual sessions with the instructor of this block.

HMNTY 461 Interpreting Past And Present Rhetorical Practices Credits: 4
The purpose of this course is to examine what rhetoric is and how it has been (and is currently) used to influence what we believe, practice and value as individuals and as a society. Beginning with the classical period, then moving chronologically to present day rhetorical theories, students will analyze the ways in which rhetoric has both influenced and been influenced by its historical context. Course grades will be determined by four examinations, an 8-10 page course paper, and an oral presentation of the work of one rhetorician.

HMNTY 462 Analyzing Modern Discourse Communities Credits: 4
In this course, students will learn how to critically examine the rhetorical effects of political, legal, journalistic, literary documents. Students will also learn how to more effectively argue by mastering particular rhetorical strategies. There will be four written projects in this course: a summary/research assignment, a review assignment, an analysis assignment and an argument assignment.

HMNTY 490P Perceptions & Images Of Disabilities In Literature And Film Credits: 4
This course combines classroom discussion of selected films and literature and independent study. Students will study films and selections from literature to develop an understanding and awareness of the social, economic and political aspects of disability as conveyed through popular culture. Students will also apply research, observation and writing skills to gain awareness and insights regarding disabilities, through working on an individual or team project. The project will further the understanding of disabilities and how various social, psychological and environmental conditions may affect people with disabilities and their families.

Information Technology (INFO-TEC)

Courses

INFO-TEC 222 Multimedia Production and Concepts Credits: 3
Multimedia production and concepts will give an overview of multimedia technology and communication theory needed to deliver information and to produce interactive presentations for the web, for CD-ROM, and for in-person presentations and demos. The course offers exposure to software, hardware, other multimedia technologies, authoring and copyright matters.
Prerequisites: COMP-SCI 101.

INFO-TEC 290 Special Topics Credits: 1-3
Selected topics in specific subject areas of Information Technology which are not part of the regular offerings.

INFO-TEC 321 Introduction to Computing Resources Administration Credits: 3
This introductory course is designed to give an overview of a wide variety of technical, interpersonal, documentation, and managerial skills needed to become an effective systems administrator.
Prerequisites: COMP-SCI 201R.

INFO-TEC 350 Object-Oriented Software Development Credits: 3
Application of object oriented programming languages as a means to implement object oriented designs. Polymorphism through inheritance and interfaces, design methods such as Responsibility Driven Design and such reusable design techniques as abstract classes and frameworks. Event-driven programming and the Java Swing classes for constructing interactive Graphical User Interfaces (GUIs),the basics of the Unifed Modeling (UML) and elementary design patterns.
Prerequisites: COMP-SCI 201R, COMP-SCI 303 (or COMP-SCI 352).

INFO-TEC 426 Practical Network Security Credits: 3
This course examines common threats to computer network security and discusses various techniques to mitigate those threats. The course material is supplemented with lab assignments that implement network security tools and use them to build a small secure network. It discusses information hiding, traffic monitoring and control, intrusion detection, and security policy. Note: NOT FOR GRADUATE CREDIT.
Prerequisites: COMP-SCI 420.

INFO-TEC 427 Network Analysis Credits: 3
This course focuses on routing in an autonomous system network using Cisco Systems equipment. It will include a review of the fundamental operations needed in AS routing and will then, through lecture and lab assignments, implement various network configurations using Cisco equipment. The concepts addressed will include router, switch and protocol implementations for Cisco Discovery Protocol, Spanning Tree Protocol, VLAN’s, VLAN Trunking Protocol and standard Cisco network routing protocols, among others.
Prerequisites: COMP-SCI 420, INFO-TEC 321.

INFO-TEC 490 Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490A Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490C Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490GP Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490IT Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490J Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490JU Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490MI Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490NA Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490NS Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490SD Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 490WD Special Topics Credits: 1-3
Selected topics in specific areas of Information Technology/ Computer Science. May be repeated for credit when the topic varies.

INFO-TEC 491 Internship Credits: 1-6
Students may participate in structured internships under the joint supervision of an employer and a faculty member. The student must carry out significant professional responsibilities that also have academic merit. The number of credit hours is based on the quality of the academic experience. Available for credit/no credit only, and students must be in good standing with a least 18 credit hours of CS/IT counting towards the degree. Registration by consent number only: petition forms for CS/IT 491 Internships are available in the CSEE Division Office.
Prerequisites: At least 18 hours of COMP-SCI/INFO-TEC that counts towards the B.I.T. degree.

Integrated Studies (INTGR)

Courses

INTGR 200 Intermediate Pre-Hospital Life Support Credits: 4
This course is designed to increase the scope of practice for the professional Emergency Medical Technician. It follows the national EMS Education Standards and encompasses EMS operations, communications, documentation, medical/legal ethics, as well as roles and responsibilities. Airway management, intravenous therapy, and the emergency assessment and management of various medical and trauma emergencies will be addressed. Offered for Emergency Medical Technicians who are interested in advancing their career or considering becoming a paramedic. Note: Admitted students in the UMKC Emergency Medical Services Paramedic Program.

INTGR 200L Intermediate Pre-Hospital Life Support Laboratory Credits: 2
Laboratory applications for emergency medical science. Note: Admitted students in the UMKC Emergency Medical Services Paramedic Program.

INTGR 201 Advanced Pre-Hospital Life Support I Credits: 4
This course encompasses EMS operations, communications, documentation, medical/legal ethics, as well as roles and responsibilities. Advanced airway management, intravenous therapy, and the emergency assessment and management of various medical emergencies will be addressed. Students acquire the skills necessary to perform intubation, intravenous cannulation, fluid resuscitation, medication dose calculation, and administration. These skills are practiced in the laboratory setting under close supervision and in clinical settings of hospitals and medical facilities in the Kansas City region. Note: Admitted students in the UMKC Emergency Medical Services Paramedic Program.

INTGR 202 Advanced Pre-Hospital Life Support II Credits: 4
This course encompasses the emergency assessment and management of the cardiovascular, environmentally-injured, geriatric, pediatric, abused, chronic care, challenged, and traumatically-injured patients. Students acquire the skills necessary to perform endotracheal oral and nasal intubation, intravenous cannulation, cardiac rhythm interpretation and treatment, medication calculation and administration, patient restraint and delivery, and resuscitation of newborn patients. These skills are practiced in the laboratory setting under close supervision, in the clinical settings of hospitals and medical facilities, and during a field internship with advanced life support ambulances in the Kansas City region. Note: Admitted students in the UMKC Emergency Medical Services Paramedic Program.

INTGR 425P Integrative Seminar in Disablilty Studies Credit: 1
The Integrative Seminar in Disability Studies provides students the venue to focus and synthesize their knowledge of disability within an academic field. Required for Interdisciplinary Certificate in Disability Studies.
Prerequisites: HMNTY 490P, PSYCH 406P, PSYCH 407P.

INTGR 430P Development Disabilities: Partners in Policymaking Credits: 8
Participants, selected through an application process conducted by the Missouri Planning Council for Developmental Disabilities, attend eight two-day sessions over a period of eight months. Partners meet with and learn from nationally known speakers, gaining state of the art information on critical issues, including state and federal issues. Partners develop skills that will enable them to form productive partnerships to influence police and law.
Prerequisites: Selection by Missouri Planning Council.

Interdisciplinary Studies (INT-DISC)

Courses

INT-DISC 201P Energy, Technology and Society Credits: 4
Independent study television course. Technology is examined as a human activity that reflects society's needs and values. The social implications of technology are explored and the concept of technological systems is developed. The history and evolution of technology is studied, particularly as it has influenced life and planning for the future.
Co-requisites: INT-DISC 202P.

INT-DISC 202P Energy Science Credits: 4
Fundamental physical principles and concepts concerning energy sources, energy production, energy use and energy reserves will be studied. Emphasis will be placed on the physics of energy including chemical, electrical, mechanical, nuclear, solar and thermal energy.
Co-requisites: INT-DISC 201P.

INT-DISC 380P People With Special Needs: Education Planning Credits: 4
This course will address educational and psychological assessment strategies that result in a diagnosis of disability. Various specific disabilities and legal parameters for public education of people with disabilities will be discussed. Students will learn how to read and understand various educational and psychological assessment reports and will become knowledgeable about how to access community supports and services to address special needs in an education setting. By the end of the course students will have created a personal notebook of educational planning and accommodations for use as a resource for parents, teachers, or students in educational settings.

INT-DISC 381P People With Special Needs: Career Exploration Credits: 4
This course will address the issues that arise in career exploration and planning for people with a disability diagnosis. Students will become familiar with the philosophy of community inclusion and will learn how to plan based upon the unique strengths and interest of the individual. Career exploration tools will be explored in class and as assigned, and students will create a personal notebook to be used as a resource tool of accommodation materials and aides.

INT-DISC 382P People With Special Needs: Disability Service Settings Credits: 4
Independent study course: Students will meet at specific times as a group with the instructor, will write a term paper, and complete a 20 hour practicum in a pre-approved disability service setting.

INT-DISC 482P The Meanings Of Masculinity In Contemporary U.S. Culture Credits: 4
Topics include: Perspectives on Masculinity; Boyhood; Collegiate Masculinities: Privilege and Peril; Men and Work; Men and Health: Body Mind; Men in Relationships; Male Sexualities; Men in Families; Masculinities in the Media; Men, Movements, and the Future. Small and large group discussions are anticipated in the classroom. Outside of the classroom, students will be expected to complete a series of assignments that are relevant to the topics at hand. This course would ideally incorporate UMKC faculty/staff and individuals/groups outside of the university who have completed research/work that seeks to understand men's lives better.

INT-DISC 483P Artful Man Embodied: Cultural Icons of Masculinity Credits: 4
This course will examine a variety of mediums used to "embody" meanings of masculinity (with special attention paid to shifting settings for one media source can alter its meaning drastically simple by being located in a different venue and/or time). This course will incorporate tours of, and works from, the Nelson-Atkins and Kemper Museums. Images by/of "men" to be examined include those found in the work of selected "masculine icon" authors; those found in popular culture; and those found in the everyday (seemingly mundane) worlds of family, work, and medicine. As the title of the course implies, students will explore historical ideas about bodies/embodiment (be they scientific, religious, social, etc.) into their image exploration.

Italian (ITALIAN)

Courses

ITALIAN 110 Elementary Italian I Credits: 3
Intended to give the student the ability to read prose of ordinary difficulty and to understand and speak simple Italian.

ITALIAN 120 Elementary Italian II Credits: 5
Continuation of ITALIAN 110.
Prerequisites: ITALIAN 110 (or equivalent).

ITALIAN 211 Second Year Italian I Credits: 3
Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.
Prerequisites: ITALIAN 120.

ITALIAN 221 Second Year Italian II Credits: 3
Prerequisites: ITALIAN 211.

ITALIAN 280 Special Intermediate Italian Topics I Credits: 1-3
Instruction of Italian on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: ITALIAN 110, ITALIAN 120.

ITALIAN 290 Special Intermediate Italian Topics II Credits: 1-3
May not be repeated for credit.
Prerequisites: ITALIAN 280.

Latin (LATIN)

Courses

LATIN 110 Elementary Latin I Credits: 3
Fundamentals of grammar and syntax; selected passages from various Latin authors concluding with readings from Caesar.

LATIN 120 Elementary Latin II Credits: 3
Continuation of LATIN 110.
Prerequisites: LATIN 110 (or equivalent).

LATIN 211 Second Year Latin Readings I Credits: 3
Selected readings from works by various Latin authors. Grammar review.
Prerequisites: LATIN 120.

LATIN 221 Second Year Latin Readings II Credits: 3
Prerequisites: LATIN 211.

LATIN 280 Special Intermediate Latin Topics I Credits: 2-4
Instruction of Latin on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: LATIN 110, LATIN 120.

LATIN 280A Special Intermediate Latin Topics I Credits: 2-4
Instruction of Latin on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: LATIN 110, LATIN 120.

LATIN 290 Special Intermediate Latin Topics II Credits: 2-4
Continuation of LATIN 280. May not be repeated for credit.
Prerequisites: LATIN 280.

LATIN 290A Special Intermediate Latin Topics II Credits: 2-4
Continuation of LATIN 280. May not be repeated for credit.
Prerequisites: LATIN 280.

LATIN 301 Virgil Credits: 3
Selected readings in Classical Latin from the works of Virgil.
Prerequisites: LATIN 211.

LATIN 302 Ovid Credits: 3
Selected readings in Classical Latin from Ovid’s Metamorphoses.
Prerequisites: LATIN 211.

LATIN 311 Prose Fiction and Epistolography Credits: 3
Selected readings in Classical Latin from Apuleius, Cicero, Petronius, Pliny, etc.
Prerequisites: LATIN 211.

LATIN 314 Lyric and Elegiac Poetry Credits: 3
Selected readings in Classical Latin from Catullus, Horace, Martial, Ovid, etc.
Prerequisites: LATIN 211.

LATIN 490 Special Readings In Latin Credits: 1-3
Intensive readings in period or genre or literary figure to be selected by the student in consultation with the instructor. Available only to advanced Latin students.

Latina / Latino Studies (LLS)

Courses

LLS 201 Introduction to Latina/o Studies Credits: 3
This course addresses and examines the social, economic, and political factors that have influenced the historical experiences of Latinas and Latinos in the U.S. Attention will focus on the major concepts, issues and debates in the field of Latina/Latino Studies. Particular consideration will be given to an analysis of and understanding as to how these factors have influenced the past and present status of Latinos in U.S. society. Given the diversity existing within the Latino population, the course will be comparative, cross-cultural, and interdisciplinary in nature.

LLS 210 Crossing Boundaries: The Latina/o Immigrant Experience Credits: 3
This course examines the Latina/o immigrant experience from the immigrants' diverse origins in the Americas to the communities they shape. Students will examine how empire, war, and economic integration have pushed people to migrate and how work, family, and immigration policy have shaped patterns of migration and settlement as well as integration and exclusion.
Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

Cross Listings: ECON 210, ENGLISH 212, SOCIOL 210.

LLS 300 Special Topics in Latina/Latino Studies Credits: 3
A variable content course offered in the area of Latina/Latino Studies. May be jointly offered with courses in other programs and departments.

LLS 300LAIR Special Topics in Latina/Latin Studies Credits: 3
A variable content course offered in the area of Latina/Latino Studies. May be jointly offered with courses in other programs and departments.

LLS 300MCC Special Topics in Latina/Latin Studies Credits: 3
A variable content course offered in the area of Latina/Latino Studies. May be jointly offered with courses in other programs and departments.

LLS 300SMI Special Topics in Latina/Latin Studies Credits: 3
A variable content course offered in the area of Latina/Latino Studies. May be jointly offered with courses in other programs and departments.

LLS 310 The World of Latino Youth and Adolescents in the U.S. Credits: 3
This course will provide a general introduction and in-depth understanding to the largest group of racial/ethnic adolescents in the United States: Latino youth. An historical examination of Latino youth will provide a better understanding of their present status, with emphasis on their contact and interactions within social institutions. Additionally, students will analyze the experiences Latino youth have within and among other groups in the broader social context based on past, present, and possible future interactions.
Cross Listings: SOCIOL 338.

LLS 380 Introduction to Latina/Latino Literature Credits: 3
An introduction to the literary production by U.S. Latinas/os, the course introduces students to writings by authors from various Latinidades - Chicana/o, Puerto Rican, Chilean American, Cuban American, Dominican American, and Mexican American - in the four main genres: poetry, fiction, drama, and film.
Prerequisites: ENGLISH 225 OR DISC 200.

Cross Listings: ENGLISH 367.

LLS 397 Independent Readings in Latina/Latino Studies Credits: 1-3
Students will complete extensive readings in an area selected by the student with prior consultation with instructor.

LLS 400 Special Topics in Latina/Latino Studies Credits: 1-3
This course is a variable content course and offered as a result of specialized faculty interest, student demand, or the availability of a visiting expert in a filed closely related to Latina/Latino Studies. The course may be jointly offered with 400-level courses being offered by other departments and programs.

LLS 400HI Special Topics in Latina/Latin Studies Credits: 1-3
This course is a variable content course and offered as a result of specialized faculty interest, student demand, or the availability of a visiting expert in a filed closely related to Latina/Latino Studies. The course may be jointly offered with 400-level courses being offered by other departments and programs.

LLS 400MAA Special Topics in Latina/Latin Studies Credits: 1-3
This course is a variable content course and offered as a result of specialized faculty interest, student demand, or the availability of a visiting expert in a filed closely related to Latina/Latino Studies. The course may be jointly offered with 400-level courses being offered by other departments and programs.

LLS 497 Directed Research Credits: 1-3
Students will develop and conduct a research project in an area selected by the student under the supervision of a faculty member.
Prerequisites: Junior or Senior Level Standing; Students may only enroll in 6 total credits of LLS 497 during their time at UMKC.

Life Sciences (LIFE-SCI)

Courses

LIFE-SCI 201 Healthcare Professions Seminar Credit: 1
This course will introduce students to various healthcare professions. Guest speakers will cover topics including day-to-day activities on the job, educational requirements, career advancement, and necessary interests and abilities.
Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 212R.

LIFE-SCI 202 Exploring Healthcare Professions Credit: 1
Students will gain an understanding of the role and scope of practice of health professionals, patient privacy, professionalism, and a deeper appreciation of what it means to be a patient through facilitated shadowing experiences.
Prerequisites: BIOLOGY 202, BIOLOGY 206, CHEM 322R.

LIFE-SCI 303 From Bench to Bedside: Translational Research Credits: 3
This course explores the spectrum between basic biological research and bedside clinical practice, delving into the topics “what is translational research?” and “how does a drug get to the market”. By engaging with people from the community involved at all levels of translational research, students will gain an appreciation for the civic issues behind medical research, the interdisciplinary nature of research, and the part that Kansas City institutions play in regional life and health sciences.
Prerequisites: Anchor I, Anchor II, BIOLOGY 108 or BIOLOGY 109 or BIOLOGY 102 or equivalent.

Co-Requisites: DISC 300.

LIFE-SCI 310 Human Lifecycle I Credits: 2
This course introduces students to various aspects of women’s health care. In addition, students will consider the cultural diversity of caring for patients with various medical conditions, and will integrate information from the basic sciences, the, and the social sciences as they learn about health care.
Prerequisites: BIOLOGY 202, BIOLOGY 206.

LIFE-SCI 320 Human Lifecycle II Credits: 2
This course introduces students to the aging process and various medical conditions in the elderly. Cultural diversity within aging patient populations will be discussed. Students will experience personal growth and reflection.

LIFE-SCI 330 Human Lifecycle III Credits: 2
This course introduces students to various aspects of pediatric health care. Students will become familiar with medical symptoms and clinical findings while integrating knowledge in anatomy, physiology, and pathophysiology of infants, children, and adolescents.
Prerequisites: LIFE-SCI 320.

LIFE-SCI 340 Human Lifecycle IV Credits: 2
This course introduces students to aspects of adult health care, including bioethics, conflict resolution, informed consent, and human subject research. Presentations on various medical symptoms and clinical findings will be provided to integrate anatomy, physiology, and pathophysiology for learning about acute and chronic medical conditions.
Prerequisites: LIFE-SCI 330.

LIFE-SCI 399 Introduction to Research Credits: 1-3
Introduction to the theory and practice of research in modern biological sciences. Requires minimum of 3-4 hours per week in the laboratory for each credit hour.
Prerequisites: BIOLOGY 108, BIOLOGY 109, CHEM 212R, 3.0 Science GPA.

LIFE-SCI 401 Biophysical Principles Credits: 3
Fundamental biophysical concepts and their application to the study of biological molecules, particularly macromolecules and supramolecular structures. Includes discussion of thermodynamics, kinetics, and spectroscopy.
Prerequisites: LS-BIOC 341, MATH 210, PHYSICS 210 (or PHYSICS 240).

LIFE-SCI 438 Molecular Recognition in Cellular Biology Credits: 2
Studies the latest development leading to an increased understanding of cellular biology processes when the experimental tools of structural biology analysis and molecular genetics are applied.
Prerequisites: BIOLOGY 108, BIOLOGY 109, BIOLOGY 202, BIOLOGY 206, LS-BIOC 341.

LIFE-SCI 490WI Senior Seminar Credits: 3
Discussion, writing and specific readings to coordinate with and amplify topics covered in School of Biological Sciences seminars; must include a term paper on a specific topic. Writing Intensive.
Prerequisites: RooWriter.

LIFE-SCI 497A Special Topics-Bioinformatics Credits: 1-3
Individual or small group study of topics in the area of bioinformatics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497B Special Topics-Genetics Credits: 1-3
Individual or small group study of topics in the area of genetics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497BB Special Topics: Behavioral Biology Credits: 1-3

LIFE-SCI 497C Special Topics-Microbiology Credits: 1-3
Individual or small group study of topics in the area of microbiology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497D Special Topics-Physiology Credits: 1-3
Individual or small group study of topics in the area of physiology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497E Special Topics - Biochemistry Credits: 1-3
Individual or small group study of topics in the area of biochemistry including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497F Special Topics - Biophysics Credits: 1-3
Individual or small group study of topics in the area of biophysics including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497G Special Topics-Cell Biology Credits: 1-3
Individual or small group study of topics in the area of cell biology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497H Special Topics: Neuroscience Credits: 1-3
Individual or small group study of topics in the area of neuroscience including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497I Special Topics-Botany Credits: 1-3
Individual or small group study of topics in the area of botany including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497J Special Topics-Zoology Credits: 1-3
Individual or small group study of topics in the area of zoology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497K Special Topics-Ecology Credits: 1-3
Individual or small group study of topics in the area of ecology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497L Special Topics-Biological Sciences Credits: 1-3
Individual or small group study of topics in the area of biological sciences including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 497P Special Topics-Biotechnology Credits: 1-3
Individual or small group study of topics in the area of biotechnology including class room work, presentation, library work, and writing of term papers or other reports. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 courses may not exceed 4 credit hours toward Biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499A Undergraduate Research-Bioinformatics Credits: 1-3
Independent research, including the writing of research reports in the area of bioinformatics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499B Undergraduate Research-Genetics Credits: 1-3
Independent research, including the writing of research reports in the area of genetics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499C Undergraduate Research-Microbiology Credits: 1-3
Independent research, including the writing of research reports in the area of microbiology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499D Undergraduate Research-Physiology Credits: 1-3
Independent research, including the writing of research reports in the area of physiology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499E Undergraduate Research-Biochemistry Credits: 1-3
Independent research, including the writing of research reports in the area of biochemistry. Combined credit for LS 497 and 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499F Undergraduate Research- Biophysics Credits: 1-3
Independent research, including the writing of research reports in the area of biophysics. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA 0f 3.0.

LIFE-SCI 499G Undergraduate Research-Cell Biology Credits: 1-3
Independent research, including the writing of research reports in the area of cell biology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499H Undergraduate Research-Neuroscience Credits: 1-3
Independent research, including writing of research reports in the area of neuroscience. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499I Undergraduate Research-Botany Credits: 1-3
Independent research, including the writing of research reports in the area of botany. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499J Undergraduate Research-Zoology Credits: 1-3
Independent research, including the writing of research reports in the area of zoology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499K Undergraduate Research-Ecology Credits: 1-3
Independent research, including the writing of research reports in the area of ecology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499L Undergraduate Research-Biological Sciences Credits: 1-3
Independent research, including the writing of research reports in the area of biological sciences. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI 499M Undergraduate Research-Biological Sciences Honors Credits: 1-3
Independent research, including the writing of research reports in the area of biological sciences.

LIFE-SCI 499P Undergraduate Research-Biotechnology Credits: 1-3
Independent research, including the writing of research reports in the area of biotechnology. Combined credit for LIFE-SCI 497 and LIFE-SCI 499 may not exceed 4 credit hours toward biology course degree requirements.
Prerequisites: Completion of Biology degree core requirements, minimum GPA of 3.0.

LIFE-SCI H490WI Honors Senior Seminar Credits: 3
Discussion, writing and specific readings to coordinate with and amplify topics covered in School of Biological Sciences seminars; must include a term paper on a specific topic. Writing Intensive.
Prerequisites: RooWriter.

Life Sciences - Anatomy (LS-ANATO)

Courses

LS-ANATO 118 Introductory Anatomy Credits: 3
Description and discussion of the cells, organs, organ systems and basic tissues of vertebrates with special emphasis on their interrelationships in functional anatomy.
Prerequisites: BIOLOGY 102 (or BIOLOGY 108) (or BIOLOGY 109).

LS-ANATO 118L Introductory Anatomy Laboratory Credits: 2
Laboratory investigation of cells, tissues, and organs with special emphasis on their interrelationship in vertebrates.
Co-requisites: LS-ANATO 118.

LS-ANATO 119 Functional Anatomy I Credits: 3
An introduction to the functional anatomy of vertebrates with emphasis on organs, organ systems and tissues.

LS-ANATO 119L Functional Anatomy I Laboratory Credit: 1
An introduction to the functional anatomy of vertebrates with emphasis on organs, organ systems and tissues.

Life Sciences - Biochemistry (LS-BIOC)

Courses

LS-BIOC 304 Biochemistry and Nutrition Credits: 4
The chemistry of the structures and processes of the human body in their normal condition with special consideration of the chemical aspects of disease of the oral structure. A presentation of the basic principles of nutrition.

LS-BIOC 3120 Biochemistry and Nutrition Credits: 3
The fundamentals of biochemistry and the nutritional implications as they relate to source and utilization of essential nutrients.

LS-BIOC 3240 Applied Nutrition Credits: 3
Students will discuss life cycle nutrition as it relates to preventive dentistry and total health. Nutritional factors from infancy to old age are discussed, including diet and nutrition for special patients such as expectant mothers, diabetics, patients with heart disease, fracture patients, institutionalized patients, etc. Students will provide nutritional counseling to healthy patients and special patients within the framework of the course. Principles will be utilized in later clinical courses and practicums.

LS-BIOC 341 Basic Biochemistry Credits: 3
One semester course covering the properties of organic compounds important to biological systems. Structures, characterization and reactions of common compounds and their relationship to the building blocks of biological systems will be discussed.
Prerequisites: BIOLOGY 202, CHEM 320 (or CHEM 322R).

LS-BIOC 360 Biochemistry Credits: 3
Introduction to modern biochemistry. Structure and function of biologically important compounds, major biochemical pathways and their regulation in animals, plants and microorganisms, and the molecular and biochemical basis of gene function will be studied.
Prerequisites: BIOLOGY 202, BIOLOGY 206, CHEM 320 (or CHEM 322R), LS-BIOC 341.

LS-BIOC 360L Laboratory in Biochemistry and Molecular Biology Credits: 3
Laboratory studies in biochemistry and molecular biology with an emphasis on modern techniques and quantitative relationships.
Prerequisites: LS-BIOC 341.

LS-BIOC 360WL Laboratory in Biochemistry and Molecular Biology Credits: 3
Laboratory studies in biochemistry and molecular Biology with an emphasis on modern techniques and quantitative relationships.
Prerequisites: LS-BIOC 341.

LS-BIOC 365 Human Biochemistry I Credits: 3
The basic principles of human biochemistry for pharmacy students presented in a two-term integrated unit. Topics will include the chemistry and mechanisms involved in biosynthesis, degradations and utilization of the major constituents of living systems and the biochemistry of specialized tissues, hormones, nutrition and regulation. Restricted to students in the School of Pharmacy.
Prerequisites: CHEM 320 (or CHEM 322R).

Co-requisites: BIOLOGY 202.

LS-BIOC 366 Human Biochemistry II Credits: 3
The basic principles of human biochemistry for pharmacy students and other undergraduates presented in a two-term integrated unit. Topics will include the chemistry and mechanisms involved in biosynthesis, degradation and utilization of the major constituents of living systems and the biochemistry of specialized tissues, hormones, nutrition and regulation.
Prerequisites: LS-BIOC 365, School of Pharmacy Student.

LS-BIOC 370 Pharmacy Biochemistry Credits: 4
The chemistry and mechanisms involved in biosynthesis, degradation and utilization of the major constituents of living systems, and the biochemistry of specialized tissues, hormones, nutrition and regulation with a focus on application to clinical pharmacy practice.
Prerequisites: Admission into the UMKC Pharm.D. program.

LS-BIOC 425 Bioinformatics Credits: 3
Study of the acquisition, storage, retrieval, analysis, modeling, and distribution of information in biomolecular databases. Recent developments in genomics and proteomics and how these databases are used in modern biological research will be emphasized.
Prerequisites: LS-BIOC 341.

LS-BIOC 430 Molecular Biology and Genetic Engineering Credits: 3
Molecular aspects of gene structure and function, including macromolecular synthesis, gene regulation, genetic transfer and biotechnology will be discussed in prokaryotes and eukaryotes.
Prerequisites: BIOLOGY 202, BIOLOGY 206, LS-BIOC 341.

Life Sciences - Microbiology (LS-MCRB)

Courses

LS-MCRB 112 Microbiology and Living Credits: 3
Lectures and demonstrations concerning the cell structure, genetics and physiology of microorganisms and the role microorganisms play in the world around man with an emphasis on medical and clinical aspects of the significance of various groups of bacteria, viruses fungi and other microorganisms. This course is intended for nursing and other allied health students and for non-biology majors interested in life sciences.

LS-MCRB 113 Introductory Microbiology Credits: 3
An introduction to microbiology with emphasis on infection and the basis of immunity. For non-majors only; does not count toward Biology degree requirements.

LS-MCRB 114L Introductory Microbiology Laboratory Credits: 2
Introductory laboratory studies in microbiology and infection to correlate with LS-MCRB 113. For non-majors only; does not count toward biology degree requirements.
Prerequisites: LS-MCRB 112 (or LS-MCRB 113).

LS-MCRB 121 Human Biology III (Microbiology) Credits: 3
Basic concepts of microbiology with emphasis on infectious diseases and host defenses.
Prerequisites: CHEM 211, LS-ANATO 119.

LS-MCRB 121L Human Biology III (Microbiology) Lab Credit: 1
Laboratory exercises demonstrating basic concepts of microbiology with emphasis on infectious diseases and host defenses.
Co-requisites: LS-MCRB 121.

LS-MCRB 313 Microbiology Credits: 3
Fundamental and applied aspects of microbial structure, metabolism, genetics and diversity. Experimental approaches to studying the microbial world will be emphasized.
Prerequisites: BIOLOGY 202, BIOLOGY 206.

Co-requisites: LS-BIOC 341.

LS-MCRB 313L Laboratory in Microbiology Credits: 3
General microbiological procedures plus advanced work in the areas of microbial physiology and genetics, pathogenic microbiology, virology, applied microbiology and biotechnology.
Co-requisites: LS-BIOC 341, LS-MCRB 313.

LS-MCRB 313WL Laboratory in Microbiology Credits: 3
General microbiological procedures plus advanced work in the areas of microbial physiology and genetics, pathogenic microbiology, virology, applied microbiology, and biotechnology.
Co-requisites: LS-BIOC 341, LS-MCRB 313.

LS-MCRB 4180 Microbiology Credits: 4
Study of infectious diseases, their etiology, symptoms, prevention and treatment. Special emphasis is placed on plaque formation, caries development, periodontal and other oral diseases that relate to dentistry.

LS-MCRB 431 Virology Credits: 3
Survey of the molecular biology of animal, plant, and bacterial viruses. The course will emphasize the molecular mechanisms of virus replication, viral pathogenesis, and the use of virus as model systems to study mammalian cells.
Prerequisites: BIOLOGY 202, BIOLOGY 206.

Co-requisites: LS-BIOC 341 (or LS-BIOC 365).

LS-MCRB 435 Immunology Credits: 3
A study of the cellular and humoral aspects of the immune response, with emphasis upon the mechanisms involved and the relationship of this response to disease processes.
Prerequisites: LS-BIOC 341 (or LS-BIOC 366), LS-MCRB 121 (or LS-MCRB 313).

Life Sciences - Physiology (LS-PHYS)

Courses

LS-PHYS 117 Human Physiology Credits: 3
Introduction to body functions presented from an organ systems approach. For non-majors only.
Prerequisites: BIOLOGY 102 (or BIOLOGY 108 or BIOLOGY 109).

LS-PHYS 3070 Oral Physiology Credits: 3
Concepts of general physiology will be discussed as they relate to the clinical practice of dental hygiene. Emphasis will be placed on the normal and abnormal physiology of oral structures, including such topics as neurophysiology, muscle function, salivation, and endocrinology.

LS-PHYS 316 Principles of Physiology Credits: 3
Physiological functions and processes of animals at the organ and organ systems levels, including concepts of integrated and homeostatic mechanisms. The relationship between organ function and underlying cellular mechanisms in vertebrates will be emphasized.
Prerequisites: BIOLOGY 202, BIOLOGY 206, LS-BIOC 341.

LS-PHYS 399 Pharmacy Physiology I Credits: 3
Introduction to the general principles of neurophysiology.
Prerequisites: BIOLOGY 202, CHEM 320.

LS-PHYS 400 Pharmacy Physiology II Credits: 3
The principles of physiology presented by an integrated approach based on an organ system format. Emphasis is placed on facts and principles pertinent for the student enrolled in pharmacy.
Prerequisites: LS-PHYS 399.

LS-PHYS 401 Physiology Lecture Credits: 5
An integrated study of normal functions of various organ systems of the human body with special consideration of the physiology of the oral cavity and its related structures.

Management (MGT)

Courses

MGT 100 Foundations of Business and College Life Credits: 3
This course provides an introduction to the functional areas of business (e.g., accounting, systems, finance, marketing, human resources, and entrepreneurship) as well as a number of contemporary business topics, including social responsibility, diversity, ethics, and globalization. Additionally, students will be exposed to various topics that facilitate a successful transition from high school to college. Examples include an overview of University and Bloch School resources, development of effective study habits, time and stress management, selection of a major and career options.

MGT 301 Effective Business Communication Credits: 3
The instructor introduces students to the strategic nature of business communication. By the end of the course, students should be able to analyze business situations, prepare messages that fulfill the intended purposed of their communication, and meet the needs and expectations of business audiences. Students will develop the tools to deliver effective, professional written and oral communications, and will learn how to use library and electronic business research tools.
Prerequisites: ENGLISH 225, RooWriter.

MGT 301A Effective Business Communication for Non-Native Speakers Credits: 3
Students will learn the strategic nature of business communication with a focus on building English language skills and understanding U.S. business terminology and culture. By the end of the course, students should be able to analyze business situations, prepare messages that fulfill the intended purposed of their communication, and meet the needs and expectations of business audiences. Students will develop the tools to deliver effective, professional written and oral communications, in addition to cultivating their English language abilities in the business environment.
Prerequisites: DISC 200, RooWriter.

MGT 306 Legal, Ethical And Regulatory Environment Of Business Credits: 3
The course looks at legal and moral thought, with attention to ethical issues in business. Students are introduced to our common law system; selected areas of law, with attention to the inclusion of cultural and moral values; and an introduction to government regulation of business.

MGT 320 Law Of Commercial Transactions Credits: 3
Study of major areas of law included in the Uniform Commercial Code. Topics may include sales, commercial paper, bank deposits and collections, aspects of property law, documents of title, investment securities, and secured transactions.
Prerequisites: MGT 306.

MGT 330 Understanding the Individual in the Organization Credits: 3
This course explores the micro dynamics of organizations: the individual and his/her relationship to other people, teams, and work groups. Topics will include: individual traits, behaviors, and skills for effective performance; self-assessment and professional development; staffing; motivation; individual and group dynamics; multicultural understanding and diversity; and ethical decision making.

MGT 337 Managing Human Capital Credits: 3
Building on prior coursework, this course will provide students with advanced human resource concepts and practices as well as practical experience in how human resources should be managed in successful businesses. Student groups will work with a local organization to diagnose, analyze, and make recommendations regarding effective programs in staffing, developing, rewarding, motivating, and managing its personnel.
Prerequisites: MGT 330.

MGT 355 Organizational Effectiveness and Leadership Credits: 3
Students will study the macro dynamics of organizations: broad knowledge of how organizations work and the various ethical means of impacting outcomes. Topics will include: structure, culture, and politics of organizations; human resources and linkages to organizational culture and success; organization influence and political savvy; managing change and learning in a global context; organizational governance, codes of conduct, and internal controls; the role of business in society; and various professional development issues.
Prerequisites: MGT 330.

MGT 360 Groups and Teams Credits: 3
Teamwork has become increasingly popular in many organizations. Whether formally integrated into the organizational structure, or temporarily created around specific projects, teams can be an important competency of organizations. They are considered an effective performance unit, and expected to efficiently cope with the fast changes and demands of today's business environment. Attaining the full advantages from teamwork requires effective management of team processes and dynamics. This course focuses on issues in team development, internal processes, and members' behavior, as well as management skills needed to effectively lead teams in organizations.

MGT 365 Managing in a Virtual Environment Credits: 3
This course builds on the fundamentals of individual and group behavior to emphasize how organizational design and management practices have been dramatically affected by the proliferation of social media and other internet technologies. Students examine cases and engage in virtual exercises to experience ethical and mindful ways to engage in the virtual environment. Virtual-appropriate variations of interaction, collaboration, conflict management, decision-making, problem-solving, and leadership are introduced. Students also examine geographic and cultural issues potentially encountered in a global virtual organization.
Prerequisites: MGT 330.

MGT 370 International Management Credits: 3
SStudents receive an introduction to management in an international environment, addressing the management functions and behaviors necessary to develop global vision and management skills at a strategic (macro) and interpersonal (micro) level. Cross-cultural management and competitive strategy are evaluated in the context of global changes.

MGT 470 International Study in Business Credits: 3-6
This course is designed to provide a study-abroad experience for the student. The course involves three components: study of international business through on-campus lectures and discussions; travel to a foreign country for visitations to business firms, government organizations, and cultural sites; and critique sessions of the international learning experience after travel completion.
Prerequisites: special application and selection process.

MGT 471 Strategic Management Credits: 3
The study of business strategy concepts and application using case studies representing "real world" situations. The course stresses the formulation of business strategies to achieve organizational objectives using strategic analysis and models based upon external and internal assessments of the organization's environment.
Prerequisites: ACCTNG 211, DSOM 326 (or concurrent enrollment), FIN 325, MGT 330, and MKT 324.

MGT 490 The Professional Experience: Internship Credits: 3
This "experiential learning" course integrates a business internship opportunity with intensive study related to professional and leadership development. Students will work in a sponsoring organization for 15-20 hours per week and use this experience as a base to build professionalism and leadership. Working with a faculty member and a small cohort of peers in a seminar setting, students will explore ideas such as cultural observation, impression management and managing up, in order to enhance their effectiveness in a business environment and develop professional and leadership skills.

MGT 496 Internship: Management Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

MGT 497 Special Topics: Management Credits: 1-3
Study and research in areas of special interest under individual faculty direction.
Prerequisites: senior standing.

Management Information Systems (MIS)

Courses

MIS 202 Computer Applications In Management Credits: 3
A comprehensive coverage of computer tools for personal productivity in a management context, including spreadsheets and databases.
Prerequisites: MATH 110 (or equivalent).

MIS 402 Information Management Credits: 3
This course introduces students to the impact of information technologies and systems on the enterprise. Business Intelligence and decision support capabilities are explored as well.
Prerequisites: MIS 202, STAT 235.

MIS 415 Managing the Information Systems Resource Credits: 3
All organizations today have information systems, and managing the related resources (systems personnel, software applications, databases, networks, computing hardware) is a necessary skill for many employees. This course is aimed at developing the non-technical skills that business-school graduates need to make appropriate decisions about the deployment of information systems throughout the firm.
Prerequisites: MIS 202 and six hours of business school courses at the 300-level or above.

MIS 496 Internship: Management Information Systems Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

MIS 497 Special Topics: Management Information Systems Credits: 1-3
Study and research in areas of special interest under individual faculty direction.
Prerequisites: senior standing.

Marketing (MKT)

Courses

MKT 324 Marketing Concepts Credits: 3
The course focuses on the processes involved in the marketing of goods and services, including the meaning and importance of marketing terminology, the marketing mix, the marketing concept, consumerism, market segmentation, market and marketing research, and the impacts of different competitive structures on marketing decision making.

MKT 335 Consumer Behavior in Marketing Credits: 3
This course draws upon findings from various disciplines including cognitive psychology, social psychology, sociology, economics, and anthropology to understand and predict buying behavior. Structured around applications in marketing strategy, topical coverage includes motivation, perception, attitude change, choice decisions and the consumption process, as well as post-purchase satisfaction.
Prerequisites: MKT 324.

MKT 348 Market Analysis Credits: 3
Market Analysis equips students with the tools needed to be intelligent users of market data. Topics to be covered include the design of research projects, questionnaire design, sampling, data collection techniques, data analysis, and the presentation of results.
Prerequisites: DSOM 309 (or concurrent enrollment), MKT 324.

MKT 418 Sales and Promotion Strategies Credits: 3
Students receive exposure to the planning, implementation, and evaluation of various revenue-generating and promotional strategies. Topics covered will include the analysis of customers, competitors, and product markets; market segmentation; product positioning; media planning; promotional effectiveness; and client-agency relationships.
Prerequisites: MKT 324.

MKT 420 Sales Management Credits: 3
This course examines the strategic management of the boundary-spanning function of the organization, the sales force. Topics include the selling process, customer relationship management, organizing the sales effort, utilizing sales force automation technology, understanding the salesperson's role, selecting appropriate salespeople, motivating the sales force, conducting training programs, and evaluating the efficacy of individual salespeople and the overall sales function.
Prerequisites: MKT 324

MKT 442 Internet/Direct Marketing Credits: 3
This course examines internet and direct marketing as these topics relate to marketing strategy and the overall marketing plan. Coverage will include topics such as website traffic, customer relationship management (CRM), email marketing, podcasts, blogs, social media, online video, online advertising, online marketing research, and other strategies and tactics for customer acquisition, retention, and add-on selling.
Prerequisites: MKT 324.

MKT 465 Introduction to Retailing and Pricing Credits: 3
This course presents an approach to retail and pricing management. Topics covered in the course include: retail strategy development, understanding the customer, retail information systems, market location selection, merchandise buying and handling, financial operations management, human resource management, operations management, store layout and design, laws ethics, and retail tactics.

MKT 476 Services Marketing Credits: 3
The purpose of this course is to show how the marketing of services differs from the marketing of goods. Additionally, students will learn the relationship between service quality and customer satisfaction, how to understand and assess service expectations, and how to match those expectations with company standards.
Prerequisites: MKT 324.

MKT 480 Marketing Strategy Credits: 3
This senior-year capstone examines various activities within the overall marketing process, and introduces the development and application of an analysis framework. The use of case problems and technology, and exposure of issues related to ethics, allow the student to gain a full understanding of the relationship between marketing and management.
Prerequisites: MKT 335, MKT 348 (or concurrent enrollment).

MKT 496 Internship: Marketing Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

MKT 497 Special Topics: Marketing Credits: 1-3
Study and research in areas of special interest under individual faculty direction.
Prerequisite: senior standing.

Mathematics (MATH)

Courses

MATH 100 Intermediate Algebra Credits: 3
Numbers and their arithmetic properties, introduction to elementary algebra including exponents and radicals, elementary geometry and formulas, linear and quadratic functions and their graphs, and equations with two unknowns. Given on credit, no-credit basis. Does not fulfill Arts and Sciences mathematics requirement. Does not count toward graduation.

MATH 105 The Language of Mathematics Credits: 3
Reading comprehension and writing skills in the language of Mathematics; grammar, syntax and logic, understanding, expressing, proving; recognizing and employing common patterns of mathematical thought; emphasizing not what is said, but how it is said. Particularly useful to students returning to school after a long hiatus, the math-anxious, students with weak skills, and those interested in elementary or middle school teaching.
Prerequisites: Three units of high school mathematics.

MATH 110 College Algebra Credits: 3
Review of elementary algebra, solution of equations, functions, exponential and logarithmic functions, inequalities, systems of linear equations, equations of second degree and their graphs, binomial theorem, complex numbers, and polynomials. Credit will not be given for both MATH 110 and MATH 120.
Prerequisite: MATH 100 (C-, CR, or higher), or ALEKS assessment score of 51% or higher.

MATH 116 Mathematics For Liberal Arts Credits: 3
A survey of elementary mathematics covering such topics as: logic, sets, counting methods, introduction to probability theory, introductory statistics, plane and coordinate geometry. The course will emphasize mathematical concepts and does not require the level of computational skill of College Algebra. Topics from the history of mathematics will be presented as well as the influence of mathematics on a variety of disciplines.
Prerequisites: Three units of high school mathematics Algebra I and higher.

MATH 120 Precalculus Credits: 5
Review of elementary algebra, solution of equations, functions, inequalities, systems of linear equations, exponential and logarithmic functions, trigonometric functions, trigonometric identities, triangles, equations of second degree and their graphs, binomial theorem, complex numbers, and polynomials. Credit will be given for either MATH 110 or MATH 120, and for either MATH 120 or MATH 125.
Prerequisites: MATH 100 (C- or higher), or ALEKS assessment of 56% or higher.

MATH 125 Trigonometry Credits: 2
Trigonometric functions, trigonometric identities, triangles, and complex numbers. Credit will be given for either MATH 120 or MATH 125.
Prerequisites: MATH 110 (or two units of high school algebra and one unit of geometry).

MATH 130 Mathematics for Teachers: Number Systems Credits: 3
Designed for elementary school teachers. A constructive development of the real number system beginning with the system of whole numbers; concepts from elementary number theory; applications of quantitative systems to problems in discrete mathematics.
Prerequisites: High school algebra and geometry.

MATH 140 Mathematics for Teachers: Elementary Geometry Credits: 3
Designed for elementary school teachers. A development from informal geometric concepts to elements of the Euclidean deductive system; groups of congruence transformations, similarity transformations and symmetries; coordinate systems and vectors.
Prerequisites: High school algebra and geometry.

MATH 202 Analytic Geometry Credits: 3
Coordinate plane, lines, circles, the parabola, the ellipse, the hyperbola, transformation of coordinates, equations of the second degree, curve sketching, polar coordinates and parametric equations, complex numbers, vectors and vector operations, and solid analytic geometry.
Prerequisites: MATH 110 (or 4 units of high school math).

Co-requisites: MATH 125.

MATH 204 Mathematics for Teachers: Mathematical Immersion Credits: 3
Adaptable for elementary-, middle-, or secondary-school mathematics teachers. Intensive problem solving experience. Develop confidence and enthusiasm about recognizing mathematics reasoning in oneself and in students. Combat mathematics anxiety and myths. Encourage flexibility in the mathematical knowledge of teacher candidates.
Prerequisites: MATH 120 or MATH 130 or MATH 140 or any MATH course 200 or above.

MATH 205 Discrete Mathematics Credits: 3
Logic, sets, and functions. Algorithms, especially integer algorithms. Methods of proof, especially induction and recursion, counting principles, and discrete probability. Relations and partial ordering with applications. Graphs, circuits, and paths.
Prerequisites: MATH 110 (or 4 units of high school math).

MATH 206 Brief Calculus And Matrix Algebra Credits: 3
Brief review of selected topics in algebra. Introduction to matrix algebra. Introduction to differential calculus and optimization. Applications to problems in business.
Prerequisites: MATH 110 (C- or higher), or ALEKS assessment score of 63% or higher.

MATH 210 Calculus I Credits: 4
Functions and graphs, rational, trigonometric, exponential functions, composite and inverse functions, limits and continuity, differentiation and its applications, integration and its applications.
Prerequisites: MATH 120 (C- or higher), or both MATH 110 and MATH 125 (C- or higher), or ALEKS assessment score of 76% or higher.

MATH 214 Mathematics for Teachers: Algebra Credits: 3
Designed for middle school mathematics teachers. Algebraic reasoning, patterns and inductive reasoning, arithmetic and algebra of integers, algebraic systems, algebraic modeling in geometry, axiomatic mathematics.
Prerequisites: MATH 110, MATH 130, MATH 140 (or MATH 224).

MATH 216 Biomath I: Calculus and Modeling Credits: 4
Introductory calculus designed for students in the biological sciences or mathematic majors interested in the application of mathematics to these sciences. Biomath I provides the mathematical content of a Calculus I course in a biological context. Topics include functions, limits and continuity, trigonometric functions, exponential functions, composite and inverse functions, limits and continuity, differentiation and its applications, integration and its applications, mathematical modeling, and discrete dynamical systems. Credit will be given for either MATH 210 or MATH 216.
Prerequisites: MATH 120 (or four units of high school mathematics including trigonometry, or MATH 110 and MATH 125, or MATH 202).

MATH 220 Calculus II Credits: 4
Techniques of integration, applications of the definite integral, improper integrals, sequences and series, power series. Taylor series and convergence, analytic geometry in calculus.
Prerequisites: MATH 210 (or MATH 216).

MATH 224 Mathematics for Teachers: Geometry Credits: 3
Designed for middle school mathematics teachers to connect middle school and college mathematics. Geometric reasoning, Euclidean geometry, congruence, area and volume, similarity, rigid motions and symmetry, vectors and transformations, some other geometries. Recommended Preparation: MATH 140.
Prerequisites: MATH 110, MATH 130.

MATH 226 Biomath II: Statistics and Modeling Credits: 3
Calculus-based statistics and modeling designed for students in the biological sciences or mathematics majors interested in the application of mathematics to these sciences. Topics include introductory ordinary differential equations, continuous dynamical systems, stochastic modeling, elementary probability, random variables, binomial distributions, Poisson distributions, normal distributions, point estimation, confidence intervals, hypothesis testing, ANOVA, and regression. Credit will be given for either MATH 226 or STAT 235 (or STAT 236).
Prerequisites: MATH 210 (or MATH 216).

MATH 244 Mathematics for Teachers: Calculus Credits: 4
Designed for elementary-and middle-school mathematics teachers. Elementary calculus, beginning with sequences and series, proceeding to functions, limits, continuity, differentiation and integration. Focus on concepts and applications with a discovery and inquiry approach.
Prerequisites: MATH 120 (or four units of high school mathematics including Trigonometry, or MATH 110 and MATH 125).

MATH 250 Calculus III Credits: 4
Vectors, solid analytic geometry, vector functions and multiple variable functions, partial derivatives, multiple integrals, line and surface integrals with applications.
Prerequisites: MATH 220.

MATH 300 Linear Algebra I Credits: 3
Linear equations, matrix algebra, real vector spaces, linear transformations, determinants, eigenvalues and eigenvectors, orthogonality, and applications.
Prerequisites: MATH 250, (or MATH 220 and COMP-SCI 191).

MATH 301 On Solid Ground: Sets and Proofs Credits: 3
Transition to advanced mathematics, elements of set theory and cardinality of sets, logic, mathematical proof techniques, induction, functions, elementary proofs in various subjects such as algebra, number theory, calculus, and others as time permits. Satisfies a state requirement for teacher certification.
Prerequisites: MATH 220.

MATH 345 Ordinary Differential Equations Credits: 4
First order equations, linear second order differential equations, Taylor series and power series solutions, Laplace transforms, elementary systems of differential equations, numerical methods, and Fourier series and boundary value problems.
Prerequisites: MATH 250.

MATH 402 Advanced Analysis I Credits: 3
Numerical sequences and completeness of the real numbers, numerical series, continuity and differentiation of real-valued functions of a real variable, integration and the fundamental theorem of calculus.
Prerequisites: MATH 250, MATH 301.

MATH 406 Partial Differential Equations Credits: 3
Separation of variables, boundary value problems, Fourier series and integrals, wave equation, heat equation, potential equation, problems in several dimensions, and Bessel's differential equation.
Prerequisites: MATH 345 (or E&C-ENGR 241, or MEC-ENGR 272).

MATH 407 Introduction to Complex Variables Credits: 3
Complex numbers, complex differentiation, elementary functions, contour integration and the Cauchy integral formula, Taylor series and Laurent series, residue calculus and its applications, and special functions.
Prerequisites: MATH 250, a 300-level MATH course (or E&C-ENGR 241, or MEC-ENGR 272).

MATH 410 Modern Algebra Credits: 3
Groups, rings, integral domains, fields and polynomial rings.
Prerequisites: MATH 300, MATH 301.

MATH 412 Advanced Analysis II Credits: 3
Topics in advanced analysis such as sequences and series of functions, power series and elementary functions, Fourier series, metric spaces, analysis in Euclidean spaces, or advanced integration.
Prerequisites: MATH 402.

MATH 414 Mathematics for Secondary Teachers: Algebra and Analysis Credits: 3
Designed for secondary-school teachers. Examine high school mathematics from a higher point of view. Real and complex numbers, functions, algebraic structures of equations, integers and polynomials, number system structures; analyses of alternate approaches, extensions, and applications of mathematical ideas, discussion of historical contexts and connections between ideas that may have been studied separately in different courses, relationships of ideas studied in secondary-school to those students may encounter in later study. When taken for graduate credit as MATH 5514, an extra project is required.
Prerequisites: MATH 300, MATH 301.

MATH 420 Linear Algebra II Credits: 3
The topics of MATH 300 are expanded and presented in the context of vector spaces over a field, with rigorous justification. Vector spaces and linear transformations, determinants, eigenvalues and eigenvectors, inner product spaces and orthogonality.
Prerequisites: MATH 300, MATH 301.

MATH 424 Mathematics for Secondary Teachers: Geometry Credits: 3
Designed for secondary-school teachers. Examine high school mathematics from a higher point of view. Congruence, distance and similarity, trigonometry, area and volume, axiomatics and Euclidean geometry; analyses of alternate approaches, extensions, and applications of mathematical ideas, discussion of historical contexts and connections between ideas that may have been studied separately in different courses, relationships of ideas studied in secondary-school to those students may encounter in later study. When taken for graduate credit as MATH 5524, an extra project is required.
Prerequisites: MATH 300, MATH 301.

MATH 430 Numerical Analysis I Credits: 3
Error analysis, solutions of equations of one variable, interpolation and polynomial approximation, numerical integration and differentiation, numerical solutions of initial-value problems.
Prerequisites: MATH 250 (or E&C-ENGR 241, or MEC-ENGR 272).

MATH 440 Numerical Analysis II Credits: 3
Direct and iterative methods for solving linear systems, introduction to approximation theory, approximating eigenvalues and eigenvectors, solution of systems of nonlinear equations.
Prerequisites: MATH 300, MATH 430.

MATH 444 Modern Geometries Credits: 3
Modern axiomatic development of Euclidean geometry and neutral geometry, followed by examination of non-Euclidean geometries; geometric transformations, and other geometries as time permits. Satisfies a state requirement for teacher certification.
Prerequisites: MATH 300, MATH 301.

MATH 464WI History Of Mathematics Credits: 3
Topics in the History of Mathematics from Babylonian times through the invention and consolidation of Calculus, with some modern subjects as time permits. The course will emphasize proofs, ideas, and arguments as given in original sources (in translation) from around the world and throughout history. In this writing intensive course, one or two term papers, in addition to several short essays and historical proof explications are required. A field trip will be taken to the Linda Hall Library Rare Book Room. This course is of special interest to secondary mathematics teachers as well as mathematics majors.
Prerequisites: MATH 301, RooWriter.

MATH 469 Mathematical Modeling Credits: 3
This course introduces analytical and numerical techniques for modeling and analysis of real-world problems in areas such as economics, engineering, biology and physics. It is designed for students with basic knowledge of linear algebra and differential equations. Interdisciplinary modeling projects are the integral part of this course.
Prerequisites: MATH 300 (or COMP-SCI 393) and MATH 345 (or MEC-ENGR 272).

MATH 490 Special Topics Credits: 1-3
Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

Mechanical Engineering (MEC-ENGR)

Courses

MEC-ENGR 111 Essential Engineering Credits: 2
Introduction to the practice and history of engineering including its impact on human history, product design/ development and its relationship to the ecosystem, professionalism and ethics, the engineering approach to solving real-world problems, engineering communications and calculations, engineering teamwork and case studies.

MEC-ENGR 130 Engineering Graphics Credits: 3
Introduction to Engineering Graphics with the use of the Computer Aided Design tools AutoCAD and SolidWorks. Introduction to 2D design with AutoCAD includes: basic features, layer control, geometric constructions, othrographic projections, dimensioning and notes, tolerancing, section views, and working drawings. Introduction to 3D design with SolidWorks includes: part modeling, revolved features, sweeps, lofts, assembly modeling and engineering drawings. No previous 2D or 3D CAD experience is necessary to take this class.

MEC-ENGR 130L Engineering Graphics Lab Credits: 0
Supplemental lab instruction and assistance for MEC-ENGR 130.

MEC-ENGR 131 Engineering Graphics-3D design Credit: 1
Introduction to Engineering Graphics using the 3D Computer Aided Design tool SolidWorks. Introduction to 3D design with SolidWorks includes: part modeling,revolved features,sweeps,lofts,assembly modeling,and engineering drawings. Some previous 2D AutoCAD experience is required to take this class. NOTE: This class starts halfway through the semester by joining in with MEC-ENGR 130 when they finish AutoCAD and begin SolidWorks.
Prerequisites: 2D AutoCAD experience.

MEC-ENGR 131L Engineering Graphics 3D Design Lab Credits: 0
Supplemental lab instruction and assistance for MEC-ENGR 131

MEC-ENGR 219 Computer Programming for Engineers Credits: 3
Analysis and synthesis of structured computer algorithms for solving engineering problems using high level programming tools such as Excel, Matlab, Fortran and/or C++.
Prerequisites: MATH 210.

MEC-ENGR 220 Electric Circuits Credits: 3
Introduction to electric circuits for civil and mechanical engineering students.
Prerequisites: MEC-ENGR 219, PHYSICS 250.

Co-requisites: MATH 345 (or MEC-ENGR 272).

MEC-ENGR 270 Engineering Analysis I Credits: 4
This is an applied course with emphasis on physics and engineering applications. Topics include engineering applications using conics, parametric equations, polar coordinates, vectors, solid analytic geometry, vector valued functions, multi-variable functions, partial derivatives (including applications), multiple integration, vector calculus including Green’s Theorum, Curl and Divergence, line and surface integrals and Stoke’s Theorem.
Prerequisites: MATH 220.

MEC-ENGR 272 Engineering Analysis II Credits: 4
An applied course using differential equations in solutions to engineering problems. Topics include applications in first-order differential equations, linear higher-order equations, Laplace transform, Series solutions of linear ODEs (Taylor, Power, and Fourier), Numerical solutions, introduction to systems of differential equations.
Prerequisites: MATH 250 (or MEC-ENGR 270).

MEC-ENGR 285 Engineering Dynamics Credits: 3
Basic fundamentals of particle and rigid body dynamics; energy and momentum methods; computer use.
Prerequisites: CIV-ENGR 275.

MEC-ENGR 299 Engineering Thermodynamics Credits: 3
Fluid properties, work and heat, first law, second law, entropy, applications to vapor and ideal gas processes.
Prerequisites: MATH 220, PHYSICS 240.

MEC-ENGR 301 Fundamental Topics in Mechanical Engineering Credits: 3
Current and new technical developments in mechanical engineering.

MEC-ENGR 301E Topics In Mechanical Engineering Credits: 3

MEC-ENGR 306 Computer-Aided Engineering Credits: 3
Principles, analysis and application of numerical methods for the solution of engineering problems. Computer implementation.
Prerequisites: CIV-ENGR 319, MATH 345 (or MEC-ENGR 272).

MEC-ENGR 324 Engineering Materials Credits: 4
The nature of the structure of engineering materials. The relationship of material structure to the physical properties. Mechanical behavior of engineering materials.
Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 276, MEC-ENGR 299, Machine Shop Safety.

MEC-ENGR 351 Fluid Mechanics Credits: 3
Concepts of the statics and dynamics of fluids, with emphasis on principles of continuity, momentum and energy. Boundary layers, dimensional analysis and drag are covered briefly. Thorough treatment of pipe flow.
Prerequisites: MATH 345, MEC-ENGR 285.

Cross Listings: CIV-ENGR 351.

MEC-ENGR 352WI Instrumentation & Measurements Lab I Credits: 4
Static and dynamic errors; experiment design; instrumentation selection and calibration; measurement of voltage, resistance, amperage, duration, frequency, displacement, velocity, acceleration, strain, force and torque.
Prerequisites: CIV-ENGR 276, MATH 345 (or MEC-ENGR 272), MEC-ENGR 220, MEC-ENGR 285, Machine Shop Safety, RooWriter.

MEC-ENGR 356 Mechanical Component Design Credits: 3
Introduction to mechanical engineering design and its impact on human history, principles of design with ductile and brittle materials for static and dynamic loading, classical and reliability-based factors of safety, fracture mechanics in design, application to the design of selected machine components.
Co-requisites: MEC-ENGR 324, CIV-ENGR 351.

MEC-ENGR 360 Thermal System Design Credits: 3
Gas and vapor mixtures, cycles, availability, imperfect gases, thermodynamic relations, combustion, chemical equilibrium, power systems and design projects. Effects of design choices on the earth and living systems.
Prerequisites: MATH 250 (or MEC-ENGR 270), MEC-ENGR 299.

Co-requisites: CIV-ENGR 351.

MEC-ENGR 362 Instrumentation & Measurements Lab II Credits: 3
Continuation of 352 with emphasis on instruments to measure temperature, pressure, fluid flow, fluid velocity, sound, spectral content and emissions.
Prerequisites: MEC-ENGR 351, MEC-ENGR 352WI.

Co-requisites: MEC-ENGR 399.

MEC-ENGR 380 Manufacturing Methods Credits: 3
Introduction to manufacturing processes with emphasis on those aspects most relevant to methods, problems in force analysis, and practicum and experimentation in machine tool applications.
Prerequisites: MEC-ENGR 324.

MEC-ENGR 385 System Dynamics Credits: 3
Kinematics of mechanical systems. Introduction to the modeling and analysis of dynamic mechanical systems. Computer analysis.
Prerequisites: MATH 345 (or MEC-ENGR 272), MEC-ENGR 285.

MEC-ENGR 390 Engineering Coop/Internship Credits: 0
Students may participate in structured Engineering Coop/ Internship under the supervision of employer. They must carry out significant professional responsibilities and whatever additional assignments are determined by the employer.
Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

MEC-ENGR 399 Heat and Mass Transfer Credits: 3
Fundamentals of conduction, convection, and radiation heat transfer. Use of nondimensional parameters. Theory of heat exchangers. Mass transfer.
Prerequisites: CIV-ENGR 351, MATH 345 (or MEC-ENGR 272), MEC-ENGR 360.

Co-requisites: MEC-ENGR 306.

MEC-ENGR 400 Problems Credits: 1-6
Special design, experimental and analytical problems in mechanical engineering.

MEC-ENGR 400CB Problems Credits: 1-6
Special design, experimental and analytical problems in mechanical engineering.

MEC-ENGR 400DQ Problems Credits: 1-6
Special design, experimental and analytical problems in mechanical engineering.

MEC-ENGR 400EA Problems Credits: 1-6
Special design, experimental and analytical problems in mechanical engineering.

MEC-ENGR 401BI Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401BN Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401FA Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401FE Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 401GS Topics in Mechanical Engineering Credits: 1-3
Topics in Mechanical Engineering

MEC-ENGR 401ID Topics in Mechanical Engineering Credits: 1-3
Current and new technical developments in mechanical engineering.

MEC-ENGR 401M Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401MB Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 401MS Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 401NE Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 401OE Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401P Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401R Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401RE Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401SA Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401SB Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 401SD Topice in Mechanical Engineering Credits: 0

MEC-ENGR 401T Topics in Mechanical Engineering Credits: 1-3
Topics in Mechanical Engineering

MEC-ENGR 401TS Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 401V Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 401X Topics in Mechanical Engineering Credits: 1-3
Current and new technical developments in mechanical engineering.

MEC-ENGR 409 Fundamentals of Engineering Review Credit: 1
This course consists of a series of lectures given by different professors and is intended as a review class for all the subjects included in the Fundamentals of Engineering exam. Classes specifically focus on the review of equations and formulas included in the reference handbook published by NCEES.

MEC-ENGR 411 Introduction to Biomechanics Credits: 3
This course is to provide students with an introduction to the engineering principles of biomechanics. Following a general introduction to anatomical terminology, students will be exposed to three primary sub-disciplines of biomechanics including kinetics and kinematics of human movement, muscle mechanics, and biomaterials. Students will become familiar with measurement techniques and current research being done within each of these units through lectures and in-class discussions and presentations of relevant journal articles. A final semester project, culminating in a NIH-style research proposal, will be developed throughout the semester in one of the three units presented.

MEC-ENGR 412 Biodynamics Credits: 3
Introduction to musculoskeletal biomechanics including: computational biomechanics, movement simulation, motor control and musculoskeletal tissues.
Prerequisites: MEC-ENGR 411.

MEC-ENGR 413 Bioinstrumentation of Human Motion Credits: 3
The purpose of this course is to provide an opportunity for students to gain a hands-on, in-depth understanding of the kinematic, and electromyographic measurement and analysis techniques used to quantify biomechanics of human motion. Students will also be introduced to neurological measurement techniques used to quantify brain activity related to the biomechanical components of human motion. To prepare for these topics, a review of data sampling and signal procession theory will be provided.
Prerequisites: MEC-ENGR 411.

MEC-ENGR 414 Material Science for Advanced Applications Credits: 3
Study of the physical and mechanical metallurgy of alloy systems of interest in engineering applications.
Prerequisites: MEC-ENGR 324.

MEC-ENGR 415 Feedback Control Systems Credits: 3
Introduction to feedback control theory for linear dynamic systems. Topics include root locus analysis, frequency response analysis, and controller design.
Prerequisites: MEC-ENGR 385.

MEC-ENGR 417 Survey of Biomedical Engineering Credits: 3
This course will provide students with an overview of the field of Biomedical Engineering. There will be a focus on issues in Injury Mechanics, Regenerative Medicine, and Tissue Engineering. Elements of anatomy (of select organs), physiology, cell and molecular biology, system modeling, biomechanics, biomaterials, tissue engineering, and medical ethics will be covered through independent projects, case studies, and classroom discussion.
Prerequisites: MEC-ENGR 324.

MEC-ENGR 420 Human Powered Vehicle Design Lab Credits: 3
Introduction to the science of human powered vehicles (HPV) providing the background necessary for the design of such vehicles. Students will learn and utilize engineering design practices and apply them toward the creation of an aerodynamic, highly engineered land based HPV.

MEC-ENGR 424 Non-Metallic Engineering Materials Credits: 3
Structures, properties and applications of ceramics, glasses, cermets, polymers and composite materials.
Prerequisites: MEC-ENGR 324.

MEC-ENGR 425 Failure Analysis Credits: 3
Organize and perform a failure investigation. In addition, the course will cover the general procedures for a failure investigation and various failure mechanisms such as ductile fracture, brittle fracture, fatigue, wear, corrosion and elevated temperature.
Prerequisites: MEC-ENGR 324, MEC-ENGR 380.

Cross Listings: MEC-ENGR 5525.

MEC-ENGR 426 Introduction to Manufacturing Management Credits: 3
The objective of this course is to expose the student to various manufacturing management tools and techniques. Focus is on both the technical tools used in manufacturing as well as on the management tools needed to implement change in the manufacturing environment. As part of this course, students will research a successful company and present an analysis of manufacturing tools and techniques used.
Cross Listings: MEC-ENGR 5526.

MEC-ENGR 431 Experimental Methods in Fluid Flow & Heat Transfer Credits: 3
Laboratory experiments involving fundamental mechanisms and phenomena associated with fluid flow and heat transfer. Current experimental methods and techniques employed.
Prerequisites: MEC-ENGR 362, MEC-ENGR 399.

MEC-ENGR 440 Heating and Air Conditioning Credits: 3
General principles of thermodynamics, heat transfer, and fluid dynamics are used to calculate building loads, size equipment and ducts, and evaluate system performance in maximizing human comfort. Consideration of indoor air quality and human health.
Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 441 Intermediate Fluid Mechanics Credits: 3
Topics in potential and viscous flow theory, and computational fluid dynamics.
Prerequisites: MEC-ENGR 351.

MEC-ENGR 444 Composite Materials Credits: 3
A survey of composite materials used in engineering, emphasizing fiber-reinforced composites as well as laminate and particulate composites.
Prerequisites: MEC-ENGR 324.

MEC-ENGR 447 Contracts and Law For Engineers Credits: 3
Law of contracts, including types, construction, interpretation, performance, and termination. Construction and Engineering service contracts: Proposals, general and financial conditions, specifications and drawings. Corporate and professional and personal liability, insurance and bonds, property, evidence, arbitration and mediation.

MEC-ENGR 449 Environmental Compliance, Auditing & Permitting Credits: 3
Statutes, regulations and permitting for air hazardous wastes and storage tanks. Asbestos, radon, EMF, and emerging areas of regulatory concern. Siting issues. Criminal and civil enforcement.
Prerequisites: Junior standing.

Cross Listings: CIV-ENGR 449.

MEC-ENGR 451 Power Plant Design Credits: 3
Preliminary component and system design. Optimum design of boilers, steam turbines, condensers and cooling towers and their integration into a system to minimize production costs and impact on the environment.
Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 452 Advanced Mechanics of Materials Credits: 3
Analysis of more complicated problems in stresses and strains.
Prerequisites: CIV-ENGR 276.

MEC-ENGR 453 Experimental Stress Analysis Credits: 3
Photoelastic, electric strain gage, brittle lacquer methods of experimental stress analysis for static loads. Strain gage work includes strain rosettes.
Prerequisites: CIV-ENGR 276.

MEC-ENGR 454 Power Generation Systems Credits: 3
Fundamentals of the power industry in a format suitable for all engineering disciplines. Survey of electric power systems, including fossil and nuclear steam cycles, combustion turbines, combines cycles, and renewable such as solar and wind. Introduction to major machinery components, systems, controls, and an overview of fuels, emissions, and emission control technologies.

MEC-ENGR 455 Digital Control of Mechanical Systems Credits: 3
Introduction to digital control systems. Topics include Z-transforms, sampling, stability analysis, and digital controller design.
Prerequisites: MATH 345, MEC-ENGR 415.

MEC-ENGR 456WI Mechanical Component Design Credits: 3
Introduction to mechanical engineering design and its impact on human history, principles of design with ductile and brittle materials for static and dynamic loading, classical and reliability-based factors of safety, fracture mechanics in design, application to the design of selected machine components.
Prerequisites: MEC-ENGR 130, MEC-ENGR 380, MEC-ENGR 385, MEC-ENGR 399, RooWriter.

MEC-ENGR 457 Mechatronic System Design Credits: 3
Theory and application of mechatronic systems through course instruction, laboratory activities, and student projects.
Prerequisites: MEC-ENGR 352 and MEC-ENGR 415.

Cross Listings: MEC-ENGR 5557

MEC-ENGR 458 Modern Control Systems Credits: 3
Controller design for multiple-input/multiple-output systems; controllability and observability; stochastic control problems; regulators and tracking controllers; observers.
Prerequisites: MEC-ENGR 415.

MEC-ENGR 460 Electromechanical Conversion Credits: 3
Basic principles of energy conversion; magnetic circuitry in general and in machinery; DC machine theory, transformer operation and circuit application; synchronous machine theory electric system operation; introduction to power electronic principles and practices.
Prerequisites: MEC-ENGR 220.

Cross Listings: MEC-ENGR 5560.

MEC-ENGR 461 Electromechanical Conversion II Credits: 3
Application of fundamental and concepts of power systems to practical power plant and industrial applications. Identification of the significant internal components of power system equipment: Single and Three Phase Circuits, DC and AC Generators/Alternators,Transformers,DC and AC Motors,Dc and AC Transmission,and System Electrical Protection.
Prerequisites: MEC-ENGR 460.

MEC-ENGR 466 Applied Optimization and Decision Modeling Credits: 3
Introduction to mathematical programming techniques and applications. Linear and integer programming, transporation models, multiple objective and goal programming.
Prerequisites: MEC-ENGR 306.

MEC-ENGR 467 Fuel Cells and Renewable Energy Systems Credits: 3
This course will provide an overview of the fundamental phenomena that govern the design and operation of fuel cells. The thermodynamics of fuel cell systems will be explored including operation of ideal fuel cells and the physical and chemical phenomena that lead to losses within the fuel cell. The course will provide the methods and techniques required to analyze the performance of low, medium, and high temperature fuel cells within an overall energy system. The fueling of fuel cells from renewable resources will also be discussed.
Prerequisites: MEC-ENGR 399.

Cross Listings: MEC-ENGR 5567.

MEC-ENGR 468 Introduction to Nuclear Engineering Credits: 3
This course provides an overview of nuclear engineering for non- nuclear engineers. The course deals primarily with nuclear reactors including topics dealing with nuclear and reactor physics, reactor kinetics and controls and radiation environment. The general reactor types are covered in some detail with other topics dealing with licensing, waste management, quality assurance, balance of plant systems (turbine island), and significant nuclear accidents are also covered. Recent design innovations including small modular reactors and fusion are discussed.
Prerequisites: MEC-ENGR 399.

Cross Listings: MEC-ENGR 5568.

MEC-ENGR 470 Experimental Design & Analysis Credits: 3
Presentation of concepts and methods of statistical analysis and the design of experiments. Concepts, techniques, interpretation, and use of results are stressed. Focus is on experimental strategy and objectives, and the application of the methods discussed, rather than the mechanics of derivation. Major sections include: a review of hypothesis testing and basic analysis of variance techniques; single factor experiments including 2k and 3k design, confounding, and Taguchi philosophy; nested and split plot designs; analysis of covariance and an introduction to response surface methods.
Cross Listings: MEC-ENGR 5570.

MEC-ENGR 476 Machine Tool Design Credits: 3
Methodology of machine tool design. Dynamic modeling, analysis, synthesis, and simulation of machine tools to meet functional requirements and design constraints.
Prerequisites: MEC-ENGR 285, MEC-ENGR 306.

MEC-ENGR 484 Vibration Analysis Credits: 3
Vibration theory with application to mechanical systems.
Prerequisites: MEC-ENGR 385.

MEC-ENGR 486 Applied Finite Element Analysis Credits: 3
The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.
Prerequisites: MEC-ENGR 306, MEC-ENGR 324, MEC-ENGR 385, MEC-ENGR 399.

MEC-ENGR 491 Internship Credits: 6
For International students who must register to cover off-campus employment which is approved as related to their degree by their departmental advisor and ISAO.

MEC-ENGR 495 Vehicle Dynamics Credits: 3
Analysis and prediction of the dynamic behavior of ground vehicles utilizing computer simulation. Mechanics of various suspension systems, tire-roadway interaction, vehicle aerodynamics, vehicle handling and steering characteristics. Special topics including non-holonomic constraint formulation and stability of motion.
Prerequisites: MEC-ENGR 385.

MEC-ENGR 496WI Mechanical Design Synthesis Credits: 4
Modern design theories and methodologies, with emphasis on the initial stages of the design process. Effect of design choices on the earth and living systems. Principles of embodiment design and life-cycle considerations. A comprehensive group design project is required. The course satisfies the Writing Intensive requirement.
Prerequisites: MEC-ENGR 456WI, RooWriter.

MEC-ENGR 499 Intermediate Heat Transfer Credits: 3
Advanced topics in conduction, convection and radiation heat transfer including transient heat transfer, phase change and heat exchangers.
Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

Military Sciences (MIL-SCI)

Courses

MIL-SCI 102 Leadership Practicum Credits: 2
Examines leadership in basic tactical and patrolling operations, Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students practice leadership according to 16 principles and learn basic soldier skills.
Co-requisites: MIL-SCI 116.

MIL-SCI 112 Leadership Practicum Credits: 2
Examines advanced squad and platoon tactical operations with emphasis on patrolling operations. Topics include: leadership techniques, basic first aid, and problem-solving exercises. A tactical field application exercise and physical fitness conditioning program are included as course requirements. Students perform duties as leaders of small units.
Co-requisites: MIL-SCI 126.

MIL-SCI 116 Foundations of Officership Credit: 1
The course introduces the student to issues and competencies that are central to a commissioned officer's responsibilities. These initial lessons establish a framework for understanding officership, leadership, and Army values. Additionally, the semester addresses life skills, including physical fitness and time management. This course is designed to give the student an accurate insight into the Army profession and the officer's role in the Army.
Co-requisites: MIL-SCI 102.

MIL-SCI 126 Basic Leadership Credit: 1
This course focuses on leadership theory and decision making. "Life skills" lessons in this course include: problem solving, critical thinking, leadership theory, followership, group interaction, goal setting, and feedback mechanisms. Upon completion of this course, students are prepared to advance to more complex leadership instruction concerning the dynamics of organization. Additionally, students will be increasingly required to demonstrate knowledge of leadership fundamentals and communications (written and oral).
Co-requisites: MIL-SCI 112.

MIL-SCI 202 Leadership Practicum Credits: 2
Course examines squad and platoon offensive and defensive operations and leadership procedures in patrolling operations. Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students will perform various leadership roles and present classroom instruction.
Corequisite: MIL-SCI 216

MIL-SCI 205 Reserve Officer Training Corps Credits: 3
Five weeks of preparatory training at Fort Knox, Kentucky. Travel pay and salary stipend provided through Military Science Department. The student is not obligated to any military service as a result of attending Basic Camp. Camp graduates are eligible to enroll in advanced military science courses and may be considered for a commission as a second lieutenant in the U. S. Army, Army Reserves or National Guard. Students are also eligible to compete for a full-tuition two-year scholarships. All College of Arts and Sciences students who complete this course can receive Physical Education credit.

MIL-SCI 212 Leadership Practicum Credits: 2
Examines advanced squad and platoon offensive and defensive operations, reaction to obstacles, and leadership procedures in patrolling operations. Includes a tactical application exercise and participation in physical fitness conditioning as a course requirement. Students will perform in various leadership roles and present classroom instruction.
Co-requisites: MIL-SCI 226.

MIL-SCI 216 Individual Leadership Series Credits: 2
This course is designed to develop within the student a knowledge of self, self-confidence and individual skills, Through experiential learning activities, students will develop problem-solving and critical-thinking skills, apply communication, feedback and conflict-resolution skills. This course delves into several aspects of communication and leadership theory. The focus of the course is on critical life skills which enable the students future success. The course concludes with a major leadership and problem-solving case study which draws upon previous instruction.
Prerequisites: MIL-SCI 126.

Co-requisites: MIL-SCI 202.

MIL-SCI 226 Leadership and Teamwork Credits: 2
This course focuses on self-development guided by knowledge of self and group processes. Experiential learning activities are designed to challenge students current beliefs, knowledge and skills. This semester takes the approach of placing students in a wide variety of group exercises designed to emphasize various leadership competencies and insights. The instructor, acting as a facilitator, helps guide student processing of the events to derive the leadership, group dynamics and problem-solving lessons that the exercises offer. Practical life skills are emphasized throughout.
Prerequisites: MIL-SCI 216.

Co-requisites: MIL-SCI 212.

MIL-SCI 302 Leadership Practicum Credits: 2
Examines squad and platoon offensive and defensive operations, the patrol leader in patrolling operations, and a tactical application exercise. Participation in physical fitness conditioning and a tactical application exercise is required. Students will perform in various leadership roles and present classroom instruction.
Prerequisites: MIL-SCI 226.

Co-requisites: MIL-SCI 316.

MIL-SCI 312 Leadership Practicum Credits: 2
Familiarization with military firearms; includes assembly and disassembly; tactical communications; and the field artillery request and a tactical application exercise. Participation in physical fitness conditioning and a tactical application exercise is required. Students will perform in various leadership roles and present classroom instruction.
Prerequisites: MIL-SCI 316.

Co-requisites: MIL-SCI 326.

MIL-SCI 316 Leadership and Problem Solving Credits: 3
Following an introduction to the principles of physical fitness and healthy lifestyles, lessons will cover: the Leader Development Program, planning and conducting individual and small unit training, basic tactical principles, reasoning skills and the military-specific application of these skills in the form of the Army's troop-leading procedures. The course concludes with a detailed examination of officership, which culminates in a five-hour officership case study.
Prerequisites: MIL-SCI 226.

Co-requisites: MIL-SCI 302.

MIL-SCI 326 Leadership and Ethics Credits: 3
Continues the focus from MIL-SCI 316 on doctrinal leadership and tactical operations at the small unit level. Instructional modules include: Army branches, Army leadership, philosophy, dynamics of a group environment, oral and written presentation skills, culminating in instruction in national and Army values and ethics. This critical semester synthesizes the carious components of training, leadership and team building.
Prerequisites: MIL-SCI 316.

Co-requisites: MIL-SCI 312.

MIL-SCI 397 US Military History Credits: 3
This course examines the beginnings of human military history from pre-colonial through the birth of America and into the post-Cold War era. The course focuses on the origins of tactics and techniques and emphasizes the military as an aspect of American society and its role in political, social, economic, and international environments.

MIL-SCI 402 Leadership Practicum Credits: 2
Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management. Participation in physical fitness conditioning and tactical application exercise is required. Students will perform in various leadership positions and present classroom instruction.
Co-requisites: MIL-SCI 416.

MIL-SCI 412 Leadership Practicum Credits: 2
Practical applications in problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management, includes a tactical application exercise. Participation in physical fitness conditioning is required. Students will perform various leadership roles and conduct classroom instruction.
Prerequisites: MIL-SCI 416.

Co-requisites: MIL-SCI 426.

MIL-SCI 416 Leadership And Management Credits: 3
A series of lessons designed to enable students to make informed career decisions as they prepare for commissioning and service as Second Lieutenants. Classes concentrate on Army operations and training management, and communications and leadership skills, which support the final transition from cadet/student to Lieutenant/leader. Subjects include: The Army Training Management System, coordinating activities with staffs, and counseling skills. At the end of this semester, students should possess the fundamental skills, attributes and abilities to operate as a competent leader in the cadet battalion.
Prerequisites: MIL-SCI 326.

Co-requisites: MIL-SCI 402.

MIL-SCI 426 Officership Credits: 3
A series of lessons that provide a review of the ethical dimensions of leadership, law in leadership, organizing for military operations to include historical case studies, personnel, supply and maintenance administration and management, personal financial planning and entering the service, The semester concludes with a 12-lesson experiential exercise simulating assignment as a new Lieutenant in a unit.
Prerequisites: MIL-SCI 416.

Co-requisites: MIL-SCI 412.

MIL-SCI 497 Leadership And Management Practicum - Directed Study Credits: 1-3
Practical application in military problem analysis, decision making, planning and organization, delegation and control, and development of interpersonal skills required for effective management.

Natural Sciences (NAT-SCI)

Courses

NAT-SCI 101P Changing Life On Earth Credits: 4
This course presents an overview of issues relating to our ever changing world. It is research oriented with papers required on topics dealing with behavior, environmental issues, and aspects of evolution.
Co-requisites: NAT-SCI 102P.

NAT-SCI 102P Fundamentals Of Life Science Credits: 4
This course emphasizes the essential properties of biological systems through four major themes: diversity, the chemical and physical basis of life, continuity, and the organismal nature of life.
Co-requisites: NAT-SCI 103P.

NAT-SCI 103P Applications Of Life Sciences Credits: 4
This course is designed to provide students with laboratory exercises, field trips, films and discussions that help apply biological principles from 102P. New concepts are introduced throughout the course.
Co-requisites: NAT-SCI 102P.

NAT-SCI 130 Physics of Sports Credits: 3
A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.
Cross Listings: PHYSICS 130, PHY-SCI 130.

NAT-SCI 140 How Things Work Credits: 3
A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.
Co-requisites: NAT-SCI 140L.

Cross Listings: PHYSICS 140, PHY-SCI 140.

NAT-SCI 140L How Things Work Laboratory Credit: 1
Simple experiments based on everyday experiences are analyzed in terms of conceptual physics. The material includes elements of mechanics of a rigid body, elastic properties of matter, fluid dynamics, thermodynamics, electromagnetism, optics and modern physics.
Co-requisites: NAT-SCI 140.

Cross Listings: PHYSICS 140L and PHY-SCI 140L.

NAT-SCI 150 Introduction to Astronomy: Gravity and Motion in the Universe Credits: 3
A survey of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion underpinning the structure and evolution of the universe. Topics include lunar phases, eclipses, planetary motion, exoplanets, formation of planetary systems, star formation, supernovae, white dwarfs, neutron stars, black holes, growth of galaxies, dark matter and the expansion of the universe.
Cross Listings: ASTR 150, PHYSICS 150, PHY-SCI 150.

NAT-SCI 153L Introductory Astronomy Laboratory Credits: 2
An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors. Concurrent enrollment in either NAT-SCI 150 or NAT-SCI 155 is encouraged but not required.
Cross Listings: PHY-SCI 153L and PHYSICS 153L.

NAT-SCI 155 Introducion to Astronomy: Interaction of Light and Matter in the Universe Credits: 3
A survey of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter underpinning energetic phenomena in the universe. Topics include telescopes and detectors, solar system exploration, planetary climates, nuclear fusion and chemical enrichment, stars and stellar evolution, interstellar material, pulsars, quasars, gamma ray bursts, the Big Bang and the possibility of life beyond Earth.
Cross Listings: ASTR 155, PHYSICS 155, PHY-SCI 155.

NAT-SCI 171 Physics For Future Presidents Credits: 3
A course intended for liberal arts students focusing on the physics they need to be informed citizens in a democracy. Energy, global warming, terrorism, and health are examples of the important topics examined from the perspective of how science should inform policy.
Cross Listings: PHYSICS 171, PHY-SCI 171.

NAT-SCI 375P Nature Of Science Credits: 4
Selected topics from the natural sciences. Provides students fundamental principles and concepts of various physical and mathematical sciences. Lectures, demonstrations and discussions provide an integrated approach to the natural sciences.

NAT-SCI 425P Introduction To Quantitative Methods Credits: 3
Topics addressed are the scientific approach to study of behavior (goals of science, research terminology, variables, distributions, measures of central tendency, confidence intervals, use of research methods and ethics in research), experimental design (validity, reliability, design and sampling techniques), and interpretation of research results. Course includes in-class computer data entry and analysis.
Prerequisites: COMP-SCI 101 and MATH 110 or MATH 116

NAT-SCI 430PC CC: Biological And Ethical Issues In Aging Credits: 3
This course is designed to provide both a disciplinary and interdisciplinary study of the biological, philosophical, and ethical foundations and principles underlying the phenomenon of aging on an individual and societal level. Various physiological, neurological, anatomical, and psychological processes and changes characteristic of the development occurring during the aging process will be identified, studied, and discussed. The philosophical and specifically ethical issues associated traditionally with aging will be re-examined and analyzed in terms of scientific, technological, cultural, sociological, economic, and legal changes in knowledge and attitudes.
Prerequisites: BIOLOGY 102 (or equivalent).

Cross Listings: PHILOS 401PC.

Nursing (NURSE)

Courses

NURSE 101 Introduction to Nursing Credits: 2
This introductory two-hour course is designed to facilitate role socialization into professional nursing. Beginning with a brief historical overview of professional nursing, nursing is defined and the philosophical and practice standards of the profession are discussed. The student explores nursing's image and power bases in relationship to professional accountabilities and roles. The value and tenets of evidence- based care are emphasized and integrated with use of nursing process in professional, reflective decision-making. A review of educational paths in professional nursing leads the student into a comprehensive survey of the multiple roles, responsibilities, and requisite skills of the professional nurse today and in the future.

NURSE 120 Anatomy & Physiology I Credits: 4
This course examines the structure and function of the human body from the molecular to the organismal level as they interact among all body systems across the life span. Instructors also attempt to correlate course materials with the clinical aspects of the application of physiological knowledge. Co-requisite laboratory exercises provide practical application of theoretical concepts. In this first term of two-term course, molecular biology, biochemistry, cellular biology, and histology are studied as well as the integumentary, musculoskeletal, and nervous systems.

NURSE 125 Medical Terminology Credit: 1
This course is designed to provide the student with a foundation in medical terminology and the components of health records. Course content will include how medical terms are formed; how medical terms are applied to organs, body systems and pathological conditions; how common medical abbreviations are used; and how health records are organized and compiled.

NURSE 127 Drug Calculations Credit: 1
The drug calculation course is designed to introduce the student to methods of drug dosage calculation needed for medication administration in the health care setting. This course will review basic mathematical concepts, introduce medication specific terminology, discuss interpretation of medication orders, identify key elements of the medication label and enable the student to calculate appropriate and accurate drug dosages.

NURSE 132A Introduction To Holistic Health Care: Medicinal Plants and Herbs Credit: 1
This course provides a hands-on introduction to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will cover medicinal plants and herbs and related topics.

NURSE 132B Introduction To Holistic Health Care: Energy Medicine Credit: 1
This course provides a hands-on introduction to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Energy Medicine and related topics.

NURSE 132C Introduction To Holistic Health Care: Relaxation Techniques Credit: 1
This course provides a hands-on introduction to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Relaxation Techniques and related topics.

NURSE 132D Introduction to Holistic Health Care: Chinese Medicine and Hypnosis Credit: 1
This course provides a hands-on introduction to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Chinese Medicine, Hypnosis and other related topics.

NURSE 134A Intro to the History of Healthcare-Trends/Issues Impacting Healthcare & Healthcare Professions Credit: 1
This course is designed to introduce the rich and unique development of some of the major American healthcare fields as disciplines, professions, arts, and sciences from a historical perspective. Past healthcare trends, the societal importance of helping, and the history of nursing education will be identified and discussed. The social, philosophical, cultural, and political forces which have impacted the course of these topics will be examined from ancient to modern times.

NURSE 134B Intro to Hist of Healthcare-Trends/Issues in Public Health, Medicine, and Physical Therapy Credit: 1
This course is designed to introduce the rich and unique development of the major American healthcare fields as disciplines, professions, arts, and sciences from a historical perspective. Trends and issues in public heath, medicine, and physical therapy will be identified and discussed. The social, philosophical, cultural, and political forces which have impacted the course of these topics will be examined from ancient to modern times.

NURSE 134C Intro to the Hist of Healthcare-Trends/Issues in Nursing, Dentistry, and Pharmacy Organizations Credit: 1
This course is designed to introduce the rich and unique development of the major American healthcare fields as disciplines, professions, arts, and sciences from a historical perspective. Past trends and issues in nursing, dentistry, and pharmacy organizations will be identified and discussed. The social, philosophical, and political forces which have impacted the course of these topics will be examined from ancient to modern times.

NURSE 134D Intro to Hist of Healthcare-Past Trends/Issues Soc Wrk, Future Pub Hlth, and Hist Effcts Cult Div Credit: 1
This course is designed to give an introductory examination of the rich and unique development of the major American healthcare field as disciplines, professions, arts, and sciences from a historical perspective. Past trends and issues in social work, the future of public health, and the historical effects of cultural diversity will be identified and discussed. The social, philosophical, cultural, and political forces which have impacted the course of these topics will be examined from ancient to modern times.

NURSE 160 Anatomy and Physiology II Credits: 4
This course is a continuation of NURSE 120. Co-requisite laboratory exercises provide practical application of theoretical concepts. Physiologic systems including endocrine, cardiovascular, immune, respiratory, digestive, renal, and reproductive are studied as well as embryology and genetics.
Prerequisites: NURSE 120 (or HLSC 120).

NURSE 220 Fundamental Concepts & Skills Credits: 6
This course focuses on fundamental concepts, skills, and techniques that provide a foundation for clinical practice. The beginning student will identify factors that may influence the human system and applies the nursing process in health care setting using basic nursing interventions. This six credit hour course consists of four credit hours of didactic/discussion and two hours of clinical laboratory/lab.
Prerequisites: Acceptance into Clinical Nursing Program.

NURSE 230 Health In Aging Credits: 2
This course focuses on the role of the nurse in promoting and maintaining the health of the older adult population. Evidence based nursing care of the older adult that includes physiological, psychological, pharmacological, and nutritional considerations as affected by theories on aging, socio-cultural influences, legal and ethical issues, and health care resources are explored. Nursing assessment, diagnoses, interventions, and outcomes specific to a diverse older adult population are discussed. Opportunities are provided for interaction with the older adult population.
Prerequisites: Admission into BSN program.

NURSE 250 Health Assessment for Nursing Practice Credits: 3
This course is designed to provide a systematic approach to the physiological, psychological sociocultural, and developmental assessment of individuals emphasizing findings considered to be within normal limits. The health history is emphasized as a tool for assessing mental and physical status. This course is designed for the pre-licensure student. This course consists of three hours of supervised practice per week.
Prerequisites: Admission into BSN program.

NURSE 252 Human Growth and Development Credits: 3
This course provides a basic introduction to the theory for human growth and development across the lifespan. Emphasis is placed upon the biological and the psychosocial aspects of growth and development. Content is organized in a modified chronological order dividing information into major stages of growth and development across the lifespan.

NURSE 256 Pharmacology Credits: 3
This is a course in pharmacology that builds on prior knowledge of anatomy, physiology, chemistry, microbiology and pathophysiology. The major focus of the course is the basic and clinical concepts of pharmacology in evidence-based care. This course covers drug knowledge in the areas of pharmacotherapeutics, pharmacodynamics, pharmacokinetics, adverse reactions and contraindications, therapeutics indications and nursing implications.
Prerequisites: NURSE 127, NURSE 220, NURSE 230, NURSE 250, NURSE 395.

NURSE 262 Management of Adult Health I Credits: 5
This medical-surgical course focuses on utilization of the nursing process to the specific illnesses of the adult client in the the acute care setting. High volume disease processes with associated nursing care are emphasized. The effects on the individual as a holistic system are explored. Skills are developed in caring for persons with biological, psychological and social system alterations to facilitate optimal client outcomes. This five credit hours course consists of three hours of didactic/discussion and two hours clinical/ lab (120 hours).
Prerequisites: NURSE 120, NURSE 220, NURSE 230, NURSE 250, NURSE 395.

Co-requisites: NURSE 256.

NURSE 326 Applied Physiology Credits: 3
In this course, clinical applications to physiologic concepts are highlighted and emphasized among all body systems across the life span. Discussion will include anatomical landmarks critical to health assessment and clinical manifestations related to physiological processes. The lab will further demonstrate these concepts through dissection, laboratory experiments, and case studies.
Prerequisites: Anatomy Physiology 100 or 200 level course, or admission in the RN-BSN program, or with faculty permission

NURSE 342 Legal & Ethical Issues Credits: 2
This course is designed to investigate medical-legal issues and explore the implications that legal intervention and interpretation as well as litigation have on the scope of nursing practice and the delivery of patient care. Ethical standards of nursing practice and diverse individual and group values are explored, and various ethical systems, concepts and principles used in ethical decision making are introduced.
Prerequisites: Admission to the Nursing Major or BSN Completion Program.

NURSE 345 Quantitative Analysis In The Health Sciences Credits: 3
This course focuses upon the skills required for the utilization of scientific findings in evidence-based care. The conceptual basis of descriptive and the inferential statistics found in the properties of the normal distribution, comprise the core of these skills. Using the normal distribution as a structure for understanding descriptive and inferential procedures, the course presents information necessary to the selection, computation and interpretation of basic statistics relevant to evidence based-care in the health sciences. Discussions of variables, measurement and tabular and graphic presentation of data precede the development of computation skills.

NURSE 346 Contemporary Women’s Health Issues Credits: 2-3
This two credit hour elective course (three credit hours with instructor consent) will introduce students to the social and personal health concerns of women. The web-based course will examine health issues which women encounter across the lifespan. Each issue will be examined from a traditional and a woman-centered perspective. Emphasis will be placed on caring for women within a holistic framework and recognizing how ethnocultural background, socioeconomic status, age, gender, and gender roles can affect their lives and their health status. Students will integrate biopsychosocial concepts of wellness, health risk identification, and health promotion.
Prerequisites: Sophomore standing or higher.

NURSE 356 Spanish for Health Care Pre-Professionals Credits: 3
This course focuses on conversational Spanish, medical terminology in Spanish and written/read Spanish. This course will provide the student with basic knowledge that will allow basic communication with clients who speak/read/write Spanish. This is a fast-paced course and will require practice of the language outside of the classroom in order to master the material presented.
Prerequisites: SPANISH 110.

NURSE 359 Introduction to International Health Care Credits: 1-3
This course is designed to introduce students to the health care issues found in other countries with a focus on low-and middle-income countries. Students will study philosophical, system and cultural aspects of health care and will be expected to compare health care in the United States with other nations. Core concepts include-globalization; health care reform; organization and management of health systems; community, public and primary health care; humanitarian assistance and refugee health; international nutrition; vaccine development and policy; disease prevention and control; and social and behavioral interventions.

NURSE 360 Management of Mental Health Credits: 4
This course is designed to introduce the student to psychiatric mental health nursing through the study of sound psychiatric nursing theory. This course will focus on the nursing process framework, and the establishment and maintenance of a therapeutic nurse-client relationship. Emphasis is placed on assessment, therapeutic communication, neurobiological theory, and pharmacology. Nursing interventions will focus on all aspects of client care, communication, client/family teaching, and community resources and their practical application in a variety of clinical settings. Content will be arranged around the major categories identified in the DSM-V-TR, e.g. grief and loss, anger and aggression, abuse and violence.
Prerequisites: NURSE 342, NURSE 366.

NURSE 362 Management of Adult Health II Credits: 5
This medical-surgical course focuses on application of the nursing process to the delivery and the management of adult clients across the care continum. This course builds on Adult Health I content to include high risk disease processes with associated nursing care. Emphasis is placed on the interaction between the client, family, nursing and the environment to result in optimal client outcomes. This five hour credit course consists of three hours of didactic/ discussion and two hours of clinical lab.
Prerequisites: NURSE 342, NURSE 364, NURSE 366.

NURSE 364 Management of Maternal & Family Health Credits: 4
This course focuses on the application of the nursing process in the adaption of the childbearing family. Emphasis is placed on adaption during pregnancy, labor, birth and postpartum period. Key concepts to be addressed include maternal, fetal, neonatal and family adaption throughtout the maternity cycle, common alterations during the cycle and culturally sensitive, family-centered nursing care. Maternal, fetal and neonatal physiology, pathophysiology and pharmacology will be addressed. Two credit hours didactic and two credit hours for clinical practice (120 clinical hours) are required.
Prerequisites: NURSE 256, NURSE 262.

NURSE 366 Management of Child & Adolescent Health Credits: 4
This course focuses on the application of the nursing process in the care of the pediatric client. Emphasis is placed on providing development appropriate care to healthy, acutely ill and chronically ill pediatric clients holistically within the context of a family system. Key concepts to be explored include age appropriate anatomy, physiology, pathophysiology, and pharmacology and their application to the nursing strategies of health assessment, health promotion, disease prevention, pain management, family centered and culturally sensitive care. Two credit hours for didactic /discussion and two credit hours for clinical /lab/ (120 hours).
Prerequisites: NURSE 262.

NURSE 395 Pathophysiology Credits: 3
This course will focus on alterations in biologic processes that affect the body's internal homeostasis. A conceptual approach will be used to emphasize general principles of pathophysiology. The etiology, pathogenesis, clinical manifestations, and sequelae of various alterations of human structure and function will be examined. Knowledge from the basic and clinical sciences will be integrated.
Prerequisites: Admission to the Nursing major.

NURSE 398 Clinical Applications Of Pathophysiology Credits: 2
This nursing elective is designed to guide students through self-directed and in-depth analysis of selected diagnoses that are common to clinical practice and represent major concepts of pathophysiology, evaluation, and management that can be applied to many other illnesses. With faculty guidance, students will work in small groups to comprehensively review and analyze a selected clinical case for presentation and discussion with peers. One case from each of the following major body systems will be presented by student groups: cardiovascular pulmonary, cancer, endocrine, hematologic, immunologic, digestive, neurological, musculoskeletal, and genitourinary. Students are expected to attend and actively participate in all of the case presentations through completion of assigned readings, prepatory review of current literature, active listening, and comprehensive peer evaluation. Students will present and facilitate discussion within the large group of selected current literature following each case presentation.
Prerequisites: 200 level Nursing courses; NURSE 395.

NURSE 401 Health Assessment for Clinical Practice Credits: 3
This course is designed to provide a systematic approach to the physiological, psychological, socio-cultural and developmental assessment of individuals emphasizing findings considered to be within normal limits. The health history is emphasized as a tool for assessing mental and physical status. This course is designed for students with previous health care education, including knowledge of biochemical functions of systems and concepts of normal. This course consists of guided self-study and on-site clinical practicum.
Prerequisites: Admission into RN-BSN program.

NURSE 403A Comparative Weight Loss I Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Specific topics that will be addressed include risks of of overweight/obesity; common psychological issues for the overweight/obese; societal perceptions and barriers for overweight/obese individuals. This course consists of one hour if didactic work with one module per week for four weeks.

NURSE 403B Comparative Weight Loss II Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Correlations between lifestyle issues such as diet, sleep, stress, and exercise will be explored. Comparison of common medically recommended diets and diet programs and their efficacy/risks; exercise requirements for weight loss and weight maintenance. This course consists of one hour if didactic education with one module per week for four weeks.

NURSE 403C Comparative Weight Loss 3 Credit: 1
This course explores the bio/psycho/social aspects of weight gain and obesity and compares common weight loss methods according to risk, benefits, and long term and short term implications. Comparison of pharmacologic weight loss options ad their efficacy/risks; non-prescription medications/ nutraceuticals for weight loss and their efficacy/risks; and bariatric surgeries and efficacy/risks. This course consists of one hour of didactic work with one module per week for four weeks.

NURSE 430A Experience of Health in Aging: Physiological & Cognitive Aspects Credit: 1
This one-credit hour course is designed for students interested in understanding the role of health in the aging population. The 430A course will focus primarily on physiologic and cognitive functioning of the older adult. Theoretical, empirical and applied knowledge of the aging process is presented. This knowledge is utilized in assessing and interpreting the physiological and psychological influences on health. This knowledge may also be used in developing strategies for the promotion, restoration, and maintenance of health in the aging population.

NURSE 430B The Experience of Health in Aging:Relationships & the Environment Credit: 1
This one-credit hour course is designed for students interested in understanding the role of health, relationships in the aging population. the N430B course will focus primarily on loss/grief and relationships environment and as these relate to the older adult. theoretical, empirical and applied knowledge of the aging process is presented. This knowledge is utilized in assessing and interpreting the influences of relationships, intimacy, loss, grief, and dying on health. This knowledge may also be used in developing strategies for the promotion, restoration, and maintenance of health in the aging population.

NURSE 430C The Experience Hlth In Aging:Community,Systems & Service Delivery Credit: 1
This one-credit hour course is designed for students interested in understanding the role of health, community, systems and service delivery in the aging population. Selected special issues (such as fluid and continence, medication use, pain and comfort, bone/joint problems) will also be discussed. The N430C course will focus primarily on community, health systems and service delivery as these relate to the older adult. Theoretical, empirical and applied knowledge on aging and the health system and delivery process is presented. This knowledge is utilized in assessing and interpreting the influences of the community and health care delivery systems on health. This knowledge may also be used in developing strategies for the promotion, restoration, and maintenance of health in the aging population.

NURSE 432A Holistic Health Care: Medicinal Plants & Herbs Credit: 1
This course provides an in-depth exploration to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will cover medicinal plants and herbs and related topics.

NURSE 432B Holistic Health Care: Energy Medicine Credit: 1
This course provides an in-depth exploration to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Energy Medicine and related topics.

NURSE 432C Holistic Health Care: Relaxation Techniques Credit: 1
This course provides an in-depth exploration to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non-traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Relaxation Techniques and related topics.

NURSE 432D Holistic Health Care: Chinese Medicine and Hypnosis Credit: 1
This course provides an in depth exploration to the practice of Holistic Health Care which promotes and preserves the health of clients by integrating traditional and non traditional cultural oriented healing modalities. Relevant to all health care providers and health care consumers, the content will include Chinese Medicine, Hypnosis and other related topics.

NURSE 433 Parish Nurse Health Ministry Basic Preparation Course Credits: 3
This course introduces students to the practice of Parish Nurse Health Ministry which promotes and preserves the health of clients in community faith-based settings. Content will include the role of the congregation in health, healing, and wholeness; the theology of health, healing and wholeness, history and philosophy of Parish Nursing, ethics of Parish Nursing; self care for Parish Nurses; assessment of individuals, families, and congregations; accountability and documentation , roles of the Parish Nurse-Integrator of faith and health, Personal Health Counselor, Health Educator, Referral Agent, Coordinator of Volunteers, Developer of Support Groups, and Health Advocate initiating a Parish Nurse Program; functioning with a ministerial team; health promotion and maintenance programs; and loss. 32 classroom hours; 13 independent library hrs.
Prerequisites: RN license.

NURSE 434A History of Healthcare - Trends/Issues Impacting Healthcare and Healthcare Professions Credit: 1
This course is designed to examine, in depth, the rich and unique development of some major American healthcare fields as disciplines, professions, arts, and sciences from a historical perspective. Past healthcare trends, the societal importance of helping, and the history of nursing education will be identified and discussed. The social, philosophical, cultural, and political forces which have impacted the course of these topics will be examined from ancient to modern times.

NURSE 434B History of Healthcare- Trends/Issues in Public Health, Medicine, and Physical Therapy Credit: 1
This course was designed to examine, in depth, the rich and unique development of the major American healthcare fields as disciplines, professions, arts, and sciences from a historical perspective. Trends and issues in public health, medicine, and physical therapy will be identified and discussed. The social, philosophical, cultural, and political forces which have impacted the course of these topics will be examined from ancient to modern times.

NURSE 434C History of Healthcare - Trends/Issues in Nursing, Dentistry, and Pharmacy Organzations Credit: 1
This course is designed to examine, in depth, and rich and unique development of the major American healthcare fields as disciplines, professions, arts, and sciences from a historical perspective. Past trends and issues in nursing, dentistry, and pharmacy organizations will be identified and discussed. The social, philosophical, cultural, and political forces which have impacted the course of these topics will be examined from ancient to modern times.

NURSE 434D Hist of Healthcare - Past Trends & Issues Scl Work, Future Pub Hlth, & Hist Effects of Cltrl Dvrsty Credit: 1
This course is designed to examine the rich and unique development of the major American healthcare fields as disciplines, professions, arts, and sciences from a historical perspective. Past trends and issues in social work, the future of public health, and the historical effects of cultural diversity will be identified and discussed. The social, philosophical, cultural, and political forces which have impacted the course of these topics will be examined from ancient to modern times.

NURSE 462 Special Topics Credits: 2
This course is designed to explore current issues and trends influencing nursing practice. Economical, political, social and cultural issues are analyzed as they relate to interdisciplinary healthcare topics. Special Topics is aimed at preparing nursing students for immediate and long term milestones in their practice, which includes NCLEX licensure study, current clinical and practice issues, and exposure to advance nursing roles in practice and research.
Prerequisites: NURSE 465, NURSE 467.

NURSE 465 Management of Community Health Nursing Credits: 4
This course focuses on applying the nursing process to the care of target community population and the individual. Emphasis is placed on health promotion and disease prevention, Discussion will include epidemiological, social, political, economic and cultural factors that influence the health of a population. The clinical components will consist of application of the nursing process to identify, prioritize, and meet the health needs of aggregates across the lifespan. The four hour course consists of two hours of didactic/discussion and two hours of clinical/lab. (120 hours)
Prerequisites: NURSE 360, NURSE 362.

NURSE 467 Management of Critical & Emergent Care Credits: 5
This course focuses on applying the nursing process to the care of critically ill clients. Key concepts are assumption, integration, and prioritization of information to take decisive client-focused action. Students will manage appropriately the interface between client and technology so that a safe, respectful, and caring environment is established and maintained. Nursing knowledge of cardiovascular/ hemodynamic monitoring and acute management of pulmonary, neurological, renal, gastrointestinal, shock and traumatic emergencies is included. This five hour course consist of three hours didactic/ discussion and two hours clinical/lab.
Prerequisites: NURSE 360, NURSE 362.

NURSE 468 Effectiveness in Complex Health Systems Credits: 5
This leadership course focuses on effectiveness in complex health systems, by building upon acquired personal and interpersonal knowledge, skills and effectiveness in health outcomes. Organizational culture and systems, leadership and management theories, cultural competence, internal and external politics, and the impact of future managerial and societal paradigm changes on health care and health care delivery systems are presented. Knowledge of budgeting and health care finance, use of the legislative system, quality management, customer service, and leadership and management styles are explored. This five hour course consists of four hours of didactic/ discussion and one hour of clinical/ lab.
Prerequisites: NURSE 465, NURSE 467.

NURSE 472 Clinical Internship Credits: 5
This is the final application course designed to complement didactic content from the core-nursing component of the pre-licensure baccalaureate program. Within this course the student will integrate and apply knowledge acquired in didactic course work and from previous clinical experiences. Students will integrate an increasingly complex knowledge base with an emphasis on developing effectiveness: a) personally; b) interpersonally, and c) in the health management of clients within the complexity of the hospital system. In collaboration with preceptors from the clinical unit, the students will manage direct care for clients in the hospital setting. Five credit hours of clinical practice (300 hours) are required.
Prerequisites: NURSE 465, NURSE 467.

Co-requisites: NURSE 468.

NURSE 476 Scientific Inquiry Credits: 3
This course focuses upon the development of those skills necessary to apply research finding to the evidence-based care of nursing. This application requires that students develop the skills to intelligently and critically read and utilize current research literature. The specific steps in the research process. Including ethical issues, are presented and discussed with emphasis upon the identification of quality research through critical analysis of research reports.
Prerequisites: 14 hours of clinical coursework (pre-licensure students).

Co-Requisites: NURSE 345 (pre-licensure and RN-BSN nursing students and BHS students).

NURSE 481 Block I: Tools for Personal Effectiveness Credits: 6
This is the first in the four-course sequence. The student will discover that the foundation for professional nursing practice is personal effectiveness. Personal effectiveness is contingent upon an understanding of the historical roots of the profession, the meaning of professionalism, image and power bases, professional standards, moral development, political role socialization and professional values. Personal effectiveness is enhanced through critical reflection of personal perspectives and biases, valuing and use of theory and research, critical thinking and decision-making, informatics' technology, the ability to manage time and stress, and the use of a career plan and informatics.
Co-requisites: ENGLISH 225.

NURSE 482 Block II: Tools for Interpersonal Effectiveness Credits: 3
This is the second in the four-course sequence. The student will discover that interpersonal effectiveness is a prerequisite to effective management of the care of humans and teams. Interpersonal effectiveness is contingent in an understanding of professional care and caring, ethics in health care, legalities of practice, communication theories and the dynamics of groups and teams. Interpersonal effectiveness is enhanced through the use of such skills as conflict resolution and negotiation, managing change, marketing, team membership, group management, political awareness, technology utilization and communication techniques. Content appropriate to these areas will be covered within this course.
Prerequisites: NURSE 481.

NURSE 483 Block III: Effectiveness in Human Health Outcomes Credits: 6
The third in the four-course sequence, NURSE 483 builds upon the first two block courses and focuses on effectiveness in human health outcomes. Students will discover that effectiveness in human health outcomes is a primary goal in the delivery of an optimum continuum of health care that encompasses health promotion, disease prevention and illness care across the lifespan. Achieving effectiveness in human health outcomes across the wellness-illness continuum and the individual-to-community continuum is contingent on acquiring an understanding of epidemiology, levels of care, communicable disease control, case management, theories applicable to aggregate populations, cultural competence, evidence-based care and information technology.
Prerequisites: NURSE 482.

NURSE 484 Block IV: Effectiveness in Complex Health Systems Credits: 6
This is the final course in the four-course sequence. Students will build upon the knowledge and skills acquired in the prior three course in order to examine the essentials of structure and designs, behavior and culture, synergy, workplace diversity, health care finance, and power and politics within complex health systems. Organizational theories, leadership, management and nursing's social responsibility in an emerging global health care environment will also be explored.
Prerequisites: NURSE 483.

NURSE 485 Application to Practice I Credits: 3
This is the first of two clinical application courses designed to complement didactic content from the four-course block sequence (NURSE 481 - NURSE 484). Students will integrate an increasingly complex knowledge base with an emphasis on developing effectiveness: personally, interpersonally, and in the health management of populations of clients within systems of community and professional organizations and practice settings. Student cohort groups, in collaboration with personnel from health related organizations and faculty, assess population health needs, identify outcomes and develop action plans based on real need. The practice experience learning processes and outcomes will be collective and provide solutions for the health care community.
Prerequisites: NURSE 481.

Co-requisites: NURSE 482, NURSE 483.

NURSE 486 Application to Practice II Credits: 3
This is the second of two Practicum application courses designed to complement didactic content from the four-course block sequence (NURSE 481 - NURSE 484) to integrate complex knowledge for personal and interpersonal development in the health management of populations of clients. Student cohort teams will apply new skills and knowledge to real issues and problems in the delivery of nursing care with an emphasis on teamwork performance and action plan implementation and outcome evaluation. The processes and outcomes of those experiences will be collaborative and provide solutions for the health care community.
Prerequisites: NURSE 483, NURSE 485.

Co-requisites: NURSE 484.

NURSE 490 Special Topics Credits: 1-9
A course of study in a special area of interest in nursing under individual faculty direction.

NURSE 490AP Special Topics Credits: 1-9

Oboe (OBOE)

Courses

OBOE 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit towards the major.

OBOE 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury performance is required.

OBOE 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

OBOE 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

OBOE 101 Freshman Oboe I Credits: 2-4

OBOE 102 Freshman Oboe II Credits: 2-4

OBOE 201 Sophomore Oboe I Credits: 2-4

OBOE 202 Sophomore Oboe II Credits: 2-4

OBOE 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: OBOE 5300.

OBOE 301 Junior Oboe I Credits: 2-4

OBOE 302 Junior Oboe II Credits: 2-4

OBOE 401 Senior Oboe I Credits: 2-4

OBOE 402 Senior Oboe II Credits: 2-4

Organ (ORGAN)

Courses

ORGAN 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

ORGAN 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

ORGAN 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

ORGAN 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

ORGAN 101 Freshman Organ I Credits: 2-4

ORGAN 102 Freshman Organ II Credits: 2-4

ORGAN 201 Sophomore Organ I Credits: 2-4

ORGAN 202 Sophomore Organ II Credits: 2-4

ORGAN 301 Junior Organ I Credits: 2-4

ORGAN 302 Junior Organ II Credits: 2-4

ORGAN 401 Senior Organ I Credits: 2-4

ORGAN 402 Senior Organ II Credits: 2-4

Percussion (PERCSN)

Courses

PERCSN 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

PERCSN 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

PERCSN 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

PERCSN 100D Applied Study For The Non-Music Major Credit: 1

PERCSN 101 Freshman Percussion I Credits: 2-4

PERCSN 101J Freshman Percussion I (Jazz) Credits: 2-4

PERCSN 102 Freshman Percussion II Credits: 2-4

PERCSN 102J Freshman Percussion II (Jazz) Credits: 2-4

PERCSN 201 Sophomore Percussion I Credits: 2-4

PERCSN 201J Sophomore Percussion I (Jazz) Credits: 2-4

PERCSN 202 Sophomore Percussion II Credits: 2-4

PERCSN 202J Sophomore Percussion II (Jazz) Credits: 2-4

PERCSN 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: PERCSN 5300.

PERCSN 301 Junior Percussion I Credits: 2-4

PERCSN 301J Junior Percussion I (Jazz) Credits: 4

PERCSN 302 Junior Percussion II Credits: 2-4

PERCSN 302J Junior Percussion II (Jazz) Credits: 4

PERCSN 401 Senior Percussion I Credits: 2-4

PERCSN 401J Senior Percussion I (Jazz) Credits: 4

PERCSN 402 Senior Percussion II Credits: 2-4

PERCSN 402J Senior Percussion II (Jazz) Credits: 4

Philosophy (PHILOS)

Courses

PHILOS 186 The Value of Beauty Credits: 3
This class surveys European aesthetics, defining what counts as beautiful and the roles art plays in society.
Cross Listings: FRN-LNG 186 and ENGLISH 186.

PHILOS 190 Money, Medicine and Morals Credits: 3
This course will improve the student's understanding of and ability to critically evaluate complex moral dilemmas in medicine, business, law and other professions. Students will learn critical thinking, arguing, writing and presentation skills through examining moral issues for professionals. Guest speakers will introduce students to practical aspects of professional life.
Cross Listings: ECON 151.

PHILOS 210 Introduction to Philosophy Credits: 3
An introduction to many of the central problems of philosophy. The various dimensions of philosophy are examined as it related to our relationships with each other, our understanding of our world and our understanding of ourselves. Connections between classical philosophers and contemporary issues are explored as philosophy is considered as a deeply personal and also as a social phenomenon.

PHILOS 211 Great Minds Credits: 3
In this course we will explores texts that have played a pivotal roles in shaping western intellectual thought and the formation of political and cultural communities up to the present day. We will focus on tracing out their common themes such as political and social organisation, political authority, morality, human nature, and the nature of knowledge. In doing so, our concerns will be twofold. On the one hand we will be trying to understand these texts in their historical and social context, on the other we will analyse and critically discuss the arguments they present and their underlying assumptions thereby learning how to construct will-formed arguments of our own.

PHILOS 212 European Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I.

Cross Listings: ART-HIST 240, CONSVTY 238, FRENCH 295, GERMAN 295, HISTORY 240, SPANISH 295.

PHILOS 221 Contemporary Moral Issues Credits: 3
This course offers a philosophical examination of ethical issues in contemporary society. Topics for discussion include ethical conflicts arising in business and technology, engineering, healthcare, politics, and the environment. Moral concerns addressed may include reproductive rights and technologies, warfare, capital punishment, pornography, privacy, consumerism, euthanasia, sexuality, and animal welfare.

PHILOS 222 Foundations Of Logic and Scientific Reasoning Credits: 3
This course introduces the basic concepts and methods of modern logic, beginning with premise, inference, conclusion, and argument, with emphasis on understanding and reconstructing complex patterns of reasoning, and analysis and construction of valid arguments.

PHILOS 231 American Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of the United States. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I, DISC 100.

Cross Listings: ART-HIST 200, CONSVTY 237, HISTORY 200.

PHILOS 232 World Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of one or more regions of the world as well as dynamics of interaction between them. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I, DISC 100.

Cross Listings: ART-HIST 260, CONSVTY 239, FRENCH 285, HISTORY 260, SPANISH 285.

PHILOS 300CK Cluster Course: Controversy And Choice In Life And Science Credits: 3
An examination of advances in the health and life sciences that involve methodological questions about the pursuit and acceptance of theories. Procedures for choosing and conducting research will be analyzed using a model that incorporates existing knowledge. Assessment and management of research are also explored. Participating guests will present solutions derived.

PHILOS 310WI Ancient Philosophy Credits: 3
A survey of the central figures of classical philosophy: the pre-Socratics, Socrates, Plato, Aristotle, the Stoics, the Epicureans and other philosophers of antiquity. The contributions of major philosophers to the development of science, religion, and social and political theories are studied.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent), RooWriter.

PHILOS 315 Logic And Methodology In The Health And Social Sciences Credits: 3
Analysis of the reasoning processes and theory-building procedures specific to the health and social sciences. As its major focus, the course will critically examine the philosophical foundations of the health and social sciences using the case study method. In addition, brief case study analyses of reasoning and theory-construction in the physical sciences will be offered in comparison.
Prerequisites: PHILOS 210, PHILOS 222.

PHILOS 320WI History of Modern Philosophy Credits: 3
A survey of the central figures of modern philosophy: Rene Descartes, Baruch Spinoza, G.W. Liebniz, Thomas Hobbes, John Locke, George Berkeley, David Hume and Immanuel Kant. In addition to the philosophical issues of the period, cultural, historical and political matters are considered. A secondary goal is the establishment of the pedigree of contemporary philosophical problems.
Prerequisites: PHILOS 210, or PHILOS 222 (or equivalent), RooWriter.

PHILOS 321 Ethics Credits: 3
Attention is given to the nature of ethical ideas and the development and history of ethical theory.
Prerequisites: PHILOS 210, PHILOS 221, or PHILOS 222.

PHILOS 322 Philosophy of Literature Credits: 3
A close study of the ancient problems at the intersection of philosophy and literature: what sort of truth, if any, do we find in literature? Does literature have ethical content? What makes a literary text beautiful? How do "literary" texts defer from philosophical and other kinds of texts? Should literary texts influence our thinking about politics and other social issues? We will study classic philosophers like Plato, Aristotle, Kierkegaard, and Nietzche, great literary writers such as Sappho, Dante, Goethe, Dosteovesky, and Rilke, and harder to categorize figures like Freud. The class will include the study of several recent philosophers who worked specifically on the subject of the "philosophy of literature," such as Bakhtin, Benjamin, Lacan, Szondi.

PHILOS 325 Aesthetics Credits: 3
The basic problems of aesthetics are examined, with special emphasis on the character of the work of art, the aesthetic response of the viewer, the creative process of the artist, and the nature of aesthetic criticism. These topics are discussed in light of conflicting aesthetic theories.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 326 Epistemology: Theories Of Knowledge Credits: 3
A study of the problems connected with the nature of knowledge and human understanding.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 327 Metaphysics: Theories Of Reality Credits: 3
An investigation of the essential problems regarding the nature of reality in its most general aspects.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 328 Philosophy In The Middle Ages Credits: 3
The history of philosophy from St. Augustine to William of Ockham, including analysis of the relationships of medieval philosophical developments to earlier and later philosophical developments.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 329 American Philosophy Credits: 3
The main trends of American thought are covered, with special emphasis on the philosophies of Peirce, James and Dewey.
Prerequisites: PHILOS 210 or PHILOS 222 (or equivalent).

PHILOS 330 19Th-Century Philosophy Credits: 3
Following a review of the influence of Kant on European thought, consideration is given to the German idealists, Comte and Positivism, Mill and Empiricism, British Neo-Hegelianism, the rise of Evolutionary Philosophy and Nietzsche.
Prerequisites: PHILOS 210 or PHILOS 222 (or equivalent).

PHILOS 331 Philosophy Of Religion Credits: 3
An analysis of the nature and function of religion and its relation to culture. An examination is made of the basic ideas of religion, and special attention is given to the problems of religion and reality, religion and science, and the changing character of religion in our times.

PHILOS 332 Existentialism Credits: 3
A study of the development of existentialism. Selections from the works of such thinkers as Kierkegaard, Nietzsche, Sartre, Heidegger, Camus and other related philosophers are considered. Special attention is devoted to the existential movements in literature, social science and medicine.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 333 Social And Political Philosophy Credits: 3
A consideration of representative views of the place of man in contemporary society. Contributions in psychology, political theory, economics, sociology and anthropology are investigated philosophically with a view toward offering a critical appraisal of the nature of man in the human community.

PHILOS 334 Philosophy Of Science Credits: 3
A critical analysis of the assumptions, methods and conceptual frameworks of the sciences. The course emphasizes such topics as the influence of theory on observation; the problem of discovery, verification and experimental confirmation; and the relation of scientific language and concepts to ordinary language and beliefs.
Prerequisites: PHILOS 222.

PHILOS 335 Philosophy Of Mind Credits: 3
A study of problems arising in connection with such topics as mental phenomena, the relation of mind to body, free will and determinism, the self and personal identity, and "thinking" machines. Classical and contemporary treatments of such concepts as "mind," "intention," "sensation," "perception," "stimulus," etc., and their relation to action and behavior are considered.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 336 Philosophy Of Language Credits: 3
A study of the nature and uses of language, with special reference to concepts of meaning, denotation, reference, syntax, name, metaphor, vagueness, and definition. Applications in the fields of psychology, linguistics, anthropology, and literary criticism are examined.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 337 Philosophy Of History Credits: 3
A discussion of methodological and substantive issues, including the nature of historical explanation, whether history can be a science, and various theories of history such as those of Vico, Hegel, Marx, and Collingwood.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 338 Philosophy Of Biology Credits: 3
An investigation of methodological and conceptual issues in biology, such as the roles of mechanistic and teleological explanations, reductionism, the nature of evolutionary theories, and the relation between taxonomy and the concept of species.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 340 Philosophy Of Law Credits: 3
An analysis of major philosophies of law, including methods of justifying legal systems through natural law, legal positivism, sociological jurisprudence, theology, etc. Contemporary legal theories are critically analyzed.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 344 Philosophy of Sport Credits: 3
This course uses sports as a point of departure to explore central philosophical themes in metaphysic/epistemology, aesthetics, ethics, and social/political philosophy. Students will explore the concept and role of sports in society from ancient Greece to modern times.

PHILOS 346 Metaphysics and Epistemology Credits: 3
this course is an advanced overview of some central themes in metaphysics and epistemology. Metaphysics focuses on basic questions about the nature of reality. Epistemology is concerned with questions about knowledge and justification. In this class, we will explore a variety of topics (causation, universals, scepticism, induction, etc.) that occupy contemporary philosophers.
Prerequisites: PHILOS 222.

PHILOS 350 Scientific Controversies Credits: 3
Students will study particular scientific controversies and the arguments scientists se to defend their own position and attack the positions of their opponents.

PHILOS 360 Current Issues In Bioethics Credits: 3
Alternative approaches to issues such as life and death, human experimentation, the scarcity of resources, contraception, abortion, euthanasia, eugenics, etc. will be discussed critically. Major theories of ethics will be applied to several of the issues in order to have the student develop his or her own approach to ethical decision making in the area of bioethics.

PHILOS 370 Environmental Ethics And Policy Credits: 3
Various philosophical approaches to issues such as the value of nature, human obligations to non-human animals, species, ecosystems and future generations; environmental justice; restoration; resource use; environmental politics; and the relation between environmental issues, policy and ethics will be discussed critically.

PHILOS 400 Interdisciplinary Studies: Cluster Course Offerings Credits: 3

PHILOS 400CJ Cluster Course: Aesthetic Issues In The Arts Credits: 3
Specialists in various art forms (e.g., literature, music, painting) will discuss specific artworks from their own perspective as artists and/or critics. This gives the student first-hand experience of how questions dealt with in the philosophy of art arise. Using this common core of examples, philosophical issues such as relevance of artists' intentions to interpretation and evaluation, the nature of aesthetic value, the nature and significance of comedy, and special issues raised by contemporary developments in the arts are discussed.

PHILOS 400CO Cluster Course: Issues In Death And Dying Credits: 3
A study of the various philosophical dimensions of death and dying in the history of thought from the pre-Socratics through the contemporary existentialist philosophers. Topics to be critically examined will include the ethical, religious and legal implications of the changing definitions of death, active and passive euthanasia, suicide, the ethical aspects of truth telling, and the impact of technological and scientific advancements as they relate to the rights and dignity of the dying patient and survivors as well as special populations such as children and incapacitated persons. The philosophical dimensions of death and dying will include epistemological, metaphysical, ethical and hermeneutic aspects. Alternate theories and approaches to ethical decision making concerning this important aspect of human existence will be presented.

PHILOS 401PC CC: Biological And Ethical Issues In Aging Credits: 3
This course is designed to provide both a disciplinary and interdisciplinary study of the biological, philosophical, and ethical foundations and principles underlying the phenomenon of aging on an individual and societal level. Various physiological, neurological, anatomical, and psychological processes and changes characteristic of the development occurring during the aging process will be studied, and discussed. The philosophical and specifically ethical issues associated traditionally with aging will be re-examined and analyzed in terms of scientific, technological, cultural, sociological, economic, and legal changes in knowledge and attitudes.
Prerequisites: BIOLOGY 102 (or equivalent).

Cross Listings: NAT-SCI 430PC.

PHILOS 423 Symbolic Logic Credits: 3
Advanced analysis of deductive procedures; sentential connectives, quantifiers, classes, and relations; the notion of formal system; introduction to axiomatics and metalogical proofs.

PHILOS 424 Art, Aesthetics And Society Credits: 3
This course examines various moral and social issues concerning the arts and the aesthetics of our environment, bringing in case studies of particular artworks. It explores the relationships between aesthetic and moral value in the case of censorship, the effect of images on the public, and the aesthetics of the natural environment. It also looks at how public art is supposed to serve the public, and ethical dilemmas faced by art museums.

PHILOS 425 History Of Aesthetics Credits: 3
An examination of the major thinkers in the history of aesthetics, such as Plato, Aristotle, Kant, Nietzsche, Tolstoy and Croce. The focus will be on how their ideas bear on topics which will interest anyone desiring to understand the origin, nature and value of the arts. Examples of these topics are the relationships among art, knowledge and morality; the natures of originality, creativity and genius; the importance of form, content and expression of emotions; and standards of taste and the claims of criticism.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 430 Plato Credits: 3
Selected dialogues of Plato are studied with a view to understanding Plato's philosophy and its position in the world of Greece and antiquity. Plato's philosophy is also examined with reference to his place in the Western tradition and in modern philosophy.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 431 Aristotle Credits: 3
Selected portions of Aristotle's works on logic, metaphysics, science, ethics, politics, and poetics are studied with a view to understanding Aristotle's philosophy and its position in the world of Greece and antiquity. Aristotle's philosophy is examined with reference to its place in the Western tradition and in modern philosophy.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 435 Hume Credits: 3
A study of selected writings of David Hume for the purpose of gaining an understanding of the rise of modern empiricism and its influence on contemporary thought.
Prerequisites: PHILOS 210 or PHILOS 222 (or equivalent).

PHILOS 435R The British Tradition In Philosophy Credits: 3
This course is a survey of major British philosophers. Among those who will be studied are Thomas Hobbes, John Locke, David Hume, J.S. Mill, E.H. Bradley, and Bertrand Russell. The influence of British philosophy on other philosophical movements will also be included.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 436 Kant Credits: 3
A study of selected writings of Immanuel Kant, with particular emphasis on the epistemological, metaphysical and ethical aspects of Kant's philosophy; an examination of Kant's significance within contemporary thought.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 445 20Th-Century Philosophy Credits: 3
A study of the development of philosophy in the 20th-Century, treating such movements as Idealism, Realism, Logical Positivism, Existentialism, Phenomenology, Pragmatism, and Analytic Philosophy.
Prerequisites: PHILOS 210 or PHILOS 222.

PHILOS 448 Recent Ethical Theories Credits: 3
An analysis and investigation of modern and contemporary ethical theories. Among the theories considered are ethical relativity, the emotive theory, utilitarianism, neo Kantianism, and situation ethics.
Prerequisites: PHILOS 321.

PHILOS 450WI Ethics And Government Credits: 3
An examination of ethical issues related to government, with the primary focus on national and local governmental bodies in the United States. Ethics in the executive, legislative and judicial branches are examined. Ethical standards for elected officials and appointed public servants are reviewed. Attempts to "legislate morality" are considered. The course includes a historical review of ethics and government and an analysis of the legal implications of legislation regarding ethics in the executive branch.
Prerequisites: PHILOS 210.

PHILOS 451 History and Philosophy of Bioethics Credits: 3
This course will provide an overview of the history of medicine and bioethics from antiquity to the present. In addition to key historical events, the course will provide an overview of foundational ethical theories. The course will explore key events in bioethics and the responses to them in the bioethics literature.

PHILOS 452 Healthcare Law and Policy Credits: 3
This course will focus on basic issues in healthcare law and public policy. Issues such as confidentiality, informed consent, healthcare financing, and end-of-life decision making will be covered. In addition to key historical events, the course will provide an overview of foundational ethical theories. The course will explore key events in bioethics and the responses to them in the bioethics literature.

PHILOS 453 Clinical Ethics and Case Consultation Credits: 3
This course will focus on classic cases in bioethics and will expose students to contemporary trends in healthcare ethics consultation.

PHILOS 480 Selected Topics Credits: 1-3
Each time this course is offered a particular philosopher or particular area of philosophy will be the topic of discussion. The course may be repeated for credit when the topic varies.
Prerequisites: PHILOS 210, PHILOS 222 (or equivalent).

PHILOS 480A Selected Topics Credits: 1-3

PHILOS 480B Selected Topics Credits: 1-3

PHILOS 480E Selected Topics Credits: 1-3

PHILOS 490 Special Topics And Readings Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.
Prerequisites: PHILOS 222, PHILOS 310WI, PHILOS 320WI, PHILOS 321 or PHILOS 423.

PHILOS 490B Special Topics And Readings Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.
Prerequisites: PHILOS 222, PHILOS 310WI, PHILOS 320WI, PHILOS 321 or PHILOS 423.

PHILOS 490F Special Topics and Readings Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.
Prerequisites: PHILOS 222, PHILOS 310WI, PHILOS 320WI, PHILOS 321 or PHILOS 423.

Physical Education (PHYS-ED)

Courses

PHYS-ED 106 Badminton Credit: 1
This course teaches the basic rules, skill techniques, terminology and strategy for badminton.

PHYS-ED 125 Golf Credit: 1

PHYS-ED 145 Social Dance Credit: 1

PHYS-ED 149 Basketball And Team Handball Credit: 1
This course teaches the basic rules, skill techniques, terminology and strategy for basketball and team handball.

PHYS-ED 153 Volleyball Credit: 1

PHYS-ED 157 Weight Training Credit: 1

PHYS-ED 158 Advanced Weight Training Credit: 1
This course teaches free weight training exercises that are used within a well-balanced training program, and provides experience needed to design weight training programs.
Prerequisites: PHYS-ED 157.

PHYS-ED 159 Jogging Credit: 1

PHYS-ED 174 Cross Training Credit: 1
This course provides knowledge, skill and opportunity to improve primary sport/activity performance or overall fitness, through designing and participating in a variety of cross training physical activities.

PHYS-ED 175 Personal Fitness Credits: 2
This course is designed to expose students to facts about and experiences in dealing with motor, physical, physiological, psychological and nutritional aspects of the human being. Specific areas of study include hypokinetic disease, physical fitness, nutrition and wellness concepts.

PHYS-ED 175L Lifetime Fitness Lab Credit: 1
This course is designed to provide supervised activity experiences including self assessment and self directed physical exercise programs that are coordinated with the lecture portion of the course.

PHYS-ED 180 Beginning Swimming Credit: 1
This course is designed to equip each student with basic water safety skills and knowledge in order to make them reasonably safe while in, on or about the water.

PHYS-ED 181 Fitness Swimming Credit: 1
This course is designed to challenge and encourage each student to develop an individualized fitness program based on personal goals. Lap swimming as well as water exercise will be incorporated in the class.

PHYS-ED 189 Special Topics: Activity Credit: 1
A course designed to deal with a special activity class which is not available in the regular course offerings. Activity class, instructors and prerequisites to be listed in the semester bulletin.

PHYS-ED 189AG Special Topics Credit: 1

PHYS-ED 189AY Special Topics:Activity Credit: 1

PHYS-ED 189BE Special Topics: Activity Credit: 1

PHYS-ED 189KF Special Topics Credit: 1
A course designed to deal with a special activity class which is not available in the regular course offerings. Activity class, instructors and prerequisites to be listed in the semester bulletin.

PHYS-ED 189KT Special Topics: Activity Credit: 1

PHYS-ED 189RC Special Topics: Activity Credit: 1
A course designed to deal with a special activity class which is not available in the regular course offerings. Activity class, instructors and prerequisites to be listed in the semester bulletin.

PHYS-ED 189RT Special Topics: Activity Credit: 1

PHYS-ED 189SC Special Topics Credit: 1

PHYS-ED 189SS Special Topics: Activity Credit: 1

PHYS-ED 189WJ Special Topics: Activity Credit: 1

PHYS-ED 189WM Special Topics: Activity Credit: 1

PHYS-ED 189XX Special Topics: Activity Credit: 1

PHYS-ED 189XY Special Topics: Activity Credit: 1

PHYS-ED 189YO Special Topics: Activity Credit: 1

PHYS-ED 206 First Aid And Safety Credit: 1
Methods of administering first aid in case of accident or sudden illness; bandaging; resuscitation; and caring for wounds and injuries. Safety in schools will be stressed. (Elective).

PHYS-ED 207 Outdoor And Leisure Pursuits Credits: 2
Designed to acquaint students with opportunities for leisure and recreational activity in the outdoors. Emphasizes safety measures and planning skills as well as development of particular movement skills and knowledge about associated wildlife.

PHYS-ED 212 Self Defense Credit: 1
Study in the theory of self defense. Content focuses on: technique for eliminating dangers from daily living, methods for recognizing and avoiding dangers, and skills and strategies for employing physical defense when necessary.

PHYS-ED 312 Physical Education For Elementary Schools Credits: 2
Identifies physical education needs of elementary school child in relation to his/her total development with emphasis on methods and materials.

PHYS-ED 312L Laboratory Experiences in Physical Educ for the Elementary School Credit: 1
This course consists of laboratory teaching experiences, with skill theme combinations of games, gymnastics, dance fitness.
Co-requisites: PHYS-ED 312.

PHYS-ED 323 Nutrition for Fitness and Sport Credits: 3
This course examines the role nutrition, complemented by exercise, may play in the enhancement of fitness and sport performance. Considerable attention will be devoted to the use of nutritional ergogenic aids with reference to athletic performance.
Prerequisites: LS-PHYS 117, LS-ANATO 118, LS-ANATO 118L.

PHYS-ED 361WI Sociology of Sport and Exercise Credits: 3
The critical examination of the function of sport in the American culture, in an interdisciplinary fashion, with a focus on the contemporary scene. The work of the course will include readings on sociological issues of sport and exercise, the writing of mini-research papers, and a long paper with a presentation.
Prerequisites: Introduction course in sociology.

PHYS-ED 370 Psychology of Sport and Exercise Credits: 3
Exploration of psychological constructs related to the competitive sport process and to physical activity.
Prerequisites: PSYCH 210.

PHYS-ED 389 Special Topics In Health And Physical Education Credits: 1-3
This course is designed to offer a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the semester bulletin.

PHYS-ED 401 Health Teaching in the Schools Credits: 2
Study of school health programs with emphasis on methods and materials for health and safety instruction in grades K-8. Available only to Elementary or Physical Education Teaching majors.

PHYS-ED 401L Health Teaching In The Schools Lab Credit: 1
Students will attain beginning level competence in skills related to teaching health in schools, including planning, preparation and presentation skills. Computer skills will be used to search internet, e-mail, and develop a computer generated presentation.

PHYS-ED 499 Internship Credits: 3-6
Extensive experience in a practical situation under supervision of university faculty and on-site personnel. Breadth and intensity of involvement will depend on student ability. Available only to upper-division majors.

Physical Sciences (PHY-SCI)

Courses

PHY-SCI 110 Foundations Of Physical Sciences I Credits: 4
Fundamental principles and concepts of the various physical and mathematical sciences, integrated by the history and philosophy of science.

PHY-SCI 110L Foundations Of Physical Sciences, Laboratory I Credit: 1
General laboratory and discussion sessions on various topics in the physical and mathematical sciences.

PHY-SCI 130 Physics of Sports Credits: 3
A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.
Cross Listings: PHYSICS 130 and NAT-SCI 130.

PHY-SCI 140 How Things Work Credits: 3
A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.
Co-requisites: PHY-SCI 140L.

Cross Listings: PHYSICS 140, NAT-SCI 140.

PHY-SCI 140L How Things Work Laboratory Credit: 1
Simple experiments based on everyday experiences are analyzed in terms of conceptual physics. The material includes elements of mechanics of a rigid body, elastic properties of matter, fluid dynamics, thermodynamics, electromagnetism, optics and modern physics.
Co-requisites: PHY-SCI 140.

Cross Listings: PHYSICS 140L and NAT-SCI 140L.

PHY-SCI 150 Introduction to Astronomy: Gravity and Motion in the Universe Credits: 3
A survey of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion underpinning the structure and evolution of the universe. Topics include lunar phases, eclipses, planetary motion, exoplanets, formation of planetary systems, star formation, supernovae, white dwarfs, neutron stars, black holes, growth of galaxies, dark matter and the expansion of the universe.
Cross Listings: ASTR 150, PHYSICS 150, NAT-SCI 150.

PHY-SCI 153L Introductory Astronomy Laboratory Credits: 2
An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors. Concurrent enrollment in either PHY-SCI 150 or PHY-SCI 155 is encouraged but not required.
Cross Listings: PHYSICS 153L and PHY-SCI 153L.

PHY-SCI 155 Introducion to Astronomy: Interaction of Light and Matter in the Universe Credits: 3
A survey of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter underpinning energetic phenomena in the universe. Topics include telescopes and detectors, solar system exploration, planetary climates, nuclear fusion and chemical enrichment, stars and stellar evolution, interstellar material, pulsars, quasars, gamma ray bursts, the Big Bang and the possibility of life beyond Earth.
Cross Listings: ASTR 155, PHYSICS 155, NAT-SCI 155.

PHY-SCI 171 Physics For Future Presidents Credits: 3
A course intended for liberal arts students focusing on the physics they need to be informed citizens in a democracy. Energy, global warming, terrorism, and health are examples of the important topics examined from the perspective of how science should inform policy.
Cross Listings: PHYSICS 171, NAT-SCI 171.

PHY-SCI 301P Scientific Approaches To The Physical Worlds Credits: 4
Applications of chemistry, earth science and astronomy in industry and to our daily environment. Particular emphasis is placed on the technological advancements made in these areas of natural science and on their relationship to our standard of living.

PHY-SCI 302P Concepts Of Chemistry, Earth Sciences And Astronomy Credits: 4
Basic principles of chemistry, earth sciences and astronomy with special emphasis on the earth and its environment.

PHY-SCI 303P Applications Of Physical Science Credits: 4
Laboratory exercise, field experiences, tutorial-type seminars and recitation in elementary chemistry, earth science and astronomy.

PHY-SCI 410A Selected Topics In Contemporary Science Credits: 3

PHY-SCI 410B Selected Topics In Contemporary Science Credits: 3

PHY-SCI 410C Selected Topics in Contemporary Science Credits: 3

PHY-SCI 410P Selected Topics In Contemporary Science Credits: 3
Selected Topics In Contemporary Science

PHY-SCI 410PF Selected Topics In Contemporary Science Credits: 3

PHY-SCI 435 Selected Topics In The History Of Science Credits: 3
Selected Topics In The History Of Science

PHY-SCI 435P Selected Topics In The History Of Science Credits: 3

PHY-SCI 435PF Selected Topics In The History Of Science Credits: 3

Physics (PHYSICS)

Courses

PHYSICS 130 Physics of Sports Credits: 3
A course intended for liberal arts students focusing on the physics involved in different sports. Physical laws and technological developments that impact sports will be studied.
Cross Listings: NAT-SCI 130, PHY-SCI 130.

PHYSICS 140 How Things Work Credits: 3
A course intended for liberal arts students focusing on the principles of operations, histories, and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.
Co-requisites: PHYSICS 140L.

Cross Listings: NAT-SCI 140 and PHY-SCI 140.

PHYSICS 140L How Things Work Laboratory Credit: 1
A course intended for liberal arts students focusing on the principles of operations, histories and relationships of objects from our daily environment. The areas of investigation include mechanical and thermal objects, electromagnetism, light, special materials and nuclear energy.
Co-requisites: PHYSICS 140.

Cross Listings: NAT-SCI 140L and PHY-SCI 140L.

PHYSICS 150 Introduction To Astronomy: Gravity and Motion in the Universe Credits: 3
A survey of modern topics in astronomy with an emphasis on developing conceptual models for the fundamental laws of gravity and motion underpinning the structure and evolution of the universe. Topics include lunar phases, eclipses, planetary motion, exoplanets, formation of planetary systems, star formation, supernovae, white dwarves, neutron stars, black holes, growth of galaxies, dark matter and the expansion of the universe.
Cross Listings: NAT-SCI 150, PHY-SCI 150, and ASTR 150.

PHYSICS 153L Introductory Astronomy Laboratory Credits: 2
An introductory exploration of astronomical phenomena and concepts through quantitative laboratory activities requiring data collection, analysis and interpretation. This course is open to students from all majors. Concurrent enrollment in either PHYSICS 150 or PHYSICS 155 is encouraged but not required.
Cross Listings: NAT-SCI 153L and PHY-SCI 153L.

PHYSICS 155 Introduction to Astronomy: Interaction of Light and Matter in the Universe Credits: 3
A survey of modern topics in astronomy with an emphasis on developing conceptual models for the interactions between light and matter underpinning energetic phenomena in the universe. Topics include telescopes and detectors, solar system exploration, planetary climates, nuclear fusion and chemical enrichment, stars and stellar evolution, interstellar material, pulsars, quasars, gamma ray bursts, the Big Bang and the possibility of life beyond Earth.
Cross Listings: NAT-SCI 155, PHY-SCI 155, ASTR 155.

PHYSICS 160 Vision and Imaging: From Light to Electrons Credits: 3
This course is intended for non-Physics majors who wish to learn about recent development in the field of physics. Students will explore light and electrons and learn how they are used to visualize nature from microscopic to macroscopic scales. The underlying physics principles in various imaging techniques and the concept of optics will be explained. Intriguing images will be shown and interpreted, to demonstrate that physics is fascinating and has great impact on our lives. No specific mathematics is required for taking this course. This course will meet the area requirements for the natural sciences.

PHYSICS 171 Physics for Future Presidents Credits: 3
A course intended for liberal arts students focusing on the physics they need to be informed citizens in a democracy. Energy, global warming, terrorism, and health are examples of the important topics examined from the perspective of how science should inform policy.

PHYSICS 190 Introduction to High Performance Scientific Computing Credits: 3
A survey course designed for students interested in learning how computer technology and scientific simulations have helped establish the frontiers of modern knowledge. Topics covered are the forms and components of high performance computing hardware; recent progress in software development; data visualization and management; examples of how high performance computing is used in practice; and introductions to some of the most popular programs used by scientists worldwide.
Co-requisites: MATH 110.

PHYSICS 210 General Physics I Credits: 4
Introduction to mechanics, wave motion and sound and heat and thermodynamics. Three hours lecture and two hours laboratory per week.
Co-requisites: At least MATH 110, MATH 120 suggested.

PHYSICS 220 General Physics II Credits: 4
Introduction to electricity and magnetism, light and optics and modern physics. Three hours lecture and two hours laboratory per week.
Prerequisites: PHYSICS 210.

PHYSICS 240 Physics For Scientists and Engineers I Credits: 5
Introduction to mechanics, wave motion and sound and heat and thermodynamics.
Co-requisites: MATH 210.

PHYSICS 250 Physics For Scientists and Engineers II Credits: 5
Introduction to electricity and magnetism, light and optics and modern physics. Four hours lecture and two hours laboratory per week.
Prerequisites: PHYSICS 240.

Co-requisites: MATH 220.

PHYSICS 301A Basic Science Physics Credit: 1
Selected topics from physics; their development and application to everyday problems. Discussion and demonstrations. Intended for teachers in the elementary schools.

PHYSICS 310 Mechanics I Credits: 3
Advanced statics and dynamics of particles and rigid bodies including gravitation.
Prerequisites: One year of physics and calculus.

PHYSICS 311 Mechanics II Credits: 3
Continuation of Mechanics I, including mechanics of continuous media, Lagranges equations, tensor algebra and theory of small vibrations.
Prerequisites: PHYSICS 310.

PHYSICS 330 Methods Of Theoretical Physics I Credits: 3
Introduction to mathematical and numerical methods used in the theoretical modeling of physical systems. Treatments of linear systems in scientific and engineering applications will be emphasized.
Prerequisites: MATH 250.

PHYSICS 350 Modern Physics With Engineering Applications Credits: 3
An introduction to the theories that revolutionized science and technology in the twentieth century. Topics include special and general relativity, introductory quantum mechanics and atomic structure. Inventions and applications based on these are also examined.
Prerequisites: MATH 210 and MATH 220 and either PHYSICS 210 or PHYSICS 240 and PHYSICS 250.

PHYSICS 353 Practical Astronomy Credits: 3
A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory.
Prerequisites: PHYSICS 240 and PHYSICS 250, MATH 210 or MATH 220.

Cross Listings: ASTR 353.

PHYSICS 355 Stellar Astrophysics Credits: 3
A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.
Prerequisites: PHYSICS 240 and PHYSICS 250, MATH 210 or MATH 220.

Cross Listings: ASTR 355.

PHYSICS 356 Galaxies Credits: 3
A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.
Prerequisites: PHYSICS 240 and PHYSICS 250, MATH 210 or MATH 220.

Cross Listings: ASTR 356.

PHYSICS 385L Physics of Electronics Credits: 3
An introduction to the solid state physics of basic electronic components and their operation through both theory and practical labwork.
Prerequisites: PHYSICS 220 or PHYSICS 250.

PHYSICS 395L Computer Interfacing Laboratory Credits: 3
An introduction to data acquisition and automation by computer interfacing transduction and control equipment through the serial and parallel buses. The course is multidisciplinary, balancing the physics of transduction to the computer science of automation programming to the electrical engineering of bus protocols. Both high- and low-level programming are taught within the context of automating an experimental procedure. Digital-to-analog and analog-to-digital conversion is also covered.
Prerequisites: PHYSICS 385L.

PHYSICS 410 Thermal Physics Credits: 3
A study of the laws of thermodynamics and their applications, with an introduction to kinetic theory. Statistical methods are emphasized.
Prerequisites: One year of physics and calculus.

PHYSICS 420 Optics Credits: 3
Geometrical optics, physical optics and introduction to selected topics in modern optics.
Prerequisites: One year of physics and MATH 210 and MATH 216.

PHYSICS 425L Optics Laboratory Credits: 2
Fundamental experiments with geometrical and physical optics.
Prerequisites: PHYSICS 420 (or concurrent).

PHYSICS 425LW Optics Laboratory Credits: 3
Fundamental experiments with geometrical and physical optics.
Prerequisites: PHYSICS 420, RooWriter.

PHYSICS 431 Methods Of Theoretical Physics II Credits: 3
A continuation of PHYSICS 330 stressing applications to Physical and engineering problems.
Prerequisites: PHYSICS 330.

PHYSICS 437 Particle Physics Credits: 3
Essential aspects of modern physics are examined in a historical context, and also in terms of the standard model describing concisely the fundamental interactions among particles. Conservation laws are discussed, and recent developments such as String Theory are considered. PHYSICS 437 is also offered as PHYSICS 5537.
Prerequisites: PHYSICS 240, PHYSICS 250, PHYSICS 350 or PHYSICS 472.

PHYSICS 445LWI Modern Physics Laboratory Credits: 3
Classical experiments in modern physics including such topics as hydrogen spectra, Faraday effect, holographs, e/m of the electron, the photoelectric effect, the Zeeman effect and the Franck-Hertz experiment. Four hours of laboratory work per week.
Prerequisites: RooWriter.

Co-requisites: PHYSICS 350.

PHYSICS 450 Introduction To Solid State Physics Credits: 3
Crystal structure and binding, elementary lattice dynamics and energy band theory. Free electron models, theory of semiconductors and metals.
Prerequisites: PHYSICS 310 or PHYSICS 410.

PHYSICS 460 Electricity And Magnetism I Credits: 3
Static electric fields in free space and material media; Kirchoff's laws and direct current circuits; static magnetic fields.
Prerequisites: One year of physics and calculus.

PHYSICS 461 Electricity And Magnetism II Credits: 3
Magnetostatics; alternating current circuits; Maxwell's equations and radiation; special relativity; topics in electromagnetism.
Prerequisites: PHYSICS 460.

PHYSICS 465 Cosmology Credits: 3
This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.
Prerequisites: PHYSICS 240 and PHYSICS 250, MATH 210 or MATH 220.

Cross Listings: ASTR 465.

PHYSICS 472 Introduction To Quantum Mechanics Credits: 3
Introduction to the theory and applications of quantum mechanics with emphasis on the mathematical treatment of modern physics.
Prerequisites: PHYSICS 350.

PHYSICS 475LWI Nuclear Physics Laboratories Credits: 3
Experiments concerning the properties of alpha, beta and gamma radiation, their emission and interactions with matter. Four hours of laboratory work per week.
Prerequisites: RooWriter.

PHYSICS 476LW Advanced Laboratory Credits: 3
This course offers a selection of important experiments in physics, performed with modern instrumentation. It is designed to give students a deeper understanding of physics and help them develop experimental abilities and improve their communication skills.
Prerequisites: RooWriter.

Co-requisites: PHYSICS 350.

PHYSICS 480 Electron and Scanning probe Microscopy Credits: 3
The principles of electron optics, diffraction, and sample preparation, image interpretation and photographic processing are taught; student operation of the electron microscope and individual projects are emphasized.
Prerequisites: RooWriter.

PHYSICS 490 Special Problems Credits: 1-3
The kind of problem and the amount of credit to be given by arrangement with the department.

PHYSICS 499 Undergraduate Research Credits: 1-3
Independent student research on a physics/astrophysics project under the supervision of a faculty member. Projects will engage students in aspects of the scientific process including data collection and analysis, research methods and strategies, scientific discussion and written/oral communication. Requires a minimum of 3-4 hours of research per week for each credit hour.

PHYSICS H150 Honors: Introduction To Astronomy Credits: 3
Honors: Introduction To Astronomy

PHYSICS H220 General Physics II Credits: 4
Fundamental principles of physics including sound, electricity, magnetism, optics, elementary modern physics, and applications of these principles to different interdisciplinary natural science.
Prerequisites: PHYSICS 210 (or equivalent).

PHYSICS H240 Physics For Science And Engineering I Credits: 5
Introduction to mechanics, wave motion and sound and heat and thermodynamics.
Co-requisites: MATH 210.

PHYSICS H250 Physics For Science And Engineering II Credits: 5
Introduction to electricity and magnetism, light and optics and modern physics.
Prerequisites: PHYSICS 240.

Co-requisites: MATH 220.

Piano (PIANO)

Courses

PIANO 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

PIANO 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

PIANO 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

PIANO 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

PIANO 101 Freshman Piano I Credits: 2-4

PIANO 101J Freshman Piano I (Jazz) Credits: 2-4

PIANO 102 Freshman Piano II Credits: 2-4

PIANO 102J Freshman Piano II (Jazz) Credits: 2-4

PIANO 201 Sophomore Piano I Credits: 2-4

PIANO 201J Sophomore Piano I (Jazz) Credits: 2-4

PIANO 202 Sophomore Piano II Credits: 2-4

PIANO 202J Sophomore Piano II (Jazz) Credits: 2-4

PIANO 300 Studio Class Credits: 0

PIANO 301 Junior Piano I Credits: 2-4

PIANO 301J Junior Piano I (Jazz) Credits: 4

PIANO 302 Junior Piano II Credits: 2-4

PIANO 302J Junior Piano II (Jazz) Credits: 4

PIANO 401 Senior Piano I Credits: 2-4

PIANO 401J Senior Piano I (Jazz) Credits: 4

PIANO 402 Senior Piano II Credits: 2-4

PIANO 402J Senior Piano II (Jazz) Credits: 4

Political Science (POL-SCI)

Courses

POL-SCI 210 American Government Credits: 3
American government and politics, with special reference to the U.S. Constitution. This course meets the state requirement for study of the U.S. and Missouri Constitutions.

POL-SCI 220 Introduction To Comparative Politics Credits: 3
Introduces students to general concepts of political authority and systematically analyzes the causes and consequences of variation in political institutions, processes and policies across countries, illustrating concepts and themes with case studies of major European and Asian countries.

POL-SCI 230 International Relations Credits: 3
An analysis of relations among nations, with emphasis on structures of international power, causes of war, and approaches to peace.

POL-SCI 301 Western Political Philosophy Credits: 3
An examination of the major theories of politics from Plato to today.

POL-SCI 302 Political Research And Analysis Credits: 3
This class focuses on methods of analysis used in political science research. This course also covers research plans used to gather information about politics and effective ways of utilizing that information. As advances in computing technology expand the availability of politically-driven data, it is possible to bring an increasing amount of information to bear on more questions.

POL-SCI 303 Political Behavior Credits: 3
This course will survey research on conventional and unconventional forms of mass political behavior. Topics to be discussed include campaign participation, voting behavior, public opinion, the media, and participation in protests and revolutions. This course will also cover the methodological approaches to the study of political behavior.

POL-SCI 304 Politics Of The Developing Nations Credits: 3
An analysis of the evolving political systems of the new nations in Africa, Asia and Latin America. Social, cultural and economic influences on political processes and policies are explored.

POL-SCI 307 The United Nations: Politics And Economics Credits: 3
This interdisciplinary course covers many facets of the United Nations, acquainting students with its structure, its operations and its involvement in international events, past and present. It merges politics, economics issues and the history of the UN in an effort to understand more fully the UN's role in international diplomacy. Students in this course will have an opportunity to participate in various Model UN conferences during the year.

POL-SCI 308 Parties and Interest Groups Credits: 3
Introduction to parties and interest groups in the United States and their important role in the political process. Topics include the formation, organization, activities, and impact of political parties and interest groups in American politics.

POL-SCI 309 Public Opinion Credits: 3
Explores public opinion in the United States, surveying theories and empirical research on the measurement, formation, and distribution of public opinion.

POL-SCI 313 Politics In The American States Credits: 3
A study of the structures, functions, and politics of the institutions of American state governments and an assessment of their role in the federal system. This course is particularly interested in the extent to which political economy and political culture, broadly defined, influence public policy within the states.

POL-SCI 314 Politics of Kansas City Metro Credits: 3
This course will provide an understanding of politics in urban America through a study of metropolitan Kansas City. It will discuss the relationships between local governments, their decision making process, city-county consolidation, structure of regional council of governments, forming political alliances and current political issues affecting the metropolitan area. The course will discuss the politics of issues like transportation, sports facilities, environment and economic competitiveness.

POL-SCI 315 Public Policy Credits: 3
A broad introductory overview of decision theories, governmental structures, and policy processes. Emphasis on the organizational and societal context of public formulation, implementation, and evaluation.

POL-SCI 316 Terrorism And Political Violence Credits: 3
This course explores terrorism and armed struggle from theoretical and historical perspectives, and analyzes a number of violent movements with nationalist, ideological, and religious motivations.

POL-SCI 318 Political Psychology Credits: 3
The field of political psychology is an interdisciplinary field that draws on both psychology and political science to address topics in the political world. This course will focus on a variety of topics including inter-group conflict, stereotyping and prejudice, political socialization, attitude formation and change, political communication, decision heuristics and biases, public opinion, and the future of political psychology.

POL-SCI 319 Campaigns And Elections Credits: 3
This course will examine the role of campaigns in determining the outcome of both congressional and presidential elections and the way that electoral rules structure both campaign strategies and electoral outcomes.This course focuses on topics such as the role of the media, campaign advertising, campaign financing, public opinion, registration requirements, and the role of interest groups.

POL-SCI 326 Racial & Ethnic Politics Credits: 3
This course provides an analysis of the political behavior and roles of racial and ethnic groups in the American political system. Theoretical, empirical, and practical issues of race, racism, and race relations are examined (in the political context). Public policy, electoral behavior, and political institutions are also investigated with regards to the empowerment and political incorporation of communities of color

POL-SCI 333 Social Networks in Politics Credits: 3
This class focuses on mass political behavior and social networks in the US. Particular attention will be devoted to how relations between individuals can affect political attitudes and participation. We will also consider how these individual relations combine to shape outcomes such as political attitudes, voter turnout, and election outcomes.

POL-SCI 336 American Foreign Policy Credits: 3
Understanding the contemporary debate over American foreign policy in terms of the premises and perspectives of several competing schools of thought.

POL-SCI 341 The Theory Of Democracy Credits: 3
Analysis of the writings of philosophers like Hobbes, Locke, Rousseau, Marx and Nietzsche who developed and analyzed the ideas associated with modern democracies.

POL-SCI 343 The Politics Of Social Security Credits: 3
A study of the American Social Security system, including its history, principles, and prospects for the future.

POL-SCI 344 Jurisprudence Credits: 3
An examination of theories of law from the viewpoint of political science.

POL-SCI 346 Introduction to the Trial Process Credits: 3
This course examines the trial process. We examine both about the structure of the judicial system and the different elements of a trial. Students will also participate in a mock trial using the American Mock Trial Associations annual problem.

POL-SCI 348 Constitutional Law: The Federal System Credits: 3
A study of the president, congress and state governments from the perspective of the Constitution, emphasizing powers and limitations on the exercise of authority.

POL-SCI 349 Constitutional Law: Civil Liberties Credits: 3
A study of civil liberties in American society, emphasizing factors and forces that restrict or enlarge their scope, as understood through constitutional interpretation.

POL-SCI 355 Politics In Eastern And Central Europe Credits: 3
An analysis of the internal politics and foreign policies of the Czech Republic, Slovakia, Hungary, Poland, and selected other countries in East-Central Europe, emphasizing the transition to post-Communist rule and new and enduring patterns of political culture.

POL-SCI 357 Western European Politics Credits: 3
This course explores democratic representation and political institutions in Western Europe.

POL-SCI 359 Latin American Politics Credits: 3
In this course we will focus on the major periods in Latin American political history since the Great Depression. This includes the pot-War period of optimism in which democratic governments promoted rapid economic development, the period of pessimism and authoritarianism from the 1960s to the 1980s, and a new democratic renewal beginning in the 1990s. We will examine the consolidating democracies that emerged in the 1990s in depth.We will also examine case studies of recently failed democracy, Venezuela, and ask why this democracy failed.

POL-SCI 360 Labor, Politics and Society Credits: 3
This course explores many aspects of unions and the labor movement in society and the vital role organized labor plays as a pillar of democratic society. Unions impact the economy, growth, and the distribution of wealth, and the impact racial and gender equality, social security health and job safety, energy and the environment, and even foreign relations. As a social movement, labor has had a major impact on American history. This course covers these topics from a labor perspective. It examines current obstacles for union organizing, recent union campaigns, labor's political role, and the relationship between labor and the media, This course is part of the Certificate Program in Labor Studies and is offered on the University of Missouri Interactive Video Network at UMKC, UMSL, and UMC.

POL-SCI 361 Global Issues in a Changing World Credits: 3
Threats to national and international securing were once dominated by military force and interstate warfare. Threats are now seen in a much broader context. Non-state, transnational actors now pose a threat to transnational business, states, and even civilizations. Issues like global climate change and HIV/AIDS are seen as threats to national survival well beyond any single nation's ability to contain. For some, the deep phenomenon of globalization is seen as a threat to national sovereignty and, indeed, a threat to the international system of states. In this course, challenges and opportunities replace threat as the organizing principle, and the role of international institutions takes center stage.

POL-SCI 362 Latin America and International Relations Credits: 3
This course we will survey the relations between Latin American states and between Latin America and the world. Taking the Latin American states as the key actors, we examine the history of US-Latin American relations, including current issues such as drug trafficking, immigration and terrorism. We will also study the region as a player on the international stage, examining Latin America's changing role in the world arena related to trade, development, and the environment. Finally we examine the emergence of new leadership in Latin America.

POL-SCI 364 Designing American Elections Credits: 3
This course examines the role of elections in American politics. Topics include voter registration, campaign finance, redistricting, the electoral college, and primary elections. We will also evaluate how different electoral rules affect political outcomes such as voter turnout, participation, and representation.

POL-SCI 365 Comparative Legislatures Credits: 3
The objective of this course is to examine the election and behavior of legislators and legislatures in a comparative context.

POL-SCI 369 Politics Of The Middle East Credits: 3
The course is designed to provide students with a working knowledge of political systems and major political issues in the Middle East and North Africa. Topics to be covered in the course include the question of Middle east exceptionalism, democratization, the eff ect of religion and identity, political economy of the Middle East, the Arab-Israeli conflict, political violence, and the Arab Spring.

POL-SCI 370 Labor Law Credits: 3
In this course, participants will examine the role of government in the regulation of labor-management relations in the United States. While the focus of the course will be on federal laws regulating private sector labor relations, parallel issues addressed in the Railway Labor Act and state public sector labor relations law will also be covered. Specific topics include the legal framework for the organization of workers, definition of prohibited or unfair labor practices of employers and unions, legal regulation of the collective bargaining process, regulation of the use of economic weapons in labor disputes, enforcement of collective bargaining agreements and the regulation of internal trade union activities.

POL-SCI 380 Political Science And Politics Credits: 1-6
Offered as a special course in the individual faculty member's area of research specialization. The course may be repeated for credit when the topic varies. The topic and instructor will be announced in advance.

POL-SCI 380A Political Science And Politics Credits: 1-6

POL-SCI 380B Political Science And Politics Credits: 1-6

POL-SCI 380C Political Science And Politics Credits: 1-6

POL-SCI 380D Political Science And Politics Credits: 1-6

POL-SCI 380E Political Science And Politics Credits: 1-6

POL-SCI 380X Political Science And Politics Credits: 1-6

POL-SCI 381 Mock Trial Credit: 1
A study of the trial process in the U.S. judicial system focusing on the structure and rules of trials, including the role of attorneys. Combination of student performance with in-class lecture and discussion.

POL-SCI 403 Political Ideology Credits: 3
A critical examination of contemporary political ideologies including democratic and authoritarian theories.

POL-SCI 404 Conflict Resolution and Cooperation Credits: 3
This course examines theories of cooperation in the international system. Students will assess the challenges to international cooperation and the means through which states and non-state actors overcome those challenges. Students will critically evaluate theories of conflict resolution and cooperation, while learning to apply those theories to current events.

POL-SCI 406 Presidential Politics Credits: 3
This course will examine the American presidency as an institution, and will analyze its role in the American political system. It will also consider the administrations of the various presidents.

POL-SCI 407 Congressional Politics Credits: 3
Focus on the U.S. Congress and its role in the political process, surveying theories and empirical research on congressional campaigns, internal procedures, and the relationship between Congress and the other branches of government.

POL-SCI 408 Judicial Politics Credits: 3
An examination of the judiciary in the American political process, emphasizing the role of judges, lawyers and the Supreme Court.

POL-SCI 409 Bureaucratic Politics Credits: 3
A study of political processes that create and operate within bureaucracies in the American pluralist system. Close attention is given to the tension between representation and rationality when making decisions.

POL-SCI 418 International Conflict and Cooperation Credits: 3
The course examines competing theories and concepts of conflict and cooperation in the international system. Students will develop an understanding of the study of international conflict and security, development of cooperation in the international system and state responses to varying security environments. Students will also acquire analytical tools for evaluating international security phenomena.

POL-SCI 424 Urban Politics and Community Power Structures Credits: 3
This course surveys and analyzes the literature covering urban politics. Students will gain both a theoretical understanding of and empirical grounding in the politics of urban America. An array of important political, social and economic problems that impact urban politics will be examined.

POL-SCI 425 Seminar in Comparative Politics Credits: 3
A survey of the major research in comparative politics including state building, democracy, economic development, and political violence.
Prerequisites: POL-SCI 220.

Cross Listings: POL-SCI 5513.

POL-SCI 427 Presidential Power: foundations, Growth, Issues Credits: 3
An intense examination of the growth of presidential power, from its constitutional foundations; the necessity of a strong presidency, but the potential for abuse. Appropriate for the general student, as well as for majors in political science.

POL-SCI 429 Courts And Public Policy Credits: 3
An analysis of how courts influence policy in selected political arenas.

POL-SCI 435 Politics Of The Environment Credits: 3
A survey of the political aspects of environmental issues. The course poses the problems of environmental damage and examines actual and proposed policies aimed at addressing them. Also offered through the PACE program.

POL-SCI 438 Urban Politics Credits: 3
The study of local politics and government in metropolitan areas with special attention to political party and interest group activity; community leadership, influences and "power"; and citizen participation and political behavior.

POL-SCI 440 Contemporary Political Thought Credits: 3
Political philosophy from Nietzsche to today.

POL-SCI 442 American Political Thought Credits: 3
This course will focus on intellectual reations to the major periods in American history (the movement for independence, the writing of the Constitution, the Jacksonian period, the Civil War debate, the growth of big business, the rise of the positive state and contemporary America). Contemporary theorists will be included along with Adams, Jefferson, Madison, Hamilton, Marshall, etc.

POL-SCI 451 International Politics In Europe Credits: 3
An examination of developments in international politics in Europe since the end of the Cold War. Issues are discussed in the context of relevant theories of international relations.
Restrictions: May not be taken by those who took "Europe After the Cold War

POL-SCI 452 Concepts in International Relations Credits: 3
This course exposes advanced undergraduate students to major conceptual and theoretical approaches to international relations.
Prerequisites: Prior course in international relations, politics, economics, or history.

POL-SCI 480 Government And Politics Credits: 1-6
This variable credit course will explore different contemporary issues and problems related to government and politics. Credit may apply to the major but will not satisfy any of the four subfields distribution requirements.

POL-SCI 490 Senior Seminar Credits: 3
A review, analysis and integration of the literatures of the several sub-fields of the discipline. For senior political science majors only.
Prerequisites: Senior standing.

POL-SCI 491 Internship Credits: 1-6
With the written consent of the department chairman, students may participate in structured internship programs approved by the department for a maximum of six hours.

POL-SCI 492WI Senior Seminar (Capstone) Credits: 3
This intensive survey of political science provides graduating seniors an opportunity for integration and review of their study of political values, behavior, and institutions. Satisfies both writing intensive and capstone requirements.
Prerequisites: Senior standing in political science, RooWriter.

POL-SCI 493 Study Abroad Credits: 1-6
With prior approval from the department advisor, students may complete coursework at an approved foreign university and receive up to 6 hours of political science credit.

POL-SCI 497 Political Science Tutorial Credits: 3
Senior political science majors may apply to do independent study under a selected professor. Must have written consent of the professor prior to registration. Only one tutorial will count toward the major.

POL-SCI 498 Honors Tutorial Credits: 1-3
Senior political science majors with a grade point average of 3.4 or above in political science may apply to do independent study under a selected professor. Must have written consent of professor prior to registration. Only one tutorial will count toward the major.

Psychology (PSYCH)

Courses

PSYCH 210 General Psychology Credits: 3
A survey of the fundamental principles, theories, and methods of psychological science.

PSYCH 270P Compulsive Gambling And Other Addictions Credits: 3
Course will focus on compulsive gambling and the psychology of addiction. Alcohol, drug, food and sex addiction will also be explored. After attending this course, the student will be able to understand the problem gambling continuum, the phases of the problem gambler and how this addiction affects the family.

PSYCH 302WI Experimental Psychology Credits: 4
The rationale and methodology of experimentation in psychology, emphasizing interpretation of data and the design of experiments. Lecture laboratory each week.
Prerequisites: PSYCH 210, RooWriter.

PSYCH 303WI Psychological Writing Credits: 3
Writing skills in science are emphasized. Instruction and intensive practice in writing are provided.
Prerequisites: PSYCH 210, RooWriter.

PSYCH 304 Learning Credits: 3
Survey course of the fundamental principles of contemporary theories of learning.
Prerequisites: PSYCH 210.

PSYCH 305 Psychology Of Women Credits: 3
A critical examination of studies of the psychology and behavior of women.
Prerequisites: PSYCH 210.

PSYCH 308 Sensation And Perception Credits: 3
The study of how we perceive the world through our senses, including the anatomy and function of the sense organs and the effect of normal and altered sensory experience on behavior. May not be taken for graduate credit.
Prerequisites: PSYCH 302WI (or concurrent).

PSYCH 310 Theories Of Aggression Credits: 3
Major theories of aggression and their application are examined.
Prerequisites: PSYCH 210.

PSYCH 311 Applied Psychology Credits: 3
The major applications of scientific psychology to human problems and behavior, such as business, mental health, and education are covered. May not be taken for graduate credit.
Prerequisites: PSYCH 210.

PSYCH 312 Social Psychology Credits: 3
Survey of behavior in the actual, imagined, and implied presence of others, including attitudes, the self, conformity, altruism, aggression, prejudice, and group processes. May not be taken for graduate credit.
Prerequisites: PSYCH 210.

PSYCH 316 Quantitative Methods In Psychology Credits: 3
Introduction to the use, calculation, reporting, and interpretation of descriptive and elementary inferential statistical techniques in psychological science.
Prerequisites: PSYCH 210; Any MATH (110 or higher, except MATH 125) with a grade of C- or better.

PSYCH 320 Ethnic And Minority Perspectives In Psychology Credits: 3
The theory, methods and content of psychology relevant to the interests and needs of ethnic minorities, and the contributions of ethnic groups and other minorities to psychology.
Prerequisites: PSYCH 210.

PSYCH 322 Child Psychology Credits: 3
Survey of child development from conception to adolescence, including major theories, developmental milestones and research related to the physical, cognitive, social and emotional growth of children. May not be taken for graduate credit.
Prerequisites: PSYCH 210.

PSYCH 322P Child Psychology Credits: 3
Survey of the child development from conception to adolescence, including major theories, developmental milestones and research related to the physical, cognitive, social and emotional growth of children. May not be taken for graduate credit.
Prerequisites: PSYCH 210.

PSYCH 323 Theory And Methods Of Personality Credits: 3
The development, organization, dynamics and determinants of personality. May not be taken for graduate credit.
Prerequisites: PSYCH 210.

PSYCH 328 Psychology Of Human Sexual Behavior Credits: 3
The psychological, biological and social factors that contribute to human sexuality, and a review of human sexual development across the lifespan.
Prerequisites: PSYCH 210.

PSYCH 331 An Introduction To Health Psychology Credits: 3
A survey of the role of psychological factors in physical health and well-being including in health promotion, disease prevention, and adjustment to illness.
Prerequisites: PSYCH 210.

PSYCH 400 Principles Of Psychological Testing Credits: 3
The theory of psychological testing and measurement.
Prerequisites: PSYCH 316.

PSYCH 403 Environmental Psychology Credits: 3
Environmental influences on the behavior of individuals and their influence on the environment.
Prerequisites: PSYCH 210.

PSYCH 405 Motivation and Emotion Credits: 3
A review of the principles of both human and animal motivation from classical drive, behavioral, and cognitive perspectives. May not be taken for graduate credit.
Prerequisites: PSYCH 210.

PSYCH 406P Introduction To Developmental Disabilities Credits: 4
Principles of human development, causes of disability, and the effects of disability on individuals and families over the life span.
Prerequisites: PSYCH 210.

PSYCH 407 Cognitive Psychology Credits: 3
Historical foundations and current state of knowledge regarding human information processing and the mental processes that underlie human behavior.
Prerequisites: PSYCH 302WI (or concurrent).

PSYCH 407P Developmental Disabilities And Community Life Credits: 4
Focus is on developmental disabilities in community life and interdisciplinary process as a means of coordinating services and supports in community settings. Students will learn about specific disciplines and professions and how they must work together in the community. Topics include the State developmental disabilities network and service system, the principles of person-centered planning, the effects of severe disability on families, and the dynamics surrounding community inclusion of persons with severe disabilities.

PSYCH 415 History And Systems Of Psychology Credits: 3
The historical development of the field of psychology, including a review of its major theoretical schools and methodological advances. This is the department's capstone course. Required of psychology majors. Should be taken only by Psychology majors and minors in their senior year.
Prerequisites: PSYCH 302WI (C- or better).

PSYCH 418 Brain and Behavior I Credits: 3
Introduction to the neural bases of human behavior, including movement, learning and memory, sensation and perception, emotion, cognition, psychological, and neurological disorders.
Prerequisites: PSYCH 302WI.

PSYCH 419 Biopsychology II Credits: 3
Advanced study of the neural bases of behavior.
Prerequisites: PSYCH 418.

PSYCH 428 Advanced Applied Child Development Credits: 3
Academic service learning course that focuses on contemporary developmental issues, particularly those with applied and social policy implications for promoting positive healthy development of children and adolescents. Students spend a minimum of 25 hours actively engaged in community work serving children or youth.
Prerequisites: PSYCH 322, earned grade of "B" or greater.

PSYCH 430 Introduction To Community Psychology Credits: 3
Introduction to community psychology, a field which seeks to understand how social, political and economic factors contribute to human and social problems and seeks to improve individual and community well-being through social innovation and action research.
Prerequisites: PSYCH 302WI.

PSYCH 433 Abnormal Psychology Credits: 3
Introduction to major psychological problems and disorders as well as consideration of some of the many interacting biopsychosocial influences viewed from an empirically-informed perspective. May not be taken for graduate credit.
Prerequisites: PSYCH 210.

PSYCH 440 The Psychology Of Aging Credits: 3
Survey of concepts, theory, and methods in the psychology of aging, including biological and social influences on behavior.
Prerequisites: PSYCH 210.

PSYCH 441 Adult Development And Aging Credits: 3
Major developmental theories of adult development and aging are reviewed, including the impact of cohort, gender, race/ethnicity, socioeconomic status, and culture on development.
Prerequisites: PSYCH 210.

PSYCH 450 Special Topics Credits: 1-3
Offered as the result of student demand, specialized faculty interests, or the availability of a visiting expert in a field related to psychology.

PSYCH 450A Special Topics Credits: 1-3

PSYCH 450L Special Topics In Psychology Credits: 1-3

PSYCH 453P Family Life Cycle: Dev Approach Understanding Family Dynamic Credits: 4
The primary purpose of this course is to enhance the student’s understanding of the dynamics of healthy families. After receiving a historical overview of the development of families and the cultural roots and traditions behind family structures, child-rearing values and other factors, the student will be given a framework to understand how healthy families establish a dynamic balance between individual and group needs, and between needs to establish structure and to be flexible in the face of change. A second framework will also be presented to provide students with an understanding of how families use their internal resources to cope with life stressors. Given these basic cultural, interactional, and coping frameworks as foundation for understanding, students will explore how families change as they move through time from formation as a couple through early child-rearing, adolescence, mid-life, and post retirement. Implication for human service professionals will be presented.

PSYCH 458 Behavior Modification Credits: 3
Survey of procedures used to change individual behaviors in variety of settings.
Prerequisites: PSYCH 302WI and PSYCH 304.

PSYCH 461A Field Practicum Credits: 4
Provides supervised experience working in community agencies/ organizations which address various human and social problems. A minimum of ten hours per week at practicum site and class attendance are required.
Prerequisites: PSYCH 302WI; at least 15 credit hours of psychology.

PSYCH 490 Directed Individual Research Credits: 1-6
Students work on an individual research project under the supervision of a departmental faculty member.

PSYCH 490P Perceptions & Images Of Disabilities In Literature And Film Credits: 4
This course combines classroom discussion of selected films and literature and independent study. Students will study films and selections from literature to develop an understanding and awareness of the social, economic and political aspects of disability as conveyed through popular culture. Students will also apply research, observation and writing skills to gain awareness and insights regarding disabilities, through working on an individual or team project. The project will further the understanding of disabilities and how various social, psychological and environmental conditions may affect people with disabilities and their families.

PSYCH H210 General Psychology Credits: 3
A survey of the fundamental principles, theories, and methods of psychological science.

Public Administration (PUB-ADM)

Courses

PUB-ADM 310 Introduction To Public Administration Credits: 3
IIntroductory analysis of the theory and practice of public administration and its special role in society. General examination of newer approaches to planning, programming, budgeting, and system analysis in the responsible-responsive administration context. The political role of the public administrator in public policy formulation and his/her general strategies.

PUB-ADM 410 Research Methods In Public Administration Credits: 3
This introductory course focuses on quantitative empirical research design and statistical analyses in relation to public administration issues and concerns.
Prerequisites: Admission to MPA 5 year program.

PUB-ADM 415 Issues In Urban Administration Credits: 3
This course is designed for students in urban affairs, urban planning, business administration, political science, sociology, geosciences, economics and related fields. It provides an overview of major issues and trends in urban administration. Issues include taxes, urban sprawl, race/ethnicity, education, poverty, affordable housing, environment, crime, and land use. Particular focus will be paid to public policy, comparing policies and leadership to construct an interdisciplinary, comparative understanding of how cities address these problems, issues and trends.

PUB-ADM 448 Leadership For Public Service Credits: 3
The two core purposes of this course are for students to learn about effective and ethical leadership, and for students to understand and develop their own capacity for leadership. The course is organized around three general themes: 1) leadership as relations with subordinates, including issues of work motivation; 2) leadership as lateral relations, including organizational politics and conflict management and resolution; and 3) leadership as influence in the organization's environment.
Prerequisites: Admission to MPA 5 year program.

PUB-ADM 455 Non-Profit Leadership Issues Credit: 1
Focusing on leadership issues in nonprofits, this course will explore issues in an intensive seminar format (fifteen class hours). Topics include building and renewing nonprofit boards, and the power of diversity in nonprofit organizations. Recommended for nonprofit management students.

PUB-ADM 455B Non-Profit Leadership Issues: Board-Staff Relations Credit: 1

PUB-ADM 455C Non-Profit Leadership Issues:A Vital Resource In A Changing World Credit: 1

PUB-ADM 495 Voluntarism, Philanthropy & The Non-Profit Sector In The U.S. Credits: 3
This course provides a survey of the origins, development and contemporary functioning of the private, nonprofit sector in the U.S. The course explores theories and concepts that describe the social, political, legal and economic meaning of voluntarism, philanthropy and the nonprofit sector

PUB-ADM 497 Special Topics In Public Administration Credits: 1-3
Study and research in areas of special interest under individual faculty direction.
Prerequisites: senior standing.

PUB-ADM 497B Special Topics In Public Administration Credits: 1-3

PUB-ADM 598E Supervised Research: International Management Credits: 1-6

Reading (EDRD)

Courses

EDRD 439 Content Area Reading And Language Development Credits: 3
Training in how to reduce the magnitude of difficulty experienced by students in making the transition from learning to read to reading to learn. Specific topics include: inquiry training: vocabulary acquisition; study skills; reading for upper level students; critical/constructive reading, writing across the curriculum, school-wide programming, and working with special needs students (e.g., L.D., ESL, culturally, different).
Prerequisites: Admission to the school of education.

Real Estate (RL-EST)

Courses

RL-EST 321 Real Estate Principles Credits: 3
The student will be introduced to the very basics of real estate from the terminology, real estate's role in the economy, legal foundations, government controls, appraisal processes, valuation processes, brokering and closing transactions, time value of money, basic management issues and lease clauses, and basic standard form purchase contracts.

RL-EST 322 Real Estate Principles II Credits: 3
This practical course is designed to build upon the terminology and professional obligations learned in Principles I. The purpose of this course is to introduce the student to the basic concepts of real estate and provide initial exposure to the real estate profession. Completion of the course will provide students with a better understanding of the complexity and breadth of the real estate industry.
Prerequisites: RL-EST 321 or ENT 321.

RL-EST 421 Real Estate Finance Fundamentals Credits: 3
This course will provide a fundamental understanding of basic financial concepts of real estate including compounding and discounting, construction of amortization tables and after-tax yield analysis for a simple real estate investment. It also touches on the basics of title insurance, ownership issues, fixed rate verses variable rate mortgages in residential real estate, understanding housing bubbles, and trends in valuation of residential real estate. In addition, the student will complete mathematical comparisons of leasing versus owning a home.
Prerequisites: FIN 325.

RL-EST 425 Principles of Real Estate Property Management Credits: 3
Explores the complexities of managing apartments, condominiums, office buildings, industrial property, and shopping centers. This course covers rental markets, development of rental schedules, leasing techniques and negotiations, repairs and maintenance, tenant relations, merchandising, selection and training of personnel, accounting and owner relations.

RL-EST 496 Internship: Real Estate Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community. Internship coursework is evaluated on a credit/no credit basis.

RL-EST 497 Special Topics: Real Estate Credits: 1-3
Study and research in areas of special interest under individual faculty direction.
Prerequisites: senior standing.

RL-EST 497A Special Topics-Real Estate Credits: 1-3
Study and research in areas of special interest under individual faculty direction.
Prerequisites: senior standing.

RL-EST 497B Special Topics-Real Estate Credits: 1-3
Study and research in areas of special interest under individual faculty direction.
Prerequisites: senior standing.

Religious Studies (RELIG-ST)

Courses

RELIG-ST 100 Introduction To Comparative Religion Credits: 3
An introduction to the major religious traditions of the world and small group or tribal religions. Emphasis on the comparative study of selected myths, rituals, types of religious specialists, and types of religious communities.

RELIG-ST 306 History of Christianity to the Middle Ages Credits: 3
This course examines the historical and theological development of Christianity from its origins to the High Middle Ages. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional, and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.
Cross Listings: HISTORY 306A.

RELIG-ST 307 History of Christianity from Middle Ages to Present Credits: 3
This course examines the historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional, and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.
Cross Listings: HISTORY 307A.

RELIG-ST 400 Special Topics In Religious Studies Credits: 1-3
Special topics in religious studies which are not offered regularly. The focus of the course varies by semester and instructor.

RELIG-ST 400A Special Topics In Religious Studies Credits: 1-3

RELIG-ST 400B Special Topics In Religious Studies Credits: 1-3

RELIG-ST 400C Special Topics In Religious Studies Credits: 1-3

RELIG-ST 400D Special Topics In Religious Studies Credits: 1-3

RELIG-ST 400E Special Topics In Religious Studies Credits: 1-3

RELIG-ST 400F Special Topics in Religious Studies Credits: 1-3

RELIG-ST 401 Religion in America Credits: 3
An in-depth examination of selected aspects of the history of religions in America from the colonial periods to the present. Special emphasis will be given to methodological issues in the study of American religious history.

RELIG-ST 402 Religion and Colonialism in Latin America Credits: 3
The study of selected aspects of the history of religions in the Americas. Primary focus is on the complex ways that European, Native American African religions helped to structure and negotiate the experiences and the significance of cultural contact and colonialism through lived worlds of meaning.

RELIG-ST 403 Vision, Dreams and Prophesies as Religious Phenomena Credits: 3
This course explores the ways visions, dreams, and prophesies have acquired religious significance in Western and non-Western contexts from the ancient period to the present.

RELIG-ST 404 Gender and Religion Credits: 3
Cross-cultural and comparative study of how religious groups create and transmit gender roles and expectations.

RELIG-ST 467 Myth And Ritual Credits: 3
Myth and "ritual" have long been fundamental categories in the study of religion. This course will briefly survey some of the major theories and approaches to the study of myth and ritual from the Enlightenment to the present. The course will not only trace the shifting meanings of "myth" and "ritual", but will critically evaluate the utility of diverse approaches to the study of religious phenomena designated by these terms. Reading will include theoretical works, as well as selected case studies.

RELIG-ST 484 Sacred Narratives and Texts Credits: 3
This course addresses the "social lives" of sacred narratives and texts in selected religions of the world. Areas of study include methods of exegesis in different religious traditions, orality and literacy (including the reoralization of written text), the canonization process, text as amulets, reading and meditative practices and techniques, and narratives and the arts. The course is comparative, cross-cultural, and interdisciplinary in nature.

RELIG-ST 487 Contemporary Approaches to the Study of Religion Credits: 3
This course which is the second installment in a two course series, charts the historical development of religious studies as an academic discipline, paying particular attention to the models, methods and assumptions that have informed it past and present. In this course, particular emphasis will be placed upon the ways the objects and aims of religious studies have shifted from the Second World War to the present.

RELIG-ST 493 Sex & Religion: The Erotic & The Anti-Erotic In Comparative Persp Credits: 3
This course is designed to highlight issues related to the various ways in which religions of the world have integrated, embraced, or repressed one of the most basic human experiences sexual expression.
Cross Listings: RELIG-ST 5593.

RELIG-ST 494RS Death In The History Of Religions Credits: 3
As a biological "fact," death would appear to be a human universal. Yet, human beings have imagined--and, thus experienced--the meaning of death in many diverse ways in different cultures and over time. This course explores the conceptualization and representation of death and dying, as well as the ritual activities surrounding death, found in selected religious communities. The goal is to gain insight into how people have sought to (re) create a world of meaning in the face of death and to gain a critical perspective on our own contemporary situation.

RELIG-ST 495RS Time And Space In The History Of Religions Credits: 3
Time and space are essential components of the lived worlds of human beings, yet the cultural and historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space found in selected religious communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period.

RELIG-ST 496RS The Body In The History Of Religions Credits: 3
The human body is the site of extensive imaginal and ritual activities in all religious traditions. This course explores some of the diverse ways religious communities have imagined and experienced the human body, as well as how the body had been manipulated and worked on in an effort to transform the human situation in the world.

RELIG-ST 497RS Special Topics And Readings Credits: 1-6
Intensive reading and/or research in an area selected by the student in consultation with the instructor. May be repeated for credit when the topic varies.

Saxophone (SAXOPH)

Courses

SAXOPH 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

SAXOPH 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

SAXOPH 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

SAXOPH 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

SAXOPH 101 Freshman Saxophone I Credits: 2-4

SAXOPH 101J Freshman Saxophone I (Jazz) Credits: 2-4

SAXOPH 102 Freshman Saxophone II Credits: 2-4

SAXOPH 102J Freshman Saxophone II (Jazz) Credits: 2-4

SAXOPH 201 Sophomore Saxophone I Credits: 2-4

SAXOPH 201J Sophomore Saxophone I (Jazz) Credits: 2-4

SAXOPH 202 Sophomore Saxophone II Credits: 2-4

SAXOPH 202J Sophomore Saxophone II (Jazz) Credits: 2-4

SAXOPH 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: SAXOPH 5300.

SAXOPH 301 Junior Saxophone I Credits: 2-4

SAXOPH 301J Junior Saxophone I (Jazz) Credits: 4

SAXOPH 302 Junior Saxophone II Credits: 2-4

SAXOPH 302J Junior Saxophone II (Jazz) Credits: 4

SAXOPH 401 Senior Saxophone I Credits: 2-4

SAXOPH 401J Senior Saxophone I (Jazz) Credits: 4

SAXOPH 402 Senior Saxophone II Credits: 2-4

SAXOPH 402J Senior Saxophone II (Jazz) Credits: 4

Social Sciences (SOC-SCI)

Courses

SOC-SCI 210P Foundations Of Social Science Credits: 3
An application of salient principles, facts and methods of social sciences to study of origins and nature of social institutions; problems of emotional adjustment and vocational choice; analysis of contemporary social, legal and economic trends affecting values, conception of freedom and of social power, and political organization.

SOC-SCI 302P Power and Authority Credits: 4
This weeknight course is intended to deal with the issues of power and authority as they bear on people at the individual, family, social and political levels. The intent of the course is to discuss the issues of control, power, authority and the limits of obedience.

SOC-SCI 355P The Environmental Movement: Roots And Actions Credits: 4
A multi-disciplinary course synergizing case studies from history, political science, environmental management, and urban planning to develop a deep understanding of current environmental issues. We will probe such issues as the Concept of Nature and Environmental aesthetics Agriculture and the Environment, Energy and the Environment, Developing the "Built Environment", Environmental Costs of Industrialism, the Birth of the Environmental Movement, Environmental Politics, Environmental Justice and many other topics.

SOC-SCI 375P Contemporary Issues In The Service Industry Credits: 4
This course will allow students to undertake in-depth research of current issues important to the service industry. Focus will be placed on understanding theoretical principles and their impact on management behavior and decision making. Issues may include; the evolving technology of the industry, the impact of the industry on national employment issues, and the social impact of the industry on class and racial issues.

SOC-SCI 395C Economics Of Energy Credit: 1
See ECON 395C.

SOC-SCI 395G Economics Of Poverty Credit: 1
See ECON 395G.

SOC-SCI 397A The Economics Of Public Process I Credit: 1
This film/tape course and ECON 397B are specifically designed in the format of the PACE program. Regular majors in economics may count one of these two courses as meeting the 27 minimum required departmental hours. The J.K. Galbraith film series and text, The Age of Uncertainty, provide the central theme for this course.

SOC-SCI 397B The Economics Of Public Process II Credit: 1
This film/tape course and ECON 397A are specifically designed in the format of the PACE program. Regular majors in economics may count one of these two courses as meeting the 27 minimum required departmental hours. The Milton Friedman film series, Free to Choose, provides the central theme for this course.
Prerequisites: ECON 201 and ECON 202.

SOC-SCI 411P Aging In American Society: Past And Present Credits: 4
Modern views of aging are often contrasted with views of aging in earlier times. The popular mythology suggests that the position of the older adult has fallen from a place of high status and respect. Exploring the myths and rhetoric, this introduction to the field of social gerontology examines aging in America as grounded in the nation's history and a variety of sociocultural contexts.

SOC-SCI 438P Labor History & Economic Policy Credits: 3
Analysis of the confluence of political and economic behavior the economics of collective action.
Prerequisites: ECON 301 and ECON 302.

SOC-SCI 457P First Nations And Survival In Latin America Credits: 4
This course examines the history of a specific country, historical and contemporary issues (such as genocide, land use, economic and political marginalization and independence movements.) The course focuses on history and experience as it is constructed by and impacts native people. Special consideration is given to women and gender constructs in the native societies and the impact of a dominant European patriarchy.

SOC-SCI 458P Women, Men And Development In A Cultural Context Credits: 4
Students will explore two main areas of social scientific discourse in Latin America: theories of development and marginalization; and feminist interpretation of and responses to development. We will explore how the phases of political and economic history are reflected in ideas about development, dependency, and women's issues. A large part of the class will be concerned with the increasingly important issue of street children in Latin America and other minority issues.

SOC-SCI 465P Human Resources In The Service Industry Credits: 4
This course will trace the historical development, and examine current policies and procedures of human resources in service organizations. Special emphasis will be placed on understanding the evolving importance of employees in developing systems to meet operational goals. Management and labor perspectives on legal employment issues, compensations issues, and team development strategies will be examined.

SOC-SCI 489P Internship In Hospitality Studies Credits: 4
This course will allow students to demonstrate mastery of acquired theories and principles in conjunction with a working hospitality organization. Emphasis will be placed on directed research and readings to enhance individual understanding or concepts. Students will work with the Hospitality Studies Coordinator on exact course requirements.

SOC-SCI 490C Readings In Labor Economics Credit: 1
Readings in Labor Economics.
Prerequisites: ECON 201 and ECON 202.

Sociology (SOCIOL)

Courses

SOCIOL 101 Sociology: An Introduction Credits: 3
An introduction to the study of society and the basic concepts of sociology.

SOCIOL 182 The Countercultural Experience Credits: 3
This interdisciplinary course examines countercultures, groups whose shared values and practices set them apart from mainstream culture. Students will explore how and why countercultures form, transform and decline; how they reason out, articulate and practice their shared cultural values; their function as distinctive discourse communities; and how individual members negotiate their identities and values within and between cultural groups.
Co-requisites: DISC 100.

Cross Listings: ENGLISH 182.

SOCIOL 201 Introduction To Social Psychology Credits: 3
Exploration of the relationships between human behavior and social context. The course focuses on how realities are socially constructed and sustained, the role of symbol systems, definitions of the situation, the self as a product of interaction, and the relationship between language, thought and culture.

SOCIOL 203 Social Problems Credits: 3
An examination of major social problems of modern Western society, including issues of racial conflict, war, civil rights, youth movements, the mass media, urban poverty, and crime. The topics will vary from year to year depending upon the instructor.

SOCIOL 205 The Social Life of Things Credits: 3
This course examines the ways anthropologists have studied the connections between people and things. It explores how social relationships are created and changed through the use and exchange of objects, and how objects themselves take on particular meanings and histories in these processes. In questioning the relationship between material culture and human sociality, the course will expose students to a range of ethnographic and historical case studies, as well as introduce them to some core theoretical perspectives and debates within anthropology.
Cross Listings: ANTHRO 205.

SOCIOL 206 Cities of the World Credits: 3
This course will focus on urban issues to help students develop global perspectives. Urbanization has been a global phenomenon, and more than half of the world population lives in urban areas. Students will learn past, present and future urban issues and challenges on the global scale and about how cities of the world have coped and will cope with these issues and challenges.
Cross Listings: UPD 206, URBAN ST 206.

SOCIOL 207 Writing Culture: The Craft of Ethnography Credits: 3
This course will explore the contexts in which powerful social groups learn, talk, and write about less powerful groups. The course material will explore how the identities and biases of anthropologists condition how they perceive, analyze, and represent others. Students will compare changes in ethnographic methods, theories, and styles across time and geography.
Cross Listings: ANTHRO 207.

SOCIOL 210 Crossing Boundaries: The Latina/o Immigrant Experience Credits: 3
This course examines the Latina/o immigrant experience from the immigrants' diverse origins in the Americas to the communities they shape. Students will examine how empire, war, and economic integration have pushed people to migrate and how work, family, and immigration policy have shaped patterns of migration and settlement as well as integration and exclusion.
Prerequisites: Anchor I, DISC 100.

Co-requisites: DISC 200.

Cross Listings: LLS 210, ECON 210, ENGLISH 212.

SOCIOL 211 Social And Psychological Development Through The Life Cycle Credits: 3
A survey of significant psychosocial issues, events and crises throughout the human life span. The life cycle of the family is examined as the primary context within which individual development occurs. Although the primary emphasis will be on normal adjustment and development, attention will also be given to the occurrence of special problems and deviations at each life stage.

SOCIOL 212 Global Health Credits: 3
This course will use the lens of critical medical anthropology to analyze the sources of poor health outcomes, health disparities, and the global impacts of health policy. Students will explore the connections between population health and other aspects of social life, such as power, inequality, war, and economics, exploring the ways in which globalization and the privatization of health creates conditions that facilitate disease.

SOCIOL 263 Introduction to Statistics in Sociology/Criminal Justice Credits: 3
A first course in the statistical analysis of quantitative data. Course emphasizes descriptive statistics, probability theory, parameter estimation, bivariate hypothesis testing, and computer applications.
Prerequisites: MATH 110, MATH 116 or an equivalent.

Cross Listings: CJC 210.

SOCIOL 300A Special Topics In Sociology Credits: 1-3
Each time this course is offered, a different area of sociology, to be announced, will be given.

SOCIOL 302 Social Stratification Credits: 3
The distribution of power, privileges and prestige are examined in a historical and comparative perspective. The process whereby distribution systems develop, become institutionalized, and become transformed are analyzed.
Cross Listings: ANTHRO 302.

SOCIOL 305 Language and Culture Credits: 3
This course is designed to familiarize students with the basic objects, aims, and methods of linguistic anthropology. Students will acquire this familiarity by studying both theoretical and ethnographic articles that focus on some of the major areas of concern within the field including: the evolution of human language, linguistic particularity and universality, the relationship of language to thought, structuralism and semiotics, trope theory, language and emotion, sociolinguistics, the development of writing systems, and language conservation and change.
Cross Listings: ANTHRO 305.

SOCIOL 306 Culture, Emotion, and Identity Credits: 3
This course introduces students to some of the key theoretical perspectives and debates within the field of psychological anthropology. By drawing upon cross-cultural studies of emotion, personhood, sexuality, illness, and consciousness it seeks to understand some of the ways that culture and society influence human psychology and experience.
Cross Listings: ANTHRO 306.

SOCIOL 310R Families And The Life Course Credits: 3
This course is an upper level introduction examining the sociological, historical, and social psychological research on the family, focusing primarily on the United States. The course examines families of varied ethnicity, as well as family compositions at different stages of the life course. Emphasis is placed on the interdependence of family members, as well as how society and policy influence the family.

SOCIOL 313R Sociology Of Gender Credits: 3
This course is an introduction to the sociological study of gender in contemporary U.S. society. Special attention is directed to how gender is experienced inter-sectionally with other social categories, including social class, race, sexuality, and age.

SOCIOL 316 Sociology Of Death And Dying Credits: 3
Examination of attitudes, behaviors and institutions related to death and dying in contemporary American society. Topics include the status of death in American society, effects of the setting on dying, interaction with the dying, funeral practices, bereavement customs, surviving spouse, and suicide.

SOCIOL 317 Policies Of Drug Use And Control Credits: 3
Utilizing both historical and contemporary information, this course provided an assessment of the "drug problem" in the U.S. and policies of control developed in response to the problem. Drug use criminalization, legalization, medical treatment and prevention strategies and related issues are considered in regard to scientific knowledge related to the patterns, causes and impact of substance abuse.
Cross Listings: CJC 317.

SOCIOL 318 Sociology Of The Aging Woman Credits: 3
An exploration of the intersection of gender and aging issues with special attention to cultural images of women, the development of self-concept and identity in mid-life and beyond, caring roles in the family, work and retirement, and health and mental health issues. These issues are examined within the context of social class, race, and ethnicity. Implications for community programs and social policy are considered.

SOCIOL 319 Theoretical Criminology Credits: 3
A comprehensive examination of the major criminological theories, their philosophical assumptions, and the sociohistorical context in which they were articulated.
Cross Listings: CJC 319.

SOCIOL 320 Social Deviance Credits: 3
The dominant sociological perspectives on deviance will be discussed with special attention given to the processes that define behavior and persons as deviant and the impact of such definitions on social relationships and identity.

SOCIOL 322 Race And Ethnic Relations Credits: 3
The nature, origin and dynamics of ethnic and race relations in the U. S. and other societies. Specific attention will be given to the historical and contemporary contexts of prejudice discrimination and confrontation.
Cross Listings: ANTHRO 322.

SOCIOL 324 Diversity And You Credits: 3
This course will examine diversity from the perspectives of race, ethnicity, class and gender. Emphasis will be placed on the impact of racism, classism and sexism on interpersonal relationships and strategies to encourage diversity in schools, neighborhoods, and the work place. Students may also enroll in "directed research" in conjunction with his course.

SOCIOL 326 Consumer Society Credits: 3
This course explores the emergence of Consumer Society as both a sociohistorical development and as an object of social scientific inquiry. Students will explore how the study of Consumer Society has been animated by different scholarly questions, debates, and analytic approaches.
Cross Listings: ANTHRO 326.

SOCIOL 327 Us Government's Indian Policies: Practices Of A Colonizing Nation Credit: 1
This class will convey information about the implementation of US government policies toward American Indians and how each of the policies, from treaty making, establishing reservations, removing, confronting tribes militarily, and abolishing reservations through allotment resulted in consequences detrimental to tribal welfare. The colonization process created ramifications and consequences that Indian people contend with to this day. This class will provide a historical overview of the consequences associated with political, social, and economic processes that divested Indian people of control over their lives and land they originally lived on.
Cross Listings: ANTHRO 327.

SOCIOL 328 Body and Society Credits: 3
Body and Society is an interdisciplinary and comparative approach to the study of the body as the subject and object of social processes. Interdisciplinary approaches to topics such as meaning, ritual, performance, and practice will provide a framework for classical as well as contemporary explorations of bodily representation and experiences across a variety of cultural contexts.
Prerequisites: ANTHRO 103.

SOCIOL 329 The Imagery Of The American Indian In Film Credit: 1
This course will trace the imagery of the American Indian used by film makers through the years and how this has played a role in reinforcing certain inaccurate perceptions of American Indian cultural, social, and economic life. The course examines the sociological implications created by persistently showing misrepresented images of American Indians. The goal is to measure and compare the reality of American Indian life (values , Traditions, and beliefs) with the images created by film makers from the early years of the 20th century to the present.
Cross Listings: ANTHRO 329.

SOCIOL 332 Sociology Of Political Life Credits: 3
The concept of power, community power structure and decision making. The social basis of liberal democracy; consensus and legitimacy; political stability and instability. Power and politics in a mass society; elites and masses; democracy and oligarchy; alienation; bureaucracy; pluralism and totalitarianism. Ideology and social movements.

SOCIOL 335R Introduction To Social Work: Principles And Practice Credits: 3
An introductory course to social work, its history and current role in the delivery of social welfare services. Designed to give the student insight into the body of knowledge, theory, values, principles, and techniques of the social work process. Investigation into the varieties of practice methods, i.e., casework, group work, community organization, and the present trend toward the generic approach.

SOCIOL 336 Society And Community Service Credits: 3
This course explores the history and increasing importance of the non-profit sector and volunteerism. Applying theoretical approaches from development and community organizing, the course analyzes the uses of volunteerism and NGOs nationally and internationally. Students' understanding will be enhanced through the inclusion of applied methods needed to manage a non-profit organization and by serving in an internship in a local non-profit during the semester.

SOCIOL 337 Community Development In Urban America Credits: 3
The focus in this course is on experiential learning in which the student participates in several urban community development projects that allow for learning about collaboratives, networking, problem-solving, and requisite skills to successfully manage a project. Principles of community development are presented to give the student background for understanding the projects visited.

SOCIOL 338 The World of Latino Youth and Adolescents in the U.S. Credits: 3
This course will provide a general introduction and in-depth understanding to the largest group of racial/ethnic adolescents in the United States: Latino youth. An historical examination of Latino youth will provide a better understanding of their present status, with emphasis on their contact and interactions within social institutions. Additionally, students will analyze the experiences Latino youth have within and among other groups in the broader social context based on past, present, and possible future interactions.
Cross Listings: LLS 310.

SOCIOL 339 American Indian Leaders: Past And Present Credit: 1
This course will examine the definition of leadership as it relates to American Indian issues. Consideration will be given to the nuances of leadership by examining the social, cultural economic, and political situations that gave cause for particular individuals to assume roles of Indian ranks with those practiced by non-indian leaders. It will trace the evolving nature of leadership within tribal nations and American Indian communitites from past to present, as well as looking at Indian leadership roles in time of war and peace. Lives of the major characters of American Indian historical record will be reviewed, such as Geronimo, Crazy horse, Sitting Bull, Osceola, Tecumseh, Pontic, Black Hawk, Quannah Parker, and Captain Jack.
Cross Listings: ANTHRO 339.

SOCIOL 340R Social Change Credits: 3
Examines the key dimensions that bring about change in societies, including revolutions and evolutionary processes. Attention is given to the global context of social change, as well as the role of social actors and social movements.
Cross Listings: ANTHRO 340R or SOCIOL 340R.

SOCIOL 341R The Anthropology Of Economic Institutions Credits: 3
Examines in a comparative perspective the social, cultural and political framework of economic activities. Emphasis is placed on socioeconomic systems and the contradictions they generate.
Cross Listings: ANTHRO 341R.

SOCIOL 347 The American Indian Image: Stereotype Vs. Reality Credit: 1
This class will take a historical, sociological, and cultural approach to review how society at large views American Indians. The course will trace the origin and continued use of American Indian stereotyped views, and assess the sociological and psychological complications that result when judging Indians solely on stereotyped imagery. The course will review the historical content of American Indian life as portrayed in early plays, films, and newspaper accounts and compare these stereotyped images with the reality of American Indian life by providing a depiction of a series of historical events that will offer a more balanced and accurate consideration for American Indian life past and present.
Cross Listings: ANTHRO 347.

SOCIOL 348 Latin American Immigrants & Refugees in the U.S. Credits: 3
The course is an introduction to the study of the culture and societies of U.S. citizens and immigrants of Latin American heritage living in the U.S. The course emphasizes recent anthropological as well as historical and cultural studies. Topics covered:ethnohistory, and cultural diffusion over successive generations.

SOCIOL 351 Gender, Work And Social Change Credits: 3
This course examines the role of gendered work and consumption in global social change. Drawing from sociological perspectives on gender and work, this course foregrounds a global comparative analysis of societal development and working contexts, including tourism employment, sex work, domestic work, and agricultural, garment, and informatics production. Academic-service learning constitutes a primary course assignment.

SOCIOL 361 Social Theory Credits: 3
A survey of the major orientations in social theory, their historical development, and contemporary issues and controversies in social theory.
Prerequisites: 3 hours in social science.

SOCIOL 362 Methods Of Sociological Research Credits: 3
Experimental and observational schemes; survey analysis; interview and questionnaire designs; scaling techniques; sampling.
Prerequisites: 3 hours in Social Science.

SOCIOL 372 Introduction To The Sociology Of Religion Credits: 3
Using the tremendous diversity of religious belief and practice in North America, in particular new religious movements, this class will acquaint students with the academic study of religion as a social (and sociological) phenomenon. Students will learn how religion has been interpreted by sociologists in the past, and how evolving perspectives shape both the way academics perceive religion and how they study it. They will learn how religion permeates and affects virtually every domain of human culture and interaction. And they will gain experience in fieldwork, coming to understand in the process religious traditions other than those in which they may have been raised.

SOCIOL 374 Anthropology of Childhood Credits: 3
This course explores how children's lives are shaped by cultural, economic, and political forces and relations. Drawing upon a range of case studies and disciplinary perspectives it will consider how and why children emerge as sites of contestation and debate, and it will examine the various ways in which the category and experience of childhood unfold in different socio-historical contexts. The main objective of the course is to better understand the social construction of childhood and use the study of childhood as privileged window for exploring the articulation of cultural, economic and political relations within the context of contemporary global society.

SOCIOL 390R Directed Field Experience I Credits: 1-6
The student will work within one or more social agencies or organizations in the city under the joint supervision of a professional within the organization and a member of the Sociology Department. In-class discussion will cover the major problems of social organization.

SOCIOL 390RA Directed Field Experience I Credits: 1-6

SOCIOL 391 Directed Field Experience II Credits: 1-6
A continuation of SOCIOL 390R.

SOCIOL 397 Independent Readings In Sociology Credits: 1-3
Intensive readings in an area selected by the student with prior consultation with instructor.
Prerequisites: Twelve hours of sociology.

SOCIOL 398 Independent Research In Sociology Credits: 1-6
Intensive research in an area selected by the student with prior consultation with instructor.
Prerequisites: Twelve hours of sociology.

SOCIOL 404WI The Sociology Capstone: Senior Seminar Credits: 3
A seminar which explores the interrelationships between sociology theory, research methods and statistics. May focus on major contemporary issues building on and integrating knowledge obtained in previous courses.
Prerequisites: SOCIOL 101, SOCIOL 263, SOCIOL 361, SOCIOL 362, RooWriter.

SOCIOL 410R Aging In Contemporary Society Credits: 3
Attitudes and stereotypes, the status of the aged in American society; the social psychology of the aging process; the response of societal institutions such as the family and political system to the aging of the population as a whole. Applications and potentials of research are considered.

SOCIOL 411 Sociology Of Human Sexuality Credits: 3
A cross cultural examination of the most fundamental dichotomy in human society: male and female. Considering sex both as a biological and social category, this course compares diversity and similarity in the interrelationships of male and female in patterns of behavior and social organization found in human societies across time and space.

SOCIOL 416 Aging And Developmental Disabilities Credits: 2
This course explores the experience of aging with a developmental disability or mental retardation within the context of normative aging. Among the comparisons made between older persons with and without developmental disabilities are their demographic characteristics, physical and cognitive functioning, role transitions and losses, identities and self-concepts, and family and caregiving issues. Policies, programs, and emerging concepts of best practices are considered within the context of quality of life, ethical, and community inclusion issues.

SOCIOL 417 Practicum In Aging And Developmental Disabilities Credit: 1
Students gain experience in working with and defining issues of Older persons with developmental disabilities through placements in sheltered workshops, senior centers, residential group homes, and other community-based programs.

SOCIOL 418 Feminist Theories Credits: 3
This class introduces the major feminist theories and their primary authors over the last 200 years. The class takes both a historical view (beginning with two millenia of male-centered theories about women) and a conceptual approach (theories are grouped by common ground) and familiarizes the student with both the historical processes that necessitate feminist theories as well as with the breadth and depth of the historically and currently available scholarship.
Prerequisites: WGS 201.

SOCIOL 431 Social Organization Of The City Credits: 3
An examination of the social structure of the American city with special reference to the historical development of American cities. Attention will be focused on the role of social institutions as they have changed in relation to urban problems.

SOCIOL 433 Immigration and the City Credits: 3
This course examines key issues and controversies in immigration research. Special attention will be paid to the social, economic, and historical developments of urban immigrant communities.

SOCIOL 434 Spatial Thinking in Social Science Credits: 3
This course will review ways in which social scientists have incorporated the concepts of space, place, and distance into their theories and research. Readings will be drawn from interdisciplinary work in the areas of urban sociology, criminology, health and demography that deal with spatial organization of communities and cities, spatial disparity of health and crimes, and mobility.
Prerequisites: junior, senior, or graduate standing.

SOCIOL 440R Sociology Of Medicine Credits: 3
Relationship of basic concepts in sociology to health and medical care. Cultural and class variations in health status. Social and cultural aspects of health.
Prerequisites: SOCIOL 101.

SOCIOL 441 Globalization and Development Credits: 3
Focuses on issues of economic development, social stratification, political institutions, and political mobilization in societies where colonialism provided the context for their long-term disadvantages in the international economic order. Specific attention is paid to the intersection of the international components that define the options and limits for societal development (e.g., market shifts, international institutions and contracts, foreign policies, and migration) and the distinct social, political and cultural implications of these factors for developing societies.
Cross Listings: ANTHRO 441.

Spanish (SPANISH)

Courses

SPANISH 110 Elementary Spanish I Credits: 3
The goals of this course are an ability to speak and to understand simple (spoken) Spanish as well as to read and write simple prose.

SPANISH 120 Elementary Spanish II Credits: 3
Continuation of SPANISH 110.
Prerequisites: SPANISH 110 (or equivalent).

SPANISH 211 Second Year Spanish I Credits: 3
Further development of comprehension and communicative skills in the language. Readings of moderate difficulty and grammar review. Practice in writing. The goal is attainment of intermediate proficiency in the language.
Prerequisites: SPANISH 120.

SPANISH 216 Spanish For The Health Sciences Credits: 3
This course will enable the student to converse with Hispanic patients and/or hospital personnel in situations such as admissions, patient care, lab work as ordered by a physician or dentist, emergency room procedures, etc. In addition, medical readings in Spanish will give professional and paraprofessional students an increased vocabulary related to the many fields within the health sciences. This course will satisfy one semester of the AS language requirement.
Prerequisites: one year of college Spanish (or its equivalent).

SPANISH 221 Second Year Spanish II Credits: 3
Continuation of SPANISH 211.

SPANISH 280 Special Intermediate Spanish Topics I Credits: 2-4
Instruction of Spanish on the second-year/intermediate level introducing new methods of foreign language teaching or special texts and topics not normally offered through regular courses. May not be repeated for credit.
Prerequisites: Elementary I and II college-level courses or equivalent.

SPANISH 285 World Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of one or more regions of the world as well as dynamics of interaction between them. Students will be exposed to a very wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I, DISC 100.

Cross Listings: ART-HIST 260, CONSVTY 239, HISTORY 260, PHILOS 232.

SPANISH 290 Special Intermediate Spanish Topics II Credits: 2-4
Continuation of SPANISH 280. May not be repeated for credit.

SPANISH 295 European Cultures, Histories & Ideas Credits: 3
This interdisciplinary course will explore the cultures, histories, and ideas of a particular region of Europe. Students will be exposed to a wide range of disciplinary approaches to this topic and learn how to engage critically in an interdisciplinary dialogue within this field. Topics will vary depending on the instructors.
Prerequisites: Anchor I, DISC 100.

Cross Listings: ART-HIST 240, CONSVTY 238, FRENCH 295, GERMAN 295, HISTORY 240, PHILOS 212.

SPANISH 301 Introduction To Literary Studies Credits: 3
Emphasis will be placed on the study of literary theory and the philosophical ideas behind the literary movements, their relations and differences. A representative work or works of each genre will be thoroughly studied and analyzed. Critical reports will be written about different features of the literary works under consideration. Strongly recommended for all majors, to be taken before 400-level literature courses.
Prerequisites: SPANISH 315.

SPANISH 315 Intermediate Conversation And Composition I Credits: 3
Grammar review, practice in speaking and writing Spanish; emphasis on idiomatic usage and practical vocabulary. Required for major.
Prerequisites: SPANISH 221 (or equivalent).

SPANISH 325 Intermediate Conversation And Composition II Credits: 3
Continuation of SPANISH 315. Required for major.
Prerequisites: SPANISH 315.

SPANISH 350 Continental Spanish Civilization Credits: 3
General cultural characteristics of Spain. Readings from representative literary works.

SPANISH 351 Latin American Civilization Credits: 3
Historical development of Latin America. Readings from representative literary works.

SPANISH 365 The Search For Mexican Identity Credits: 3
The goal of the course is to familiarize the student with the poignant search for self awareness and definition witnessed in the letters and fine arts of Mexico in the 20th-century. Readings will include works by Vasconcelos, Reyes, Ramos, Paz, Rulfo and Fuentes, and will be complemented by slide presentations of pertinent works by major artists.

SPANISH 373 History Of Spanish Literature I Credits: 3
A study of the development of Spanish peninsular literature from the Middle Ages to 1700.
Prerequisites: SPANISH 315 SPANISH 325.

SPANISH 374 History Of Spanish Literature II Credits: 3
A study of the development of Spanish peninsular literature from 1700 to present.
Prerequisites: SPANISH 315 SPANISH 325.

SPANISH 380 Special Topics Credits: 1-3
Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

SPANISH 383 Introduction To Spanish American Literature I Credits: 3
The colonial period. Selected readings in historical and literary material from the time of the conquest to the period of struggle for independence.
Prerequisites: SPANISH 315.

SPANISH 384 Introduction To Spanish American Literature II Credits: 3
The 19th and 20th-centuries. Selected readings from prose and poetry of Spanish-American writers.
Prerequisites: SPANISH 315.

SPANISH 385 Commercial Spanish Credits: 3
Business practices in correspondence in the Spanish language; special vocabulary of business, trade, banking and administration. Refinement of grammatical and stylistic skills. Subjects treated include price inquiries, quotations, offers, orders, complaints, administrative, banking and diplomatic correspondence.
Prerequisites: SPANISH 221 (or equivalent).

SPANISH 403 History of the Spanish Language Credits: 3
An introduction to the history of the Spanish language from Latin to the present, with an overview of dialects in the Peninsula and in the Americas.
Prerequisites: SPANISH 325 or higher grammar class.

SPANISH 414 Early 20th Century Penisular Literature: From the Generation of 1898 to Surrealism Credits: 3
Selected readings in Spanish narrative, poetry, drama and philosophical essay from the beginning of the 20th Century to the Avant-Garde movements in the 1930's.

SPANISH 415 Advanced Conversation And Composition I Credits: 3
Continued practice in speaking and writing Spanish, with attention to the elements of style. Continued in SPANISH 425. First semester required of all majors and second semester recommended. Both semesters required of prospective high school teachers. Either or both semesters may be repeated with the consent of the instructor and the Spanish section head. No more than six hours credit may be applied towards a degree.
Prerequisites: SPANISH 325.

SPANISH 416 Medieval Spanish Literature Credits: 3
From the Cantar de Mio Cid to 1499.

SPANISH 417 Spanish-American Lyric Poetry Credits: 3
A survey of poetry in Spanish America from Colonial times to World War II, including a study of the most representative poets and their writings.

SPANISH 418 Romantic Movement In Spain Credits: 3
The origin and development of romantic literature against the historical and ideological background of the first half of the 19th century. Various literary genres will be studied; these will include works by Rivas, Espronceda, Larra, Zorrilla, Gil y Carrasco, Becquer and others.

SPANISH 420 Cervantes' Don Quixote, Part I Credits: 3
An intensive reading of the first part of Cervantes' novel, Don Quixote.

SPANISH 421 Cervantes'Don Quixote, Part II Credits: 3
An intensive reading of the second part of Cervantes' novel, Don Quixote. Part One is not a prerequisite.
Cross Listings: SPANISH 5521.

SPANISH 425 Advanced Conversation And Composition II Credits: 3
Continuation of SPANISH 415. See SPANISH 415. Required for teacher certification in Spanish.
Prerequisites: SPANISH 415.

SPANISH 426 Golden Age Drama Credits: 3
The development of the Spanish drama from Lope's youth to the death of Calderon.
Cross Listings: SPANISH 5526.

SPANISH 427 Pre-Columbian And Spanish Colonial Literature Credits: 3
A study of the pre-Columbian works in drama, narrative, and poetry (Popol Vuh, Apu-Ollantay, Incan and Aztec poetry) leading into a survey of Spanish-American colonial literature.
Cross Listings: SPANISH 5527.

SPANISH 428 Contemporary Spanish Poetry Credits: 3
A comprehensive and intensive study of 20th-century Spanish poetry. Poets and poetry will be studied in the light of literary movements, foreign influences, political tendencies and philosophical ideas.
Cross Listings: SPANISH 5528.

SPANISH 429 The Novel Of The Mexican Revolution Credits: 3
The revolution as the principal focus of 20th-century Mexican fiction. The course will examine both the evolving understanding of the event/process and the sophistication of narrative technique employed in its presentation. Among the writers to be studied are Azuela, Guzman, Lopez y Fuentes, Yanez, Revueltas, Rulfo and Fuentes.
Cross Listings: SPANISH 5529.

SPANISH 430 Spanish Mysticism Credits: 3
An examination of the development of mysticism in Oriental and Occidental civilizations, with emphasis on the great periods of mystic experience as reflected in the literary production of the Spanish Golden Age. Readings could include the works of Fray Luis de Granada, Fray Luis de Leon, Saint John of the Cross and Saint Teresa of Avila.
Cross Listings: SPANISH 5530.

SPANISH 431 The Golden Age Novel Credits: 3
A study of major prose works of the Golden Age. Possible topics include authorship, innovative narrative techniques, textual strategies and metafiction issues. Readings could include works by Alfonso Martinez de Toledo, Diego de San Pedro, Fernando de Rojas, Francisco Delicado, Cervantes, and Lope de Vega.
Cross Listings: SPANISH 5531.

SPANISH 432 Pastoral Literature Credits: 3
A study of the development of pastoral literature during the Spanish Golden Age. Possible texts: Juan del Encina's Eclogues, Montemayor's Los siete libros de la Diana and Cervantes' Galatea. These works will be examined within their historical and cultural context.
Cross Listings: SPANISH 5532.

SPANISH 433 Cervantes' Exemplary Novels Credits: 3
A study of Cervantes' Exemplary Novels within the context of 17th-Century Spain. Attention will be paid to interpretive possibilities and how knowledge of historical contexts might influence readings of this rich and varied cultural output.
Cross Listings: SPANISH 5533.

SPANISH 434 The Picaresque Novel Credits: 3
A study of the development of picaresque fiction during the Spanish Golden Age. The course deals with novelists principally active during the Baroque period such as Mateo Aleman, Francisco Lopez de Ubeda, Miguel de Cervantes, and Francisco de Quevedo.
Cross Listings: SPANISH 5534.

SPANISH 435 Peninsular Poetry Credits: 3
This course is a survey of poetics and poetry in Spain from the Reconquest to the present, with emphasis on socio-historical contexts and movements. It examines theoretical and methodological approaches to literary analysis and also provides practical experience in exploring poetic texts. Students will analyze a wide spectrum of poems, while discussing the cultural, philosophical, linguistic, political and ethical considerations that surround the reception of a text.

SPANISH 436 Spain's Transition to Democracy: Literature and Film Credits: 3
This course reviews the cultural production between the death of Francisco Franco in 1975 and the entrance in the European Union in film, literature and music, within its historical and political context.

SPANISH 450 Modern Classics Of Latin American Literature Credits: 3
The goal of the course is to familiarize the student with the principal Latin American writers of the modern period. The focus will be dual: the progressive sophistication of literary technique and the refinement of social conscience. Among the authors to be studied are: Asturias, Borges, Carpentier, Cortazar, Donoso, Fuentes, Garcia Marquez, Paz, Rulfo and Vargas Llosa.
Cross Listings: SPANISH 5550.

SPANISH 453 Spanish-American Short Story Credits: 3
A study of Spanish-American short stories from Romanticism to the present.
Cross Listings: SPANISH 5553.

SPANISH 460 U.S.-Latino Literature Credits: 3
An interdisciplinary approach to U.S.-Latino Studies, including both literary and cultural texts. The course will be taught in English, the language in which the texts are produced.

SPANISH 480 Special Topics Credits: 1-3
Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

SPANISH 480A Special Topics Credits: 1-3
Each time this course is offered a particular genre or area of literature will be treated. Topics will be announced in advance. May be repeated for credit when the topic changes.

SPANISH 490 Special Readings Credits: 1-3
Intensive readings in field or literary figure to be selected by the student in consultation with the instructor. Available, by permission only, to advanced students of Spanish; available only when student cannot take regularly scheduled courses.
Prerequisites: 3.0 GPA.

SPANISH 499 Senior Seminar (Capstone) Credits: 3
Required for major. Covers seminal works of Peninsular and Latin American literature in their historical and cultural context. Course content varies, but will include such elements as geography, politics, folklore, history of the language, architecture, art and music. To be taken during final Fall Semester of residence.
Prerequisites: 18 hours beyond first year.

Special Education (EDUC-SP)

Courses

EDUC-SP 407 Educating Exceptional Children And Youth Credits: 3
An introductory course in special education concerning issues, theories, and practices for educating the exceptional student in both general and special classrooms or settings; identification and educational intervention procedures for children and adolescents with exceptionalities, including behavior disordered; learning disabled, mentally retarded, speech impaired; visually impaired, physically impaired, hearing impaired, multihandicapped and gifted.

Statistics (STAT)

Courses

STAT 234 Mathematics For Teachers: Probability And Statistics Credits: 3
Designed for elementary-and middle-school mathematics teachers. Foundational knowledge of probability and statistics, elements of statistics, organizing, displaying and describing data, probability distributions, correlation, regression, prediction, estimation.
Prerequisites: 4 units of high school math or MATH 110.

STAT 235 Elementary Statistics Credits: 3
An introduction to descriptive and inferential statistics. Organization and presentation of data, averages and variations, elementary probability, random variables, special discrete distributions, normal distributions, sampling distributions, point estimation, confidence intervals, and hypothesis testing. Credit will not be given for both STAT 235 and STAT 236.
Prerequisites: MATH 110 (C- or higher), or ALEKS assessment score of 61% or higher.

STAT 236 Applied Statistics For Public Administration Credits: 3
Designed for students in business, public administration, and urban studies; will cover descriptive and inferential statistics, elementary probability, analysis of nominal and ordinal data, regression analysis; will use a statistical software package to apply the tools of statistics and answer quantitative questions. Credit will not be given for both STAT 235 and STAT 236.
Prerequisites: 4 units high school math or MATH 110.

STAT 436 Introduction To Mathematical Statistics I Credits: 3
Sample space, conditional probability, random variables, probability distribution functions and probability densities; transformations of random variables, mathematical expectation, conditional distributions and expectations, laws of large numbers and limit theorems, applications.
Prerequisites: MATH 250.

STAT 441 Introduction To Mathematical Statistics II Credits: 3
Sampling Distributions; point estimation; internal estimation; hypothesis testing; analysis of variance; nonparametric methods; statistical software applications; topics in Applied Statistics.
Prerequisites: STAT 436.

String Bass (STR-BASS)

Courses

STR-BASS 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

STR-BASS 100B Applied Study Of A Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

STR-BASS 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

STR-BASS 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

STR-BASS 101 Freshman String Bass I Credits: 2-4

STR-BASS 101J Freshman St Bass I (Jazz) Credits: 2-4

STR-BASS 102 Freshman String Bass II Credits: 2-4

STR-BASS 102J Freshman St Bass II (Jazz) Credits: 2-4

STR-BASS 201 Sophomore String Bass I Credits: 2-4

STR-BASS 201J Sophomore St Bass I (Jazz) Credits: 2-4

STR-BASS 202 Sophomore String Bass II Credits: 2-4

STR-BASS 202J Sophomore St Bass II (Jazz) Credits: 2-4

STR-BASS 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: STR-BASS 5300.

STR-BASS 301 Junior String Bass I Credits: 2-4

STR-BASS 301J Junior St Bass I (Jazz) Credits: 4

STR-BASS 302 Junior String Bass II Credits: 2-4

STR-BASS 302J Junior St Bass II (Jazz) Credits: 4

STR-BASS 401 Senior String Bass I Credits: 2-4

STR-BASS 401J Senior St Bass I (Jazz) Credits: 4

STR-BASS 402 Senior String Bass II Credits: 2-4

STR-BASS 402J Senior St Bass II (Jazz) Credits: 4

Teacher Education (TCH-ED)

Courses

TCH-ED 130 Number Systems and Related Topics Credits: 3
This course is designed for elementary perservice teachers to meet certification requirements for a course in number theory. The course provides a constructive development of the real number system, introduces concepts from elementary number theory and applies this knowledge of quantitative systems to solve various types of problems.
Prerequisites: High School Algebra and Geometry.

TCH-ED 140 Geometry for Elementary Teachers Credits: 3
This course is designed for elementary perservice teachers to meet certification requirements for a course in geometry. It provides a constructive development of axiomatic geometry and introduces concepts from transformation geometry. Elements of spatial sense and measurement are included and an emphasis is placed on applying this knowledge to solve various types of problems.
Prerequisites: High School Algebra and Geometry.

TCH-ED 150 Foundations of Urban Education Credits: 3
This course is designed to introduce students to the social and philosophical issues in urban education and will include an emphasis on culture, race, class, and ethnicity as they relate to schooling in urban America.

TCH-ED 151 Introduction to Urban Education Field Experience Credits: 2
Introduction to Urban Education Field Experience. The field experience is intended to give students an opportunity to see the application of learning theory in authentic classroom situations. Students are encouraged to become involved in the learning of the classroom and provide a helping hand to the teacher.

TCH-ED 152 Urban Education Seminar 1: Social Justice Credits: 2
Introductory seminar to the field of urban education. This seminar aligns with the other fall semester experiences and allows students an opportunity to dialogue about the possible application of their experience work as it applies to teaching in an urban school. Students will be introduced to current topics in education and society; identify, develop and enhance study strategies; observe, listen and think critically, sharpen writing skills; and work effectively in groups.

TCH-ED 153 Math Methods for Urban Education teachers: Number Systems Credits: 2
Designed for elementary school teacher. A constructive development of the real number system beginning with the system of whole number, concepts for the elementary number theory; applications of quantitative systems to problems in discrete mathematics.
Prerequisites: High School Algebra or College Algebra.

TCH-ED 201 Children's Literature Credits: 3
Survey of books for children. Attention given to standard aids for selection, criteria for evaluating different types of literature and creating an environment for response to literature. A primary focus on multicultural literature for children.

TCH-ED 251 Child and Adolescent Development for Urban Educators Credits: 3
This course is designed to provide students with the information they will use as educators to design developmentally appropriate practices for the children they will work with in the classroom setting, thus discussions about how the information is translated into the classroom will be applied.
Co-requisites: TCH-ED 252.

TCH-ED 252 Field Exp: Child/Adolescent Development Credit: 1
This field experience is designed in conjunction with TCH-ED 251 to provide students with real-world interactions to study the development of children from birth to adolescence. Field experience settings have been arranged to provide students with an opportunity to observe and interact with children as they study the four stages of development.
Co-requisites: TCH-ED 251.

TCH-ED 253 Urban Education Seminar II: Social Justice Credit: 1
This seminar aligns with the other semester experiences and allows students an opportunity to dialogue about the possible application of their experience work as it applies to teaching in an urban school. Students will be introduced to current topics in urban education and society; identify, develop and enhance study strategies; observe, listen and think critically, sharpen writing skills; and work effectively in groups as they explore social justice and the relationship between society and schools.
Prerequisites: TCH-ED 152.

TCH-ED 254 Math Methods for Urban Teachers: Geometry Credits: 2
Designed for elementary school teachers. A constructive development of geometry and concepts from elementary teacher education; applications will be made to connect with elementary curriculums.
Prerequisites: High School Algebra and Geometry or College Algebra.

TCH-ED 255 Intergrated Music and Visual Arts Credits: 3
Basic principles of creativity and their application in the multicultural teaching of art, creative dance and musical and rhythmic interpretation will be explored. An emphasis is placed on interrelationship of these disciplines and their integration into the curriculum. Special emphasis will be placed on helping students to develop a wider and more respectful understanding of out nation's cultural diversity as reflected in all art forms. Students will be exposed to the literature, poetry, theater, visual art and music contributed by African-Americans, Hispanic Americans and Native Americans among other.
Prerequisites: Admission into the Institute for Urban Education.

Co-requisites: TCH-ED 256.

TCH-ED 256 Field Experience: Music and Visual Arts Credit: 1
The field experience is intended to give students an opportunity to see the application of learning theory and integration of the arts in authentic classroom situations.
Prerequisites: Admission into the Institute for Urban Education.

Co-requisites: TCH-ED 255.

TCH-ED 258 Math Methods for Urban Teachers: Probability and Statistics Credits: 2
Designed for Elementary and Middle School Teachers. This course is designed to provide undergraduate students in elementary and middle school mathematics with the foundational knowledge of the teaching of probability and statistics and how to use the elements of statistics to interpret and solve problems in elementary and middle school classrooms.
Prerequisites: High School Algebra and Geometry or College Algebra.

TCH-ED 259 Introduction to Urban Teaching Credits: 3
This course is designed to introduce students to the sociopolitical context of urban education, schooling, teaching and learning. It will provided an overview of education in a multicultural democracy, mostly African Americans, Latino Americans, and other racial/ ethnic groups and immigrants. Specifically, it will introduce students to the notion of teaching for social justice, the social justice teacher and social empowerment. Opportunities will be provided for students to review research, debunk stereotypes, negative views, and to recognize urban learners as capable, motivated, and resilient. The ultimate goal of this course is to facilitate experiences that will enable students to develop the knowledge, skills and dispositions needed for learning in urban schools.

TCH-ED 265 Field Experience: Urban Teaching Credit: 1
As a co-requisite to Introduction to Urban Teaching, students will spend 60 hours in urban schools working with diverse student populations, specifically; students will work with African Americans, Latino Americans, and English Language Learners grades K-8. Reflection and discussion of clinical experiences will occur during the urban education seminar and Introduction to urban education classes. Students will keep a reflective journal of their experiences working with diverse learners.
Prerequisites: Admission into the Institute for Urban Education.

Co-requisites: TCH-ED 266.

TCH-ED 266 Urban Education IV: Classroom Management Credit: 1
This course will present the foundations for developing expertise in classroom management. Theory and activities will introduce students to strategies and procedures to manage student's behavior as well as keep them on task throughout the school day. The intent of this course is to provide the prospective teacher with the skills and the expertise necessary to manage the classroom behavior of students effectively while creating a caring and supportive atmosphere.
Prerequisite: Must be admitted to the Institute for Urban Education.

Co-requisites: TCH-ED 265.

TCH-ED 300 Summer Community Experience Credits: 3
This course provides an in-depth examination into both the evolution of ghetto communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. In addition, theories of educational psychology as well as child and adolescent behavior will be infused to assist participants in developing age appropriate mentoring/teaching strategies and activities.

TCH-ED 310 Instruction for Diverse Learners Credits: 3
Focus on classroom organization, building relationships with students, and building supportive classroom environment for diverse learners in urban settings.
Co-requisites: TCH-ED 397.

TCH-ED 311 Curriculum and Learning Theory Credits: 4
Focus on classroom organization, building relationships with students, and applying theoretical knowledge of child development to the analysis of contexts impacting students' educational experiences. Classroom processes and teacher interactions that undergird effective instruction and proactive classroom management.
Prerequisites: TCH-ED 310.

Co-requisites: TCH-ED 398.

TCH-ED 316 Integrated Methods: Literacy, Social Studies, and the Arts I Credits: 6
Focus on ways to integrate social studies content with literacy skills and artistic expression using methods and materials that are developmentally appropriate and relevant for learners from diverse backgrounds in an urban school and community.
Co-requisites: TCH-ED 397.

TCH-ED 317 Integrated Methods: Literacy, Social Studies, and the Arts II Credits: 6
Focus on ways to integrate social studies content with literacy skills and artistic expression using methods and materials that are developmentally appropriate and relevant for learners from diverse backgrounds in an urban school and community.
Prerequisites: TCH-ED 316.

Co-requisites: TCH-ED 398.

TCH-ED 318 Literacy Assessment and Instruction Credits: 3
Focus on using formal and informal assessments to design appropriate literacy instruction for diverse learners in urban elementary classrooms.
Prerequisites: TCH-ED 316, TCH-ED 317.

Co-requisites: TCH-ED 497.

TCH-ED 350 Multi-Media Production For The Classroom Credit: 1
An introductory course in the media production techniques involving knowledge and practical use of computers, scanners, digital video, digital audio and graphics to create professional multimedia for use in the classroom. The class is designed for prospective and current classroom teachers.

TCH-ED 351 Literature for a Lifetime Credits: 6
This course will provide students with an encompassing survey of fiction and non-fiction literature appropriate for all age ranges from the young child to adult. Lectures and discussions will focus on the value of literature as a tool for thinking, as a way of illuminating modern life, as a means of understanding history and human behavior, and as a source of aesthetic pleasure and lifelong enjoyment. Students will learn how to select and critique both the media used in illustrated books and the literacy techniques and forms of the many genres of literature. In this course special emphasis will be placed on literature that reflects life in many cultures and periods of history, in particular from those racial and ethnic sources that make modern America such a pluralistic and diverse society. There will also be an emphasis on the universal themes that run through literature of the societies.
Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 365 Seminar in Teacher Identity, Power and Privilege Credit: 1
Focus on developing teacher candidates' knowledge of themselves and their roles in facilitating learning for diverse student populations. Acquaints pre-service teachers with three areas of multicultural education: knowing one's self, knowing diverse student populations, and knowing effective practices which will accelerate the learning of the diverse student populations.
Co-requisites: TCH-ED 397.

TCH-ED 366 Field Experience: Literacy Credit: 1
Students will spend 100 hours working in an urban school classroom. Students will have the opportunity to apply learning and lessons designed in the semester's pedogoical courses, particulary Integrated Instruction: Language Arts and Social Studies. Students will work with their seminar leader, having the opportunity to be observed and conference about their teaching.

TCH-ED 385 Teaching and Learning with Technology Credits: 3
This is an introductory course that covers the fundamentals of standard educational computer applications in addition to providing basic concepts regarding classroom hardware and software integration. This course familiarizes students with the National Educational Technology Standards for Teachers and Students. Because of the computer's increasing importance in all phases of education, hands-on experiences are required throughout the course.

TCH-ED 397 Internship I Credits: 2
Teacher candidates will work with teachers and students in urban classrooms one full school day per week.
Co-requisites: TCH-ED 310, TCH-ED 316, TCH-ED 365.

TCH-ED 398 Internship II Credits: 2
Teacher candidates will work with teachers and students in urban classrooms one full school day per week.
Prerequisites: TCH-ED 397.

Co-requisites: TCH-ED 311, TCH-ED 317, TCH-ED 413.

TCH-ED 399 Continuous Enrollment Credit: 1
A practicum experience for students delaying student teaching for one semester.

TCH-ED 400 Child Development Credits: 3
Intellectual and social development from birth through middle childhood and their implications for the educative process.

TCH-ED 402 Integrated Arts Credits: 3
Basic principles of creativity and their application in the multicultural teaching of art, creative dramatics, creative movement and musical rhythmic interpretation will be explored. An emphasis will be placed on the interrelationship of these disciplines and integration into the curriculum.

TCH-ED 403 Educational Psychology Credits: 3
This course will provide an introductory examination of psychological research and theory which have implications for, and applications to learning and instruction in interactive social contexts, such as classrooms.

TCH-ED 404 Education of the Exceptional Child and Youth Credits: 3
Students will be introduced to identification and educational intervention strategies for educating exceptional children and adolescents in inclusive classroom situations. This course requires a 10-hour field experience.

TCH-ED 405 Practicum I Credit: 1
Taken in conjunction with elementary and middle school methods courses. Students are expected to spend 60 hours at classroom sites throughout the semester.

TCH-ED 406 Practicum II: Elementary Credit: 1
Taken in conjunction with elementary courses. Students are expected to spend 60 hours at classroom sites during the semester.

TCH-ED 407 Practicum III - Elementary Credit: 1
Taken in conjunction with the elementary courses. Students are expected to spend 60 hours at classroom sites during the semester.

TCH-ED 408WI Advanced Foundations Credits: 3
The course will concentrate on the development of a philosophical, historical and social model to assist in understanding the complexities, strengths and problems of present day education.
Prerequisite: RooWriter.

TCH-ED 409 Curriculum and Assessment Credits: 3
Curriculum and Assessment is the first of a three-part course sequence designed to assist the preservice teacher in acquiring the knowledge and skills to become an effective practitioner in a world of constant change. The preservice teacher in turn will become a professional educator and facilitator of learning by developing an understanding of the varied roles and relationships that are an integral part of the teaching/learning process. This course focuses on the meaning of curriculum, the role of standards in curriculum design and implementation, the role of assessment is used to effectively enhance instruction and student learning.
Prerequisites: Admission into the Teacher Education program in Elementary or Middle School Education or the IUE.

TCH-ED 410 Teacher in the Classroom Credits: 2
This is the second of a three-part sequence designed to assist the preservice teacher in acquiring the knowledge and skills to become an effective practitioner in a world of constant change. The preservice teacher in turn will become a professional educator and facilitator of learning by developing an understanding of the varied roles and relationships that are an integral part of the teaching/learning process. It is designed to assist preservice teachers in not only make the transformation from to student to professional educator, but also in developing the knowledge, management, and reflective skills to implement a well-planned and effective curriculum that meets the needs, interests challenges and lives of students who live in and will function in an increasingly culturally diverse, democratic society in an interdependent world.
Prerequisites: Admission into the Teacher Education program in Elementary or Middle School Education or the IUE.

TCH-ED 412 Language Arts in the Elementary and Middle School Credits: 3
Provides instruction in planning, implementing and assessing language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 413 Mathematics in the Elementary School Credits: 3
Mathematics-specific pedagogy. Methods, techniques, tools and materials for the effective teaching of mathematics. Emphasis on problem solving and reasoning skills in applying mathematics and on teaching in the context of diverse student backgrounds. Four contact hours per week include a two-hour laboratory.

TCH-ED 414 General Methods Elementary and Middle - 3 Credits: 2
To summarize and synthesize the pre-service educational experience. To become knowledgeable about the realities of a school life in a "real" classroom.

TCH-ED 415 Reading 1: Intro to Literacy and Reading Instruction Credits: 4
This course introduces concepts about literacy processes; i.e., social, cultural, cognitive and linguistic foundations of reading and writing processes. The major focus of the course is on learning components of a comprehensive reading curriculum, and a range of instructional approaches and methods appropriate for learners at different stages of literacy development.

TCH-ED 416 Reading II: Assessing and Teaching Diverse Learners Credits: 4
This course focuses on understanding the major components of reading processes (phonemic awareness, word identification and phonics, vocabulary and background knowledge, fluency, comprehension strategies, and motivation) and how they are integrated in fluent reading for individual students at different stages of literacy development. The major project for the course involves assessing and teaching an individual student of the course of the semester. Teacher candidates should also assess and teach small groups of readers.
Prerequisites: TCH-ED 415, admission into teacher education program.

TCH-ED 417 Science Methods In The Elementary School Credits: 3
The course prepares pre-service teachers to teach science from a constructivist, inquiry-oriented perspective.

TCH-ED 418 Social Studies Methods in the Elementary and Middle Schools Credits: 3
A critical analysis of current practices, teaching methods, materials and the relationship of the social sciences to social studies. Emphasis is on understanding cultural diversity and cultural influences on learning. The planning, implementation and evaluation of an interdisciplinary social studies unit of instruction, focusing on competencies and skills needed for the 21st Century.

TCH-ED 419 Student Teaching in Elementary School Credits: 3-12
Observation and student teaching under supervision in an elementary school. Elementary majors must enroll in 12.0 credit hours. Music education majors enroll in 3.0 or 7.0 hours; art education and foreign language education majors enroll in 7.0 hours.

TCH-ED 420 Adolescent Development Credits: 3
Various aspects of physiological, emotional, cognitive, social and moral development in adolescence will be considered. Attention is focused on a conception of adolescence that is grounded on current research and theory.

TCH-ED 422 Practicum I Credit: 1
Development of observation, interview and analytic skills. Teaching experiences such as teacher aide and/or tutor will be included. Students will be expected to spend 60 hours at classroom sites during the semester.

TCH-ED 423 Practicum II Credits: 2
A continuation of Practicum I. Further development of observation, interview and analytic skills. Teaching experiences such as teacher aide and/or tutor will be Included. Students will be expected to spend 60 hours at classroom sites during the semester.
Prerequisites: TCH-ED 422.

TCH-ED 424 General Methods - Secondary 1 Credits: 2
Basic principles of teaching at the secondary level. This course is to be based on significant research in the area and will encourage a reflective style of teaching.

TCH-ED 425 General Methods - Secondary 2 Credits: 2
The intent of this course is to prepare pre-service teachers to be effective managers of instruction who are skillful in interpersonal communication. Course activities include opportunities for applying techniques based upon a variety of management/discipline models. Field experiences permit on-site observation of various management styles.

TCH-ED 427 Reading in the Secondary School Credits: 3
An examination of the reading process and study of methods and materials used by the secondary school classroom teacher in assessing student reading ability, determining the readability of content area materials and teaching students of all reading levels how to comprehend their textbooks and other printed instructional materials in various content area subjects.

TCH-ED 429 Effective Practices for Teaching Math and Science to Diverse Learners Credits: 3
Supports teacher candidates' work with implementing inquiry learning with elementary students in mathematics and science and working with families and communities.
Prerequisites: TCH-ED 413.

Co-requisites: TCH-ED 497.

TCH-ED 430 Gateway to Teaching Credits: 3
This course is designed to introduce pre-service teachers to the education profession and to the teacher education program at UMKC. Through lecture discussion and field experiences the students will examine the social, political, cultural and professional aspects of teaching in 21st century America. In addition, the students will be given an overview of the teacher preparation program and the requirements and expectations for completing the program and qualifying for a certificate to teach in the state of Missouri.
Prerequisites: Admission into the Teacher Education program.

TCH-ED 431 Summer Community Experience Credits: 3
This field-based course provides an in-depth examination into both the evolution of urban communities and dynamics of community building in inner cities, with special emphasis on Kansas City, Missouri. In addition, theories of educational psychology as well as child and adolescent behavior will be infused to assist participants in developing age appropriate metoring/teaching strategies and activities. Students in the course are engaged with the community through field trips, simulations, course events, and community service.
Prerequisites: Admission into Elementary Education program or Institute for Urban Education.

TCH-ED 432 Special Methods of Teaching English to Middle School and High School Students Credits: 3
This course stresses the understanding, skills and information pertinent to teaching English/language arts in middle schools and junior and senior high schools.

TCH-ED 433 Special Methods of Teaching Middle and Secondary Mathematics Credits: 3
Provides students the opportunity to develop and present lessons in various high school mathematics topics. The emphasis is on modeling the concepts introduced and on using strategies that enable students to discover generalizations for themselves.

TCH-ED 435 Special Methods of Teaching Middle and Secondary Science Credits: 3
Provides an opportunity for future science teachers to refine their skills as science educators and at the same time to reflect upon the ways and whys of teaching science.

TCH-ED 436 Special Methods of Teaching Social Studies to Middle/Secondary School Students Credits: 3
The primary goal of this course is to enable preservice social studies teachers to reflect critically on curriculum and pedagogy in secondary social studies. Students will be introduced to current practices and issues in secondary school social studies.

TCH-ED 437 Student Teaching in Secondary School Credits: 3-12
Observation and student teaching under supervision in a secondary school. Secondary majors not specifically listed here must enroll in 12.0 credit hours. Music education majors enroll in 3.0 or 7.0 hours; art education and foreign language education majors must enroll in 7.0 hours.

TCH-ED 438 Cultural Responsive Strategies for Working With Diverse Student Populations Credits: 3
This course is designed to move students from cultural awareness to the application of culturally responsive practice. Specifically, this course will heighten students' understanding of cultural characteristics and their relationships to teaching and learning.
Prerequisites: Admission into Teacher Education Program.

TCH-ED 440 Introduction To Early Childhood Education Credits: 3
Introduction to the field of early childhood care and education, birth to age 8. Designed to familiarize future practitioners with the unique characteristics of early childhood education and its practice.

TCH-ED 441 Literacy Development I Credits: 3
An introduction to how language is acquired and how to facilitate oral language expression in early childhood classrooms.

TCH-ED 442 Observation, Assessment & Screening in Early Childhood Classrooms Credits: 3
This course is designed to identify developmentally appropriate ways to measure and evaluate child growth and development.
Co-requisites: TCH-ED 480.

TCH-ED 444 Mathematics In Early Childhood And Elementary Schools Credits: 3
The course prepares teachers who can create a learning environment in which mathematical concepts are drawn from and modeled within the child's active investigation of his or her own surroundings and views of the world. The emphasis is upon mathematics as a sense-making tool through which observation, action, classification, ordering, seeking patterns and common features, and testing of ideas come together to organize experiences and solve problems in the immediate environment. Stress is placed on methods and materials to make mathematics learning active and hands-on. A variety of materials, physical models, and tools are studied in terms of the way they can be used to help children explore, develop and test ideas, construct meaning, and communicate ideas.

TCH-ED 445 Science In Early Childhood And Elementary Schools Credits: 3
Focus on ways of involving young children in science activities and experiences designed to promote curiosity, investigation and self-awareness as they explore their world.

TCH-ED 447 Social Studies In Early Childhood & Elementary Schools Credits: 3
This course is designed to help students understand basic social studies concepts and pedagogy for young learners.

TCH-ED 450 Integrating The Curriculum In Early Childhood Education Credits: 3-4
A culminating curriculum course for early childhood students. The overall goal is to help students become more aware, skilled and informed about developmentally and educationally appropriate practice and curriculum for children during early childhood. Its focus is on constructing an integrated curriculum. A field-based experience is included.

TCH-ED 451 Child Guidance Within The Classroom Credits: 3
Designed to help students examine and evaluate guidance techniques and teaching strategies used in classrooms for young children. Preventive measures in classroom management will be stressed.
Co-requisites: TCH-ED 481.

TCH-ED 452 Family and Program Relationships in Early Childhood Education Credits: 4
Provides insight into the challenge of parenting, knowledge about the development and implementation of parent education and support programs, and the significance of school-family relationships. In addition, this course seeks to facilitate students' understanding of and sensitivity to parents' perspectives regarding the care and education of their young children.
Co-requisites: TCH-ED 453.

TCH-ED 453 Learning from Parents Credits: 2
Designed to provide students with direct interactions with parents whose children are participating in early childhood programs, birth to age 8. Emphasis is placed upon students' understanding of, and sensitivity to, parents' perspectives regarding the care and education of their young children and recognition of parents as significant informants about their children.
Co-requisites: TCH-ED 452.

TCH-ED 454 Human Relations In The Early Childhood Classroom Credits: 3
Students will analyze the connections between an effective helping relationship and effective teaching in the early childhood classroom. Effective interpersonal communication skills will be identified and practiced. The development of self-concept will be discussed.

TCH-ED 455 Student Teaching In Preschool Credits: 6-10
Observation and student teaching under supervision in a preschool setting.

TCH-ED 456 Student Teaching In Elementary, K Through 3 Credits: 6-12
Observation and student teaching under supervision in an elementary school, grades K through 3.

TCH-ED 457 Infant And Toddler Care And Education Credits: 3
In this course, students will investigate infant and toddler care and education theories and practices. Students will learn about appropriate curriculum and teaching methods, visit infant and toddler programs, learn about state regulations and national standards for quality, and complete an environment rating scale.

TCH-ED 458 Practicum For Learning About Infants And Toddlers Credit: 1
The purpose of this course is to learn about child care and education practices in various centers. We will discuss how practices are influenced or constrained by human biology and developmental stages, as they are by ecological and environment pressures such as mothers' work roles. The central themes of the course can be summarized by the phrases purposeful care practices and the optimal practices for infants and toddlers.

TCH-ED 459 Early Childhood Program Management and Advocacy Credits: 2
Students will begin to explore basic early childhood program components. Different types of advocacy will be presented, discussed, and implemented.
Prerequisites: TCH-ED 440.

TCH-ED 460 Middle School Curriculum Credits: 2
This course offers the pre-service teachers an overview of middle school goals, basic principles, and organizations. The course explores interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 461 Student Teaching In Middle School Credits: 6-12
Observation and student teaching under supervision in a middle school setting.

TCH-ED 462 Middle School Principles and Organization Credits: 2
This course offers the pre-service teachers an overview of middle school goals, basic principles, and organizations. The course explores interdisciplinary teaming, flexible scheduling, exploratory and advisory programs, and other aspects of the organization within the context of middle school goals and practices.

TCH-ED 464 Math Methods for Urban Teachers Credits: 3
Mathematics-specific pedagogy for urban teachers. Methods, techniques, tools and materials for the effective teaching of mathematics. Emphasis on problem solving and reasoning skills in applying mathematics and on teaching in the context of diverse student backgrounds. Portions of this course will occur in urban school classrooms. Students will apply learning to urban classrooms.
Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 465 Urban Education VI: Teaching Diverse Students Credit: 1
This interactive course will investigate and examine the principles of teaching diverse students and factors influencing effectiveness of instruction, including empowering African American males, teaching students from diverse populations and working with students with special needs. Some of the class sessions will be taught electronically and work will be submitted electronically.
Prerequisites: Admission into the Institute of Urban Education.

TCH-ED 466 Field Experience: Diverse Learners Credit: 1
Students will spend a minimum of 90 hours in an urban school classroom. Students will have the opportunity to apply learning and lessons designed in the semester's pedagogical courses, particularly Best Practices for Teaching Math, Science, and strategies for working with diverse learners. Students will work with their seminar leader, having the opportunity to be observed and conference about their teaching.
Prerequisites: Admission into the Institute for Urban Education.

Co-requisites: TCH-ED 465.

TCH-ED 470 Philosophy and History of Science and Technology Credits: 3
This course uses an historical survey to introduce the main philosophical interpretations of the nature and structure of both science and technology. Core concepts such as prediction, explanation, progress, truth, and utility will be examined in light of various philosophical perspectives. Following this, case study methodology will be used to examine interactions among science, technology, and society. Although the major focus will be upon modern Western culture, some attention will be paid to earlier and non-Western cultures. Case studies to be examined include: Perception and Estimation, nuclear power and pesticides; the impact of high technology upon medicine; and the estimated cost/benefit of computer-mediated communications, for example, the Internet.

TCH-ED 475 Working with Families and Communities Credits: 3
This course provides an in-depth examination of research and theory relative to children, family, and community which have implications for and application to learning and instruction. Emphasis will be placed on the exploration and critical examination of and insights into the challenge or parenting, knowledge about the development and support programs, and the significance of school-family relationships. In addition, this course seeks to facilitate students' understanding of and sensitivity to families' perspectives regarding the care and education of their children and adolescents. The course is for students in the elementary education program and Institute for Urban Education.
Prerequisites: Admission into Teacher Education or IUE.

TCH-ED 480 Practicum I Early Childhood Credit: 1
Early Childhood students will participate in observation, assessment, and screening activities as they explore the complex nature of primary school settings. Students will be expected to spend 60 hours at classroom sites during the semester.
Co-requisites: TCH-ED 442.

TCH-ED 481 Practicum II Early Childhood Credit: 1
Early Childhood students will participate in classroom management and guidance practices as they explore the complex nature of pre-kindergarten settings. Students will be expected to spend 60 hours at classroom sites during the semester.
Prerequisites: TCH-ED 480, admission into teacher education program.

Co-requisites: TCH-ED 451.

TCH-ED 483 Early Childhood Reading I: Introduction to Literacy and Reading Education Credits: 4
This course introduces concepts about literacy processes: i.e., social, cultrual, cognitive and linguistic foundations of reading and wrtiting processes. The major focus of the course is on learning components of comprehensive reading curriculum and a range od instructional approaches and methods appropriate for early childhood learners at different stages of literacy development.

TCH-ED 484 Early Childhood Reading II: Assessing and Teaching Diverse Learners Credits: 4
This course introduces focuses on understanding the major components of reading processes (Phonemic awareness, word identification and phonics, vocabulary and background knowledge, fluency, comprehension strategies, and motivation) and how they are integrated in fluent reading for individual students at different stages of literacy development. The major projects for the course involves assessing and teaching an individual student over the course of the semester. Teacher candidates should also assess and teach in small groups of readers.
Prerequisites: Admission into the teacher education program.

TCH-ED 485 Language Arts in the Early Childhood Claassroom Credits: 3
This course provides instruction in planning, implementing, and assessing early childhood (birth through third-grade) language arts activities. Critical analysis in classroom settings is emphasized. Other issues discussed include: literature-based instruction, multicultural perspectives, special needs students and professional behaviors.

TCH-ED 492 Integrated Instruction: Language Arts and Social Studies Credits: 6
This course will focus on teaching Language Arts and Social Studies in the Urban Elementary School. Methods, techniques, tools and materials for the effective teaching will be observed and practiced. Students will work closely with in-service teachers and their university instructor. There will be emphasis on balanced literacy, readers' and writers' workshops, literacy development, assessment techniques and the integration of social studies and language arts. Curriculum mapping and unit planning will be introduced and practiced in this course. This course will focus on school and classroom organization and management, detailed lesson planning, use of instructional materials and media in the teaching of language arts and social studies.
Prerequisites: Admission into the Institute of Urban Education.

TCH-ED 493 Mathematics Capstone Credits: 2
This seminar will develop academic excellence, inquiry and reflective problem solving, and skills to create caring and safe environments. It is designed to complement the student teaching experience through discussing and analyzing school and school-based issues. It is intended to help further development of reflective, critical, and analytical approaches to pedagogical decision making through supportive collaboration. Students are asked to use knowledge of child/adolescent development, learning, classroom dynamics, society, history, culture, and subject area to analyze classroom situations, and develop and defend alternatives to observed teaching practices and problems.
Prerequisites: TCH-ED 433.

Co-requisites: Student Teaching.

TCH-ED 494 Language Arts Capstone Credits: 2
Designed for students in their last professional semester of the TE program, and are in a full-time student teaching placement. The course will serve as a culminating experience of the major concepts from the previous three semesters. Topics covered include: school law, classroom management, working with special needs students, building critical thinking activities into the curriculum, planning and implementing authentic assessments, and examining the obligations, challenges, and realities of the teaching profession.
Prerequisites: TCH-ED 432.

Co-requisites: student teaching.

TCH-ED 495 Science Capstone Credits: 2
This course is a continuation of science teaching methods to prepare prospective middle and high school science teachers with the necessary background knowledge and laboratory skills to become effective professional science teachers. This course is pragmatic in nature to assist you during student teaching and will stress application of inquiry instruction, science assessment, data analysis, and analysis of learning. The blended and online synchronous format allows maximum contact time in a classroom setting. Topics include science safety, classroom management, behavior management, homework, and NSTA position statements, working with students with disabilities, and professionalism in science education. The objectives will be addressed in a seminar setting within the context of student teaching. Application of materials developed during science methods and subsequent preparation of the Teacher Work Sample are a major emphasis area.
Prerequisites: TCH-ED 435.

Co-requisites: student teaching.

TCH-ED 496 Social Studies Capstone Credits: 2
This seminar is designed to complement the student teaching experience through the discussion and analysis of school-based issues. It is intended to help you further develop a reflective, critical and analytical approach to pedagogical decision making through supportive collaboration. You will be asked to use your knowledge of child/adolescent development, learning, classroom dynamics, society, history, culture and your subject area to analyze classroom situations, as well as to defend alternatives to observed teaching practices and problems.
Prerequisites: TCH-ED 436.

Co-requisites: Student Teaching.

TCH-ED 497 Teaching Internship Credits: 3-8
Teacher candidates will work 3 to 5 days at the school site in which the candidate will complete the year-long teaching internship.
Prerequisites: TCH-ED 398.

TCH-ED 498 Urban Education Seminar VII Credit: 1
This seminar meets weekly for 2 hours and is led by a clinical professor who serves as a mentor for the students throughout their program. Students will work closely with mentor teachers in the application and integration of social justice and the elementary school curriculum. A critical analysis of current practices, teaching methods, materials and how social justice manifests in curriculum and instruction. Emphasis is on understanding cultural diversity and cultural influences on learning. Concepts of a classroom community, parental relations and democratic classroom processes will be addressed. Students will have opportunities to apply their learning to urban classrooms.
Prerequisites: Admission into the Institute for Urban Education.

TCH-ED 499 Capstone Credits: 2
This seminar is designed to complement the student teaching experience through the discussion and analysis of school-based issues. It is intended to help further develop a reflective, critical and analytical approach to pedagogical decision making through supportive collaboration.

Theatre (THEATRE)

Courses

THEATRE 100 Topical Studies In Theatre Practice Credits: 1-3
(A, B, C, D) This course provides students with an opportunity to explore special offerings in theatre practice. Different sections of the course may be repeated.

THEATRE 101 Introduction To Acting Credits: 3
An introductory course to acquaint the freshman theatre major and non-major student with the process of acting through relaxation and improvisational exercise.

THEATRE 113 Introduction To Technical Production Credits: 3
An introduction to the technical production process with emphasis on production organization, planning and scenic construction techniques. Required laboratory work.

THEATRE 121 Oral Interpretation Of Literature Credits: 3
Principles of interpretation, analysis and oral reading of prose and poetry. Emphasis upon platform performance: body language, vocal control and performance techniques.

THEATRE 130 Foundations Of Fine Arts Theatre Credits: 3
An introduction to theatre arts and a general orientation to the creative and technical aspects of live performance. Includes historical overview, analysis of the components of a play, and observation of and critical reaction to theatrical productions. Frequent guest speakers.

THEATRE 180 Theatre Production I Credit: 1
A practicum course in theatre to be elected for one credit each semester during the freshman and sophomore years. The student will be assigned to a different area each semester. High school students may elect for college credit.

THEATRE 210 Introduction To Design For The Theater Credits: 3
An introduction to aesthetics and design for the theater in the areas of scenery, costume, lighting and sound. The emphasis is upon the theory, vocabulary, form, style, historical influences and process in each area. Attendance at theater productions is required. Course is taught by design faculty from each area.

THEATRE 295 Speech For The Theatre I Credits: 3
Training in voice and articulation and the techniques of adaptation to the needs of the artist-performer in the theatre: exercises to free the voice, develop effective breathing, tone production, articulation, flexibility of vocal production, and projection.

THEATRE 295B Speech For The Theater I Credits: 3

THEATRE 298 Movement For Actors Credits: 3
Basic movement training including relaxation and alignment techniques, exercises to increase physical facility and skills to enhance rhythmic coordination and physical characterization.

THEATRE 300 Acting I Credits: 3
Basic principles of dramatic performance: training in voice, movement and language as an organic developmental whole.

THEATRE 300CH Cluster Course: Healing And The Arts Credits: 3
This course explores the healing potential of theatre fine arts, music and narrative literature in the lives of their creators, those who experience the works of art and in society as a whole. This course fulfills the Cluster Course.

THEATRE 300CR Interdisciplinary Studies:Special Topics Credits: 3
Faculty from at least two different departments (one of which must be a department in the division of humanities, including history) may determine the topic and syllabus, subject to the approval of the director of Integrated Studies and the programs advisory committee in addition to the approval of the departments involved. This special topics course will satisfy the interdisciplinary course requirement for the B.A.

THEATRE 300CS Cluster Course: History Of Russian Culture Credits: 3

THEATRE 315 Acting II Credits: 3
Textual analysis, characterization and building a role.
Prerequisites: THEATRE 300.

THEATRE 317 Scene Design Credits: 3
Introduces the mechanics of layout: perspective, basic drafting techniques, front elevation and floorplan execution. Second half of the semester emphasizes scenic design as an art form. Recommended Preparation: THEATRE 311.
Prerequisites: THEATRE 113.

THEATRE 325 Acting III Credits: 3
Study and practice of period and contemporary styles of acting.
Prerequisites: THEATRE 315.

THEATRE 329 Master Class In Acting Credits: 2
(A,B,C,D) Class in advanced studies in acting. May be repeated for credit up to eight hours and guest artist change.
Prerequisites: THEATRE 325.

THEATRE 331 Advanced Oral Interpretation Credits: 3
Oral interpretation of poetry and prose. Careful analysis of selected masterpieces as art forms and an application of the aesthetic discipline to the oral reading of literature.

THEATRE 333 History Of Costuming I Credits: 3
The study of the history of European costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 340 Stage Makeup Credit: 1
Lecture and laboratory work in the fundamentals of makeup for the stage.

THEATRE 350 Theatre History I Credits: 3
Development of theatre art, including the physical stage, technical production elements, dramatic literature, and audience behavior from primitive origins to the 18th century.

THEATRE 351WI Theatre History II Credits: 3
Development of Theatre art, including the physical stage, technical production elements, dramatic literature, and audience behavior from the 18th century to the present.
Prerequisites: RooWriter.

THEATRE 352 History Of Costuming II Credits: 3
The study of the history of Non-European costume, with emphasis on the social and economic ramifications of costuming through the ages.

THEATRE 371 Stage Lighting Credits: 3
First half of the course introduces the student to the technical aspects of stage lighting through lectures, laboratory and crew work. Second half of semester involves the student in the fundamentals of design theory and procedure.

THEATRE 373 Master Class In Technology Credits: 2
Class in advanced studies in technology. May be repeated for credit up to eight hours as content and guest artist change. Permission of instructor or head of area required.

THEATRE 378 Stage Management I Credits: 3
A functional analysis of the duties and responsibilities of the stage manager, with particular reference to the organization and conducting of rehearsals and performances, professional practices and union requirements. Requires student to be an assistant to a stage manager on a University or an KC Rep production. The first of a two-semester requirement in stage management for theater majors.

THEATRE 379 Master Class In Design Credits: 2
Class in advanced studies in design. May be repeated for credit up to eight hours as content and guest artist change.

THEATRE 380 Theatre Production II Credit: 1
(A,B,C,D) A practicum course in theatre to be taken one hour each of the last four semesters. The student will work in various areas each semester, to be selected from: (1) scenery construction, (2) scene painting, (3) stage crew, (4) wardrobe, (5) properties, (6) lighting, (7) house management, (8) assistant stage management. As advanced theatre majors, each student will be expected to accept crewhead responsibilities and demonstrate proficiency in the areas selected.
Prerequisites: THEATRE 113.

THEATRE 395 Speech For The Theatre II Credits: 3
(C,D) THEATRE 395 is a continuation of THEATRE 295. The objective of these classes is: training in voice and articulation and the techniques of adaptation to the needs of the artist performer in the theatre: exercises to free the voice, develop effective breathing, tone production, articulation, flexibility of vocal production, and projection.
Prerequisites: THEATRE 295 and THEATRE 295B.

THEATRE 400 Special Problems In Theatre Credits: 1-6
(A-M) Research and/or production projects for advanced upperclass students. No more than three hours with any one instructor. (A) Acting; (B) Children's Theatre; (C) Costumes; (D) Scenic Design; (E) Directing; (F) History; (G) Lighting; (H) Playwriting; (I) Sound; (J) Stage Management; (K) Technical Production (L) Theatre Management; (M) Theory and Criticism.

THEATRE 400A Special Problems In Theatre: Acting Credits: 1-6

THEATRE 400B Special Problems In Theatre: Design Credits: 1-6

THEATRE 400C Special Problems In Theatre: Costumes Credits: 1-6

THEATRE 400CC The Practice and Theory of Creativity - Cluster Course Credits: 3
A team taught multidisciplinary course for undergraduate students that fosters awareness of the nature and power of creativity, One third of the class covers current literature on the creative process. The remainder uses arts as a catalyst for creative individual and group projects that foster communication and remove barriers to creativity. Throughout the course processes are taught which integrate creativity with the discipline necessary to realize the creative objective.
Cross Listings: CONSVTY 434CC.

THEATRE 400CH Special Problems In Theatre Credits: 1-6

THEATRE 400D Special Problems In Theatre: Scenic Design Credits: 1-6

THEATRE 400E Special Problems In Theatre: Directing Credits: 1-6

THEATRE 400F Special Problems In Theatre: History Credits: 1-6

THEATRE 400G Special Problems In Theatre: Lighting Credits: 1-6

THEATRE 400H Special Problems In Theatre: Playwriting Credits: 1-6

THEATRE 400I Special Problems In Theater: Sound Credits: 1-6

THEATRE 400J Special Problems In Theatre: Stage Management Credits: 1-6

THEATRE 400K Special Problems In Theatre: Technical Production Credits: 1-6

THEATRE 400L Special Problems In Theatre: Theatre Management Credits: 1-6

THEATRE 400M Special Problems In Theatre: Theory And Criticism Credits: 1-6

THEATRE 400N Special Problems In Theatre: Dramaturgy Credits: 1-6

THEATRE 400P Special Problems: Storytelling Art And Technique Credit: 1

THEATRE 400R Special Problems In Theatre Credits: 1-6

THEATRE 400S Special Topics In Theatre Credits: 1-6

THEATRE 400T Special Problems In Theatre Credits: 1-6

THEATRE 400U Special Topics In Theatre Credits: 1-6

THEATRE 400V Special Problems in Theater Credits: 1-6

THEATRE 400X Special Problems In Theatre Credits: 1-6

THEATRE 401CH Cc: The Practice And Study Of Creativity Credits: 3
This cluster course will provide students with a deep understanding of the mechanics value power and challenges of creativity in all aspects of their lives, allowing them to continually adapt themselves to a rapidly changing world and to become outstanding community leaders. The class will foster awareness of the nature and power of students' creativity from three different perspectives: visual arts/art history, theatre/dance, and music composition/performance.
Cross Listings: CONSVTY 497.

THEATRE 403 Theatre Company & Production Credit: 1
This course serves (1) as a weekly company meeting for Theatre majors, (2) an organizing point for production assignments and duties for the semester, and (3) a study of a special topic which will change each semester. Course is repeatable. Required of Majors for every semester they are enrolled.
Prerequisites: Theatre Majors and Minors.

THEATRE 415 Beginning Directing Credits: 3
Theory and process of play production, including interpretation, composition, picturization, movement, rhythm, and character interpretation.

THEATRE 418 History of American Musical Theatre Credits: 3
A survey of trends in the American musical theatre from the 18th century to the present. This course includes material on creators and repertory in addition to the discussions of stylistic, analytical, social, aesthetic, and commercial aspects of musical theatre.

THEATRE 425 Advanced Directing Credits: 3
Continuation of work in THEATRE 415, with special attention to proscenium, arena, and thrust staging techniques.
Prerequisites: THEATRE 415 (or equivalent).

THEATRE 431 Rendering Techniques For The Theatre Designer I Credits: 3
Introduces the mechanics of handling black and white media to develop three-dimensional technique with an emphasis on observational training and object drawing.

THEATRE 432 Costume Design Credits: 3
The practice of the theatrical costume design, leading to the preparation of designs for production, and the execution of designs in actual costuming for the stage.

THEATRE 432A Costume Design Credits: 3

THEATRE 432B Costume Design Credits: 3

THEATRE 432C Costume Design Credits: 3

THEATRE 432D Costume Design Credits: 3

THEATRE 437 Playwriting I Credits: 3
Theory and practice of writing for the theatre with emphasis on the basic techniques.

THEATRE 438 Playwriting II Credits: 3
Theory and practice of writing for the theatre with emphasis on advanced techniques.

THEATRE 476 Theatre Sound And Electronics Credits: 3
Study of electronic principles used in audio and control devices. Concentrates on applying knowledge to using the equipment employed in the theatre such as sound-effect systems, inter-communication equipment, and includes a special section on the creation of sound and music for theatre productions.

THEATRE 478 Stage Management II Credits: 2
Practicum course in stage management. Requires stage management of a University production and/or assistant stage management of an KC Rep production and/or assistant stage management of a main stage University production.
Prerequisites: THEATRE 378.

THEATRE 489 Seminar In Professional Theatre Credit: 1
This course shall be conducted by a visiting artist who is in residence with either Kansas City Repertory Theatre or the academic theatre. Both student work and the work of the visitor shall be analyzed and criticized in this semester.

THEATRE 497 Repertory Theatre Credits: 3-6
Apprentice-level responsibilities for THEATRE 497 are as follows: apprentices will be used in as many production areas as possible: (1) as actors in small roles and/or extras or supers; (2) as understudies if possible; (3) as needed in the following departments: (a) properties; (b) carpentry and the shop; (c) lighting; (d) costumes; (e) house management; (f) stage management; (g) running crews.
Prerequisites: Selection for apprenticeship by departmental chairman.

Trombone (TROMB)

Courses

TROMB 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

TROMB 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TROMB 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

TROMB 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

TROMB 101 Freshman Trombone I Credits: 2-4

TROMB 101J Freshman Trombone I (Jazz) Credits: 2-4

TROMB 102 Freshman Trombone II Credits: 2-4

TROMB 102J Freshman Trombone II (Jazz) Credits: 2-4

TROMB 201 Sophomore Trombone I Credits: 2-4

TROMB 201J Sophomore Trombone I (Jazz) Credits: 2-4

TROMB 202 Sophomore Trombone II Credits: 2-4

TROMB 202J Sophomore Trombone II (Jazz) Credits: 2-4

TROMB 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: TROMB 5300.

TROMB 301 Junior Trombone I Credits: 2-4

TROMB 301J Junior Trombone I (Jazz) Credits: 4

TROMB 302 Junior Trombone II Credits: 2-4

TROMB 302J Junior Trombone II (Jazz) Credits: 4

TROMB 401 Senior Trombone I Credits: 2-4

TROMB 401J Senior Trombone I (Jazz) Credits: 4

TROMB 402 Senior Trombone II Credits: 2-4

TROMB 402J Senior Trombone II (Jazz) Credits: 4

Trumpet (TRUMPET)

Courses

TRUMPET 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

TRUMPET 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TRUMPET 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

TRUMPET 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

TRUMPET 101 Freshman Trumpet I Credits: 2-4

TRUMPET 101J Freshman Trumpet I (Jazz) Credits: 2-4

TRUMPET 102 Freshman Trumpet II Credits: 2-4

TRUMPET 102J Freshman Trumpet II (Jazz) Credits: 2-4

TRUMPET 201 Sophomore Trumpet I Credits: 2-4

TRUMPET 201J Sophomore Trumpet I (Jazz) Credits: 2-4

TRUMPET 202 Sophomore Trumpet II Credits: 2-4

TRUMPET 202J Sophomore Trumpet II (Jazz) Credits: 2-4

TRUMPET 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: TRUMPET 5300.

TRUMPET 301 Junior Trumpet I Credits: 2-4

TRUMPET 301J Junior Trumpet I (Jazz) Credits: 4

TRUMPET 302 Junior Trumpet II Credits: 2-4

TRUMPET 302J Junior Trumpet II (Jazz) Credits: 4

TRUMPET 368 Orchestral Literature for Trumpet Credit: 1
Intended to introduce students to the standard repertoire for orchestral trumpet; class meets once weekly for an hour. Students will be expected to prepare and play approximately a dozen works per semester,rotating parts in a full trumpet section.

TRUMPET 401 Senior Trumpet I Credits: 2-4

TRUMPET 401J Senior Trumpet I (Jazz) Credits: 4

TRUMPET 402 Senior Trumpet II Credits: 2-4

TRUMPET 402J Senior Trumpet II (Jazz) Credits: 4

Tuba (TUBA)

Courses

TUBA 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

TUBA 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

TUBA 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

TUBA 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

TUBA 101 Freshman Tuba I Credits: 2-4

TUBA 102 Freshman Tuba II Credits: 2-4

TUBA 201 Sophomore Tuba I Credits: 2-4

TUBA 202 Sophomore Tuba II Credits: 2-4

TUBA 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: TUBA 5300.

TUBA 301 Junior Tuba I Credits: 2-4

TUBA 302 Junior Tuba II Credits: 2-4

TUBA 401 Senior Tuba I Credits: 2-4

TUBA 402 Senior Tuba II Credits: 2-4

University College (UNIV)

Courses

UNIV 100 Academic Development Credit: 1
This course is designed to help students further develop needed critical thinking and academic skills. Students will have the opportunity to analyze individual learning behavior, and to learn, adopt, and apply critical thinking methods and academic skills that promote success in college.
Prerequisites: University College Student.

UNIV 101 University College Seminar Credits: 3
The purpose of UNIV 101 is to help new students make a successful transition to the University of Missouri-Kansas City, both academically and personally. This course aims to help students develop and apply critical thinking skills (Interdisciplinary and Innovative Thinking and Valuing and Reasoning), engage in the curricular and co-curricular life of the university, articulate to students the expectations of the University and its faculty, understand the value of a liberal education in the 21st century, and continue to clarify their purpose, meaning, and direction. First-time, year-one students admitted into the University College will enroll in UNIV 101.

UNIV 102 Career and Major Planning Credits: 1-2
The goal of this course is to provide intervention and assistance in order for students, who have not declared their majors, to make purposeful decision about academic plans and career goals while fostering academic success. UNIV 102 (2 hour section) is required for new transfer or transitioning UMKC students. UNIV 102 (1 hour section) is required for students having completed UNIV 101 in the previous term.
Prerequisites: UNIV 101.

UNIV 202 Next Steps in Career & Major Exploration Credit: 1
Designed to actively engage students in their educational and career-planning process by exploring factors that influence personal decision-making. While the course is practical and applied, it also addresses the broader view of work in our lives. The course will include discussion of factors that impact major and career decision-making in order to empower students to make an appropriate decision.
Prerequisites: UNIV 102.

UNIV 300 Peer Leadership Credit: 1
Designed for the study and practical application of leadership skills that will benefit Peer Leaders working with courses/laboratory instructors and students. Open to Peer Leaders only. May be repeated for a total of 3 hours. Course to be utilized by multiple academic units to support training efforts.

Urban Planning and Design (UPD)

Courses

UPD 101 Introduction To Urban Studies Credits: 3
Introduction to Urban Studies is a lecture and discussion course that provides the undergraduate student with an overview of the interdisciplinary field of urban social science. The student who successfully completes this course will have a broad understanding of the major issues,vocabulary, basic methods, and prominent scholars in urban studies. We will explore current events of relevance, including the opportunities and problems facing major cities in the United States including Kansas City.
Cross Listings: BLKS 101, URBAN ST 101, ECON 158.

UPD 203 GIS For Urban Planning Credits: 3
This introductory level GIS course is designed to expose planning students to Geographical Information Systems (GIS). Students will learn basic concepts and theories of GIS and applications of GIS software with hands-on experience. Students will also learn how to search for demographic, socio-economic, land use, transportation, and geospatial data, and how to use such data for their academic research and professional planning work with GIS. Students will apply GIS to the multiple scales of planning work.

UPD 206 Cities of the World Credits: 3
This course will focus on urban issues to help students develop global perspectives. Urbanization has been a global phenomenon, and more than half of the world population lives in urban areas. Students will learn past, present and future urban issues and challenges on the global scale and about how cities of the world have coped and will cope with these issues and challenges.
Cross Listings: SOCIOL 206, URBAN ST 206.

UPD 260 History Of Planning And Urban Design Credits: 3
An overview of planning history with an emphasis on the 19th and 20th centuries. The historic framework will include urban history, the rise and development of urban planning, urban design, and social theory and how these areas have affected the shape of our cities.

UPD 268 Queer in the City/An Introduction to LGBT Studies Credits: 3
This course introduces queer theory within the context of gender studies and urban studies. We will read, discuss, and react to classic text in queer theory, lesbian and gay studies, and sexuality and space studies. There will be an emphasis on finding "otherness" within everyday spaces, places, texts, and discourses.
Prerequisites: Anchor I and DISC 100.

Co-requisites: DISC 200.

Cross Listings: URBAN ST 268, WGS 268.

UPD 280 Land Use Planning Credits: 3
This course explores the basic principles of plan making, land use development and regulation. Students are introduced to contemporary planning and policy issues. Including land use conflicts and alternative models for sustainable planning, design and management. Students will learn how to develop a land use plan using Geographic Information Systems (GIS) and other design tools. An introductory GIS course (UPD 203) is highly recommended.

UPD 300 Quantitative Planning Methods And Techniques Credits: 3
Statistical analysis and other analytic techniques of data gathering. Data and problems framed from complex, real world situations. Competence in firsthand research; survey design; case study method; data gathering methods such as observation, open-ended interviewing and questionnaires.

UPD 310 Planning And Design Studio I Credits: 4
The urban planning and design studio will introduce to the student a methodology of designing urban spaces. Students will actively participate in problem solving and determine the physical shaping of communities and cities, while developing abilities in graphic methods of communication and Presentation. The application of principles of urban design, social, political, cultural, economic and environmental considerations will help inform solutions. Students will have the opportunity to work interactively with a wide spectrum of professionals, neighborhood leaders, and political entities in developing strategies for solutions to real urban situations.
Prerequisites: ENV-DSN 201 and ENV-DSN 202 with a grade of C- or better.

UPD 312 Planning And Design Studio II Credits: 4
This course integrates material from Quantitative Planning Methods and Techniques (UPD 300). Instruction in urban planning and design focusing on the synthesis of land use analyses, regulatory reviews, urban design issues, and public participation facilitation. Continued instruction in techniques for visually presenting planning and design ideas.
Prerequisites: UPD 300, UPD 310 with a grade of C- or better.

UPD 320 Planning Theory And Practice Credits: 3
This course examines contemporary urban planning and design practice. Theories about planning practice and related case studies will be the basis of this course. Topics covered will include the definition of urban planning, the idea of the "public realm," planning/design expertise and the rational model, the role of diversity, public participation, communicative planning, advocacy and equity planning, ethics comprehensiveness and the limits of planning. The course will include assignments that will build student’s ability to write quick and analytical assessments, often required in planning practice. Students will be required to attend public planning forums in and around the region.

UPD 332CZ Enviromental Sustainability Credits: 3
This course will introduce the concept of sustainability and review how sustainability might work at the individual, neighborhood, state, nation and global scales. Students will participate in some form of community engagement on sustainability as well as reflect upon how their own practices impact the environment. Counts toward AS Interdisciplinary "Cluster course." Key course in sustainability minor.

UPD 340 Neighborhood And Community Development Credits: 3
Course provides a comprehensive introduction to the field of community development and neighborhood planning. The development of theoretical models that explain neighborhood change and history in the U.S. will serve as the basis. Issues explored include: community organizing, social movements, federal and state policies, and the role of planning organizations and community development corporations in neighborhood revitalization.

UPD 400 Advanced GIS For Urban Planning Credits: 3
This advanced level GIS course is designed to expose students to high level GIS techniques and geospatial analyses in urban planning. Students will learn advanced theories and geographic information tools with hands-on experiences. Students will have an opportunity to apply their knowledge and skills in GIS to a real world planning project in class.

UPD 401 Portfolio and Resume Development Credit: 1
This class focuses on the development of portfolios necessary for professional advancement in the design fields. Students examine the various types of resumes and portfolios that can be used in different employment situations. Students will be exposed to the many design decisions that must be made when developing a resume and portfolio.

UPD 403 GIS for Urban Planning Credits: 3
The introductory level GIS course is designed to expose graduate students to Geographical Information Systems (GIS). Students will learn basic concepts and theories of GIS and application of GIS software with hands-on experience. Students will also learn how to search for demographic, socio-economic, land use, transportation, and geospatial data.

UPD 410 Planning And Design Studio III Credits: 4
Instruction in problem analysis and plan development for defined urban or suburban location with multiple constituencies.
Prerequisites: UPD 312 and not more than one grade of D in a UPD studio course.

UPD 411 Professional Practice I Credit: 1
This course prepares students for professional practice in planning and design. Issues to be addressed in the seminar include mediation, public meeting facilitation methods and presentation skills. Students engage in writing assignments addressing urban plans and designs concurrent with their work in Planning and Design Studio III (UPD 410).
Co-requisites: UPD 410.

UPD 412WI Planning And Design Studio IV Credits: 5
Capstone course that incorporates a topical plan or a comprehensive plan for a client comprising a development subdivision, a community or a redevelopment area.
Prerequisites: UPD 410 with a grade of C- or better, RooWriter.

UPD 413 Professional Practice II Credit: 1
A continuation of professional practice seminar addressing issues of Urban Planning and Design practice including different career options in the public, private, and the nonprofit sectors. The course will chart a path of successful post graduation professional development.
Co-requisites: UPD 412WI.

UPD 420 Transportation Planning Credits: 3
The course provides fundamental theories, methods, and contemporary issues in transportation planning. The topics covered in this course include the transportation planning process, transportation systems, travel demand analysis, and policy issues such as the linkage between land use and transportation, urban transportation finance, social and environmental justice, transportation and environmental impacts , and traffic congestion.

UPD 430 Planning For Historic Preservation Credits: 3
The course provides a survey of major issues in the field of historic preservation and heritage studies from a planning perspective. Will focus primarily on the built environment of the United States, as well as world heritage sites and international perspectives. The course will include the urban planning techniques used for preserving historic buildings, neighborhood and districts, as well as some of the landmark legal decisions and legislation that have shaped heritage preservation practice in the U.S. Recommended Preparation: UPD 260.

UPD 432 Urban Environment Planning And Design Credits: 3
The built environment does not exist in a vacuum. Cities operate within broad ecological processes. Effective environmental planning can protect important natural resources while providing for a higher quality of life for urban residents. As a survey course in a subfield of urban planning, this course introduces students to environment planning approaches and techniques.
Prerequisites: UPD 320.

UPD 440 New Urbanism Credits: 3
This course will focus on all the components of the New Urbanism-from the region to the block and the building. It will give a detailed analysis of the history and techniques of NU, and the current state of the practice. The course will be a combination of lecture and field work, as students will be asked to participate in exercises that will deepen their understanding of the built environment.

UPD 450 Planning Law And Practice Credits: 3
Introduction to legal procedures basic to urban planning; including legal, constitutional, legislative, and administrative concepts, controls, and land-use regulations.

UPD 460CC CC: Queer in the City: An introduction to Lesbian and Gay Studies Credits: 3
This course introduces queer theory within the context of gender studies and urban studies. We will read, discuss, and react to classic text in queer theory, lesbian and gay studies, and sexuality and space studies. There will be an emphasis on finding "otherness" within everyday spaces, places, texts, and discourses.

UPD 472 Urban Redevelopment Credits: 3
Contemporary issues of urban redevelopment, with an emphasis on American cities, will be examined. Redevelopment processes recently completed or underway in the greater Kansas City region will be the subject of a case study and a theoretical review by each student.

UPD 490 Urban Planning Internship Credits: 3
Urban planning work experience off-campus with an approved professional, Government, or non-profit agency sponsor. A contract specifying the expected product of the internship is required between the student, agency, and faculty coordinator.
Prerequisites: UPD 203, UPD 300.

UPD 496 Directed Studies In Urban Planning Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 499 Special Topics In Urban Planning Credits: 1-3
Advanced independent research and analysis in urban planning. Topics and methods used in research, to be established by student and academic supervisor prior to enrollment.

UPD 499C Special Topics In Urban Planning Credits: 1-3
Advanced independent research and analysis in urban planning. Topics and methods used in research, to be established by student and academic supervisor prior to enrollment.

UPD 499E Special Topics In Urban Planning Credits: 1-3
Advanced independent research and analysis in urban planning. Topics and methods used in research, to be established by student and academic supervisor prior to enrollment.

Urban Studies (URBAN ST)

Courses

URBAN ST 100 Neighborhood And Community Development Credits: 3
Course provides a comprehensive introduction to the field of community development and neighborhood planning. The development of theoretical models that explain neighborhood change and history in the United States will serve as the basis. Issues explored include: Community organizing,social movements,federal and state policies,and the role of planning organizations and community development corporations in neighborhood revitalization.
Cross Listings: UPD 340.

URBAN ST 101 Introduction To Urban Studies Credits: 3
Introduction to Urban Studies is a lecture and discussion course that provides the undergraduate student with an overview of the interdisciplinary field of urban social science. The student who successfully completes this course will have a broad understanding of the major issues, vocabulary, basic methods, and prominent scholars in urban studies. We will explore current events of relevance, including the opportunities and problems facing major cities in the United States including Kansas City.
Cross Listings: BLKS 101, ECON 158, UPD 101.

URBAN ST 206 Cities of the World Credits: 3
This course will focus on urban issues to help students develop global perspectives. Urbanization has been a global phenomenon, and more than half of the world population lives in urban areas. Students will learn past, present and future urban issues and challenges on the global scale and about how cities of the world have coped and will cope with these issues and challenges.
Cross Listings: UPD 206, SOCIOL 206.

URBAN ST 268 Queer in the City/An Introduction to LGBT Studies Credits: 3
This course introduces queer theory within the context of gender studies and urban studies. We will read, discuss, and react to classic text in queer theory, lesbian and gay studies, and sexuality and space studies. There will be an emphasis on finding "otherness" within everyday spaces, places, texts, and discourses.
Prerequisites: Anchor I and DISC 100.

Co-requisites: DISC 200.

Cross Listings: UPD 268, WGS 268.

URBAN ST 340 Neighborhood and Community Development Credits: 3
Course provides a comprehensive introduction to the field of community development and neighborhood planning. The development of theoretical models that explain neighborhood change and history in the U.S. will serve as the basis. Issues explored include: community organizing, social movements, federal and state policies, and the role of planning organizations and community development corporations in neighborhood revitalization.

URBAN ST 460CC CC: Queer in the City: An Introduction to Lesbian and Gay Studies Credits: 3
This course introduces queer theory within the context of gender studies and urban studies. We will read, discuss, and react to classic text in queer theory, lesbian and gay studies, and sexuality and space studies. There will be an emphasis on finding "otherness" within everyday spaces, places, texts, and discourses.

URBAN ST 495 Urban Studies Internship Credits: 1-6
Students obtain directed practical experience working with non-profits,governments, or private enterprises. Duties will vary based on contractual agreement between the student, host organization, and the professor.
Prerequisites: junior standing or higher.

URBAN ST 499WI Urban Studies Seminar Credits: 3
This is the capstone course in the Urban Studies Program and is required for majors in the junior/senior year. Students critique urban research and prepare a paper and an oral presentation on an approved topic.
Prerequisites: RooWriter.

Viola (VIOLA)

Courses

VIOLA 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

VIOLA 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VIOLA 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

VIOLA 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

VIOLA 101 Freshman Viola I Credits: 2-4

VIOLA 102 Freshman Viola II Credits: 2-4

VIOLA 201 Sophomore Viola I Credits: 2-4

VIOLA 202 Sophomore Viola II Credits: 2-4

VIOLA 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: VIOLA 5300.

VIOLA 301 Junior Viola I Credits: 2-4

VIOLA 302 Junior Viola II Credits: 2-4

VIOLA 401 Senior Viola I Credits: 2-4

VIOLA 402 Senior Viola II Credits: 2-4

Violin (VIOLIN)

Courses

VIOLIN 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

VIOLIN 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VIOLIN 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

VIOLIN 100D Applied Study for the Non-Music Major Credit: 1
Nine half-hour lessons. No jury required.

VIOLIN 101 Freshman Violin I Credits: 2-4

VIOLIN 102 Freshman Violin II Credits: 2-4

VIOLIN 201 Sophomore Violin I Credits: 2-4

VIOLIN 202 Sophomore Violin II Credits: 2-4

VIOLIN 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

Cross Listings: VIOLIN 5300.

VIOLIN 301 Junior Violin I Credits: 2-4

VIOLIN 302 Junior Violin II Credits: 2-4

VIOLIN 401 Senior Violin I Credits: 2-4

VIOLIN 402 Senior Violin II Credits: 2-4

Voice (VOICE)

Courses

VOICE 100A Preparatory Applied Study Credits: 2
One-hour weekly lesson. Limited to two semesters study. Jury examination is required. There shall be a jury which shall be for comments only unless the student is applying for entrance to the 101 level, at which time a graded jury is required. May not be taken for credit toward the major.

VOICE 100B Applied Study of a Second Instrument Credits: 2
Applied study of a second instrument. One half-hour lesson weekly. Applied study for those students who wish to pursue applied study in an area other than, and in addition to, their primary performance study. No jury examination is required.

VOICE 100C Applied Study for the Non-Music Major Credits: 2
Applied study for the non-music major. One half-hour lesson weekly. No jury required.

VOICE 101 Freshman Voice I Credits: 2-4
One hour weekly participation in Vocal Performance Seminar is required.

VOICE 102 Freshman Voice II Credits: 2-4
One hour weekly participation in Vocal Performance Seminar is required.

VOICE 201 Sophomore Voice I Credits: 2-4
One hour weekly participation in Vocal Performance Seminar is required.

VOICE 202 Sophomore Voice II Credits: 2-4
One hour weekly participation in Vocal Performance Seminar is required.

VOICE 300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons.

VOICE 301 Junior Voice I Credits: 2-4
One hour weekly participation in Vocal Performance Seminar is required.

VOICE 302 Junior Voice II Credits: 2-4
One hour weekly participation in Vocal Performance Seminar is required.

VOICE 401 Senior Voice I Credits: 2-4
One hour weekly participation in Vocal Performance Seminar is required.

VOICE 402 Senior Voice II Credits: 2-4
One hour weekly participation in Vocal Performance Seminar is required.

Women and Gender Studies (WGS)

Courses

WGS 201 Introduction To Women's & Gender Studies Credits: 3
This class provides an introduction to the interdisciplinary field of women's and gender studies. The focus of this course will be the many ways gender is integral to our understanding of our world and the communities in which we live.

WGS 268 Queer in the City/An Introduction to LGBT Studies Credits: 3
This course introduces queer theory within the context of gender studies and urban studies. We will read, discuss, and react to classic text in queer theory, lesbian and gay studies, and sexuality and space studies. There will be an emphasis on finding "otherness" within everyday spaces, places, texts, and discourses.
Prerequisites: Anchor I and DISC 100.

Co-requisites: DISC 200.

Cross Listings: UPD 268, URBAN ST 268.

WGS 286 Critical Issues in Women's and Gender Studies Credits: 3
This class is an interdisciplinary course that will examine critical issues in women's and gender studies by focusing on the intersections of gender, race, class, sexuality, and social context. Through their study of these intersections, students will become more sensitive to the impact of social structures on gender and the experiences of women and men.
Prerequisites: Anchor I and DISC 100.

Co-requisites: DISC 200.

Cross Listings: ENGLISH 286, FRN-LNG 285.

WGS 301 Introduction to Feminist Theory Credits: 3
This course covers a wide variety of feminist theories and theoretical perspectives, primarily since the 1960s, and is devoted to understanding and evaluating this body of work and the insights and possibilities for change that it suggests.
Prerequisites: WGS 201.

WGS 314CC Weimar Culture: Gender and Modernity in Central Europe Credits: 3
A cluster course concerned with the culture of Weimar Germany (1919-1933), a period of crucial importance not only for German history but also for European and world history. Examines how film, advertising, theater set design, painting, photography and other media sought to re-imagine gender identities, foster new cultural forms, and transform economic relations during the Roaring Twenties in Germany.
Cross Listings: GERMAN 314CC.

WGS 405 Special Topics In Women's And Gender Studies Credits: 1-3
Each time this course is offered a different area of Women's and Gender Studies will be covered. This course may be repeated for credit when the topic changes.

WGS 408 Gender, Health, and Development in Senegal Credits: 3
This course examines women's economic empowerment, health education initiatives, philanthropy, and social entrepreneurship in West Africa and Senegal in particular. In the main city of Dakar we will visit indigenous and global nonprofits to study their policies and processes. The culture, both urban and rural, will be experienced in order to provide a unique perspective on the Senegalese and their culture.
Cross Listings: FRN-LNG 408, HISTORY 408, HLSC 408.

WGS 460CC CC: Queer in the City: An introduction to Lesbian and Gay Studies Credits: 3
This course introduces queer theory within the context of gender studies and urban studies. We will read, discuss, and react to classic text in queer theory, lesbian and gay studies, and sexuality and space studies. There will be an emphasis on finding "otherness" within everyday spaces, places, texts, and discourses.

WGS 484 Women's & Gender Studies Internship Credits: 1-4
The Women's Studies Internship Program is an opportunity for undergraduate students to gain on-site experience. Students will receive 1-4 hours of academic credit while learning and working in off- or on-campus placements. Students will engage in the ongoing feminist effort to integrate research with social activism as they apply academic knowledge to their work experience and consider how practical experience informs or alters theory. Internship experiences may take place on or off-campus, such as at the UMKC Women's Center or a local battered women's shelter. The Women's Center Director serves as coordinator for all internship experiences.
Prerequisites: WGS 201.

WGS 499 Women's And Gender Studies: Senior Seminar Credits: 3
This capstone course focuses on research leading to a term paper on a Women's and Gender Studies Topic.

World Literature (WLD-LIT)

Courses

WLD-LIT 210 Foundations Of World Literature I Credits: 3
This coos studies ancient world literature such as The Descent of Inanna, Egyptian love poetry, Hebrew Scriptures, the epics of Homer and Virgil, the Analects of Confucius, and the Oriental wisdom of Laozi. The course also considers ancient creation epics such as the cosmic battle between Marduk and Tiamat, the Metamorphosis of Ovid, and the great Indian epic The Ramayana.
Cross Listings: CLASSICS 210.

Graduate Course Offerings

Accounting (ACCTNG)

Courses

ACCTNG 5501 Finance Performance & Assessment Credit: 1.5
This course covers the fundamentals of financial reporting systems. The material is presented from a user perspective. This approach is intended to prepare students to use accounting information and will not necessarily result in students understanding the process used to record accounting transactions. Material is presented in a manner that emphasizes how accounting information is used for decision making.

ACCTNG 5510 Legal & Ethical Environment for Accountancy Credits: 3
The course exposes accounting students to major legal subjects and ethical issues that they will encounter on the CPA exam an in accountancy practice. Working individually and in groups, students will be asked to solve problems regarding business formation and securities regulation, intellectual property rights, contract formation and secured interests of creditors.
Prerequisites: MS Accountancy students who did not have any business law course as part of their undergraduate degree.

ACCTNG 5517 Survey Of Accounting Credits: 3
An overview of financial and managerial accounting. The course introduces the various reports that are used by stockholders, creditors, and managers to assess company performance and evaluate financial health. In addition, techniques are presented that assist firm managers in planning, control, and decision-making activities.

ACCTNG 5550 Accounting Information Systems Credits: 3
This course examines a number if systems employed to process accounting information, the internal control activities typically used in each system, and associated documentation tools.
Prerequisites: ACCTNG 310, MIS 202.

ACCTNG 5556 Cost Management Credits: 3
A study of the principles and techniques of cost accounting with emphasis on the structure of cost accounting systems and the processing, summarizing, and reporting of cost information. Topics include various issues relevant for manufacturing and service organizations, and introduction of situations that requires the application of cost information to managerial settings.
Prerequisites: ACCTNG 5517 (or equivalent).

ACCTNG 5557 Introduction To Income Taxation Credits: 3
An investigation of the structure of federal, state, and local taxation, along with an examination of the impact of taxes on the management decision process. NOT available for students who have completed ACCTNG 408.
Prerequisites: ACCTNG 5517 (or equivalent).

ACCTNG 5558 Financial Accounting Theory Credits: 3
A study of the theory and practice of financial accounting with emphasis upon financial statement preparation and analysis of asset, liability, and equity measurement.
Prerequisites: ACCTNG 310 or ACCTNG 5517 (or equivalent).

ACCTNG 5559 Advanced Financial Accounting Theory Credits: 3
A study of advanced topics in financial accounting. Topics include business combinations and financial statement consolidation theory and practice.
Prerequisites: ACCTNG 311 (or equivalent).

ACCTNG 5560 Introduction To Auditing And Accounting Systems Credits: 3
Fundamentals underlying the design of accounting systems and the processing of accounting data. Current auditing standards and procedures are extensively investigated, with emphasis on the nature of internal control, audit evidence,and audit reports. NOT available for students who have completed ACCTNG 405.
Prerequisites: ACCTNG 5558 (or equivalent).

ACCTNG 5561 Personal Financial Planning Credits: 3
A study of the personal financial planning process and environment, with the goal of training participants to prepare integrated financial plans. Topics addressed include an overview of insurance, retirement, investments, debt management, tax issues, estate planning and professional ethics.
Prerequisites: ACCTNG 5517 (or equivalent).

ACCTNG 5565 Advanced Accounting Systems Credits: 3
An in-depth analysis of various contemporary issues in accounting information systems.
Prerequisites: ACCTNG 350 (or equivalent).

ACCTNG 5567 Information Systems Control And Audit Credits: 3
A study of the theory and practices employed to provide a secure computing environment. Potential threats to information systems as well as controls designed to counter those threats are emphasized.
Prerequisites: one previous graduate course in accounting systems, management information systems, or computer science.

ACCTNG 5569 Information Systems Consulting Credits: 3
An application of systems concepts to the evaluation of information systems of local organizations. Student teams will analyze, document and make recommendations for the improvement of these systems, and will communicate their findings via written reports and oral presentations.
Prerequisites: one graduate information systems course.

ACCTNG 5570 Fraud Auditing Credits: 3
This course is designed to provide students with an understanding of accounting-based fraud and the fraud audit process. This course will examine fraud risks and ways to manage, prevent, and detect the occurrence of fraud.
Prerequisites: ACCTNG 405 (or equivalent).

ACCTNG 5571 Individual Tax Problems Credits: 3
A study of substantive issues relating to individual taxation using the Internal Revenue Code and Regulations as sources. Topics include a detailed study of current issues such as alternative minimum tax, passive losses, and employee business expenses.
Prerequisites: ACCTNG 5557 (or concurrent enrollment in ACCTNG 409).

ACCTNG 5572 Tax Theory And Business Applications Credits: 3
A study of substantive issues relating to the taxation of business entities including multi-jurisdictional considerations. Topics include business formation and dissolution, business valuation, selection of business entity, compensation of employees, sales or exchanges of business property, and business tax credits.
Prerequisites: ACCTNG 409 or ACCTNG 5557 (or equivalent).

ACCTNG 5573 Taxation Of Estates, Gifts, And Trusts Credits: 3
A study of substantive issues in the income taxation of estates and trusts and the taxation of estates and gifts using the Internal Revenue Code and
A study of substantive issues in the income taxation of estates and trusts and the taxation of estates and gifts using the Internal Revenue Code and
Regulations as sources. Emphasis will be placed on lifetime and post-mortem planning techniques as well as compliance requirements.
Prerequisites: ACCTNG 409 or ACCTNG 5557 (or equivalent).

ACCTNG 5574 Tax Accounting Credits: 3
A study of substantive issues relating to the accounting aspects of federal income taxation. Topics include methods of income and expense reporting, adoption of and change in accounting periods and methods, and annual accounting and transactional concepts.
Prerequisites: ACCTNG 409 or ACCTNG 5557 (or equivalent).

ACCTNG 5575 Managerial Accounting: Issues, Tools And Analysis Credits: 3
A look at various tools used to assist in the planning, control, performance evaluation, and decision-making activities of managers. Contemporary issues that confront management are introduced where appropriate.
Prerequisites: ACCTNG 307 or ACCTNG 5556 (or equivalent).

ACCTNG 5576 Tax Research, Procedure And Practice Credits: 3
An introduction to research sources and methods with an emphasis on analysis and communication of conclusions. Administrative procedures of the Internal Revenue Service and the professional responsibilities of tax practitioners will also be addressed.
Prerequisites: ACCTNG 409 or ACCTNG 5557.

ACCTNG 5577 Advanced Auditing Credits: 3
An analysis of real-world cases of audit problems with emphasis on red flags, pressures auditors face, and serious implications of audit failure (both perceived and real).
Prerequisites: ACCTNG 405 (or equivalent).

ACCTNG 5578 Current Problems In Accounting Credits: 3
This course will focus on an in-depth exploration of specific problems including, but not confined to those accounting problems which have resulted in official positions being published or considered by the accounting profession.
Prerequisites: ACCTNG 420 (or equivalent).

ACCTNG 5579 Theory Of Income Determination Credits: 3
This course will consider the historical and cultural development of accounting principles and the relationship of those principles to economic concepts of profit and cost. Consideration of the economic aspects of accounting measurements will provide a vehicle for exploring accounting problem areas in terms of both internal and external reporting needs. Pertinent literature in the field will be explored as a basis for both oral and written reports.
Prerequisites: ACCTNG 420 (or equivalent).

ACCTNG 5580 Financial Reporting Systems Credits: 2
Introduces generally accepted accounting principles and concepts along with the preparation and analysis of financial statements.
Prerequisites: Admission to Executive MBA Program.

ACCTNG 5587 Special Topics Credits: 3
This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

ACCTNG 5595 Internship Credit: 1
An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

ACCTNG 5597 Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

ACCTNG 5597B Special Topics In Accounting:Cost/Managerial Accounting Theory Credits: 1-3

ACCTNG 5597G Special Topics In Accounting:Personal Financial Planning Credits: 1-3

ACCTNG 5899 Required Graduate Enrollment Credit: 1

Anesthesia (ANESTH)

Courses

ANESTH 5505 Anatomy for AAs Credits: 3
Provides a specialized introduction to clinical human anatomy for students seeking a Masters of Science in Anesthesia. Clinical aspects for the anatomy with examples and case presentations will be included.
Prerequisites: Acceptance to the MSA program

ANESTH 5518 Professionalism for the Anesthesiologist Asst I Credit: 1
Medical terminology and introduction to legal and ethical areas of Anesthesiologist Assistant practice; professional behavior, legal obligations of anesthetists and patient, and social and community contexts of health care.

ANESTH 5528 Professionalism for the Anesthesiologist Asst II Credits: 0.5
Special topics in Anesthesiologist Assistant practice; impact of substance abuse, cognitive deficiency and mental illness in creating an impaired provider.
Prerequisites: acceptance into MSA program.

ANESTH 5538 Professionalism for the Anesthesiologist Asst III Credits: 0.5
Special topics in Anesthesiologist Assistant practice; principles of evidence based medicine and approaches to mastering life long learning and maintaining professional competencies.
Prerequisites: acceptance into MSA program.

ANESTH 5540 Patient Monitoring and Instrumentation Credits: 3
Students are taught the clinical application of anesthesia instrumentation. Monitors and devices used in the operating room are studied with respect to principles of operation, calibration, and interpretation of clinical data. A hands-on laboratory is utilized to maximize direct contact to the instruments.

ANESTH 5541 Methods of Anesthesia I Credits: 2
Addresses intraoperative monitoring for complicated patients and complex surgical procedures. Advanced and supplemental monitors and devices used in the operating room are studied with respect to principles of operation, calibration and interpretation of data.
Prerequisites: ANESTH 5540.

ANESTH 5556 Physiology for Anesthesiologist Assistants I Credits: 3
Basic and applied human systems physiology with emphasis on topics and areas of special concern to the anesthetist.

ANESTH 5557 Physiology for Anesthesiologist Assistants II Credits: 2
Applied Physiology for Anesthesiologist Assistants II. Continuation of ANESTH 5556.
Prerequisites: ANESTH 5556.

ANESTH 5558 Anesthesia & Co-existing Disease I Credits: 2
The essential link from basic anatomy and physiology to anesthesia care.
Prerequisites: ANESTH 5556.

ANESTH 5559 Anesthesia & Co-existing Disease II Credits: 2
The essential link from basic anatomy and physiology to anesthesia care.
Prerequisites: ANESTH 5558.

ANESTH 5560 Introduction to Anesthesia Credits: 2
Introduction to basic concepts dealing with clinical anesthesia. Medical terminology, human anatomy, medical chart interpretation and drug dosage calculations.

ANESTH 5561 Orientation to Simulation and Clinical Application Credits: 5
A skills lab based course to prepare students for anesthesia patient care in the operating room. Classroom, simulation laboratory and actual operating room environments will be used to teach preoperative assessment, IV placement techniques, airway management, intraoperative patient care and post-operative management. BLS (Basic Life Support) certification is a course requirement.

ANESTH 5562 Anesthesia Clinical Correlation I Credit: 1
A series of conferences presented by faculty and students that applies to anesthetic theory as it relates to the clinical experience. Specific anesthetic situations are emphasized.
Prerequisites: ANESTH 5560.

ANESTH 5563 Anesthesia Clinical Experience I Credits: 4
A continuation of the preparation, observation and hands-on learning format initiated in ANESTH 5561. Patient management and technical skills are refined with close attention to the didactic course work. A comprehensive clinical examination is administered at the end of the semester. ACLS (Advanced Cardiac Life Support) certification is required for course completion.
Prerequisites: ANESTH 5561.

ANESTH 5564 Anesthesia Clinical Correlation II Credit: 1
A spectrum of case presentation conferences presented by the faculty and students dealing with basic and major problems in anesthesia management. Medical and surgical history of individual patents and the outcomes of anesthesia and surgery are emphasized. Journal Club and MM conferences are included.
Prerequisites: ANESTH 5562.

ANESTH 5565 Anesthesia Clinical Experience II Credits: 8
ANESTH 5565 Anesthesia Clinical Experience II (2)- An continuation of ANESTH 5563. A comprehensive examination is administered at the end of the semester. PALS (Pediatric Advanced Life Support) certification is required for course completion.
Prerequisites: ANESTH 5563.

ANESTH 5567 Anesthesia Clinical Experience III Credits: 16
Continued exposure to anesthesiologist assistant clinical practice including clinical subspecialties of anesthesiology (obstetrics, pediatrics, neurosurgery, cardiothoracic, and others). Students rotate at several different hospital sites.
Prerequisites: ANESTH 5565, ACLS and PALS certification.

ANESTH 5568 Anesthesia Clinical Correlation III Credit: 1
Anesthesia Clinical Correlation III - The second year equivalent of ANESTH 5562.
Prerequisites: ANESTH 5564.

ANESTH 5569 Anesthesia Clinical Experience IV Credits: 12
Clinical clerkship course where students are in the operating room (OR) five days per week and receive extended exposure to many clinical subspecialties. Students are expected to perform basic clinical competencies with minimal to no assistance from clinical instructors, while attempting advanced competencies with frequent assistance.
Prerequisites: ANESTH 5567.

ANESTH 5570 Anesthesia Clinical Correlation IV Credit: 1
Anesthesia Clinical Correlation IV - The second year equivalent of ANESTH 5564.
Prerequisites: ANESTH 5568.

ANESTH 5571 Anesthesia Clinical Experience V Credits: 16
Clinical clerkship course where students are in the operating room (OR) five days per week and receive extended exposure to many clinical subspecialties. Students are expected to perform basic clinical competencies with minimal to no assistance from clinical instructors, while attempting advanced competencies with frequent assistance.
Prerequisites: ANESTH 5569.

ANESTH 5573 Anesthesia Clinical Experience VI Credits: 16
Clinical clerkship course where students are in the operating room (OR) five days per week and receive extended exposure to many clinical subspecialties. Students are expected to perform basic clinical competencies with minimal to no assistance from clinical instructors, while attempting advanced competencies with frequent assistance.
Prerequisites: ANESTH 5571.

ANESTH 5575 Pharmacology for Anesthesiologist Assistants I Credits: 2
Basic concepts in pharmacology: principles of drug action, receptor theory, pharmacokinetics, pharmacodynamics and drug dose calculations. The course will emphasize the primary medications used to provide anesthesia and to support patients during the perioperative period.

ANESTH 5576 Pharmacology for Anesthesiologist Assistants II Credits: 2
Pharmacology for Anesthesiologist Assistants (2)- Principles of drug action, receptor theory, pharmacodynamics, and pharmacokinetics are taught. The course emphasizes those medication classes most commonly encountered within the practice of an anesthesiologist assistant. Special attention is given to anesthetic agents and adjunctive therapies.

ANESTH 5577 Methods of Anesthesia II Credits: 3
Continuation of ANESTH 5541, addresses advanced intraoperative monitoring for complex patients and surgical procedures. Advanced supplemental monitors and devices used in the operating room are studied with respect to principles of operation, calibration, and interpretation of data.
Prerequisites: ANESTH 5541.

ANESTH 5585 Physiological Model-based Simulation I Credits: 2
Physiological Model-based Simulation I- Introduction to physiological model-based simulation and procedure simulation with an emphasis on improving appropriate anesthesia-associated basic science knowledge, and manual skills in anesthesia machine checkout, anesthesia materials and equipment set up and performing anesthesia for uncomplicated surgical cases.

ANESTH 5586 Physiological Model-based Simulation II Credits: 2
Physiological Model-based Simulation II - An extension of ANESTH 5585 with an emphasis on improving or exercising knowledge of anesthesia-appropriate basic science and the use of more advanced equipment and techniques for uncomplicated cases with an introduction to crisis management.
Prerequisites: ANESTH 5585.

ANESTH 5590 Special Topic Credits: 0.5-3
An opportunity to explore new topics or existing topics in greater detail and are not included in the usual course offerings.

Anthropology (ANTHRO)

Art (ART)

Courses

ART 5506 Graduate Photography Credits: 3-6
Photography on the graduate level with individual selection of media and technique. May be repeated up to a total of 15 hours.

ART 5510 Graduate Painting Credits: 3-6
Painting on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5513 Graduate Graphic Design Credits: 3-6
Graphic design on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5515 Graduate Drawing Credits: 3-6
Drawing on the graduate level with individual selection of media and technique. Student may pursue selected projects on a group or individual basis. May be repeated up to a total of 15 hours.

ART 5520 Graduate Print Media Credits: 3-6
Print media on the graduate level with individual selection of medium and technique.

ART 5540 Graduate Digital Imaging Credits: 3-6
Digital imaging on the graduate level with individual selection of subject and technique. Permission of the department is required.

ART 5550 Graduate Performance Art Credits: 3-6
Performance art on the graduate level with individual selection of medium and technique. May be repeated up to a total of 15 hours.

ART 5576 Graduate Digital Video and Motion Design Credits: 3-6
Digital video and motion design on the graduate level with individual selection of subject and technique. Permission of the department is required.

ART 5591 Directed Technical Studies Credits: 2-4
Individually directed studies or research in selected projects of a technical nature in studio art. May be repeated up to a total of six hours applicable to a degree program.

ART 5599 Research And Thesis Credits: 1-9
Production and/or writing of thesis. Usually taken in the last term of candidacy.

ART 5899 Required Graduate Enrollment Credit: 1

Art History (ART-HIST)

Courses

ART-HIST 5501 Scope And Methods Of Art History Credits: 3
An exploration of the discipline of art history, including theoretical issues, guiding questions and problems, diverse approaches (historical and current), and research tools. Required of all Art History graduate students and best taken early in one's studies.

ART-HIST 5539 Paris in the Age of Rococo Credits: 3
In the early 18th century, Paris overtook Rome as the artistic center of Europe. We explore all of the visual arts during the vibrant "Rococo," the age of Watteau, Chardin, and Boucher.

ART-HIST 5540 Seminar in French Art: Renaissance and Baroque Credits: 3
A history of French art from the time of Louis XII through the Age of Louis XIV, with emphasis on painting and architecture.

ART-HIST 5541 Seminar in Northern Baroque Art: The Age of Rubens, Rembrandt, and Wren Credits: 3
The arts of England and the Low Countries in the 17th and early 18th centuries. Emphasis on painting and the graphic arts in the Spanish and Dutch Netherlands, and on architecture in England.

ART-HIST 5547 Seminar in Italian Baroque Art: The Age of Caravaggio, Bernini, and Borromini Credits: 3
Painting, sculpture, and architecture in Italy from the creation of the Baroque style in the late 16th century to the beginnings of the Barochetto era.

ART-HIST 5548 Seminar in Span Art: El Greco to Goya Credits: 3
A study of Spanish art from the later 15th Century to the Napoleonic invasion.

ART-HIST 5561 Traditional and Contemporary Native American Art Credits: 3
This course aims to inspire students to appreciate the history and aesthetics of traditional and contemporary Native North American arts. We examine cultural and aesthetic continuities between Meso-American and Native North American Arts. Then we explore how Native American arts reflect the history of North America, including influences from Europeans, and conclude with contemporary Native American artists and their incorporation of various global influences.

ART-HIST 5562 History of Modern Design Credits: 3
This course examines innovations in design, beginning with the Arts and Crafts movement in the 19th century, surveying all the major design trends of the twentieth century, and concluding with contemporary developments in the age of the computer.

ART-HIST 5563 Primitivism and Its Aftermath Credits: 3
This course explores one of the seminal movements of the modern era and its ramifications for the visual arts today. Class discussions will consider the complexities and contradictions of primitivism and its rejection through their appropriations from archaic, folk, and non-western art traditions, from 1800-on, while also situation these creative endeavors within the cultural and political contexts of the period.

ART-HIST 5564 Modern Art and the Grotesque Credits: 3
The course explores how the grotesque shaped the history, practice and theory of art in the nineteenth and twentieth centuries. The grotesque plays a major role in many modern styles, and its expressive possibilities encompass the capriccio, the carnivalesque and burlesque, the fantastic, and the abject and uncanny. Artists have incorporated the grotesque as a means to push beyond established boundaries, explore alternate modes of experience, and to challenge cultural and aesthetic conventions.

ART-HIST 5565 Seminar In American Art Credits: 3
Graduate-level seminar dealing with an announced area in American art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5566 Seminar In 19th-Century Art Credits: 3
Graduate-level seminar dealing with an announced area in 19th-century art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5567 Seminar In 20th-Century Art Credits: 3
Graduate-level seminar dealing with an announced area in 20th-century art. May be repeated once, provided there is a change in the area of concentration

ART-HIST 5568 Participatory Forms of Spectatorship in Contemporary Art Credits: 3
This course explores art practices from the second half of the 20th century that challenge spectators to become more actively involved in the reception and even in the production of art. The course will examine the sociopolitical conditions and technological developments which have contributed to the strengthening of participatory tendencies in contemporary art.

ART-HIST 5569 Sensing, Feeling, Thinking: Contemporary Art and the Mind Credits: 3
Contemporary artists are challenging viewers to reflect on how they perceive, feel and think. This seminar provides an introduction to the mental processes underlying emotion and visual cognition and familiarizes students with contemporary art practices that reveal the dynamic correlations between body, mind and subjectivity.

ART-HIST 5570 Seminar In Renaissance Art Credits: 3
Graduate-level seminar dealing with an announced area in Renaissance art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5571 Seminar In Art Of Africa, Oceania And New World Cultures Credits: 3
Seminar in art of Africa, oceania and new world cultures. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5572 Seminar In Asian Art Credits: 3
Seminar dealing with an announced area in Asian Art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5573 Visual Arts Administration Credits: 3
This course on professional arts administration includes assignments in: copyright laws, database management, ethics issues, evaluation design, gallery museum management, grant writing and budgeting, public relations, resume design, tax laws, and website design and management. Students are required to learn relevant computer programs. This course is also open to music and theatre majors. Research requirements for graduate credit are more comprehensive and professional.

ART-HIST 5575 Seminar In Baroque Art Credits: 3
Graduate-level seminar dealing with an announced area in Baroque art. May be repeated once, provided there is a change in the area of concentration.

ART-HIST 5576 Site-Specific Art: Within and Beyond the Museum Walls Credits: 3
At a time of increased transnational mobility, contemporary artists are conceiving artworks that catalyze an enhanced awareness of the geographical and socio-political conditions of existence and art making. This seminar examines artworks that are produced outside the studio and are inspired by specific natural environments, museum settings and public spaces.

ART-HIST 5577 Contemporary Artists of the African Diaspora Credits: 3
This course examines cultural and aesthetic continuities between traditional and contemporary arts and artists in Africa and in the Americas, including the study of contemporary Africans whose cultures had the greatest influence in the Americas, as well as contemporary African-American artists in Brazil, Cuba, Haiti, and the United States.

ART-HIST 5579 From the Parthenon to the Altar of Peace Credits: 3
The course centers on the many different styles of Greek and Roman art from the fifth century B.C. to the early first century A.D. Attention is also paid to the political and literary forces behind its imagery. Three monuments serve as the pillars upon which the course rests: the Parthenon, Pergamon Altar, and the Ara Pacis. The lessons learned about style, the interaction of politics, literature, and art and the foibles of scholarship are intended to be applied to other fields of art history.

ART-HIST 5590 Directed Studies In Art History Credits: 1-6
Individually directed studies or research in selected topics or problems in art history. May be repeated up to a total of six hours applicable to a degree program.

ART-HIST 5599 Research & Thesis Credits: 1-9
Production and/or writing of thesis. Usually taken in the last term of candidacy.

ART-HIST 5699 Research And Dissertation Credits: 1-12
Dissertation Research and writing in Art History.

Arts & Sciences - General (A&S)

Courses

A&S 5500 Interdisciplinary Colloquium On Aging Credits: 3
This course will introduce students to gerontology as a field of study and as a profession. The context for the emergence of the field is set in important demographic transitions of the 20th century. Identification and understanding of major issues and controversies in the field will help locate the contributions of a range of disciplines to aging studies. The connection of these issues with the development of social policies will be discussed.

A&S 5500C Interdisciplinary Colloquium On Aging III Credits: 1-2

A&S 5500L Special Readings Topics/Philosophy Credits: 1-3

A&S 5500P Special Topics-Readings Psychology Credits: 1-3

A&S 5500Q Special Readings/Topics Theatre Credits: 1-3

A&S 5501 Special Readings/Topics Credits: 1-3
This is a designated Arts and Sciences course which gives all departments in the College the flexibility to offer, on demand and as the need arises, a graduate-level readings course in a particular area of specialization in any discipline in the College. The individual departments determine the content of the course in any given semester in the same manner as any reading course, special topics, or independent study is presently handled. The departments are responsible for approving individuals or groups for the course and determine whether or not the course will be included as a part of a post-baccalaureate degree in their disciplines.

A&S 5501B Special Topics: Critical Thinking In Social Studies Credits: 1-3

A&S 5501D Special Readings/Topics Credits: 1-3

A&S 5501E Special Readings/Topics Credits: 1-3

A&S 5501K Special Topics Credits: 1-4

A&S 5502 Introduction To African American Studies Credits: 3
This course provides an introduction to the contexts, theories, and methodologies that undergird African American studies. In addition to substantial time spent covering particular research skills and resources, students will also be introduced to African American culture and the issues related to African studies from several perspectives: history, literature, sociology, communication studies, and the like. Influences and perspectives from Africa, the Caribbean, and South America will also be covered. The course will thus provide a broad background in African American culture and history, an introduction to the methodologies of several disciplines, and discussion of particular contemporary and historical issues such as slavery, segregation and integration, the Civil Rights Movement, Pan-Africanism, Afrocentrism, and current political debates.

A&S 5505 Career Education And Transition In Special Education Credits: 3
This course is designed to increase awareness and knowledge about current disabilities legislation, vocational education, vocational rehabilitation, quality transition programs, school to work, self advocacy, workplace accommodations and comprehensive life skills learning.
Prerequisites: EDUC-SP 407 (or equivalent).

A&S 5509 Methods Of Inq: Research Issues And Methods In The Liberal Arts Credits: 3
This course serves as an introduction to various methods of inquiry and research in the humanities, social sciences, and sciences. This course includes graduate level instruction in library research use of computer generated research tools and a strong emphasis on academic writing.

A&S 5520 Critical Choices: Final Research Project And Capstone Seminar Credits: 3
This seminar is designed as a capstone experience for students in the last semester of their studies in the Master of Arts in Liberal Studies program. Each student defines a final research project, spends the semester developing it, and presents his or her findings to the seminar at the conclusion of the course. Each project is intended to be thought-provoking and to be researched from an interdisciplinary point of view.

A&S 5535 Directed Studies In Liberal Arts Credits: 1-3
Open to students in the Master of Arts in Liberal Studies Program, this course offers students the opportunity to pursue independent work at the graduate level on selected topics of an interdisciplinary nature, working with faculty members from at least two different departments. The course may not be repeated beyond a total of three credit hours.

A&S 5540 Liberal Arts Thesis Credits: 1-3
Open to students in the Masters of Arts in Liberal Studies Program who wish to include a written thesis in their program of studies. The course may not be repeated beyond a total of three credit hours.

A&S 5550 Seminar In Social Science Perspectives Study Of Community Credits: 3

A&S 5571A Seminar In The Social Sciences Credits: 1-6
This is a designated Arts and Sciences course which gives all departments in the College the flexibility to offer, on demand and as the need arises, a graduate level seminar in a particular area of specialization in any discipline in the college. The individual departments determine the content of the course in any given term in the same manner as any seminar is currently handled.

A&S 5572 Seminar In Philosophy Of Science I Credits: 3

A&S 5591 Practicum In Community Social Science Research Credits: 3

A&S 5592 Field Practicum In Aging Credits: 3-8
Students spend 180-480 hours in a field placement with the supervision in a community agency or organization which services or advocated for older persons and keep a journal documenting and reflecting on the practicum activities and experiences, particularly as related to gerontological theory and research. Students will study a particular subject relevant to their placement and describe this in a written project.

A&S 5899 Required Graduate Enrollment Credit: 1

Basic Medical Science (BMS)

Courses

BMS 5590 Special Topics Credits: 1-3
An opportunity to explore new topics or existing topics in modified or greater detail; topics which are not included in the usual course offerings.

BMS 9265 Human Biochemistry 1 - Medical Credits: 5
Presents basic principles of human biochemistry. Addresses structure, function, biosynthesis, degradation and utilization of the major constituents of living systems. Employs an integrative approach to the basic science and clinical medicine aspects of normal and defective metabolism.

BMS 9296 Human Structure Function I Credits: 7
Part 1 of a 4 part series (January-February). Integrated course in anatomy, histology, embryology, physiology and biochemistry. All basic science lectures have clinical faculty to emphasize basic science concepts relevant to the practice of medicine. This unit covers introductory principles and the musculoskeletal system.

BMS 9297 Human Structure Function II Credits: 6
Part 2 of a 4 part series (February-April). Integrated course in anatomy, histology, embryology, physiology and biochemistry. All basic science lectures have clinical faculty to emphasize basic science concepts relevant to the practice of medicine. This unit covers cardiopulmonary and gastrointestinal systems.

BMS 9298 Human Structure Function III Credits: 5
Part 3 of a 4 part series (April-May). Integrated course in anatomy, histology, embryology, physiology and biochemistry. All basic science lectures have clinical faculty to emphasize basic science concepts relevant to the practice of medicine. This unit covers urinary and reproductive systems.

BMS 9300 Human Gross Anatomy I Credits: 5
Regional study of the anatomy of the chest, abdomen and pelvis. A systematic and regional study of the anatomy of the maxillofacial and anterior neck structures with emphasis on the biomdeical applications of the anatomy studies.

BMS 9301 Human Gross Anatomy II Credits: 5
A continuation of BMS 9300.

BMS 9308 Histology Credits: 2.5
A motivative microanatomic study of the normal morphology of cells, tissues, organs and organ systems to stimulate the learning of terminology and basic cellular structure of the human body.

BMS 9310 Neurosciences Credits: 9
Lecture-based course covering major neurological disorders and disease states. Specific neurologic diseases will be correlated to the didactic sessions by clinicians. Laboratory component is oriented around brain dissection sessions. Laboratory experience will demonstrate gross lesions and integrate the lesions with the clinical symptoms. A variety of supplemental audiovisual material also supports the class.

BMS 9311 Medical Microbiology Credits: 6
Covers basic scientific principles of virology, bacterial physiology and genetics. Presents information relevant to the pathogenesis of human infections caused by viruses, bacteria, fungi, protozoa and helminthes. Provides a concise presentation of basic immunological principles and their clinical relevance. Provides a concise review of antimicrobial therapeutic regimens including mechanism of action and clinical settings in which specific agents might be used. Utilizes case presentations to illustrate the manner in which reasonable differential diagnoses are developed and a rational approach toward empiric antimicrobial usage.

BMS 9399 Human Structure Function IV Credits: 4
Part 4 of a 4 part series (June-July). Integrated course in anatomy, histology, embryology, physiology and biochemistry. All basic science lectures have clinical faculty to emphasize basic science concepts relevant to the practice of medicine. This unit covers the head and neck system. Includes a comprehensive examination for the Human Structure Function Series I-IV.

BMS 9701 Clinical Anatomy of Head and Neck Credits: 2-4
A detailed dissection of the maxillofacial and anterior neck regions, with the emphasis being placed on the clinical application of the surgical procedures used in these areas. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program.

Bassoon (BASSOON)

Courses

BASSOON 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Co-requisites: Enrollment in lessons or recital.

BASSOON 5500A Graduate Bassoon-Secondary Credits: 2

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

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

BASSOON 5501 Graduate Bassoon - Masters Performance Credits: 4

BASSOON 5601 Graduate Bassoon - Doctoral Performance Credits: 4

Biology (BIOLOGY)

Courses

BIOLOGY 5501 Proposal Writing Credit: 1
This course addresses how to develop a testable hypothesis, and write a NIH-style proposal to convince the reader of the significance of the proposed studies. Students will write a proposal that will form the basis of their oral comprehensive exam in the Cell Biology and Biophysics (CBB) and Molecular Biology and Biochemistry (MBB) disciplines. The is limited to doctoral students with CBB and MBB coordinating disciplines.
Prerequisites: Plan of Study filed with the School of Graduate Studies.

BIOLOGY 5510 Gross Anatomy for Nurse Anesthetists Credits: 3
This course will present and examine the anatomic concepts and conditions essential for critical thinking and decision making by the nurse anesthetist. Specifically, the course will provide the foundation upon which patient interventions may be based during the perioperative period.
Prerequisites: Graduate status.

Co-requisites: BIOLOGY 5510L.

BIOLOGY 5510L Gross Anatomy for Nurse Anesthetists Credit: 1
This laboratory course will present and examine the anatomic concepts and conditions essential for critical thinking and decision making by the nurse anesthetist. Specifically, the course will provide the foundation upon which patient intervention may be based during the perioperative period.
Prerequisites: Graduate status.

Co-requisites: BIOLOGY 5510.

BIOLOGY 5519 Principles of Evolution Credits: 3
Synthesis of the modern concepts of evolution. Discussion of the biological processes that produce organic diversity through phyletic change. Discussed are variation, mutation, population genetics, natural selection and adaptation.
Prerequisites: BIOLOGY 206.

BIOLOGY 5525 Bioinformatics and Data Analysis Credits: 3
Methods and procedures for the storage, retrieval and analysis of information in biomolecular and biological databases. Emphasis will be given to the use of database information in biological research and to recent developments in genomics and proteomics.
Prerequisites: LS-BIOC 341, LS-BIOC 360.

BIOLOGY 5528 Human Genomic Epidemiology Credits: 3
This course is designed for biological researchers and clinicians interested in studying common human diseases using state-of-the-art genomics/genetics epidemiological approaches.The course provides a basic yet comprehensive introduction to key topics in human genome epidemiological research, including basic concepts and methodologies of quantitative/statistical genetics, an introduction to emerging technologies and analytical methods for genomic science, basic study for various types of genomic research approaches, utilization of widely-used software packages for analyses of genomic data, and examples of human genome epidemiology information improving health, and ethical, legal and social issues in the design and conduct of human genome epidemiology studies.

BIOLOGY 5534 Cardiovascular Pulmonary Physiology Credits: 3
Function of the cardiovascular and pulmonary systems at the cellular, tissue, and system levels with particular emphasis on regulation, maintenancy of homeostasis and integration with other systems.
Prerequisites: LS-PHYS 316 (or equivalent).

BIOLOGY 5539 Mammalian Physiology Credits: 4
Study of the physiological functions and controls in human and related mammalian systems, with emphasis on fundamental processes that underlie normal and abnormal clinical conditions.
Prerequisites: LS-PHYS 316 (or equivalent).

BIOLOGY 5540 Pathophysiology Credits: 4
Pathophysiology will focus on the physiological basis of cellular and tissue function, and the consequences of dysregulated metabolic/cellular expression on essential homeostatic processes in cells, cytoplasmic compartments and primary organ systems.
Prerequisites: BIOLOGY 5539.

BIOLOGY 5542 Neurobiology Credits: 3
Neurobiology will consist of the presentation of theory and data concerning cellular and molecular fundamentals of the nervous system, synaptic mechanisms, sensor-motor systems, and higher-order functions of the nervous system.
Prerequisites: LS-BIOC 304.

BIOLOGY 5591 Directed Individual Studies Credits: 1-6
Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor. Not to be identified with thesis research.

BIOLOGY 5592 Master of Arts Topics in Biology Credits: 1-6
Special problems and topics in biology specifically intended to satisfy the project or report requirement for the master of arts degree in biology.
Prerequisites: Nine hours of graduate work in Biology.

BIOLOGY 5593 Master of Science Topics Credits: 1-4
Investigation of problems and topics to satisfy the M.S. topics requirement for the master of science degree in Cellular and Molecular Biology.
Prerequisites: LS-MBB 5561, LS-MBB 5562.

BIOLOGY 5899 Required Graduate Enrollment Credit: 1

Black Studies (BLKS)

Courses

BLKS 5502 Conceptual and Theoretical Foundations in African American Studies Credits: 3
This course will provide an in-depth examination of the theoretical and conceptual parameters of African American studies. We will study the evolution of the field, key scholars and creative intellectuals, and seminal categories of thought.

BLKS 5503 Writing for African American Studies Credits: 3
This course instructs students in how to produce advanced knowledge in the field of African American studies. It provides training in the construction of quality research papers for graduate, scholarly, and professional work and exposes students to a wide array of scholarly journals, databases, and authoritative resources in African American studies. Each time the course in taught, students will develop their research around a specific topic defined by the instructor.

BLKS 5504 Research Seminar Credits: 3
This course introduces the logic, theory, and techniques of empirical research and applies them to African American Studies. It exposes students to a variety of research approaches in order to examine their utility for producing knowledge within the field.

BLKS 5520 Critical Health Issues in Black Communities Credits: 3
Beginning with the African context and the imposition of chattel slavery, this course examines social, cultural, and historical factors affecting the health status of African Americans to the present era. It explores a variety of health-related issues including the interplay between environment, biology, and culture; folk and popular health practices; structured inequality and oppression; lifestyle, beliefs, and values; and the organization and delivery of health care.Moreover, this course moves well beyond the idea that medical care- its presence, absence, or quality- is the singular or most critical factor determining the health of a people, community, or society. It reveals the importance of social phenomena in disease resistance and health promotion. Historical shifts from the prominence of infectious to chronic diseases; the implications to health of chattel slavery, sharecropping, segregation, poverty, and structures inequality; the relationship between psychosocial factors and disease, i.e. destabilized social settings that compromise resistance to disease; environmental racism; and the health status of African Americans as it relates to the organization of work, family structure and function, religious beliefs, the organization of medical care, lifestyle, consumer manipulation, and post-industrial society are major issues addressed by the course.

BLKS 5521 The Black Family & Male-Female Relationships Credits: 3
The course examines the historical evolution and current status of the African American family in the e United States. Utilizing the African experience as its stating point, the course conveys a broad understanding of the role of the family in human survival and progress. We investigate such issues as male-female relationships, sexual practices, dating, marriage, single parenting, the education issues, including institutionalized inequality, that affects the viability of today's African American family.

BLKS 5525 African American Business Development Credits: 3
This course investigates the various challenges to African American business development and entrepreneurship in the United States. We study the lives of successful, pioneering African American businesswomen and men in order to assess how they managed to transcend the barriers of racism and structured inequality. We explore why certain kinds of enterprises emerged among African Americans and why others did not, and we scrutinize the traditional business problems for African Americans of capitalization, distribution, market penetration, and wealth creation.

BLKS 5534 From Field Shout to Hip Hop: African American Poetic Traditions Credits: 3
This course examines the development of African American poetry from its early forms as field shouts, ballads, and blues to present forms including spoken word and hip hop. Includes authors such as Phillis Wheatley, Paul Lawrence Dunbar, Langston Hughes, Gwendolyn Brooks, Tupac Shakur, and Jessica Care Moore.

BLKS 5535 Stages toward Freedom: African American Dramatic Traditions Credits: 3
This course explores the development of African American dramatic traditions from the eighteenth century through the Harlem Renaissance, Black Arts Movement, to current postmodernism. Includes authors such as W.W. Brown, Zora N. Hurston, Amiri Baraka, Sonia Sanchez, August Wilson, Suzan-Lori Parks.

BLKS 5537 The Civil Rights Movement in African American Literature Credits: 3
This course examines how African American literature shaped ideas about freedom, rights, citizenship and race in the civil rights movement. It draws on a variety of literary forms-speeches, essays, autobiographies, fiction, drama, poetry and film-to explore the movement's impact on communities and cultures as well as its various debates and competing visions.

BLKS 5538 Women's Literature in Africa and the African Diaspora Credits: 3
This course is a comparative examination of the variety of literary works produced by women of African descent in the United States, the Caribbean and Africa. Students will explore the cross-cultural implications of texts in light of the intersections of gender, race and class.

BLKS 5580 Special Topics/Seminar Credits: 1-3
In-depth exploration of special topics in Black Studies.

BLKS 5590 Directed Study/Research Credits: 1-6
Individual research and learning projects supervised by a faculty member.

BLKS 5599 Research Thesis Credits: 1-6
Individually directed research leading to preparation and completion of a thesis.

BLKS 5699 Research and Dissertation Credits: 1-12
Individually directed research leading to preparation and completion of a doctoral dissertation.

BLKS 5899 Required Graduate Enrollment Credit: 1
Enrollment required during the completion of a thesis/dissertation.

Business & Public Administration (B&PA)

Cello (CELLO)

Courses

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

CELLO 5500A Graduate Cello - Secondary Credits: 2

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

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

CELLO 5501 Graduate Cello - Masters Performance Credits: 4

CELLO 5601 Graduate Cello - Doctoral Performance Credits: 4

Chemistry (CHEM)

Courses

CHEM 5511 Laboratory Safety And Health I Credit: 1
An introduction to laboratory safety and health. Topics to be discussed include good laboratory practice; laboratory hazards; safe chemical handling; storage and disposal; first aid; protective equipment; and federal regulations.

CHEM 5520R Survey Of Organic Chemistry Credits: 3
An intensive advanced survey of the structure, synthesis and reactions of organic compounds.

CHEM 5521R Mechanisms Of Organic Reactions Credits: 3
A comprehensive course in which the mechanisms of organic reactions are discussed in light of modern chemical principles.
Prerequisites: CHEM 322R and CHEM 432.

CHEM 5522 Synthetic Organic Chemistry Credits: 3
A critical approach to the synthesis and modification of organic molecules; newer methods will be emphasized.
Prerequisites: CHEM 322R and CHEM 432.

CHEM 5529 Selected Topics In Organic Chemistry Credits: 3
Selected topics from the chemistry and theories of organic structures with particular attention to recent developments.

CHEM 5530 Systematic Physical Chemistry Credits: 3
An intensive and comprehensive review of the principles of physical chemistry. This course may either emphasize thermodynamics with an introduction to principes of quantum mechanics or emphasize quantum mechanical description of atoms and molecules, molecular spectroscopy, statistical mechanics and kinetics.

CHEM 5530A Physical Chemistry I Credits: 3
This graduate course reviews principles of physical chemistry, focusing on thermodynamics, equilibria and electrochemistry.

CHEM 5530B Physical Chemistry II Credits: 3
This graduate course reviews principles of physical chemistry, focusing on quantum chemistry, molecular spectroscopy and structure, and kinetics.

CHEM 5531 Classical Thermodynamics Credits: 3
A rigorous treatment of the laws of thermodynamics and their application to ideal and non-ideal equilibrium systems.

CHEM 5532 Chemical Kinetics Credits: 3
Empirical analysis of chemical reaction rates. Theories of unimolecular and bimolecular reactions, reactions in solution and complex reactions. Review of modern and classical techniques used to study chemical kinetics.

CHEM 5533 Quantum Chemistry Credits: 3
Application of quantum mechanical methods to the study of systems of chemical interest. Exact solutions and approximate methods will be discussed.

CHEM 5534 Molecular Spectroscopy Credits: 3
A theoretical introduction to molecular spectroscopy and its relation to structure. Electronic, vibrational and rotational spectra of chemical systems will be discussed.

CHEM 5535 Statistical Thermodynamics Credits: 3
A rigorous treatment of the fundamental concepts of statistical thermodynamics, with applications to specific systems that reflect the interests of students participating in the course.

CHEM 5539 Selected Topics In Physical Chemistry Credits: 3
Selected topics and recent developments in physical chemistry.
Prerequisites: CHEM 5530.

CHEM 5541R Advanced Analytical Chemistry Credits: 3
An intensive review of modern concepts of analytical chemistry.
Prerequisites: CHEM 432.

CHEM 5551R Advanced Inorganic Chemistry I Credits: 3
A systematic treatment of bonding, structure, reactions and reaction mechanisms of inorganic compounds, with emphasis on classical transition metal compounds and organometallic compounds.
Prerequisites: CHEM 451R or equivalent.

CHEM 5559 Selected Topics In Inorganic Chemistry Credits: 3
Various special topics in the inorganic area to be offered in different semesters.
Prerequisites: CHEM 5551R.

CHEM 5567 Advanced Bioorganic Chemistry Credits: 3
This course examines the organic chemistry and laboratory synthesis of the major biopolymers and organic chemistry related to biological systems. Emphasis is on literature and library research and natural product and solid phase organic synthesis, combinatorial synthesis, bioconjugates and applied bioorganic chemistry.

CHEM 5571R Introduction To Polymer Chemistry Credits: 3
Survey of organic and inorganic monomers and polymers; the occurrence, synthesis, structures and properties of natural and synthetic polymers; discussion of general properties of plastics, elastomers, fibers, resins and plasticizers.
Prerequisites: CHEM 432.

CHEM 5580R Computer Applications To Chemical Problems Credits: 3
An intense course in FORTRAN programming and its uses in chemical problems related to theory and experimentation. Emphasis will be placed on the mathematical structures of the chemical problems and the coding of these problems into Fortran. No previous programming experience is required.

CHEM 5587 Environmental Chemistry I Credits: 3
A survey of how chemical principles can be applied to the environment. Included will be topics in aquatic chemistry, atmospheric chemistry and chemistry of the geosphere and soil.

CHEM 5588 Environmental Chemistry II Credits: 3
Discussion of selected topics in advanced environmental chemistry, such as environmental toxicology, environmental risk, the chemistry of hazardous wastes and their treatment, and environmental analytical chemistry.

CHEM 5590 Directed Studies Credits: 1-3
Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor.

CHEM 5598 Research Methodology Conference Credits: 3
Student will meet on an individual basis with two faculty members who are involved in research. The student’s adviser will coordinate this course.

CHEM 5599 Research And Thesis Credits: 1-9
Research for thesis.

CHEM 5611 Chemistry Seminar Credit: 1
Presentation and discussion of topics currently appearing in United States and foreign literature.

CHEM 5699 Research And Dissertation Credits: 1-16
Research for dissertation.

CHEM 5899 Required Graduate Enrollment Credit: 1

Civil Engineering (CIV-ENGR)

Courses

CIV-ENGR 5500 Problems Credits: 1-6
Supervised investigation in civil engineering to be presented in the form of a report.
Prerequisites: Graduate standing.

CIV-ENGR 5501 Advanced Topics in Civil Engineering Credits: 1-3
Current technical developments in civil engineering.

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

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

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

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

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

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

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

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

CIV-ENGR 5501HA Advanced Topics in Civil Engineering Credits: 1-3
Current technical developments in civil engineering.

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

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

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

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

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

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

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

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

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

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

CIV-ENGR 5515 Engineering Leadership & Ethics Credits: 3
Analysis of leadership, including 360-degree assessment of students' leadership. Discussion of leadership cases and application to engineering careers. Frequent analysis of engineering ethics cases using the NSPE Code.
Prerequisites: Graduate status.

Cross Listings: CIV-ENGR 415.

CIV-ENGR 5521 Matrix Methods of Structural Analysis Credits: 3
An introduction to the fundamentals of stiffness and flexibility methods for analysis of truss and frame structures. Application of the computer programs to three dimensional structures.
Prerequisites: CIV-ENGR 321.

Cross Listings: CIV-ENGR 421.

CIV-ENGR 5523 Advanced Structural Steel Design Credits: 3
Advanced topics in steel design such as connections and serve as a practical application in the design of multi-story steel buildings.
Prerequisites: CIV-ENGR 323.

CIV-ENGR 5526 Prestressed Concrete Credits: 3
Design and behavior of prestressed concrete structures; material and system or pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.
Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5527 Advanced Reinforced Concrete Design Credits: 3
Advanced Topics in the design of footings, retaining walls two way floor slabs, torsion and continuous structures, shear friction, strut and tie design, precast design.
Prerequisites: CIV-ENGR 422WI.

Cross Listings: CIV-ENGR 427.

CIV-ENGR 5529 Advanced Design of Structures for Blast and Fire Credits: 3
General overview of Blast Design; risk assessment and design criteria; simplified Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 5531 Fund of Geomaterial Characterization Credits: 3
Overviews state-of-the-art instrumental techniques for analysis of the physio-chemical properties of soils and civl engineering materials. Analysis techniques will be presented for soils, fresh and hardened concrete, asphalt binders, and metals.
Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 431.

CIV-ENGR 5532 Foundation Engineering Credits: 3
Design of basic foundation structures, footings, retaining walls, pile foundations, dams.
Prerequisites: CIV-ENGR 335.

Cross Listings: CIV-ENGR 432.

CIV-ENGR 5536 Advanced Soil Mechanics Credits: 3
Theoretical soil mechanics as applied to solution of specific engineering problems.
Prerequisites: CIV-ENGR 335.

CIV-ENGR 5542 Hydraulic Structures Credits: 3
A review of the history and hydraulic design procedures for a variety of hydraulic structures including spillways, water measurement structures, canal structures and energy dissipation structures.
Prerequisites: CIV-ENGR 357.

Cross Listings: CIV-ENGR 442.

CIV-ENGR 5544 Unit Processes in Environmental Engineering Credits: 3
Typical chemical and physical relationships are applied to unit processes of water and wastewater. Troubleshooting for operation problems is emphasized.
Prerequisites: CIV-ENGR 342.

CIV-ENGR 5545 Environmental Engineering Microbiology Credits: 3
Theory and application of fundamental principles of microbiology, toxicology, ecology, and aquatic biology of the microorganisms of importance to environmental engineers.

CIV-ENGR 5546 Limnology Credits: 3
A survey of the physical, biological, and chemical issues important in surface fresh waters. Includes carbonate chemistry, algal assay and Thermocline analysis.
Prerequisites: CHEM 211, MATH 345.

CIV-ENGR 5547 Contracts and Law for Engineers Credits: 3
Law of contracts, including types, construction, interpretation, performance, and termination. Construction and Engineering service contracts: Proposals, general and financial conditions, specifications and drawings. Corporate and professional and personal liability, insurance and bonds, property, evidence, arbitration and mediation.

CIV-ENGR 5549 Environmental Compliance, Auditing, & Permitting Credits: 3
Statutes, regulations and permitting for air hazardous wastes and storage tanks. Asbestos, radon, EMF, and emerging areas of regulatory concern. Siting issues. Criminal and civil enforcement.
Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

CIV-ENGR 5552 Hydraulics of Open Channels Credits: 3
The fundamentals of free surface flow are investigated. This includes the study of the principles of continuity, Momentum and Energy; Specific Energy, Discharge and Force; Steady-Gradually varied and Steady, Rapidly Varied Flow; Hydraulic Structures; and, the derivation of, and general methods for solution of the 1-dimensional, unsteady St. Venant Equations.
Prerequisites: CIV-ENGR 351.

CIV-ENGR 5553 Hydraulics and Variability of Rivers Credits: 3
This course investigates the fundamental concepts of alluvial channel behavior including stream channel evolution and change due to natural and man-induced modifications to streams and watersheds. Numerous case studies of river behavior and studied from the perspective of hydraulics, geomorphology and sediment transport.
Prerequisites: CIV-ENGR 357.

Cross Listings: CIV-ENGR 453.

CIV-ENGR 5554 River Stability and Scour Credits: 3
With more than 500,000 bridges over water, a significant number are damaged or destroyed by floods annually. This is a study of the theory of and fundamentals methods and procedures recommended to evaluate and analyze stream stability and scour at bridges. Specific topics include Bridge hydraulics; stream stability bridge piers and abutments; hydraulic modeling of floods; and, countermeasures for protection of bridge infrastructure.
Prerequisites: CIV-ENGR 357.

Cross Listings: CIV-ENGR 454.

CIV-ENGR 5556 Urban Hydrology Credits: 3
An introduction to urban hydrology and urban drainage systems focusing on the engineering techniques and unique issues associated with estimating and designing for rainfall/runoff in an urban metropolitan area.
Prerequisites: CIV-ENGR 357.

Cross Listings: CIV-ENGR 456.

CIV-ENGR 5563 Construction Law Credits: 3
Broad concepts in law as related to business, industry, and the processes of design procurement, construction, and the role of the design professional.

CIV-ENGR 5565 Project Finance Credits: 3
This course introduces students to the financial concepts faced by engineers. Students will learn how to read and apply financial statements and how to use these same financial concepts in developing pro formas to evaluate and support major capital investments. The effect of time on the value of money, appropriate discount factors, and the internal rate of return are explored in the class. All students will be required to develop a comprehensive financial model to evaluate/justify a real world capital project.

CIV-ENGR 5566 Green Building and Sustainable Infrastructure Credits: 3
This course will discuss various green building rating systems. Upon completion of this course students will be prepared for LEED Green Associates Exam for New Construction. This course will include many knowledgeable guest speakers to bring a current and real world connection to the topics discussed in class, Students will better understand what sustainability means and how it applies in the context of our build environment and have a good idea of how technology will impact our sustainable future.

CIV-ENGR 5567 Introduction to Construction Management Credits: 3
Structure of the construction industry; construction drawings and specifications; estimating and bidding; construction contracts, bonds and insurance; planning and scheduling of construction operations; project management; computer techniques.
Prerequisites: SCE 201, MEC-ENGR 272 (or MATH 345).

Cross Listings: CIV-ENGR 467.

CIV-ENGR 5568 Construction Planning and Scheduling Credits: 3
Planning and scheduling of construction operations by the critical path method, Network diagramming, scheduling computations, and time-cost trade-offs. Manpower and equipment leveling. Computer and non-computer techniques.
Prerequisites: SCE 201, CIV-ENGR 467.

Cross Listings: CIV-ENGR 468.

CIV-ENGR 5569 Construction Methods and Equipment Credits: 3
Introduction to methods used to plan, construct and manage heavy civil projects. Topics will include development, project control, equipment productivity, earthmoving fundamentals, formwork design, and other issues in heavy civil projects.
Prerequisites: SCE 201, CIV-ENGR 467.

Cross Listings: CIV-ENGR 469.

CIV-ENGR 5570 Corrosion Engineering Credits: 3
This course will cover the physical interaction of metallic materials with their environments, called corrosion. Corrosion is an electrochemical process and the thermodynamics and kinetics of corrosion processes will be discussed.
Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 5571 Advanced Portland Cement Concrete Credits: 3
This course will cover topics such as cement chemistry, concrete proportioning, aggregates, mineral and chemical admixtures, fresh and hardened properties of concrete, and durability of concrete.
Prerequisites: CHEM 211, CHEM 211L, CIV-ENGR 378WI.

CIV-ENGR 5573 Durability of Civil Engineering Materials Credits: 3
Investigation of pavements and structures including steel, reinforced concrete, and plain concrete for a variety of applications and masonry and asphalt. Explores the identification, cause of, and remediation for issues related to metallic corrosion and concrete deterioration in civil engineering projects. Course content will be delivered through lectures, labs, and case study examples.
Prerequisites: CIV-ENGR 335, CIV-ENGR 378WI.

Cross Listings: CIV-ENGR 473.

CIV-ENGR 5575 Seismic Design of Structures Credits: 3
Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.
Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 5582 Advanced Traffic Engineering Credits: 3
This course covers the review of traffic flow characteristics, the field survey practices and studies, traffic signal designs, freeway operation, and the introduction to Intelligent Traffic Systems (ITS).
Prerequisites: CIV-ENGR 319, CIV-ENGR 481.

CIV-ENGR 5584 Pavement Materials, Design, Maintenance, and Rehabilitation Credits: 3
Traffic loading and volume, stress and deflection, characterization of pavement materials, design of flexible and rigid pavements, design of overlays, evaluation of pavement performance, maintenance techniques, and rehabilitation options.
Prerequisites: CIV-ENGR 378WI.

CIV-ENGR 5585 Freight Transportation Analysis Credits: 3
This course provides a better understanding of freight transportation and its issues, as well as the techniques of system analysis.
Prerequisites: CIV-ENGR 481.

CIV-ENGR 5599 Thesis Research Credits: 1-6
Independent investigation in the field of civil engineering to be presented in the form of a thesis.

CIV-ENGR 5601AE Advanced Topics In Civil Engineering Credits: 1-3

CIV-ENGR 5601AS Doctoral Topics Civil Engineering Credits: 1-3

CIV-ENGR 5601B Advanced Topics In Civil Engineering Credits: 1-3

CIV-ENGR 5601CH Advanced Topics In Civil Engineering Credits: 1-3

CIV-ENGR 5601G Advanced Topics In Civil Engineering Credits: 1-3

CIV-ENGR 5601RE Advanced Topics In Civil Engineering Credits: 1-3
Advanced Topics In Civil Engineering

CIV-ENGR 5601SD Advanced Topics In Civil Engineering Credits: 1-3

CIV-ENGR 5601X Advanced Topics In Civil Engineering Credits: 1-3

CIV-ENGR 5602 Directed Reading in Civil Engineering Credits: 1-3
Faculty supervised readings course.
Prerequisites: Graduate standing.

CIV-ENGR 5607 Numerical Methods in Engineering Credits: 3
Classification and numerical solution of engineering problems--ordinary and partial differential equations, algebraic equations. Includes initial, boundary, eigen-# and characteristic-value problems.
Prerequisites: MATH 345.

CIV-ENGR 5622 Theory of Elasticity Credits: 3
Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.
Cross Listings: MEC-ENGR 5622.

CIV-ENGR 5623 Theory of Plates and Shells Credits: 3
Bending of plates with various loading and boundary conditions. Deformations, stresses in thin shells.
Prerequisites: CIV-ENGR 5622.

Cross Listings: MEC-ENGR 5623.

CIV-ENGR 5624 Theory of Elastic Stability Credits: 3
Buckling of columns, beams, rings, curved bars, thin plates, shells.
Prerequisites: CIV-ENGR 5622.

Cross Listings: MEC-ENGR 5624.

CIV-ENGR 5625 Advanced Prestressed Concrete Credits: 3
Design and behavior of prestressed concrete structures; material and system of pretensioned and post tensioned systems; prestress losses; flexure, shear, bond, deflections and partial prestress in determinate structures; indeterminate beams-introduction.
Prerequisites: CIV-ENGR 422WI.

CIV-ENGR 5629 Adv. Design of Structures for Blast and Fire Credits: 3
General overview of Blast Design; risk assessment and design criteria; simplified Blast Effects Analysis; ground shock, material response; antiterrorism design considerations; weapons effects and mitigation; internal explosions; progressive collapse analysis; and introduction to Fire Design.

CIV-ENGR 5645 Water Quality Modeling Credits: 3
Derivation and application of models for describing oxygen budget, nutrient exchange, and biological productivity in streams, lakes and estuaries.
Prerequisites: CIV-ENGR 342.

CIV-ENGR 5646 Physiochemical Treatment Processes Credits: 3
Fundamental principles, analysis and modeling of physical and chemical processes for water and wastewater treatment.
Prerequisites: CIV-ENGR 342.

CIV-ENGR 5647 Biochemical Treatment Processes Credits: 3
Biochemical principles, kinetic models and energy considerations in the design of biological wastewater treatment processes.
Prerequisites: CIV-ENGR 342.

CIV-ENGR 5648 Environmental Engineering Practicum Credits: 3
Numerical water quality modeling of actual site data for wasteload allocation.

CIV-ENGR 5649 Design of Water and Wastewater Treatment Facilities Credits: 3
Development of design criteria and their application to the design of water and wastewater treatment facilities.
Prerequisites: CIV-ENGR 342.

CIV-ENGR 5651 Fundamentals of Fluid Mechanics Credits: 3
Fundamentals of fluid motion, lecture and laboratory. Instrumentation, technique and analysis for experimental studies in fluid mechanics.

CIV-ENGR 5655 Sediment Transport Credits: 3
The study of sediment transport in rivers: the relationship between sediment transport and the fundamentals of fluvial geomorphology. Computation of sediment transport and sediment transport modeling.
Prerequisites: CIV-ENGR 452 (or CIV-ENGR 5552).

CIV-ENGR 5656 Advanced Hydraulic Engineering Credits: 3
Rapidly varied flow and design of transition structures. Hydraulic design of spillways, reservoirs and related structures.

CIV-ENGR 5675 Advanced Seismic Design of Structures Credits: 3
Introduction to basic analysis and design principles for the seismic design of buildings (concrete, steel, wood). General seismic principles, codes and loads, static lateral force procedure, dynamic lateral force procedure, topics in rigidities of buildings.
Prerequisites: CIV-ENGR 323 (or CIV-ENGR 422WI), MEC-ENGR 285.

CIV-ENGR 5679 Dynamics of Structures Credits: 3
Study of the dynamic behavior of structures. Analysis of equivalent lumoed parameter systems for the design of structures in a dynamic environment.
Prerequisites: CIV-ENGR 276 (or CIV-ENGR 421), MEC-ENGR 484 (or MATH 345, MEC-ENGR 285).

Cross Listings: MEC-ENGR 5679.

CIV-ENGR 5681 Traffic Flow Theory Credits: 3
This course covers the review of macroscopic and microscopic traffic flow characteristics, the traffic flow models, and the traffic simulation applications.
Prerequisites: CIV-ENGR 319, CIV-ENGR 481.

CIV-ENGR 5682 Transportation Network Modeling Credits: 3
This course is about modeling, solving, and understanding network flow problems, especially in the transportation discipline. This course covers equilibrium traffic assignment, network design, fleet assignment, fleet routing, and crew scheduling.
Prerequisites: CIV-ENGR 319, CIV-ENGR 481.

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

Clarinet (CLARINET)

Courses

CLARINET 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: CLARINET 300.

CLARINET 5500A Graduate Clarinet-Secondary Credits: 2

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

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

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

CLARINET 5501 Graduate Clarinet - Masters Performance Credits: 4

CLARINET 5601 Graduate Clarinet - Doctoral Performance Credits: 4

Communication Studies (COMM-ST)

Courses

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

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

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

Computer Science & Electrical Engineering (CSEE)

Courses

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

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

CSEE 5112 Computer Network Design and Analysis Credits: 3
This course provides an introduction to analytic and simulation modeling of computer networks and network topological design. Topics covered include the analysis of delay and loss systems, topological optimization, network dimensioning, and routing coupled with analysis techniques for network planning and design.
Prerequisites: COMP-SCI 394R, COMP-SCI 421A.

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

CSEE 5130 Queuing Theory and Applications Credits: 3
This course introduces the queuing models and theory to analyze performance of computing and engineering systems in terms of delay, blocking, and buffer utilization. Both continuous and discrete time models are covered, including variations of M/M/1, M/G/1 and GI/M1 systems using quasi birth-and-death models and matrix analytic techniques. it also covers networks that can be analyzed with product form techniques. Probabilistic reasoning and intuitive understanding is stressed.
Prerequisites: COMP-SCI 394R and MATH 300.

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

CSEE 5690 Advanced Special Topics Credits: 1-3
A lecture course presenting advanced research level topics. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

CSEE 5697 Directed Readings Credits: 1-3
Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

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

CSEE 5899 Required Graduate Enrollment Credit: 1
Required Graduate Enrollment.

Computer Science (COMP-SCI)

Courses

COMP-SCI 5510 Information Theory Credits: 3
Representation, transmission and transformation of information, information compression and protection, generation, storage, processing and transmission of information.
Prerequisites: BS in Computer Science, Engineering, or Mathematics.

COMP-SCI 5511 Advanced Telecommunications Networks Credits: 3
Efficient source coding and channel coding techniques, principles of switching, digital transmission over microwave, copper and optical media, T-carrier and SONET systems, traffic consideration in telecommunications networks, network synchronization, control and management, ATM concepts.
Prerequisites: COMP-SCI 394R, COMP-SCI 411.

COMP-SCI 5513 Digital Cellular Communications Credits: 3
Principles of microwave communications, performance metrics, mobile communications and cellular topology, co-channel and adjacent channel interference, fading and shadowing, various types of diversity, TDMA, FDMA and CDMA and other techniques for channel assignment, cellular network architectures, design considerations, PCN concepts.
Prerequisites: COMP-SCI 411.

COMP-SCI 5514 Optical Fiber Communications Credits: 3
Fiber optic cable and its characteristics, optical sources and transmitters, optical detectors and receivers, optical components such as couplers and connectors, WDM and OFDM techniques, modulation and transmission of information over optical fibers, design of optical networks, single and multihop fiber LANs, optical carrier systems.
Prerequisites: COMP-SCI 411.

COMP-SCI 5514A Optical Networking Credits: 3
Components of optical networks such as OADM, OXC, optical switches, DWDM, and their functions and interactions. Design, analysis and routing over all-optical networks to include waveband, wavelength and lightpath routing.
Prerequisites: COMP-SCI 411.

COMP-SCI 5517 Digital Switching: Techniques and Architectures Credits: 3
Integration of transmission and switching, single and multistage switching principles, space and time division switching, conventional switch architectures such as 4ESS, integration of circuit and packet switching, ATM switching and design considerations, ATM switch architectures, evaluation and comparison, future trends.
Prerequisites: COMP-SCI 394R, COMP-SCI 411.

COMP-SCI 5520 Network Architecture I Credits: 3
Principles, protocols, and architectures of data networks, internetworking, routing, layering, and addressing, with specific investigation of the Internet Protocol (IP), Mobile IP, Multiprotocol Label Switching (MPLS), IP over Asynchronous Transfer Mode (ATM) networks, and virtual private networks.
Prerequisites: COMP-SCI 420 (or COMP-SCI 421A), COMP-SCI 431.

COMP-SCI 5521 Network Architecture II Credits: 3
Principles, protocols and architectural issues of computer networks for transport layer and above, with specific emphasis on TCP/IP for best-effort services as well as for emerging multi-media services.
Prerequisites: COMP-SCI 5520.

COMP-SCI 5522 Computer Network Design and Analysis Credits: 3
Topological design, capacity and flow assignment problem-modeling and algorithms, and their analysis, issues in network control.
Prerequisites: COMP-SCI 303, COMP-SCI 394R, COMP-SCI 421A.

COMP-SCI 5523 Capacity Planning for Service-Oriented Architectures Credits: 3
Web site, cloud service, and data center administrators are faced with the task of adequately sizing their Information Technology (IT) infrastructure so that they can provide quality of service required by users at an affordable cost. In this class we will explore the Internet's complex relationships and how these relationships impact performance and availability of Web and cloud services. The fundamentals of service oriented architectures will be presented and we will develop performance models based on probability fundamentals and the theory of queuing networks and apply these models toward the design and analysis of large scale information systems.
Prerequisites: COMP-SCI 394R, COMP-SCI 421A.

COMP-SCI 5524 Protocol Design Credits: 3
Protocols as formal algorithms, architectural definition, protocol specification languages and models and their translation to implementation languages, overview of verification methods, symbolic execution.
Prerequisites: COMP-SCI 421A.

COMP-SCI 5526 Network Routing Credits: 3
Algorithms, protocols and analysis for network routing. Routing in different networks such as circuit-switched networks, Internet, broadband networks, and transmission networks are covered.
Prerequisites: COMP-SCI 5520, COMP-SCI 5522.

COMP-SCI 5528 Local Area Networks: Analysis and Design Credits: 3
Definition of local area networks (LAN), LAN architecture and protocols, topology, transmission media, channel access protocols, modeling, simulation and performance evaluation of LANs, considerations in design and implementation, examples.
Prerequisites: COMP-SCI 421A, COMP-SCI 494R.

COMP-SCI 5531 Advanced Operating Systems Credits: 3
Components of an operating system, scheduling/routing mechanisms, process control blocks, design and test various operating system components.
Prerequisites: COMP-SCI 431.

COMP-SCI 5532 Discrete Event Simulation Credits: 3
Review of statistical distributions, generation of pseudorandom variates and stochastic processes, basic queueing systems such as M/M/m and Jackson Networks, simulation project.
Prerequisites: COMP-SCI 5594.

COMP-SCI 5551 Advanced Software Engineering Credits: 3
Current concepts in software architecture and design, comparative analysis for design, object-oriented software design, software quality criteria for evaluation of software design. Introduction to metrics, project management and managerial ethics.
Prerequisites: COMP-SCI 451R.

COMP-SCI 5552 Advanced Data Structures Credits: 3
Formal modeling including specification and deviation of abstract data types, completeness issues in the design of data types and data structures, implementation of data structures from a formal data type specification, verification of abstract to concrete data mapping.
Prerequisites: COMP-SCI 291, COMP-SCI 303.

COMP-SCI 5552A Formal Software Specification Credits: 3
Formal modeling including specification and deviation of abstract data types, completeness issues in the design of data types and data structures, implementation of data structures from a formal data type specification, verification of abstract to concrete data mapping.
Prerequisites: COMP-SCI 291, COMP-SCI 303.

COMP-SCI 5554 Software Tools and Programming Environments Credits: 3
Taxonomy of software tools and environments, generic software tool architecture, interface techniques for users, intra-system and stand-alone systems, integration of heterogeneous systems components.
Prerequisites: COMP-SCI 451R.

COMP-SCI 5556 Human Factors in Computer Systems Credits: 3
Design of "user friendly" man-machine interface, survey of recent psychological studies in man-machine interaction, user interface design, instrumentation and testing, analytic models of man-machine interaction.
Prerequisites: COMP-SCI 451R.

COMP-SCI 5560 Knowledge Discovery and Management Credits: 3
This course teaches students fundamental theory and practice in the field of knowledge discovery and management and also provides them with hands-on experience through application development.
Prerequisites: COMP-SCI 5551, COMP-SCI 461 (or COMP-SCI 464).

COMP-SCI 5561 Advanced Artificial Intelligence Credits: 3
AI systems and their languages, implementations and applications, case studies of various expert systems, current research topics in AI, logic programming using PROLOG.
Prerequisites: COMP-SCI 461.

COMP-SCI 5564 Inference Techniques and Knowledge Representation Credits: 3
Inference Techniques is an in-depth course of logic and automatic theorem proving, intended for Computer Science graduate students, with particular importance to those students interested in Artificial Intelligence. The main areas of study will be concerned with the principals and techniques used for automatic theorem proving. An overview of the representation of knowledge and logic, a detailed appreciation of theorem proving methods, and implementation techniques will be provided in the course. The course will provide background for further study in varying fields of A.I.
Prerequisites: COMP-SCI 461.

COMP-SCI 5566 Introduction to Bioinformatics Credits: 3
This course introduces students to the field of Bioinformatics with a focus on understanding the motivation and computer science behind existing Bioinformatic resources, as well as learning the skills to design and implement new ideas.
Prerequisites: COMP-SCI 303, a course or background in Biology (Genomics or Meta Models preferred).

COMP-SCI 5567 Machine Learning in Bioinformatics Credits: 3
This course introduces students to the field of Machine Learning algorithms that are used in Bioinformatics, illustrated by several examples of applications to various problems.
Prerequisites: COMP-SCI 303, a course or background in Biology (Genomics or Meta Models preferred).

COMP-SCI 5570 Architecture of Database Management Systems Credits: 3
Covers in detail, architecture of centralized database systems, database processing, management of concurrent transactions, query processing, query optimization, data models, database recovery, datawarehousing, workflow, World Wide Web and Database performance, and reviews the architecture of some commercial centralized database systems.
Prerequisites: COMP-SCI 431, COMP-SCI 470.

COMP-SCI 5571 Distributed Database Management Systems Credits: 3
Detailed study of distributed database systems architecture, in-depth study of distributed transaction management, distributed concurrency control and recovery algorithms, database distribution, distributed query optimization and analysis of database system design, and intelligent network databases.
Prerequisites: COMP-SCI 5570.

COMP-SCI 5572 Mobile Computing Credits: 3
This course covers in detail the architecture of mobile and wireless network. It discusses and develops reveland concepts and algorithms for building mobile database systems (MDS), which is necessary for managing information on the air and E-commerce.
Prerequisites: COMP-SCI 5570.

COMP-SCI 5573 Information Security and Assurance Credits: 3
This course deals with information security and assurance and covers the concepts necessary to secure the cyberspace. It introduces security models, assurance policies, security policies and procedures, and technology. It enables students to understand the need for information assurance, identify security vulnerabilities, and devise security solutions that meaningfully raise the level of confidence in computer systems. It teaches students how to design secured database and computer systems.
Prerequisites: COMP-SCI 470.

COMP-SCI 5574 Large Scale Semistructured Date Management Credits: 3
This course will cover topics related to managing large scale semistructured data modeled using the Extensible Markup Language XML and the Resource Description Framework (RDF). This will include storing XML (e.g. natively, using a relational database), indexing XML (e.g. numbering schemes, structural indexes, sequencing paradigms), XML query processing algorithms (e.g. join-based, subsequence-based), RDF DATA STORAGE (e.g. triple stores, graph stores), RDF indexing and SPARQL query processing algorithms. The course will also cover emerging many core processor architectures (e.g. Intel Single-chip Cloud Computer) and the opportunities they provide for building next-generation semistructured data management solutions. Extensive reading of research papers and in-class presentations will be a core part of this class. Grades will be based on in-class presentations of research papers, exams, and a research project (to be done in groups).
Prerequisites: COMP-SCI 470 (or equivalent).

COMP-SCI 5575 Advanced Computer Graphics Credits: 3
Review of transformations, 3D viewing, curve fitting in 3D, generation of surfaces, hidden surface elimination, scan-line coherence, rigid solid representation, shading, color theory.
Prerequisites: COMP-SCI 475.

COMP-SCI 5581 Parallel Computer Architecture I Credits: 3
Parallelism in computer architecture, pipelined processors, array processors and multi-processor systems, algorithms for SISD, SIMD, MISD and MIMD organizations, vectorization, pipelining algorithms.

COMP-SCI 5590 Special Topics Credits: 1-3
Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

COMP-SCI 5590NN Special Topics Credits: 1-3
Selected topics in specific areas of computer science. May be repeated for credit when the topic varies.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

COMP-SCI 5590SS Special Topics in Computer Science Credits: 1-3

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

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

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

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

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

COMP-SCI 5591 Concurrency Models Credits: 3
Concurrency control constructs, P/V primitives, cobegin/coend, monitors, message transmission, rendezvous systems, underlying mathematics of concurrent systems, Petri Nets, liveness (deadlock), reachability, boundedness, invariants, system modeling.
Prerequisites: COMP-SCI 431.

COMP-SCI 5592 Design and Analysis of Algorithms Credits: 3
Combinatorial analysis, searching and sorting, shortest path algorithms, spanning trees, search and traversal techniques, backtracking, branch and bound, heuristics, algebraic simplification and transformation.
Prerequisites: COMP-SCI 303.

COMP-SCI 5594 Introduction to Queuing Theory Credits: 3
Review of statistics and probability, stochastic processes, Markov Processes, the basic Poisson process, equilibrium conditions, M/M/1 system with variations local and global balance in networks of queues, open and closed networks.
Prerequisites: COMP-SCI 494R.

COMP-SCI 5595 Mathematical Foundations of Computer Science Credits: 3
Study of the theory, and algorithmic techniques, of the fields of graph theory, combinatorics and number theory, as they relate to their application in the field of computer science.
Prerequisites: COMP-SCI 303, COMP-SCI 494R.

COMP-SCI 5596A Computer Security I: Cryptology Credits: 3
Study of theory, and algorithmic techniques, of the fields of number theory and cryptology, as they are applied in the general area of computer and network security.
Prerequisites: COMP-SCI 291.

COMP-SCI 5596B Computer Security II: Applications Credits: 3
Application of the algorithmic techniques learned in COMP-SCI 5596A to provide suitable security countermeasures to the variety of security threats across the spectrum of computing.
Prerequisites: COMP-SCI 5596A.

COMP-SCI 5597 Directed Readings Credits: 1-3
Readings in an area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

COMP-SCI 5598 Research Seminar Credits: 1-3
Graduate research based on intensive readings from the current research literature under the direction of a faculty member. Arrangements must be made prior to registration.

COMP-SCI 5599 Research and Thesis Credits: 1-6
A project investigation leading to a thesis, or written report under the direction of a faculty member. A prospectus must be accepted prior to registration.

COMP-SCI 5622 Advanced Network Analysis Credits: 3
Design and analysis of data networks, comparative analysis of capacity and flow strategies, time-delay/cost trade offs, concentration and buffering in store and forward networks, random access techniques, pure, slotted and reservation type Aloha schemes, carrier sense multiple access.
Prerequisites: COMP-SCI 5522.

COMP-SCI 5623 Network Simulation and Modeling Credits: 3
Simulation and modeling of network topologies and protocols, evaluation of the physical layer, data-link layer, network layer routing algorithms, local and long-haul networks.
Prerequisites: COMP-SCI 5522, COMP-SCI 5532.

COMP-SCI 5651 Distributed Computing for Software Systems Credits: 3
Formal descriptions of problems encountered in distributed computing for architecture. Parameters to formal requirements, operating system support, communications support, process synchronization, and system verification, distinctions between real time and concurrent time. The nature of life cycles, project organization and use of automated tools.
Prerequisites: COMP-SCI 5531 (or COMP-SCI 5551 or COMP-SCI 5570).

COMP-SCI 5690 Advanced Special Topics Credits: 1-3
A lecture course presenting advanced research level topics. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.
Prerequisites: Ph.D. Candidacy.

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

COMP-SCI 5694 Advanced Queueing Theory Credits: 3
Non-Markovian systems such as M/G/1, G/M/1 and G/G/1, solutions of networks of non-Markovian nodes, queuing network approximate solution techniques.
Prerequisites: COMP-SCI 5594.

COMP-SCI 5697 Directed Readings Credits: 1-3
Readings in an area selected by the doctoral student in consultation with a doctoral faculty member. Arrangements must be made prior to registration.

COMP-SCI 5698 Advanced Research Seminar Credits: 1-3
Advanced research by a group of doctoral students based on intensive readings from the current research literature under the direction of one or more doctoral faculty. Original research results of each student are exchanged by presentations and group discussion. Arrangements must be made prior to registration.

COMP-SCI 5699A Research And Dissertation Research In Computer Science Credits: 1-12
Doctoral research in computer science.

COMP-SCI 5899 Required Grad Enrollment Credit: 1

Conservatory (CONSVTY)

Courses

CONSVTY 5517 Advanced Opera Workshop Credits: 2

CONSVTY 5523 Analytical Procedures Credits: 3
An introduction to recent methods of stylistic and formal analysis including twelve-tone, Schenkerian and set theoretic approaches.

CONSVTY 5524B Advanced Analysis II - Common Practice Period Credits: 3
Theory and analysis of selected works from the 17th through the mid-19th century.
Prerequisites: CONSVTY 5523.

CONSVTY 5524C Advanced Analysis III - Contemporary Period Credits: 3
Theory and analysis of selected works from the late 19th century to the present.
Prerequisites: CONSVTY 5523.

CONSVTY 5526A Introduction to Schenkerian Theory and Analysis Credits: 3
An introduction to the theories and analytic methodology of Heinrich Schenker (1868-1935).
Prerequisites: CONSVTY 421A.

CONSVTY 5526B Schenkerian Analysis Credits: 3
Continuation of CONSVTY 5526A, emphasizing the acquisition of advanced skills in Schenkerian analysis.
Prerequisites: CONSVTY 5526A.

CONSVTY 5527 Advanced Counterpoint Credits: 3
Analysis and writing in 18th century style and forms including canon, invention and fugue.

CONSVTY 5528 Contemporary Harmonic/Contrapuntal Styles Credits: 3
Analysis and writing in contemporary styles.
Prerequisites: CONSVTY 428.

CONSVTY 5529 Aspects of Time and Music Credits: 3
A course offering a broad-based, multi-disciplinary exploration of the natures of time preparatory to an in-depth study of some of music's primary temporal aspects; these focus on complex treatments of rhythm and meter in tonal music.
Prerequisites: CONSVTY 5523, CONSVTY 5591G.

CONSVTY 5531 Advanced Orchestration Credits: 3
Analysis of advanced orchestration techniques with a focus on relatively recent music for large instrumental ensembles. Discussion of student works-in-progress for orchestra or wind ensemble.
Prerequisites: CONSVTY 431.

CONSVTY 5533 Advanced Composition Credits: 3
Intensive work in advanced composition in the large forms for various vocal and instrumental ensembles and orchestra. May be repeated for credit.

CONSVTY 5534 Advanced Electronic Music Composition Credits: 3
Creative, original composition of music in diverse styles utilizing the full range of equipment and techniques available. May be repeated for credit.

CONSVTY 5534B Advanced Computer Music Language Study Credits: 3
This course is designed to fulfill the computer language option of the foreign language requirement for DMA students in composition. Focus will be on development and mastery of skills in computer languages specifically related to musical composition, such as MAX or Csound, or in compositional uses of more general languages such as html, C, and Lingo.
Prerequisites: CONSVTY 335.

CONSVTY 5534C Electroacoustic Music Aesthetics and Analysis Credits: 3
An overview of the context and practice of electroacoustic music in two parts: 1) new aesthetic parameters of sonic composition made possible by technology; and 2) creating a cogent analysis of a work by developing individual, personalized analytical tools. Offered in rotation with CONSVTY 5534 and CONSVTY 5534B.

CONSVTY 5536 Improvisation in Music Therapy Credits: 3
This course is designed to learn, lead, and participate in the theory and practice of improvisation in music therapy for clients and therapists.

CONSVTY 5537 Administration of Music Therapy Credits: 3
This course is designed for the person who wishes to become a music therapy professor either entering into an existing program or starting one's own program. It also may be valuable to those considering academia or to be better informed about the academic process when dealing with music therapy programs.

CONSVTY 5540B Advanced Methods In Instrumental Music Credits: 2
Organizational and rehearsal techniques for programs from the beginning bands and orchestras through high school and college ensembles. Includes information regarding methods, materials and program building.

CONSVTY 5540C Advanced Methods In Choral Music Credits: 2
Addresses the organization of secondary and college choral classes and ensembles. Areas of study include methods, materials and program building.

CONSVTY 5541 Theories and Practice of Music Therapy Credits: 3
This course addresses the history and development of the music therapy profession in the United States and other countries. This course is open to music therapy graduate students.

CONSVTY 5542 Clinical Supervision in Music Therapy Credits: 3
This course prepares the music therapist for clinical supervision of music therapy students across training levels and situations. The course includes both theoretical background on supervisee development, issues of clinical supervision, and practical application and skill development in the area of clinical supervision of music therapy students.

CONSVTY 5543 Psychology of Music Credits: 3
The study of psychological aspects of music including acoustical phenomena and factors affecting musical preference, perception and taste. A review of related literature and basic methodology for experimental investigation and quantification of related variables will be included.

CONSVTY 5544 Advanced Clinical Experience Credits: 2
This course provides the graduate student with board certification in music therapy an opportunity to refine and enhance current clinical skills and to develop individually specified American Music Therapy Association Advanced Level Competencies. Students will demonstrate the ability to integrate advanced competencies in musicianship, theory and clinical practice. Students will conform to the AMTA Code of Ethics and standards for Clinical Practice and the CBMT Scope of Practice. The course includes a weekly seminar and clinical rotations at a mutually agreed upon clinical facility.

CONSVTY 5545 Seminar In Music Therapy Credits: 2
This course is designed to address relevant topics in the theory, practice and research of music therapy to promote an advanced level of practice in the music therapist. Topics will be based on faculty scholarship and advanced practice expertise, as well graduate student interest. Course structure will involve weekly meetings with the instructor and independent research and reading by the student.

CONSVTY 5547 Opera History Credits: 3
The history of opera from its origins to the present.
Prerequisites: CONSVTY 5593.

CONSVTY 5548 Opera Literature Credits: 2
A survey of opera literature, opera synopsis, and operatic stagecraft from 1600 to present.
Prerequisites: CONSVTY 5547.

CONSVTY 5554 Music of the Medieval Era Credits: 3
Seminar in the music of the Middle Ages, from 800 to 1400.
Prerequisites: CONSVTY 5593.

CONSVTY 5555 Music Of The Renaissance Credits: 3
Seminar in the music of the Renaissance, from 1400 to 1600.

CONSVTY 5556 Music of the Baroque Era Credits: 3
Seminar in the music of the Baroque era, from 1600 to 1750.
Prerequisites: CONSVTY 5593.

CONSVTY 5557 Music of the Classical Era Credits: 3
Seminar in the music of the Classical era, from 1750 to 1828.
Prerequisites: CONSVTY 5593.

CONSVTY 5558 Music of the Romantic Era Credits: 3
Seminar in the music of the Romantic era from 1828 to 1914.
Prerequisites: CONSVTY 5593.

CONSVTY 5559A Music Since 1900: 1900-1945 Credits: 3
Seminar in music from 1900 to 1945.
Prerequisites: CONSVTY 5593.

CONSVTY 5559B Music Since 1900: 1945 to the Present Credits: 3
Seminar in music since 1945.
Prerequisites: CONSVTY 5593.

CONSVTY 5560A Seminar: History Of Russian Vocal Music Credits: 3

CONSVTY 5560B Seminar: Nineteenth-Century Nationalism In Music Credits: 3

CONSVTY 5560C Seminar: History Of American Music Credits: 3

CONSVTY 5560D American Musical Theater Credits: 3
A survey of trends in the American musical theater from the 18th century to the present.

CONSVTY 5560E Music and Film Credits: 3
This course will survey the use of music in cinema. It will include sections on music, technology, the film medium and the various ways in which music adds to the cinematic experience.
Prerequisites: Graduate status.

CONSVTY 5560F Music of Asia Credits: 3
This course surveys music in East Asia, from historical styles to traditional music to contemporary composition.
Prerequisites: Graduate status.

CONSVTY 5560G Music of Latin America Credits: 3
Survey of selected musical traditions (sacred and secular, fold, traditional, and concert music) and representative composers of Central and South America.
Prerequisites: CONSVTY 5593.

CONSVTY 5564 History And Literature Of Chamber Music Credits: 3
A study of masterpieces of chamber literature, vocal and instrumental, from various periods, through research, listening, and performance.

CONSVTY 5566A Advanced Vocal Literature: French Melodies Credits: 2
In-depth study of the French melodies of Duparc, Faure, Debussy, Ravel, and Poulenc.

CONSVTY 5566B Advanced Vocal Literature: German Lieder Credits: 2
In-depth study of the German lieder of Schubert, Schumann, Brahms, Wolf, Mahler, and Strauss.

CONSVTY 5566C Advanced Vocal Literature: Nationalistic Art Songs Credits: 2
In-depth study of Nationalistic art songs of Russia, Scandinavia, Spain, and Middle Europe.

CONSVTY 5566D Advanced Vocal Literature: 20Th Century Amer & Engl Art Songs Credits: 2
In-depth study of the 20th Century American and English art songs.

CONSVTY 5574 History And Philosophy Of Music Education Credits: 3
An overview of the history of music education in this country from the beginning of the seventeenth century to the present. Also includes a discussion of the major philosophical models used to justify the study of music.

CONSVTY 5576 Professional Aspects Of College Teaching Credits: 2
Designed for graduate students planning a career in college teaching. Covers preparation of job application materials; presentation of a master class; interviews with a search committee and dean; faculty loads and evaluation procedures; tenure and rank, and relationships with students, colleagues and administrators.

CONSVTY 5577 Advanced Vocal Diction Credits: 2
This course is designed to review and hone diction skills in Italian, French and German on the level of professional opera, recital and oratorio performance; the vocal literature is approached through the text with both reading and singing practice, It is limited to graduate vocal majors.
Prerequisites: CONSVTY 171, CONSVTY 172.

CONSVTY 5580 Advanced Choral Conducting-Masters Level Credit: 1
An overview of conducting topics, including score preparation technique, and performance problems. May be repeated for credit.

CONSVTY 5582A Advanced Choral Conducting - Technique Credits: 2
An introductory study of the techniques of choral conducting. An overview of conducting topics, including score preparation, rehearsal techniques and performance problems. May be repeated for credit.

CONSVTY 5582B Advanced Choral Conducting - Style Credits: 2
A study of conducting problems of music of the Renaissance, Baroque, Classic, Romantic and Twentieth century; further examination of performance problems associated with choral performances of madrigals, chamber music, a cappella works and music utilizing advanced compositional techniques. May be repeated for credit.

CONSVTY 5582C Advanced Choral Conducting-Rehearsal Techniques Credits: 2
An advanced study of methods and rehearsal procedures in the development and organization of choral performance; includes concepts of tone quality, diction, programming, and development of communication skills. May be repeated for credit.

CONSVTY 5583A Advanced Instrumental Conducting Credits: 2
An introductory study of the techniques of instrumental conducting. An overview of conducting topics, including score preparation, rehearsal techniques and performance problems.

CONSVTY 5583B Advanced Instrumental Conducting - Orchestra Credits: 2
A further study of the techniques of instrumental conducting, including such topics as string techniques, performance practice, baton technique and the art of accompaniment.
Prerequisites: CONSVTY 5583A.

CONSVTY 5583C Advanced Instrumental Conducting - Band Credits: 2
A further study of the technique of band conducting, including such topics as wind/percussion techniques, performance practice, baton technique, and contemporary wind chamber repertoire.
Prerequisites: CONSVTY 5583A.

CONSVTY 5584 Systematic and Integrated Reviews in Music Credits: 2
Maintaining an awareness of the vast array of information available in the literature and integrating it into practice is a vital skill for evidence-based and best practice in music-based professions. This course will introduce graduate students to a methodological system of analyzing and synthesizing high quality research to answer a relevant question. The pursuit of scholarly dissemination of information for the advancement of music-based professions will be encouraged.

CONSVTY 5585 Practical Applications in Experimental Statistics and Research Credits: 3
This course examines common research designs and statistical concepts used by music therapists and music educators. During this class, students will learn about and complete projects that utilize nonparametric and parametric statistical tests.
Prerequisites: CONSVTY 5594A.

CONSVTY 5586A Seminar In Orchestral Literature Credits: 2
Advanced study of a variety of styles, periods, and analytical procedures encountered by orchestral conductors. Content will vary from semester to semester. May be repeated for credit.

CONSVTY 5586B Seminar In Wind/Band Literature Credits: 2
Advanced study of a variety of styles, periods, and analytical procedures encountered by instrumental conductors of wind ensembles/bands. Content will vary from semester to semester. May be repeated for credit.

CONSVTY 5587 Seminar In Choral Literature Credits: 2
Each seminar is concerned with the conductor’s viewpoint of a segment of the literature from the specified historical periods and styles, and explores the analysis, interpretation, historical context, and conducting problems of that literature. May be repeated for credit.

CONSVTY 5589 Academic Portfolio Credits: 1-3
Creative synthesis of coursework or clinical experience resulting in original products such as research documents, pedagogical materials, technology applications, music compositions or arrangements, and musical improvisation applications. Portfolio item may not include materials used to meet admission requirements. May be repeated for credit.

CONSVTY 5589A Academic Portfolio II Credits: 1-3
Additional coursework or clinical experience resulting in original products.
Co-requisites: CONSVTY 5589.

CONSVTY 5590 Special Topics Credits: 1-3
A seminar in selected topics in various fields and idioms of music. May be repeated for credit when the topic varies.

CONSVTY 5590AC Special Topics Credits: 1-3

CONSVTY 5590AD Special Topics Credits: 1-3

CONSVTY 5590BC Special Topics Credits: 1-3

CONSVTY 5590BJ Special Topics Credits: 1-3

CONSVTY 5590CA Special Topics Credits: 1-3

CONSVTY 5590CE Special Topics Credits: 1-3

CONSVTY 5590CF Special Topics Credits: 1-3

CONSVTY 5590CJ Special Topics Credits: 1-3

CONSVTY 5590CL Special Topics Credits: 1-3

CONSVTY 5590CT Special Topics Credits: 1-3

CONSVTY 5590CY Special Topics Credits: 1-3

CONSVTY 5590DC Special Topics Credits: 1-3

CONSVTY 5590EC Special Topics Credits: 1-3

CONSVTY 5590FC Special Topics Credits: 1-3

CONSVTY 5590HE Special Topics Credits: 1-3

CONSVTY 5590HG Special Topics Credits: 1-3

CONSVTY 5590HS Special Topics Credits: 1-3

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

CONSVTY 5590IN Special Topics Credits: 1-3

CONSVTY 5590IT Special Topics Credits: 1-3

CONSVTY 5590JH Special Topics Credits: 1-3

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

CONSVTY 5590LM Special Topics Credits: 1-3

CONSVTY 5590MB Special Topics Credits: 1-3

CONSVTY 5590OL Special Topics Credits: 1-3

CONSVTY 5590OW Special Topics Credits: 1-3

CONSVTY 5590PA Special Topics Credits: 1-3

CONSVTY 5590PC Special Topics Credits: 1-3

CONSVTY 5590PO Special Topics Credits: 1-3

CONSVTY 5590PP Special Topics Credits: 1-3

CONSVTY 5590PS Special Topics Credits: 1-3

CONSVTY 5590SE Special Topics Credits: 1-3

CONSVTY 5590SV Special Topics Credits: 1-3

CONSVTY 5590TF Special Topics Credits: 1-3

CONSVTY 5590TJ Special Topics Credits: 1-3

CONSVTY 5590TT Special Topics Credits: 1-3

CONSVTY 5591E Group Piano Pedagogy Credits: 3
Study of teaching techniques and materials related to teaching group piano at the college level. Course responsibilities include both observation and supervised teaching.

CONSVTY 5591G Pedagogy of Music Theory I Credits: 3
Study of teaching techniques and materials combined with supervised teaching.

CONSVTY 5591H Advanced Pedagogy I - Voice Credits: 2

CONSVTY 5591J Advanced Pedagogy I-General Credits: 2
An overview of basic pedagogical practice including modes of instruction, feedback, reinforcement, and assessment. Students will review current literature in this area and develop a project related to their own teaching.

CONSVTY 5591K Pedagogy of Music History Credits: 3
Techniques and materials related to teaching music history and music appreciation combined with supervised teaching.

CONSVTY 5592E Advanced Piano Pedagogy Credits: 3
Study of teaching techniques and materials related to teaching applied piano at the collegiate level. Course responsibilities include both observation and supervised teaching.

CONSVTY 5592H Advanced Pedagogy II - Voice Credits: 2

CONSVTY 5593 Introduction To Research And Bibliography In Music Credits: 3
A survey of procedure in bibliography, research, and scholarly writing.

CONSVTY 5594A Introduction To Descriptive And Experimental Research In Music Credits: 3
Introduction to basic descriptive and experimental methodologies in music. Includes a review of important literature in music, proposal writing, design, data analysis and scholarly writing styles used in graduate research.

CONSVTY 5597 Master’s Recital Credits: 4
For voice students, a one hour weekly participation in Vocal Performance Seminar is required.

CONSVTY 5597A Master’s Conducting Performance Credits: 4

CONSVTY 5597B Master’s Recital II Credits: 4

CONSVTY 5597CE Master’s Recital Credits: 4

CONSVTY 5598 Research Problems Credits: 2
Individual study with a member of the adjunct, associate or graduate faculty. Study will culminate in the writing of a formal paper. Research projects must be completed within two consecutive semesters, and filed in the Music Library. The paper must be in agreement with the Conservatory Library’s Format Guidelines for Music Dissertations and Theses.

CONSVTY 5598B Research Problems In Computer Languages And Music Credits: 1-3
Individual study with a member of the adjunct, associate, or graduate faculty. Study will culminate in the production of a project (computer program, CD-ROM,composition, or other document) that demonstrates skills in computer languages specifically related to music. This course fulfills the computer language option of the foreign language for DMA students in composition.

CONSVTY 5599 Thesis Credits: 1-9

CONSVTY 5693 Advanced Research and Bibliography In Music Credits: 3
Advanced procedures in bibliography, research, and scholarly writing.
Prerequisites: CONSVTY 5593.

CONSVTY 5695 Practicum In Music Education Credits: 3-6
Individual conference course requiring the development of a research paper in a special subject and designed to resolve a practical problem of special interest to the student. Conference.

CONSVTY 5697 Doctoral Recital Credits: 4
For voice students, a one hour weekly participation in Vocal Performance Seminar is required.

CONSVTY 5697A Doctoral Lecture Recital Credits: 4

CONSVTY 5697B Doctoral Conducting Performance Credits: 1-4

CONSVTY 5697BP Doctoral Conducting Performance Paper Credit: 1
Individual study with the student’s conducting teacher. Study will culminate in the writing of a formal paper addressing aspects of a doctoral conducting performance.

CONSVTY 5697C Doctoral Recital II Credits: 1-4

CONSVTY 5697CP Doctoral Recital Paper II Credit: 1
Additional individual study with the student’s applied teacher. Study will culminate in the writing of another formal paper addressing aspects of a doctoral recital.
Co-requisites: CONSVTY 5697P.

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

CONSVTY 5697DP Doctoral Conducting Performance Paper Credit: 1
Additional individual study with the student's conducting teacher. Study will culminate in the writing of another formal paper addressing aspects of a doctoral conducting performance.
Co-requisites: CONSVTY 5697BP.

CONSVTY 5697P Doctoral Recital Paper Credit: 1
Individual study with the student's applied teacher. Study will culminate in the writing of a formal paper addressing aspects of a doctoral recital.

CONSVTY 5698 Research Problems Credits: 2
Individual study with a member of the adjunct, associate, graduate or doctoral faculty. Study will culminate in the writing of a scholarly paper.

CONSVTY 5698A Doctoral Research Problems II Credits: 2
Additional study with a member of the adjunct, associate, graduate or doctoral faculty. Study will culminate in the writing of another scholarly paper.
Co-requisites: CONSVTY 5698.

CONSVTY 5698B Doctoral Music Product Credits: 1-4
Individual study with a member of the adjunct, associate, graduate, or doctoral faculty. Study will culminate in the writing of a creative, original composition, arrangement or edition of music.

CONSVTY 5699 Dissertation Research Credits: 1-16

CONSVTY 5899 Required Graduate Enrollment Credit: 1

Counseling Psychology and Counselor Education (CPCE)

Courses

CPCE 5500 Introduction To Professional Counseling Credits: 3
This course introduces students to the professions of counseling and counseling psychology as practiced in a variety of settings. The course provides and overview of basic concepts of mental health, client problems, history of the profession, ethical and professional standards, counseling in a multicultural and pluralistic society, and licensure and credentialing. The course also orients students to the counseling program at UMKC. May be taken prior to admission.

CPCE 5502 Fndtns Of Elementary & Secondary School Counseling & Guidance Credits: 3
The course will present an overview of theory and practice in the field of school counseling and will examine the roles and functions of guidance counselors. For School Counseling Emphasis only.

CPCE 5503 Psychopathology: Diagnoses And Classification Credits: 3
This course is designed to provide students with an opportunity to study psychopathological patterns, mental disorders, and other reactions in client behavior, which are encountered by therapists, counselors, and psychologists in contemporary psychological service systems. The major focus of the course will be on learning current diagnostic criteria and making differential diagnoses. Attention will also be given to the etiology, development, dynamics, and treatment of psychopathology. In addition, the influence of culture on behavior and treatment will be discussed.
Prerequisites: CPCE 5500.

CPCE 5504 School Guidance Programs Credits: 3
This course will provide knowledge and skills in the development and management of school guidance programs, including program planning, implementing and evaluation.

CPCE 5505 Career Development I Credits: 3
Theories of career development and vocational choice and their implications in counseling. Emphasizes knowledge of occupational and career information sources and use of these data by counselors and counseling psychologists. Open to any student who has been admitted to an advanced degree program.

CPCE 5515 Assessment Methods In Professional Counseling Credits: 3
This course provides an understanding of assessment process and assessment techniques. Students will develop skills in selection, administration, and interpretation of representative assessment instruments.
Prerequisites: CPCE 5500.

CPCE 5520 Theories of Counseling Credits: 3
Theoretical positions in counseling; significance of these theories in professional practice. To be taken prior to CPCE 5531.
Co-requisites: CPCE 5500, CPCE 5530.

CPCE 5521 Special Counseling Methods - Substance Abuse Credits: 3
Theories and methods of counseling as applied to clients with substance abuse problems. Includes assessment, treatment strategies, and evaluation. Skills practice in implementing methods.

CPCE 5523 Counseling the Older Adult Credits: 3
This course provides an overview of the basic biological, psychological and social aspects of later life as preparation for counseling the diverse older adult population, Current evidence-based theory related to this specific population is presented along with refinement of interpersonal and counseling skills to support counseling intervention with older adults and their families in the multiple contexts they are served. Best practice examples for meeting the needs and providing mental health services to older adults are reviewed.

CPCE 5527 Theory And Methods Of Sexual Counseling Credits: 3
The focus of this course is on sexual development and the acquisition of therapeutic skills to work with problems relating to human sexual functioning and sexual dysfunctions.
Co-requisites: CPCE 5520.

CPCE 5528 Introduction to Play Therapy Credits: 3
Course covers the philosophy and rationale for using play media in counseling with childeren and the history of play therapy. The client-centered theoretical approach will be examined with an emphasis on creating and maintaining a relationship with the child that allows for the effective use of play media.

CPCE 5530 Methods Of Counseling Credits: 3
This course is designed to introduce students to the fundamental concepts and methods of counseling. Students will apply ethical and multicultural principles to the helping relationship while learning the basic methods of humanistic, psychodymamic, and cognitive behavioral approaches as they relate to the helping process. A main focus of this course is the acquisition of basic helping skills. Students will also become familiar with counseling outcome research and will increase their level of counselor self-awareness.
Prerequisites: CPCE 5520.

CPCE 5531 Counseling Practicum I Credits: 3
Closely supervised therapeutic counseling with individuals; translation of theory into practice; clinical and professional techniques and issues.
Prerequisites: CPCE 5553.

CPCE 5532 Counseling Practicum II Credits: 3
Supervised therapeutic counseling with individuals and consultation in professional settings.
Prerequisites: CPCE 5531.

CPCE 5533 Couples And Family Therapy Practicum Credits: 3-6
Supervised application of theories and methods of family therapy with individuals, couples and families.
Prerequisites: CPCE 5532 and CPCE 5542.

Co-requisites: CPCE 5541.

CPCE 5534 Practicum For The Assessment Of Children And Adolescents Credits: 3
The practicum for the assessment of children and adolescents covers the facilitation of psychological evaluations for this population and includes maintaining a caseload of assessment evaluations to complete through the CCS Assessment Center. Specialized assessment evaluations and conceptualization issues are covered in the second half of the course, with evaluations for ADHD and other learning disorders emphasized. Special topics will be discussed at the end of the course.
Prerequisites: CPCE 5515.

CPCE 5539 Continuing Counseling Practicum Credits: 1-6
Supervised therapeutic counseling with individuals.
Prerequisites: CPCE 5532.

CPCE 5540 Theories And Methods In Group Counseling Credits: 3
Theories and research in group counseling as related to the work of the counselor and counseling psychologist; establishing and maintaining a counseling group; qualifications of the group leader; goals for group counseling; therapeutic and anti-therapeutic forces in groups; special techniques.
Prerequisites: CPCE 5530.

CPCE 5541 Couples And Family Therapy Credits: 3
Introduction to family relationships and the application of life cycle stages to working with couples and families. Focus also includes the study of a range of family configurations and issues with attention to diversity.

CPCE 5542 Theories and Techniques of Family Systems Therapy Credits: 3
A study of major family systems theories and their applied practices in family therapy. Students will develop skills in family assessment techniques and family therapy processes.
Prerequisites: CPCE 5530.

CPCE 5550 Organization And Administration Of Counseling Programs Credits: 3
Organization, administration, and planning of counseling programs with emphasis on their practical aspect; counseling practice in schools and agencies; intraprofessional relationships; legal and ethical considerations. Course to be taken near completion of the master’s program.

CPCE 5551 Counseling in a Pluralistic Society Credits: 3
Addresses the needs of diverse populations served by counselors and addresses developing intervention methods of working with these populations. Focuses on advocacy and change agent roles of counselors.
Prerequisites: CPCE 5520.

CPCE 5553 Ethics And Professional Issues In Counseling Credits: 3
This course is designed to examine the major ethical and professional issues within the counseling profession. More specific, ethical dilemmas and professional issues relevant to the practice of mental health, marriage and family, school and substance abuse counseling are the major foci of this course. In addition, instruction is designed to enhance student understanding of the ethical standards such that students can effectively apply the critical thinking necessary to practice ethical behavior with clients, professional colleagues, consultees, and the communities in which they work.

CPCE 5575A Internship In Counseling I Credits: 3-16
First semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.
Prerequisites: CPCE 5532 .

CPCE 5575B Internship In Counseling II Credits: 3-16
Second semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.
Prerequisites: Admission to Educational Specialist program in counseling, CPCE 5575A.

CPCE 5575C Internship In Counseling III Credits: 3-16
Third semester of a sequence of applied experiences in a planned, supervised program. Seminar accompanies internship experiences. The following areas of specialization are available: a) Marriage and Family, b) Mental Health, c) School, and d) Substance Abuse.
Prerequisites: Admission to Educational Specialist program in counseling.

CPCE 5589 Special Topics Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed in the semester bulletin.

CPCE 5589CA Special Topics Credits: 1-6

CPCE 5589GC Special Topics Credits: 3

CPCE 5589NP Special Topics Credits: 1-6

CPCE 5589PL Special Topics Credits: 1-6

CPCE 5589SE Special Topics Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed in the semester schedule.

CPCE 5590 Seminar Credits: 3
Discussion and evaluation of literature in Counseling Psychology and Counselor Education.

CPCE 5590CF Seminar in Couples and Family Counseling Credits: 3
This is a final seminar for students in the couples and family emphasis area. It is an advanced study of couples and family counseling and related research with a focus on current issues and problems in the profession. This course should be taken toward the end of students' programs of study.
Prerequisites: CPCE 5533.

CPCE 5590GC Seminar in Gerontological Counseling Credits: 3
The final seminar is designed to familiarize students with current topics of interest in the field of gerontological counseling, while preparing them to provide counseling service to a variety of clients. This course should be taken toward the end of the student's program of study.
Prerequisites: CPCE 5532.

CPCE 5590MH Seminar In Mental Health Counseling Credits: 3
This final seminar is designed to familiarize students with current topics of interest in the mental health field, while preparing them to provide mental health services to a variety of clients. This course should be taken toward the end of students' programs of study.
Prerequisites: CPCE 5532.

CPCE 5598 Individual Studies Credits: 1-6
Review of the research and trends relative to selected problems.

CPCE 5599 Research And Thesis Credits: 1-9
Research and Thesis

CPCE 5600 Introduction To Counseling Psychology Credit: 1
This course is intended to assist new doctoral students in their orientation to UMKC and to the profession of Counseling Psychology. The course also introduces students to the ethical principles and code of conduct for psychologists.

CPCE 5605 Career Development II Credits: 3
Major theories and research in vocational psychology and career development and implications for the work of the counseling psychologist and counselor.
Prerequisites: CPCE 5505.

CPCE 5609 Assessment II: Intellectual And Cognitive Assessment Credits: 3
This course is designed to provide students with a foundation in the use of intellectual and cognitive assessment instruments in clinical evaluation. The course covers theoretical issues pertinent to intellectual and cognitive assessment as well as basic assessment skills including administration, scoring, interpretation, and communication of results for commonly used measures.
Prerequisites: Admission to the Ph.D Program in Counseling Psychology.

Cross Listings: PSYCH 5509.

CPCE 5610 Theoretical And Professional Issues In Counseling Psychology Credits: 3
This course is designed to introduce first year doctoral students to the fundamental concepts and methods of psychology conceived as the application of scientific and ethical reasoning to human problems. It will provide an in-depth examination of the American Psychological Association code of ethics and its application to the conduct of psychologists. Critical and analytical thinking will be emphasized in all aspects of the course. The course will cover broad models of clinical and counseling psychology and their historical and scientific foundations, issues in diagnosis, cross-cultural applications and professional problems in light of ethical principles, professional standards, scientific data multi-cultural contexts.

CPCE 5611 Objective Personality Assessment Credits: 3
This course is designed to help students develop knowledge and skills related to the selection, administration, and interpretation of some representative objective personality assessment instruments used in counseling/clinical settings. Students will also learn to integrate data obtained from an assessment battery to write comprehensive psychological reports.

CPCE 5615 Survey Of Research In Counseling Psychology Credits: 3
Survey of significant research in counseling psychology. Critical evaluation of research procedures, instrumentation, and clinical application of results.
Prerequisites: EDUC-R&P 5605 and EDUC-R&P 5608.

CPCE 5620 Advanced Theories And Methods Of Counseling Credits: 3
Personality and learning theories and their implications for professional practice in counseling psychology. Emphasis on critical evaluation of assumptions, methods, comprehensiveness and usefulness of the theories, with reference to related research.
Prerequisites: CPCE 5532.

CPCE 5631 Advanced Counseling Practicum Credits: 3
Advanced supervised therapeutic counseling with individuals and supervised consultation in clinical settings.
Prerequisites: CPCE 5532.

CPCE 5632 Practicum In Group Counseling Credits: 3
Leading groups under supervision. Focus on problems and experiences of counselors and counseling psychologists when leading groups.
Prerequisites: M.A. in Counseling, CPCE 5540.

CPCE 5633 Advanced Couples & Family Practicum Credits: 3
Advanced supervised application of theories and methods of family therapy with individuals, couples and families.
Prerequisites: CPCE 5542.

CPCE 5634 Practicum For The Assessment Of Children And Adolescents Credits: 3
The practicum for assessment of children and adolescents covers the facilitation of psychological evaluations for this population and includes maintaining a caseload of assessment evaluations to complete through the CCS Assessment Center. Specialized assessment evaluations and conceptualization issues are covered in the second half of the course, with evaluations for ADHD and learning disorders emphasized. Special topics will be discussed at the end of the course.
Prerequisites: CPCE 5515.

CPCE 5639 Continuing Advanced Counseling Practicum Credits: 1-6
Supervised therapeutic counseling with individuals, beyond the advanced level.
Prerequisites: CPCE 5631.

CPCE 5640 Theories And Methods Of Counseling Supervision Credits: 2
This course offers an overview of counseling supervision theories and models, and contemporary research. It also addresses supervision process and tasks, diversity in supervision, and supervisor’s ethical and legal responsibilities.
Prerequisites: CPCE 5631.

CPCE 5641 Supervision Practicum Credit: 1
This course is designed to provide students with an opportunity to practice supervision. Students will be assigned 2 to 3 counselors-in-training from a CPCE 5531 and CPCE 5532 practicum class to supervise over the course of a semester. The practicum instructor will provide weekly supervision.
Prerequisites: CPCE 5640.

CPCE 5645 Projective Testing Credits: 3
Course focuses on the diagnostic use of projective assessment techniques, with a special focus on the Rorschach Inkblot Test.
Prerequisites: CPCE 5515, Enrolled in Doctoral Psych. Program, and Measurement of Intelligence or Cognitive Assessment course.

CPCE 5650 Prevention and Consultation in Counseling Psychology Credits: 3
An overview of the psychologist's role in consultation, program development and evaluation in the context of prevention. Students will also apply their knowledge and develop skills in prevention and consultation by developing a prevention program for a real-life setting.

CPCE 5675 Internship In Counseling Psychology Credits: 1-16
Applied experiences in a professional setting under supervision of licensed psychologists.

CPCE 5690 Special Problems Credits: 1-6
Individual studies; thesis exploration; special reading.

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

Criminal Justice and Criminology (CJC)

Courses

CJC 5500 Sociology Of Law Credits: 3
A sociological study of the legal system with focus on organizational analyses of the legal profession, courts as a social system, the bureaucratization of the legal process, stratification and the allocation of legal services and careers.

CJC 5511 Sociological Methods II Credits: 3
Quantitative research is the primary focus of the course; emphasis is placed on problem formulation; research design; sampling procedures, questionnaire construction and interviewing techniques; data collection; problems of scaling, computer statistical programs; linking appropriate statistical analyses with data analysis; and report writing.
Prerequisites: CJC 483 or equivalent.

Cross Listings: SOCIOL 5511.

CJC 5515 Qualitative Research Methods in Criminal Justice Credits: 3
This course focuses on qualitative research methods, such as interviewing techniques, focus groups, content analysis, and field observation. Emphasis is placed on research design, data collection, and data analysis.
Prerequisites: CJC 483 or equivalent.

CJC 5516 Intermediate Statistics Credits: 3
A systematic development of the logic and practice of selected statistical methods used in sociological research. Included are analysis of variance and covariance, regression analysis, multiple contingency, and non-parametric tests.
Prerequisites: CJC 363 or equivalent.

Cross Listings: SOCIOL 5516.

CJC 5518 Advanced Criminological Theory Credits: 3
This course provides an understanding of past as well as present criminological theories by examining each criminological tradition (beginning in the 18th century and continuing into the present.) The primary aim of the course is to determine the root causes of deviant and criminal behaviors. Moreover, this course offers special attention to how society has historically reacted and responded to crime and deviant behavior. Furthermore, by examining crime and deviant behavior from a historical context, the students are able to determine how criminological theories have influenced public policies designed to reduce and control criminal behavior. In the final analysis, students will examine the rationales that society use to justify efforts toward punishment and treatment.
Prerequisites: CJC 319 or equivalent.

CJC 5520 Juvenile Justice Credits: 3
This course provides a historical and contemporary overview of the juvenile justice system via a critical examination of the function of this system and theories explaining delinquency in adolescence. We will explore special topics within juvenile justice and proposals for juvenile justice reform.

CJC 5551 Seminar In Policing Credits: 3
This course addresses the important topics related to the institution of policing. Through readings and class discussions, students will gain a better understanding of both historical aspects of policing as well as the future of policing. Topics include selection, training and socialization, police management, deviance and corruption, use of force, community oriented policing.

CJC 5565 Seminar In Crime Prevention Credits: 3
This seminar examines variations in methods to reduce crime in America, including strategies from the criminal justice system as well as other institutions. Building on established criminological theory, this seminar will evaluate the best practices to prevent crime across a variety of social contexts.

CJC 5570 Contemporary Corrections And Correctional Policy Credits: 3
Present-day correctional alternatives are considered regarding the correctional policy that is, or potentially can be, carried out within the various programs. Prisons, probation, parole community-based programs are evaluated as to the theory of punishment demonstrated within these programs. Emphasis is placed on what constitutes a rational and workable corrections policy and the form of correctional programs needed to realize such policy.

CJC 5575 Correctional Rehabilitation And Treatment Credits: 3
This course will begin with a thorough examination of the rise, fall, and recent resurrection of "rehabilitation and treatment" in American correctional strategies. Both past and current treatment strategies will be studied regarding their effectiveness in reducing recidivism. This will be done through a survey of the quantitative literature base. There will be some emphasis on treating special needs offenders (e.g., sex offenders, juvenile offenders, offenders with developmental disabilities or mental illnesses.)

CJC 5576 Seminar In Criminal Justice And Criminology Issues Credits: 3
This course is an advanced exploration of the relationship between the criminal justice system and criminal behavior from at least one of the following perspectives: psychological, sociological, economic, legal, political or administration/ management. Will include discussions and analysis of contemporary readings and on-going research in the selected perspective.

CJC 5580 Seminar: Policy And Decision Making In Criminal Justice Credits: 3
The focus of the course is assessment of the character and recent crime trends in the United States, with attention to identifying elements that shape justice system policies in response to crime. Consideration is given to the nature and scope of policy and decision-making processes in legal institutions and law enforcement bureaucracies, how such policies have impacted crime, and alternative policies address the problem of crime.

CJC 5590 Directed Studies In Criminal Justice And Criminology Credits: 1-3
Individual research and study in the student’s field of interest as approved and directed by major professors. The work involves examination and reporting of selected problems affecting the various agencies of our legal system. A. Law Enforcement B. Court Operations and Administration C. Corrections D. Legal Theory and Philosophy E. Criminological Theory F. Sociology of Law.

CJC 5592 Advanced GIS For Crime Analysis Credits: 3
This course provides an overview of crime mapping as it relates to the spatial and temporal analysis of crime. Utilizing theory related to criminal offending, this course will provide students with hands-on experience in geographic profiling and crime prevention strategies.
Prerequisites: GEOG 203 or equivalent.

CJC 5595 Crime Analysis Internship Credits: 3
This experience involves working with crime analysts in the field. Students will learn and hone practical skills while being supervised by department faculty or staff.
Prerequisites: CJC 5592.

CJC 5599 Research And Thesis Credits: 1-6
Directed specialized research. Before writing a thesis, the student must clear the topic and research design with the Supervisory Committee.

CJC 5699 Dissertation Research Credits: 1-12
Individual directed research leading to preparation and completion of doctoral dissertation.
Prerequisites: Ph.D. course requirements completed.

CJC 5899 Required Graduate Enrollment Credit: 1

Curriculum and Instruction (EDUC-C&I)

Courses

EDUC-C&I 5504 Social Studies In the Schools Credits: 3
Trends and curricular developments in social studies. Focus on the development of social studies concepts, the development of critical thinking skills, and analysis of values.

EDUC-C&I 5505 Introduction To Curriculum Theory Credits: 3
An introduction to curriculum theory with the recognition that knowledge, power, ideology and schooling are connected to patterns of complexity and contradictions. Emphasis will be placed on curricula that cultivate theoretical discourses about the quality and purpose of schooling and human life.

EDUC-C&I 5506 Curriculum Design Credits: 3
This course is designed to enhance educators’ skills in the areas of curriculum design and interpretation. Students will apply and adapt strategies for curriculum development as well as for interpreting and adapting existing curricula.

EDUC-C&I 5508 Curriculum And Methods For Teaching The Non-Motivated Learner Credits: 3
Analysis of materials relevant to reluctant learners; student-teacher prepared consumable materials; current research; methods for presenting material.

EDUC-C&I 5509 Reducing Risk Factors For Students In Educational & Community Stn Credits: 3
The course offers an overview of current research and of special programs that deal with students who are likely to fail at school or in life. The roles of the larger society in helping create such problems will be considered. There will be an emphasis on early identification of such students and a consideration and evaluation of a number of programs designed to help them. The course will also present descriptions of the roles that educators can implement in programs designed for prevention and intervention.

EDUC-C&I 5510 Differentiating Instruction Through Teaching/Learning Styles Credits: 3
Teaching practices based upon teaching/learning styles are explored and modeled. Through differentiated instruction students learn to use style preferences to meet the needs of learners in a typical classroom including the culturally diverse, at-risk, the remedial, the learning disabled, the gifted, and the special needs students. Differentiation emphasizes learning centers, self-selection, self-pacing, subgrouping, contracting and peer tutoring. (K-12).

EDUC-C&I 5511 Developing Multidisciplinary Problem Solving Skills Credits: 3
Development of heuristic strategies in problem analysis, information processing, modeling and logical thinking. Study of methods and materials for teaching problem solving strategies, with applications from several school curriculum areas and instructional settings. Use of microcomputers to develop skills.

EDUC-C&I 5512 Strategies For Effective Classroom Management Credits: 3
The course presents several current approaches to classroom management and how they might be applied to the classroom. The approaches are evaluated in terms of psychological theory and research. Direct experiences with discipline problems are offered through simulation and role-playing.

EDUC-C&I 5513 Effective Communication In The Classroom Credits: 3
This course will emphasize the relationship between communication and classroom climate, and the influence of communication on motivation and student behavior. Communication with large groups, small groups, and individuals is studied and practiced.

EDUC-C&I 5514 Overview of Culturally Responsive Pedagogy Credits: 3
An introduction to ways of thinking about the relationship among teaching, learning, learner characteristics and experiences, and learning outcomes for traditionally underserved students. Particular attention will be given to a framework for understanding the meaning of culture in framing the curriculum and engaging students in meaningful learning experiences and tasks. A practice-based approach to improving learning for traditionally underserved students will be employed. Each participant will be required to participate in and facilitate discussion, develop a personal inventory, and conduct a historical analysis of her/his school and its relation to the community.

EDUC-C&I 5515 Integrated Arts As A Model For Classroom Instruction Credits: 3
This course provides background on theory, research and practice in arts education. Students will learn to integrate the arts across the curriculum and explore the value of the arts as conveyors of information, powerful tools of communication and bridges to the broader culture. This course will also give the students the opportunity to create, study and experience the arts as a model for classroom instruction.

EDUC-C&I 5516 Understanding the Crisis in Urban Schools Credits: 3
The participants in this course will develop deep knowledge of practices related to long-term and persistent challenges in urban schools. Participants will examine well-documented accounts of conditions and situations within and outside that influence the culture and learning outcomes in high performing and low performing urban schools. These accounts will represent multiple perspectives including those of teachers, administrators, students, parents, and other stakeholders. The insights gained from the documented accounts examined in this course will be used to conceptualize new context- specific approaches and frameworks for improving practices, policies, and learning outcomes in urban schools

EDUC-C&I 5517 Teaching Methods And Practices Credits: 3
This course is designed to present and evaluate basic instructional methods and techniques and to determine the ways in which instruction is affected by the social and cultural context of the school.

EDUC-C&I 5518 Assessment of Diverse Learners, Engagement and Motivation Credits: 3
A framework for assessing diverse learners and implementing culturally responsive pedagogy, leading to increased learner engagement and motivation. An overview of the purposes of assessments, how assessment measures are aligned to the principles of culturally responsive pedagogy, and implications for overall learner academic, personal and social growth. Finally, specific strategies for building engagement and motivation, particularly for learners living in poverty and those from ethnically diverse backgrounds are provided.

EDUC-C&I 5519 Discipline Specific Pedagogy for Diverse Learners Credits: 3
An introduction to the use of research-based, discipline specific pedagogy for traditionally under served students in core subject areas of reading, mathematics, science and social studies. Additionally,participants examine the philosophy and theoretical perspectives that support different pedagogical approaches and the social context for learning in classrooms with diverse students.

EDUC-C&I 5520 English Curriculum In The Middle And High School Credits: 3
Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examination of program objectives, teaching methods, and instructional materials in English.
Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5522 Language Arts Curriculum In The Elementary And Middle School Credits: 3
Consideration of language concepts as they relate to the teaching of the Language Arts in Grades K through 8. Significant research and its application to current trends in teaching the language arts will be explored.
Prerequisites: an undergraduate course in Language Arts or reading.

EDUC-C&I 5523 Advanced Literature For Children Credits: 3
History of children's books. Less well-known works of high quality from countries other than Europe, bilingual, and recent translations of books.
Prerequisites: TCH-ED 201 (or equivalent).

EDUC-C&I 5531 Diagnosis And Remediation Of Mathematics Learning Problems Credits: 3
This course addresses the problems of children, youth and adults in basic education, in learning mathematics, whether in the regular classroom or in special environments. Attention is given to the skill of identification of mathematical conceptual levels and to specific difficulties impeding normal progress. There is a focus on methods and materials of remediation in basic skills and concept development. Relevant research literature is examined.

EDUC-C&I 5536 Specialized Secondary School Curriculum Mathematics Credits: 3
Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examinations of program objectives, teaching methods and instructional materials in Mathematics.
Prerequisites: valid regular teaching certificate, undergraduate Special Methods or equivalent, teaching experience.

EDUC-C&I 5539 Mathematics Curriculum Development Credits: 3
Application of principles of curriculum development to the mathematics content and instructions. Development of a rationale for objectives and content selection and for evaluation. Study and evaluation of current programs, trends and experiments.

EDUC-C&I 5540 Evaluation Of Computer Software Credits: 3
The goals of the course are to provide students with a systematic evaluation process which analyzes the hardware resources and application needs of various user groups. This course provides the student with both an academic understanding of evaluation and requirement analysis for educational user groups. The course includes a practicum activity for application projects.

EDUC-C&I 5541 Teaching Mathematics With Computer Credits: 3
The use of a variety of technologies and the appropriate software in teaching secondary mathematics will be investigated and the resulting impact on curriculum will be covered.
Prerequisites: Mathematics teaching certificate or the equivalent of an undergraduate degree in mathematics.

EDUC-C&I 5542 Methods of Teaching English as a Second Language Credits: 3
This course covers the historical and current approaches, methods, and techniques of teaching English to speakers of other languages, from grammar translation to audiolingual and communicative approaches. Additionally, successful classroom practices that address the needs of culturally and linguistically diverse students will be presented.

EDUC-C&I 5543 English Grammar for ESOL Teashers Credits: 3
This course is about teaching English grammar and methods of teaching grammar for graduates, prospective and current teachers of English to speakers of other languages. It includes analysis of the major grammatical structures of American English, discussion of the role of teaching grammar, effective classroom methods and techniques for the English as a second/foreign language classroom.

EDUC-C&I 5544 Theory and Research in Second Language Teaching and Learning Credits: 3
This course covers both second language learning theories and second language research and design. It will also contain a survey of both qualitative and quantitative research literature.

EDUC-C&I 5545 Linguistics for ESOL Teachers Credits: 3
This course is an introduction to linguistic theories focusing on topics that are particularly relevant to ESOL teachers in culturally and linguistically diverse settings. It also covers applying these theories to practice in ESOL classrooms. The contents include basic practical knowledge in phonetics, phonology, morphology, syntax, pragmatics and semantics.

EDUC-C&I 5546 Intercultural communication Credits: 3
This course serves as an introduction to the background of English language learners (ELL) from many countries of the world. It also serves to facilitate ESOL students' success in ELL and mainstream classrooms. The course will introduce culture in general at first and then focus on how to better understand the ELL students' cultures. Class participants will learn to develop lessons that enhance intercultural communication and understanding among all students.

EDUC-C&I 5547 Second Language Acquisition Credits: 3
The course focuses on the foundations of second language learning and teaching. Major theoretical approaches to second language acquisition and second language learning will be discussed. The course is also one of the requirements for an endorsement to teach in English as a second language classroom.

EDUC-C&I 5548 English As A Second Language In Content Areas Credits: 3
Theoretical perspectives of teaching, learning and researching literacy development. The focus of this course will be on content based English as a second language instruction. The course is one of the requirements for an endorsement to teach in an English as a second language classroom.

EDUC-C&I 5549 Practicum In English As A Second Language Credits: 3
A four-week practicum for teachers and researchers in the field of second language learning and teaching. Students will have the opportunity to develop their own teaching plan of action according to the curriculum guidelines of the program in which they participate. Students will develop a portfolio and reflection piece about their own learning in the practicum.

EDUC-C&I 5551 Science Curriculum In The Middle And High School Credits: 3
Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examination of program objectives, teaching methods and instructional materials in Natural Sciences.
Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5553 Curriculum And Instruction In Science Credits: 3
Advanced study of contemporary programs and practices in science education at all instructional levels. Examination of program objectives and teaching methods and development of instructional materials for classroom use.
Prerequisites: A science teaching methods course and teaching experience.

EDUC-C&I 5554 Assessment In Science Education Credits: 3
Advanced study of science education assessment with option for elementary or secondary emphasis.

EDUC-C&I 5560 Teaching And Learning In The Urban Classroom Credits: 3
Emphasis will be placed on examining beliefs, assumptions, values and their influence on the processes of teaching, perception of the urban learner, understanding the characteristics of the urban learner, and processes for transforming pedagogical practices, including fostering collaboration between home and school.
Prerequisites: EDUC-UL 5525, EDUC-UL 5526, EDUC-UL 5527, or EDUC-UL 5528.

EDUC-C&I 5561 Teaching Diverse Populations In Today's Classrooms Credits: 3
This course focuses on culturally responsive pedagogies for meeting the academic needs and learning styles of culturally diverse students. Emphasis will be placed on critical investigation of the role of socio-cultural dynamics on learning and teaching, and design of curriculum, materials, and pedagogical and disciplinary practices that affirm student's culture. The ultimate goal of the course is to examine ways in which a culture-based curricular perspective provides powerful scaffolding for enabling and empowering educational experiences for diverse students.
Prerequisites: EDUC-UL 5525, EDUC-UL 5526, EDUC-UL 5527, or EDUC-UL 5528.

EDUC-C&I 5562 Teaching For Equity And Social Justice Credits: 3
This course examines a systems approach to the design, development, assessment, and implementation of school practices that support equity and social justice for all students. It investigates issues of educational inequities and educational empowerment. Practitioners will develop the knowledge, skills and dispositions needed for empowering self and students. Emphasis will be placed on social action learning, empowerment and agency.
Prerequisites: EDUC-UL 5525, EDUC-UL 5526, or EDUC-UL 5528 and EDUC-C&I 5560 or EDUC-C&I 5561 or EDUC-C&I 5562.

EDUC-C&I 5563 Multicultural Perspectives In Education Credits: 3
This course provides an opportunity for students to engage in a critical and in-depth study of multicultural education. Students will examine current theoretical, conceptual, ideological, and political positions that help frame the multicultural education debate. The ultimate goal of the course is to help students develop critical and multiple perspectives about education in a democratic society with the aim of transforming curricular and pedagogical practice.
Prerequisites: EDUC-UL 5525, EDUC-UL 5526, EDUC-UL 5527 or EDUC-UL 5528 and EDUC-C&I 5560 or EDUC-C&I 5561.

EDUC-C&I 5565 Social Studies Curriculum Elementary Education Credits: 3
Trends and new curricular developments in elementary school social studies. Focus on integration of social science concepts, the development of critical thinking skills, and analysis of values.

EDUC-C&I 5566 Social Studies Curriculum In The Middle And High School Credits: 3
Advanced study of contemporary programs and procedures in specialized sectors of the secondary school curriculum. Examinations of program objectives, teaching methods, and instructional materials in Social Studies.
Prerequisites: valid regular teaching certificate, undergraduate special methods or equivalent, teaching experience.

EDUC-C&I 5570 Curriculum And Instruction In Technology Credits: 3
Study of contemporary programs and practices of technology usage in education at all instructional levels. Examination and application of technologically enhanced teaching methods, assessment, and curriculum development for classroom use.

EDUC-C&I 5571 Cognition & Technology Credits: 3
The purpose of this course is to respond to current research in the field of cognition and educational technology and design an evaluative research response to a local technology program. The educators will define the concepts concerning implementation of new technologies into learning environments and the mediational effects on the types and quality of learning that result from that process.

EDUC-C&I 5572 Assessing The Role Of Technology In Education Credits: 3
The purpose of the course is to develop an understanding of changing role of technology in education by reviewing current and historical articles on the topic. This includes a historical analysis of trends and expectations within educational settings and outside educational settings and defining the educator's understandings of the role of technology in educational settings, past, present and future.

EDUC-C&I 5573 Development Learning Tech Progs:Traditional & Non-Trad Settings Credits: 3
The purpose of this course is to develop understandings of currently implemented educational technologies including both software and hardware configurations. The educators will review current use of a variety of current technologies integrated into traditional settings and non-traditional settings and evaluate their effectiveness in developing standards-based learning outcomes and constructivist-based learning outcomes.

EDUC-C&I 5575 Internship - Early Childhood Credits: 3-16
Applied experiences in a planned, supervised curriculum program. Seminar accompanies internship experiences.

EDUC-C&I 5576 Administration Of Early Childhood Programs Credits: 3
This course is designed to examine the administrative functions and decisions involved in effectively directing an Early Childhood Program. Students may plan their own Early Childhood Program incorporating philosophical values and beliefs.

EDUC-C&I 5577 Early Childhood Special Education Methods Credits: 3
EDUC-C&I 5577 provides an overview of the field of early childhood special education, with an emphasis on inclusive education for young children ages birth-third grade. This emphasis includes methods and practices for providing services for young children with special needs and their families and the adaptation of developmentally appropriate curriculum and the classroom environment. Historical, political, and theoretical contexts are provided as framework for the course.

EDUC-C&I 5578 Play In Early Childhood Education Credits: 3
The purpose of this course is to study the various play theories and developmental levels of play. Students plan play activities and participate in Early Childhood programs.

EDUC-C&I 5579 History, Theories, And Issues In Early Childhood Education Credits: 3
This course is designed to explore the historical and theoretical principles in early childhood education. Current issues in the field will be examined and discussed.

EDUC-C&I 5580 Curriculum In Early Childhood Education Credits: 3
The content of this course will include an exploration of appropriate curriculum and instruction of early childhood classrooms. Students will recognize, understand and analyze the differences and similarities between early childhood curriculum and instruction methods and elementary education instruction.

EDUC-C&I 5581 Infant-Toddler Programs: Research Theory And Practice Credits: 3
This course is designed to investigate the research relevant to infant and toddler programs, learn about the appropriate curriculum and teaching methods, and visit infant and toddler programs.

EDUC-C&I 5582 Program Models In Early Childhood Education Credits: 3
This course is designed to explore and analyze program models in early childhood education in terms of their theoretical and/or philosophical bases and their transformation into practice. During this process, students are encouraged to evaluate their own personal views and values concerning teaching/learning issues in early childhood education.

EDUC-C&I 5583 Supervision In Early Childhood Education Credits: 3
The purpose of this course is to study the process of effective supervision of staff in the diverse contexts of early childhood education. This course is designed to prepare students to supervise teachers, staff, paraeducators, or volunteers in early childhood education programs. Students will explore theories of adult development, the supervision process, professional development, and the evaluation process.

EDUC-C&I 5584 Early Childhood Culminating Project Credits: 1-6
This seminar is designed for graduate students to explore current issues and topics pertaining to the field of early childhood education. An in-depth investigation of ways to work with community agencies will be included.

EDUC-C&I 5585 Teaching and Learning with Techonolgy Credits: 3
This is an introductory course that covers the fundamental of standard educational computer applications in addition to providing the basic concepts regarding classroom hardware and software integration. This course familiarizes students with the National Educational Technology Standards For Teachers and Students. Because of the computer's increasing importance in all phases of education, hands-on experiences are required throughout the course.

EDUC-C&I 5586 Multimedia in Education Credits: 3
This course will introduce students to a variety of methods for creating instructional multimedia materials for K-16 classroom use, with a particular emphasis on free and web-based digital editing and conversion programs.
Prerequisites: EDUC-C&I 5585 (or TCH-ED 385).

EDUC-C&I 5587 Facilitating Technology Implementation Credits: 3
This course will prepare students to facilitate the integration of educational technology in PK-12 settings. Skills taught will include planning and implementing educational technology professional development to classroom teachers and integration strategies that increase the potential for meaningful learning.
Prerequisites: EDUC-C&I 5585 (or TCH-ED 385).

EDUC-C&I 5589 Special Topics In Education Credits: 1-6
A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589AD Special Topics in Education Credits: 1-6
A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589AM Special Topics In Education Credits: 1-6

EDUC-C&I 5589CD Special Topics In Education Credits: 1-6

EDUC-C&I 5589EG Special Topics In Education Credits: 1-6

EDUC-C&I 5589ES Special Topics Credits: 3

EDUC-C&I 5589GR Special Topics Credits: 3

EDUC-C&I 5589HR Special Topics In Education Credits: 1-6

EDUC-C&I 5589IC Special Topics In Education Credits: 1-6

EDUC-C&I 5589ME Special Topics In Education Credits: 1-6

EDUC-C&I 5589SC Special Methods Science Credits: 5

EDUC-C&I 5589SE Special Methods English Credits: 5

EDUC-C&I 5589SM Special Methods Math Credits: 5

EDUC-C&I 5589SS Special Methods Social Studies Credits: 5

EDUC-C&I 5589TL Special Topics In Education Credits: 1-6
Special Topics In Education

EDUC-C&I 5589TM Special Topics In Education Credits: 1-6
A course designed to deal with a curriculum topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-C&I 5589UC Sepcial Topics in Education Credits: 1-6

EDUC-C&I 5590 Seminar Credits: 3
Discussion and evaluation of literature in curriculum.
Prerequisites: EDUC-C&I 5505.

EDUC-C&I 5591 Curriculum & Instruction For The 21St Century Credits: 3
A seminar including critical examination of current issues affecting schools such as education for democracy and global interdependence in a diversified society, curriculum and instruction in a technological, post-industrial society; the changing demographics of the U.S. and the implications for curriculum and instruction; and the roles of teachers and administrators in the school of the future. Students will be actively involved in "research-in-action" study of both theory and practice.

EDUC-C&I 5595 Action Research For Practitioners Credits: 3
This course comprises a guided graduate research paper experience. Course participants will work together to plan individual action research studies related to diverse, urban schooling. This course is designed to enable practitioners to engage in systematic inquiry on some aspect of their practice in order to find out more about that practice and eventually improve it. Participants in the course are expected to put their assumptions, ideas and practices to the test by gathering, analyzing and drawing conclusions from evidence. This course is to be taken during the last year of degree study. Course enrollment requires faculty advisor approval and a minimum 3.0 GPA. Participation in this course entails a field placement for research purposes. If a placement in a school is required, students will need to complete a TB test and submit fingerprints for the standard Background Check process by the start of the semester. Any costs associated with these tests are the responsibility of the student. All course participants are further required to obtain a LiveText subscription.

EDUC-C&I 5596 Classroom Assessment Credits: 3
This course is designed to help practitioners develop an understanding of the various roles of classroom assessment, strengthen their own assessment strategies be able to better use data in the development of curriculum that is appropriate for all learners. Students will develop a more clear understanding of the relationship of curriculum, instruction assessment ways in which good assessments can help diverse learners.

EDUC-C&I 5598 Individual Studies Credits: 1-6
Review of the research and trends relative to curriculum in education.

EDUC-C&I 5618 Survey Of Research In Curriculum Credits: 3
Review and analysis of research in curriculum theory and methods.

EDUC-C&I 5619 Systemic Curriculum Evaluation and Review Credits: 3
This course focuses on current practices in systemic curriculum review at the grade, school, district or state level in order to better serve the needs of diverse learners. Emphasis will be placed on the processes of curriculum review, curriculum change, implementation, evaluation of changes, and on-going long-range curriculum planning and review.

EDUC-C&I 5620 Seminars In Theories Related To Curriculum Credits: 3
Study of major historical developments in curriculum and their influence on contemporary models and practices.
Prerequisites: EDUC-C&I 5504 or EDUC-C&I 5505.

EDUC-C&I 5626 Seminar in Multicultural Perspectives In Education Credits: 3
This seminar provides an opportunity for student engagement in critical and in-depth study of multicultural perspectives in education. Students will examine current demographic and achievement realities and the theoretical, conceptual, ideological, and political positions that help frame multicultural education, The ultimate goal is to help students develop critical and multiple perspectives about education for a democratic society, and the knowledge, skills and dispositions for transformative intellectualism and change agency.
Prerequisites: Interdisciplinary Ph.D. Student Status.

EDUC-C&I 5640 Apprenticeship And Conference In College Training Credits: 2-5
Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education.

EDUC-C&I 5690 Special Problems Credits: 1-6
Individual studies: thesis exploration, special reading.

EDUC-C&I 5697 Dissertation Curriculum And Instruction Credits: 1-16
Dissertation Curriculum And Instruction

Decision Science and Operations Management (DSOM)

Courses

DSOM 5505 Decision Sciences Credit: 1.5
Understanding the conceptual framework of statistics as it relates to business decision-making and problem solving. Most of the work will be done based on the real-life applications of statistical concepts to business problems and cases. The course includes the topics of descriptive statistics, probability distributions, tests of hypotheses, and multi-variate analysis.

DSOM 5507 Operations and Supply Chain Management Credit: 1.5
An integrating study that focuses on the models and methods of supply chain and operations management (SCOM). Managerial approaches to planning, scheduling, and controlling cost, time quality, production, inventory, services, and supply chain are studied. This survey course exposes students to supply chain management, ERP systems, lean/just-in-time, total quality management, e-commerce, and other contemporary SCOM topics in both product and service-oriented organizations.

DSOM 5508 Statistical Analysis In Business Credits: 3
Data analysis and statistical inference in the context of business management. Communication of analysis and conclusions using text, numbers, and graphics is emphasized. Understanding the conceptual framework of probability and statistics as it relates to statistical tests and procedures is emphasized more than computational methods. Most of the work will be done using a computer spreadsheet. The course includes the topics of estimation, tests of hypotheses, analysis of variance, and multiple regression.

DSOM 5509 Applied Statistical Methods Credits: 2
Investigates the use of detailed sample data for purposes of estimating, predicting, forecasting, and explaining correlations among varied observations. Students will apply the concepts of probability theory, central tendency, sampling, inference, modeling, and forecasting to help solve managerial problems and support decision processes.
Prerequisites: Admission to Executive MBA Program.

DSOM 5514 Forecasting Theory And Applications Credits: 3
A study of the essential concepts, theoretical basis and applications of alternative forecasting methods. Typical methods included are smoothing and decomposition time-series methods, regression methods, econometric models, single and multiple series autoregressive/moving average methods (ARIMA methods of Box-Jenkins).
Prerequisites: DSOM 5508 (or equivalent).

DSOM 5516 Multivariate Statistical Methods Credits: 3
Theory and managerial applications of multiple regression analysis, multivariate analysis of variance, discriminant analysis, factor analysis and canonical correlation. Computations via statistical software and spreadsheets.
Prerequisite: DSOM 5508 or equivalent.

DSOM 5519 Supply Chain and Operations Management Credits: 3
An integrating study that focuses on the models, methods, and computer-based systems of supply chain and operations management (SCOM). Managerial approaches to planning, scheduling, and controlling cost, time, quality, production, inventory, services, and supply chains are studied. This survey course exposes students to supply chain management, ERP systems, lean/just-in-time, six sigma, total quality management, e-commerce, and other contemporary SCOM topics in both product and service-oriented organizations.
Prerequisites: ACCTNG 5517, DSOM 5508, and FIN 5501.

DSOM 5540 Service Operations Management Credits: 3
This course focuses on the increasing importance and role of service in our economy. Topics studied are: the role of services in an economy, the nature of services, service strategy, the service delivery system, service facility location, the service encounter, service quality, productivity and quality improvement. Methods of process analysis in service organizations, methods improvement procedures, and work measurement techniques are developed to provide the basis for analyses of processes, layouts, and job design in a service organization.
Prerequisites: DSOM 5519 (or equivalent).

DSOM 5542 ERP-Enterprise Resource Planning Systems Credits: 3
Discusses the design and implementation of Advanced Manufacturing Technologies (AMT). This includes just-in-time (JIT) systems, cellular and flexible manufacturing systems (CM FMS), computer integrated manufacturing (CIM), and enterprise resource Planning (ERP) systems. It also explores the role that manufacturing plays in product development efforts and cross-functional teams. Other topics such as manufacturing strategy, maintenance, set-up and lot size reductions, group technology and focused factories, production and operations scheduling and control techniques, and the design of work systems are presented as well. Case Studies and group projects/presentations are used for instructional purposes. Students are also required to use the MAX software to perform an ERP system analysis.
Prerequisites: DSOM 5519 (or equivalent).

DSOM 5543 Project Management Credits: 3
Planning and control of projects, to include network models, risk analysis, time reduction, resource scheduling, leadership, and evaluation.
Prerequisites: DSOM 5519 (or equivalent).

DSOM 5544 Global Supply Chain and Logistics Management Credits: 3
A study of integrated global supply chain management and logistics. Topics include integrating global ERP and forecasting systems, inventory management, distribution requirements planning, supply chain management, purchasing and supplier/vendor networks, logistics, transportation networks, and E-operations. ERP systems and network optimization are studied relative to both production and service operations.
Prerequisites: DSOM 5519 (or equivalent).

DSOM 5566 Operations Management for World Class Competitiveness Credits: 2
An examination of the basic principles and strategies used to manage the production and distribution of goods and services. This course positions operations management (OM) as an important tool for achieving strategic leadership through competitive advantage, and illustrates how the managerial integration of OM functions with corporate strategy improves business processes.
Prerequisites: Admission to the Executive MBA program.

DSOM 5587 Special Topics Credits: 3
This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

DSOM 5595 Internship Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

DSOM 5597 Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

DSOM 5899 Required Graduate Enrollment Credit: 1

Dental Hygiene (DENT-HYG)

Courses

DENT-HYG 5500 Introduction to Educational Methodology Credits: 3
This course is designed to introduce the student to basic educational methodologies and to provide participants with a better understanding of the teaching/learning process. The course includes units on instructor/student relationships, educational approaches, educational ethics and professionalism, the scholarship of teaching and learning and curriculum theory.

DENT-HYG 5502 Foundations of Teaching Credits: 2
This course provides an introduction to the evidence-based best practices in course design for students who are preparing for a ca5reer in teaching and for those who simply wish to learn more about classroom instruction. Students will explore outcomes centered course design. Content application activities include syllabus development, writing objectives, constructing lesson plans, preparing presentations, developing course management sites, and test development.
Prerequisites: Must be a student enrolled in the MSDHE program.

DENT-HYG 5510 Student Teaching and Conference I Credits: 2-4
Student teaching experience in classroom areas as selected by the student under the direction of a supervising professor. The student develops behavioral course objectives, test and examination items, classroom presentations, and prepares student evaluations in the selected classroom teaching areas. The student may select teaching assignments in one of the developed externship student teaching programs. Conferences will be held in conjunction with the course.
Prerequisites: DENT-HYG 4040, DENT-HYG 5500.

DENT-HYG 5512 Student Teaching and Conference II Credits: 2-4
This course is designed to provide the graduate dental hygiene student with additional experience in classroom teaching. Student teaching experiences will be selected by the student under the direction of and in conference with a supervising professor.

DENT-HYG 5516 Special Issues in Higher Education for Health Professional Credits: 3
This course is designed to introduce the student to matters encountered in higher education - specific to dental hygiene education. Weekly readings, assignments, and sessions will familiarize the student in topics such as: writing resumes and cvs, motivational interviewing, accreditation, promotion and tenure, and social media.

DENT-HYG 5520 Independent Study in Hospital Dentistry Credits: 2-4
An introduction to the role of the dental hygienist in one or more clinical settings within the hospital environment. The settings may include the operating room, surgical wards, prenatal clinics, post-partum area, medical docent teams, medical clinics, specialty clinics and other areas of special interest. Specific student experiences are to be arranged in consultation with and under the direction of the hospital dental hygiene faculty member.

DENT-HYG 5530 Clinical Instruction and Conference I Credits: 2-4
Students will actively participate in clinical instruction under the supervision of a dental hygiene faculty member. Topics relative to clinical teaching will be discussed in weekly seminars. Students will be encouraged to apply knowledge gained in DENT-HYG 4620 and DENT-HYG 5500 during clinical instructional experiences. Additionally the student must participate in at least ½ day of clinic per week to equal another credit hour of course work.

DENT-HYG 5532 Clinical Instruction and Conference II Credits: 2-4
This course is a continuation of DENT-HYG 5530. Under the supervision of the dental hygiene faculty, the student will continue to develop skills as a dental hygiene clinical instructor.
Prerequisites: DENT-HYG 5530.

DENT-HYG 5553 Evidence Based Decision Making in the Clinical Practice of Dental Hygiene Credits: 2-4
This course is designed for the graduate and degree completion dental hygiene student and will expand on the student's basic knowledge of the dental hygiene process of care. Utilization of evidence based decision making skills will be explored in an effort to incorporate current scientific literature, personal clinical experience and patient preferences as it relates to the delivery of comprehensive patient care. Skills taught in this course will enhance background knowledge related to the dental hygiene process of care and help to foster an attitude of critical analysis and life-long learning.

DENT-HYG 5560 Practicum in Clinical Supervision and Management Credits: 2-4
Practical experience in functioning as a Clinic Supervisor. Clinical managerial projects will be assigned according to students' interests and goals by agreement between student and instructor.

DENT-HYG 5565 Advanced Special Patient Care Practicum I Credits: 1-4
This course is designed to familiarize the student with general principles of cancer therapy and the role of the dental team in the multidisciplinary care of patients undergoing oncology treatments. Special emphasis will be placed on the treatment of the patient with head and neck cancer, and preventive and palliative dental interventions for control of the orl complications associated with all cancer therapies. Cancer prevention issues and the psychosocial and economic impact of cancer diagnosis will also be discussed.

DENT-HYG 5566 Advanced Special Patient Care Practicum II Credits: 1-4
This course will provide the graduate dental hygiene student with the opportunity to explore the relationship of an oncology dental program to medical health care facilities.

DENT-HYG 5570 Administrative Practicum Credits: 1-4
Practical experience in administration. The student selects areas of responsibility based on their goals and interests in administration. Possible areas of involvement are: recruitment, admissions, curriculum and course development, course scheduling, grant and report writing and student advising.

DENT-HYG 5575 Extended Care Permit: Dental Safety Net in Kansas & Missouri Credits: 3
This course is designed to increase the knowledge base of practicing dental hygienists in the area of public health dentistry, including health promotion, disease prevention, current legislation, evidence based treatment, school based portable dentistry, coalitions, treating the geriatric and disabled populations, as well as how to write and secure grant monies. In addition, the course will expose dental hygienists to a variety of public health settings in which they can practice with an Extended Care Permit (in KS) or the Dental Hygiene Designation (in MO). Information on how to apply for the permits will also be shared.

DENT-HYG 5576 Extended Care Permit (ECP) III Training Course Credits: 2
The Extended Care Permit (ECP) III Training Course is designed to prepare a registered dental hygienist to apply for the Kansas Extended Care Permit III. Hygienists with the ECP III certificate can practice under the sponsorship of a dentist in a variety of public health settings including schools and long term care facilities in Kansas.
Prerequisites: Must be a student enrolled in the MSDHE program.

DENT-HYG 5585 Portfolio Capstone Course Credit: 1
This capstone course serves as the culminating experience for students in the MS in Dental Hygiene Education (MS in DHE). During the Capstone course, students will create a coherent and cohesive body of work reflective of attainment of the competencies for their respective programs - in the form of an e-Portfolio. This course should be taken in the semester of anticipated completion/graduation of the MS In DHE program.

DENT-HYG 5590 Independent Study Credits: 1-4
Independent study of a particular topic or area of interest to the student in dental hygiene/dentistry and/or higher education.

DENT-HYG 5595 Writing in Science Credits: 1-2
This seminar course is designed to provide advanced education students in the health professions the skills necessary to write and communicate in science. Course activities and topics include: critical analysis of the literature, literature summary tables, structure and organization of documents, style and usuage, drafting, revising and finishing. Participants will practice the craft of scientific writing not only as the writer but also as the reader providing correction and reorganization where appropriate. While this course examines many writing tasks, exercise culminate with the development of a research protocol or scientific article.

DENT-HYG 5599 Research And Thesis Credits: 1-6
This course is designed to support the research process from protocol development through data collection and report of results. Research committee chairperson typically serves as the course director.

Dentistry Professional (DENT)

Courses

DENT 6203 Oral Surgery Clinical II Credit: 1

DENT 6305 Operative Dentistry I Lecture Credit: 1
An introduction to the prevention and principles of the restorative treatment of dental caries.

DENT 6305L Operative Dentistry I Laboratory Credits: 2
Restorative procedures discussed in DENT 6305 are performed on laboratory manikins.

DENT 6306 Transitions: An Introduction to the Profession and Practice of Dentistry Credit: 1.5
This course is the first in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of ethics, professionalism and practice management. The courses use self-assessment and strategic planning as foundations and lead the students through identification of personal and professional aspirations, and culminate in building each student’s competence in dental practice management.

DENT 6307 Transitions: Introduction to the Profession & Practice of Dentistry II Credit: 1
This course is the second in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course builds on strategic planning foundation to gain an understanding of personal financial management in the context of personal and professional goals in the field of dentistry.

DENT 6310C Patient Care I Credits: 3
This course introduces the dental student to the foundation knowledge and skills and values for the provision of oral health care. This includes infection control, cubicle set-up and breakdown, dental assisting, patient/operator positioning, patient vital signs, radiographic techniques, patient communication and basic concepts of oral health and disease. Students will assist third and fourth year students in various clinical areas after appropriate preparation, and will provide oral hygiene instruction for elementary age students.

DENT 6312 Dental Behavioral Science I Credits: 1-2
An introduction to the basic principles of behavioral science as they relate to oral self-care. Topics include basic principles of human behavior, adherence and motivational interviewing. Students will complete an in-depth motivational project and a communation basic skills exam with selected patients.

DENT 6313 Applied Biochemistry Credits: 4
This is a course geared to the biomedical foundation knowledge of dental students. The course is composed of six sections focused on clinically important topic areas each cumulating with a clinical presentation. Course content will intentionally emphasize new knowledge areas in cancer, inflammation, genetic diseases, metabolic diseases, mineralized tissues in health and disease, oral health, hormone actin, and blood coagulation/wound healing.
Prerequisites: an Undergraduate Biochemistry course.

DENT 6314C Patient Care II Credits: 3
This course builds on the skills introduced in DENT 6310C with a review and the continuation of the clinical rotations. In addition, students will learn the steps of a basic oral diagnosis, and will demonstrate their understanding with graded peer exams and by performing selected portions of a diagnosis on two clinic patients with the assistance of a 3rd or 4th year dental student.

DENT 6315C Patient Care III Credit: 1
This course introduces preventive theory necessary to provide patient care. Students are introduced to fundamental clinical procedures including dental deposits, gingival assessment, identification and classification of periodontal diseases, and periodontal probing. The information learned in this course continues in fall, second year (Patient Care IV) where student are introduced to basic periodontal instrumentation skills to assess and treat simple patients.

DENT 6316 Dental Morphology Credits: 3
This lecture/laboratory course introduces the student to the anatomy of the oral cavity and structures of the stomatognathic system. A thorough review of dental anatomy and dental terminology of the primary and permanent dentition will be presented. The students' knowledge of dental morphology will be reinforced by constructing wax models of permanent dentition.

DENT 6317 Dental Occlusion Credits: 3
This lecture/laboratory course will review the principles of occlusion and the anatomy and function of the stomatognathic system. The course will also provide an introduction to temporomandibular disorders and pathological changes caused by the occlusion. The practical application of gnathologic instruments is demonstrated in the laboratory, followed by occlusal treatments useful in the management of temporomandibular disorders. The judicious use of gnathologic instruments in dental reconstruction and occlusal therapy will be reviewed.

DENT 6318 Dental Biomaterials Credit: 1
This course combines the sciences of chemistry, physics, biology, materials science, and engineering to explain the use and behavior of a variety of materials used in dentistry. The purpose of the course is to provide an expanded overview and a clinically-focused approach to the selection and application of biomaterials used throughout dentistry.

DENT 6328 Clinical Decision Making in Dentistry Credits: 1-2
An experiential course that uses current controversies in to facilitate development of skills needed for making valid decision in clinical dentistry. Students will apply basic principles of database searching, research design and methodology to the critical analysis of contemporary dental literature. This one-hour course will: 1) Provide you with sufficient information to perform week on the portions of the national boards that deal with research design and methodology; and , 2) give you skills sufficient to search for, locate, and evaluate valid information related to clinical questions in contemporary dentistry.

DENT 6350 Introduction To The Histopathology Of Oral Tissues Credits: 2.5
A comparison of the microscopic anatomy of healthy and diseased oral tissues.

DENT 6352 Patient Care IV Credits: 3
This course is a continuation of DENT 6315C which introduces preventive theory and the instrumentation skills necessary to provide patient care. Students are introduced to fundamental clinical procedures including plaque control, gingival assessment, and periodontal probing. Basic periodontal instrumentation skills are introduced.

DENT 6390 Dental Research Experience Credit: 1
This independent study course focuses upon experience gained in both an area of dental research as well as the process of research in working with an established dental researcher.

DENT 6402 Transitions: Introduction to the Profession and Practice of Dentistry III Credits: 0.5
This course is the third in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course builds on strategic planning foundation established in year one to gain an understanding planning for development of a dental practice.

DENT 6403 Transitions: Introduction to the Profession & Practice of Dentistry IV Credits: 0.5
This course is the fourth in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course continues the strategic planning framework as the dental practice business plan is developed. The focus for this course is on managing the finances of a dental practice.

DENT 6410 Operative Dentistry II Lecture Credit: 1
A continuation of DENT 6305. Principles of cavity preparation, materials and techniques are stressed.

DENT 6410L Operative Dentistry II Laboratory Credits: 2
A continuation of DENT 6305L. Restorative procedures are performed on laboratory manikins and extracted teeth.

DENT 6411 Operative Dentistry III Lecture Credit: 1
A continuation of DENT 6410.

DENT 6412 Anesthesiology I Lecture Credit: 1
Infiltration and regional anesthesia; technique of injections; complications of local anesthesia; a brief overview of conscious sedation.

DENT 6414 Pathology I Lecture Credits: 4
The general etiology of disease; circulatory and metabolic disorders; degenerative processes; inflammation; infection and immunity; tumors; and organ system pathology.

DENT 6415 Pathology II Credits: 2
A study of developmental defects, inflammatory diseases, and neoplasia of the oral region.

DENT 6416 Complete Removable Prosthodontics Credit: 1
This course will introduce the dental student to concepts and procedures involved in the rehabilitation of the completely edentulous patient. Information presented will include proper clinical examination techniques, an evaluation of the findings and their impact on treatment and treatment options. The student will become familiar with the clinical steps involved in the fabrication of complete dentures and the rationale supporting these procedures. Laboratory steps as they relate to clinical treatment procedures will also be discussed. There will be additional information presented regarding single complete dentures, immediate dentures, overdentures, implant-retained complete dentures, and rebasing and relining techniques.

DENT 6416L Complete Removable Prosthodontics I Laboratory Credits: 2
This course will introduce the student to the clinical and laboratory steps involved in the fabrication of complete dentures. Students will learn how to manipulate the materials involved as well as indications for their usage. The course will be structured to closely resemble the clinical experience in concept and techniques where feasible. The goal is to teach the skills necessary to manage edentulous patients and also to teach in detail the entire process of complete denture fabrication. This will enhance overall dental skills and provide a knowledge base with which to critically evaluate laboratory procedures and results. This laboratory course provides the student the opportunity to acquire the foundational skills, which must be mastered before clinical competency, can be attained. A goal of the course is to provide the opportunity for the student to acquire the hand/eye skills, which are necessary to treat the edentulous patient in a clinical setting.

DENT 6417 Removable Partial Prosthodontics Credit: 1
In lecture students will study terminology and all aspects of removable partial denture design theory to provide health, longevity, and esthetics of the prosthesis and periodontium.

DENT 6417L Removable Partial Prosthodontics Laboratory Credits: 2
Laboratory experience in the survey and design of partially edentulous casts making master impressions, recording jaw relation records, setting teeth, and processing a removable partial denture for a manikin.

DENT 6420 Periodontics I Credits: 2
It is the scope of this course to introduce the basic disease mechanisms involved in the evolution of the inflammatory periodontal lesion; i.e., the interaction of the host tissues with the oral microbial flora. The course will cover the entire range of possible periodontal diseases, ranging from simple marginal gingivitis to AIDS related necrotizing ulcerative periodontitis. Further, the course will continually reinforce the science of periodontology and its overwhelming relationship to the clinical practice of periodontics.

DENT 6422 Fixed Prosthodontics I Lecture Credit: 1
This course is designed to provide the foundation knowledge needed by the novice to formulate clinical judgments in the areas of treatment planning, tooth preparation, and the selection and use of dental biomaterials for the restoration of single teeth with fixed prosthodontic restorations. The topics covered also include provisional restorations, impressions materials and technique, dental cements, and laboratory aspects involved in the fabrication of cast gold crowns.

DENT 6422L Fixed Prosthodontics I Laboratory Credits: 2
The second course in the fixed prosthodontic curriculum is designed to provide foundation knowledge needed by the novice to formulate clinical judgments in the areas of treatment planning, tooth preparation, and the selection and use of dental biomaterials for the restoration of missing teeth with fixed partial dentures and implants.

DENT 6423 Fixed Prosthodontics II Lecture Credit: 1
The second course in the fixed prosthodontic curriculum is designed to provide foundation knowledge needed by the novice to formulate clinical judgments in the areas of treatment planning, tooth preparation, and the selection and use of dental biomaterials for the restoration of missing teeth with fixed partial dentures and implants.

DENT 6423L Fixed Prosthodontics II Laboratory Credits: 2
The second laboratory course in fixed prosthodontics is focused on the replacement of missing teeth with fixed partial dentures and implant restoration. Projects build the skills to begin development of clinical competence in fixed partial dentures and implant restorations.

DENT 6424 Oral Diagnosis And Oral Medicine Credits: 1-2
Includes presentation of the principles of history taking and examination of the patient, the signs and symptoms of diseases and the medical management of patients with illness. The dental management of patients with systemic disease is stressed.

DENT 6426 Oral Radiology Lecture Credits: 2
Radiation physics, radiation biology, quality assurance, imaging principles, radiation hygiene, radiographic interpretation and techniques of intra-oral survey are presented.

DENT 6429 Dental Behavioral Science II Credit: 1
This course builds upon the foundational material with a focus on dealing with challenging patients and managing professional stress. Students will complete an in-depth anxiety management project and communication competency exam with selected patients.

DENT 6431 Pediatric Dentistry I Lecture Credit: 1
The overall goal of this didactic course is to provide the student with the fundamental knowledge necessary to provide comprehensive dental care to pediatric patients. In addition, this course strives to develop an attitude towards learning such that the student will seek opportunities to further his/her knowledge and skills in pediatric dentistry subsequent to graduation. Finally, this course is intended to sensitize students to their responsibility as health care providers for the children in their community.

DENT 6435 Endodontics I Lecture Credit: 1
An introductory course in endodontics emphasizing pulp and periapical biology and pathology. Extra emphasis will be placed on endodontic diagnosis of non-odontogenic facial pain, problems with anesthesia in endodontics and treatment planning.

DENT 6436 Orthodontics: Growth And Development Credit: 1
Certain malocclusions and dental deformities can occur due variations in growth and normal developmental process. In order to treat and understand these problems, an in-depth and through understanding of craniofacial growth and development is necessary. Understanding how and when the face and head is actively growing will enable the clinician to redirect facial growth to reduce the severity of forming skeletal/ dental malocclusions. Since orthodontic treatment may involve the modification and/ort manipulation of skeletal growth, it is important not only to understand dental development but also physical, physiologic and psychosocial development. This course is designed to address these needs.

DENT 6439 Medical Emergencies In The Dental Office Credit: 1

DENT 6440 Oral Surgery I Credit: 1
An introduction to the basic principles of oral surgery.

DENT 6441C Treatment Planning Credits: 2
The student is introduced to comprehensive treatment planning in dentistry using lectures, cases, and class discussions.

DENT 6442 Endodontics II Lecture Credit: 1
A continuation of the study of endodontics emphasizing non-surgical endodontics, surgical endodontics and post-endodontic treatment.

DENT 6442L Endodontics Laboratory Credits: 2
The preparation and filling of root canals of extracted teeth in the laboratory setting.

DENT 6460C Review of Pre-Clinical Dentistry Credits: 2
A combination of lecture, selected readings and independent study designed to reinforce and integrate concepts contained in the pre-clinical dental curriculum. The course will meet for 3 hours each week for the first 7 weeks of the term, with an additional 11 hours of independent computer-aided study required during this period.

DENT 6501C Intro to Comprehensive Patient Care Credits: 1-10
The purpose of this course is to introduce the student to the clinical environment and to familiarize him/her with comprehensive patient care. In addition, it allows the student to develop and interpret basic diagnostic aids that enable him/her to arrive at a diagnosis and treatment outline, the beginning steps of comprehensive care. Patient care is provided following the outlined treatment plan. The student will apply the principles/concepts of patient care. Students begin treatment of a "family" of patients under faculty supervision.

DENT 6502 Grand Rounds I Credit: 1
Students prepare to develop and present oral reports typically given at professional meetings such as case presentations, table clinics, research reports or presentatons of new techniques (such as in Table Clinic requirements or Senior Grand Rounds). This course will expand on the student’s basic knowledge of critical review of scientific literature and information literacy. Cases and problems in denistry and oral health will be the context for identification and application of current valid scientific literature. This course seeks to foster an attitude of critical analysis and commitment to life-long learning.

DENT 6504 Community and Professional Education Credit: 1
Preventive oral health education to school-aged children and scientific presentation to a professional audience.

DENT 6509C Comprehensive Patient Care I Credits: 1-10
Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skills through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6510C Comprehensive Patient Care II Credits: 1-10
Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skills through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6514 Pathology III Lecture Credit: 1
Continued study of pathological conditions of the oral region with emphasis on clinical signs and symptoms.

DENT 6515 Periodontics II Credit: 1
The overall goal of this course is to help the pre-doctoral students to recognize periodontal disease and treatment plan the needed periodontal therapy. Specific goals are to enhance the student’s knowledge of the surgical aspects of periodontal therapy, and the relationship of periodontal disease and its treatment to the overall dental treatment plan.

DENT 6517 International Outreach Credit: 1
Students in predoctoral dental education or advanced education in the dental school will have the opportunity to apply knowledge and skills while delivering care in a international setting.The long range goal is a practitioner who is sensitive to diverse community needs.

DENT 6518 Transitions: Introduction to the Profession & Practice of Dentistry V Credits: 0.5
This course is the fifth course in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course continues the strategic planning framework and focuses on practice building strategies.

DENT 6520 Transitions: Introduction to the Profession & Practice of Dentistry VI Credits: 0.5
This course is the sixth course in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course continues with the strategic planning framework and focuses on the skills, knowledge and attitudes necessary for the day to day leadership of a dental practice.

DENT 6521 Oral Surgery II Lecture Credit: 1
The diagnosis and treatment planning of fractures, cysts, neoplasms, and other problems in oral pathology of the mandible and maxilla and associated anatomical structures.

DENT 6521C Periodontics Clinical I Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6522 Oral Surgery Lecture III Credit: 1
A continuation of DENT 6521.

DENT 6524 Principles Of Medicine And Physical Diagnosis Credits: 2
Includes presentation of the principles of history-taking and examination of the patient, the signs and symptoms of diseases and the medical management of patients with illness. The dental management of patients with systemic disease is stressed.

DENT 6526 Orthodontics I Credit: 1
OrthodonticsI is a course designed to introduce the student to the field of orthodontics. The lecture will introduce the student to basic orthodontic terminology, description, diagnosis, and mechanotherapy. This course will prepare the student for the clinical treatment of patients needing limited tooth movement.

DENT 6526C Preventive Dentistry Clinical Credit: 1
Clinical application of those principles taught in preceding terms.

DENT 6526L Orthodontics I Laboratory Credits: 2
This is a course designed to introduce the student to the field of orthodontics. The laboratory enables the student to master the materials of orthodontics in order to complete diagnostic records, to construct fixed and removable appliances, and to be familiar with tooth movement mechanics. This course will prepare the student for clinical treatment of patients needing limited tooth movement.

DENT 6527 Pharmacotherapeutics Credits: 2
This course will provide the background necessary for the dentist to become knowledgeable about the drugs their patients may be taking and their related medical conditions. Lecture topics include the diseases and medical conditions commonly seen in dental patients on an outpatient basis. The course presents the effects, mechanisms of action, dosage forms, and relevant pharmacokinetics for the drugs used in the management of these diseases. The course will cover the important side-effects and precautions of drugs that are pertinent to the safe management of dental patients.

DENT 6531 Complete Removable Prosthodontics II Lecture Credit: 1
Advanced principles of complete denture construction are stressed and emphasis on their clinical application is included. Additional clinical approaches to the partial and completely edentulous patient are explored.

DENT 6531C Oral Diagnosis Clinical I Credits: 1-2
Clinical application of diagnostic principles. Students will complete a diagnostic basic skills examination on a selected patient.

DENT 6532C Oral Diagnosis Clinical II Credits: 1-2
Further clinical application of diagnostic principles. Students will complete a diagnostic competency examination on a selected patient.

DENT 6534 Advanced Predoctoral Prosthodontics Credit: 1
This course reviews advanced principals in Fixed and Removable Prosthodontics. Using evidenced based concepts, information will be presented to aid the student clinician make well informed clinical choices which will help prepare them for the use of prosthodontic techniques in the practice of general dentistry. A variety of materials, devices, and concepts will be presented. Making intelligent choices in the selection and use of these restorative materials and concepts will be a focus.

DENT 6537 Oral Oncology Credits: 0.5
A lecture course on oral oncology will deal with the biologic aspects of cancer; the detection of oral cancer and the different modalities of treatment of cancer; the dental aspects both from surgical reconstruction and prosthetic reconstruction following cancer surgery; and management of the patient prior to, during, and following radiation therapy to the head and neck and during chemotherapy for systemic cancer.

DENT 6538 Orthodontics II Credit: 1
This course will present a variety of topics related to orthodontics, such as: normal development, abnormal occlusal deviations during the developing permanent dentition, diagnosis and treatment planning of orthodontic problems, biomechanical principles in orthodontics, adolescent vs. adult orthodontics, peridontal health during orthodontic treatment, complications associated with orthodontic treatment and controversial aspect of orthodontics. You should also be able to recognize which kind of cases exceed the scope of limited treatment and may require intervention by a specialist.

DENT 6542C Operative Dentistry Clinical I Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6551CR Oral Surgery Clinical Credits: 2
This is a course for application of principles taught in didactic courses (DENT 6412, DENT 6439, DENT 6440, DENT 6521, DENT 6522, and DENT 6610) and the Oral Surgery Rotations. Oral Surgery Clinical is designed to prepare the dental student with the necessary didactic and clinical skills to properly evaluate patients and provide Oral Surgery care in a safe effective and caring manner and to evaluate competency in two areas: managing medical emergencies and oral surgical skills expected of a general dentist.

DENT 6556 Radiographic Interpretation Credit: 1
This is a comprehensive multidisciplinary course in radiologic interpretation of normal anatomy, anomalies, dental caries, periodontal disease, periapical pathology and infections of the maxilla and mandible.

DENT 6558C Treatment Planning I Credit: 1

DENT 6559 Diagnosis And Management Of Orofacial Pain Credit: 1
Essential conceptual, clinical and technical information and skills necessary in the diagnosis and treatment of Orofacial Pain States. Diagnostic protocols and radiographic procedures and their integration as it relates to painful head and neck conditions are presented in depth. Differential diagnosis and special diagnostic techniques are also addressed. Behavioral factors associated with the development of chronic pain and complicating the management of pain states are identified and discussed.

DENT 6562C Removable Prosthodontics Clinical Credit: 1
Clinical application of those principles taught in preceding terms.

DENT 6564 Introduction to Pharmacology Credits: 2
This course presents an introduction into the mechanisms of action, pharmacodynamics, adverse-effects, dosage forms, relevant pharmacokinetics, for the most common outpatient drugs prescribed and used by patients seen by the dentist. This self-study course represents a more independent approach to the teaching of second year dental school pharmacology. The online format will methodically guide the student through the textbook, providing goals and additional references that allow for the self-study of pharmacology. the online course substitutes for the lecture by highlighting important areas of pharmacology that need particular attention and helps focus the dental student’s time. Be removing the lecture component of the course, the student is allowed to study at times and places of their preference. This allows more flexibility with time, but requires more self-discipline and time management skills from the student.

DENT 6566 Bridge Course Credits: 2
This course is designed as a lecture and clinical course to provide a transition into the clinical phase of the dental curriculum for the third year dental student.

DENT 6591C Professional Development I Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6592C Professional Development II Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6593C Professional Development III Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6595 Introduction To Implant Dentistry Credit: 1
To provide the undergraduate student with a solid background into the role of implant dentistry in their profession. Advances in technique and materials which are responsible for improved predictability will be presented. Emphasis will be on patient selection, treatment planning and basic restorative techniques. The student will be able to initiate uncomplicated dental implant procedures with this information and will be prepared to enter into more advanced continuing education and graduate programs in this subject.

DENT 6600 Review Of Clinical Dentistry Credits: 1-2
A summative review of the basic areas of clinical dentistry.

DENT 6601C Endodontics Clinical Credits: 1-2
Clinical application of principles taught in preceding terms.

DENT 6602 Grand Rounds II Credit: 1
This course is a continuation of Grand Rounds I and its aim is similar to Grand Rounds I: expand on the dental student’s basic knowledge of critical review of scientific literature and information literacy. Students will present a Table Clinic at Midwest Dental Conference and prepare a proposal for their senior Grand Rounds presentation.

DENT 6603 Grand Rounds III Credit: 1
Grand Rounds III is an independent study course designed to develop research skills required to keep abreast of current concepts in dentistry, develop the organizational skills needed for an effective case presentation, and develop professional public speaking skills. After completing relevant literature research, the student will prepare the presentation of a case study and give a multimedia presentation to peers and colleagues.

DENT 6604 Grand Rounds IV Credit: 1
Grand Rounds IV continues DENT 6603 and is an independent study course designed to develop research skills required to keep abreast of current concepts in dentistry, develop the organizational skills needed for an effective case presentation, and develop professional public speaking skills. After completing relevant literature research, the student will prepare the presentation of a case study and give a multimedia presentation to peers and colleagues.

DENT 6605 Review Of Clinical Dentistry II Credits: 1-2
A review of foundation knowledge for clinical dentistry.

DENT 6606C Pediatric Dentistry Clinical I Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6607C Pediatric Dentistry Clinical II Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6608C Pediatric Dentistry Clinical III Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6609C Comprehensive Patient Care III Credits: 1-10
Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skills through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6610 Anxiety And Pain Control In Dentistry Credit: 1
Techniques of selecting, administering and evaluating inhalation and intravenous sedation agents. An introduction to general anesthesia will also be included. Clinical experience in inhalation and intravenous sedation is highly desirable.

DENT 6610C Comprehensive Patient Care Iv Credits: 1-10
Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skill through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6611C Fixed Prosthodontics Clinical I Credits: 1-2
Clinical application of principles taught in preceding terms.

DENT 6613 Periodontal Treatment Planning Credit: 1

DENT 6614 Dentistry For The Special Patient Credits: 1-2
The purpose of this course is to acquaint the student with the dental treatment of three populations of patients who you may encounter in your dental career (and often have trouble finding adequate care). They include patients who are developmentally disabled, the elderly, and the medically-compromised. The course will present management techniques for in-office treatment and appropriate referral of those patients best treated in another setting. This course builds upon the skills and knowledge gained in previous courses in many disciplines, to provide an interdisciplinary experience with special patient populations. A required rotation at the Regional Center for the Developmentally Disabled gives practical experience to topics covered in lecture.

DENT 6614C Comprehensive Patient Care V Credits: 1-10
Third and fourth year dental students will spend the majority of their curriculum time mastering the competencies required of a general dentist. This includes the ability to complete a dental diagnosis and treatment plan, present the case to the patient, implement and evaluate the dental care delivered. Comprehensive patient care courses foster development of skill through daily evaluation in technique, patient management, and diagnostic ability, supplemented by periodic mentor and team faculty evaluation. Semester evaluation will also take into account clinical productivity using a time unit system.

DENT 6615 Transitions: Introduction to the Profession & Practice of Dentistry VII Credit: 1
This is the seventh course in a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course continues with the strategic planning framework and focuses on the development of a dental practice business plan.

DENT 6616 Transitions: Introduction to the Profession and Practice of Dentistry VIII Credits: 0.5
This course is a continuation of a sequence of courses throughout the dental education curriculum designed to prepare the graduate dentist in the skills and values of professionalism, practice management and ethics. This course allows fourth year dental students to apply concepts and principles presented in the previous practice management courses in the Innovation Center and in small group seminars. A series of small group seminars will allow for in-depth discussion of professional issues.

DENT 6617 Pediatric Dentistry Seminar Credits: 0.5
This course is designed to allow fourth year students to build on the concepts presented in DENT 6431. Using a seminar format, students will review pediatric dentistry concepts with emphasis on clinical application.

DENT 6618 Dental Jurisprudence Credit: 1
Legal aspects of dentistry to include dentist-patient and dentist-state relationships, risk management and malpractice prevention and claim handling, business and employment issues. Overview of common contractual terms in employment, associateship, partnership and other business contracts.

DENT 6621C Periodontics Clinical II Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6622C Periodontics Clinical Iv Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6626 Clinical Treatment Planning Credit: 1
This course builds on the didactic courses and clinical experiences in treatment planning. Each student will demonstrate competency in comprehensive treatment planning to earn credit in the course.

DENT 6630 Practice Management I Credit: 1
A consideration and evaluation of the various economic factors and managerial practices that affect the operational aspects of the practice of dentistry. The course provides a working knowledge of basic practice management topics to help future dentists operate and/or be members of a dental practice. Various systems of practice will be presented givng students the opportunity to develop their own philosophy of practce (The Practice Blueprint).
The course will expose students to basic business and economic principles, practical information on the daily operation of a dental practice, different oportunities available to practice dentistry, enhance their interpersonal communication skills and prepare them for life outside of dental school.

DENT 6631 Practice Management II Credit: 1
A continuation of the objectives of DENT 6630. Students will be introduced to the financial and economic skills necessary for operating a small business (i.e. a dental practice). Upon completion, students should feel competent in operating the business side of their practice profitably. Resources and ongoing support are also provided.

DENT 6633 Introduction To Dental Public Health Credit: 1
Discussion of contemporary issues in community health and community oral health with emphasis on preparing students for their roles as professional members of their communities.

DENT 6634 Community-Based Dental Education (CODE) I Credit: 1
The purpose of this course is to expose third and forth year dental students to alternative methods of dental care delivery to populations at high risk for dental disease. Specifically the course places junior and senior students in an existing network of community health centers and rural outreach sites

DENT 6635 Community-Based Dental Education (CODE) II Credit: 1
Prerequisites: DENT 6634, Completion of Third Year.

DENT 6636C Oral Radiology Clinical Credits: 2
Clinical application of those principles taught in preceding terms with emphasis on use of a variety of film holding devices. Radiographic quality assurance and darkroom maintenance will be reviewed during this course.

DENT 6641CR Operative Dentistry Clinical I Credits: 1-2
Clinical application of principles taught in preceding terms.

DENT 6642C Operative Dentistry Clinical II Credits: 1-2
Clinical application of those principles taught in preceding terms.

DENT 6650 Applied Ethics Credits: 0.5
Four or five case studies will be used during seminars. Basic ethical principles from DENT 6306 will be applied to the case studies. Two of the cases will involve ethical issues, and one of the cases will add community dentistry issues. Other cases will be used as generated or suggested by each seminar group.

DENT 6656C Orthodontic Clinical I Credit: 1
The purpose of this course is to allow each student to develop the skills, knowledge and values to diagnose potential or actual malocclusions and manage patient who need orthodontic intervention.

DENT 6657C Orthodontic Clinical II Credits: 0.5
A continuation of DENT 6656C.

DENT 6690 Independent Study in Dentistry Credits: 1-6
This course provides students the opportunity to undertake independent study projects in specific areas of dentistry. Course may be repeated.

DENT 6691C Professional Development Iv Credits: 0.5-3
Clinical application of those principles taught in preceding terms.

DENT 6692C Professional Development V Credits: 1-2
Clinical application of those principles taught in preceding terms.

Dentistry-Biological Sciences (BIO-SCI)

Courses

BIO-SCI 5700 Biomaterials Teaching Credits: 2
Through this course, students will acquire teaching experience in graduate and undergraduate biomaterials.

BIO-SCI 5706 Growth and Development I Credit: 1
A course designed to teach the general principles of normal and abnormal physical, psychological and social growth and development of children and adolescents. The growth and development of the craniofacial structures is emphasized.The diagnosis of malocclusions is stressed. Consideration is given to possible approaches to their treatment.

BIO-SCI 5707 Growth and Development II Credits: 1-2
A comprehensive study of the genetical aspects of growth and development with special analysis of the molecular control of these processes by both intrinsic and epigenetic factors.
Prerequisites: BIO-SCI 5706.

BIO-SCI 5710 Genetics and Biochemistry of Cranial Facial Biology Credits: 2
Biochemistry of oral structures and the effect of oral diseases on these structures. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. programs.

BIO-SCI 5739 Biomaterials for the Dental Specialist Credit: 1
Discussion of basic biomaterials principles and terminology including explanation of physical, mechanical and surface chemical properties, metallurgy, polymer chemistry, ceramics and composites. Clinical examples of how these principles apply to Prosthodontics, Endodontics and Orthodontics will be presented. Students cannot take both this course and BIO-SCI 5742 for credit.

BIO-SCI 5740 Oral Pathology I Credits: 2
A study of the clinical and histopathologic features of oral diseases, including inflammatory, degenerative, metabolic, and neoplastic diseases and developmental disturbances.

BIO-SCI 5742 Biomaterials for the Restorative and General Dentist Credits: 2
A thorough discussion of basic biomaterials principles and how they apply to the practice of general and restorative dentistry. Students cannot take both this course and BIO-SCI 5739 for credit.

BIO-SCI 5743 Advanced Seminar in Dental Biomaterials Credits: 1-2
The use and behavior of dental biomaterials in Pediatric Dentistry, Prosthodontics, Orthodontics, and Restorative Dentistry will be discussed in depth. Current basic and clinical literature related to these areas will be discussed and research information to improve dental practice will be presented.
Prerequisite: BIO-SCI 5739 (or BIO-SCI 5742).

BIO-SCI 5747 Research Instrumentation Used in Dental Biomaterials Credits: 2-4
A discussion and laboratory use of instrumentation employed in dental biomaterials research. Practical hands-on experience will include calibration and use of specific research equipment including the Instron, metallurgical mounting and polishing equipment, measuring microscope, metallograph, and contact angle gonemeter.

BIO-SCI 5749 Special Problems In Oral Pathology Credits: 1-2
The student will review surgical cases and literature pertinent to those cases under the guidance of faculty members of the department.

BIO-SCI 5750 Special Problems in Dental Biomaterials Credits: 2-4
The student will select or be assigned a special research problem including appropriate literature reviews of a special topic in dental biomaterials. Emphasis will be placed on the correlation between basic and clinical research. The design and conduct of clinical research will be discussed.

BIO-SCI 5751 Elements of the Scientific Method Credits: 1-2
Through individualized instruction with thesis committee chair, student will conduct a literature review in preparation for developing a research question leading to the thesis research proposal. Students will select and rotate through a minimum of four laboratories in the Department of Oral Biology conducting a short research project in each. At the end of the semester, a report is required reviewing the research project and the instrumentation in each laboratory. Students are also required to attend the weekly Department of Oral Biology Seminar Series and the monthly Professional Development Seminar Series. Research presentations cover a variety of biological, engineering and psychological disciplines relevant to oral science education and the oral health care profession. Presentations will be by faculty, students, and invited guest lecturers.

BIO-SCI 5752 Research Methods in Oral and Craniofacial Sciences Credits: 1-5
Student will write the thesis research proposal in consultation with committee chair and members plus obtain appropriate IRB and/or IACUC approvals. For the MS degree qualifying exam, the student will write the research proposal, present the research proposal at a committee meeting, and answer related questions. Following the successful completion of the qualifying exam, the research proposal is the basis of the MS thesis project. As the student identifies a research focus for the dissertation project, they will begin reviewing the literature.

BIO-SCI 5759 Special Problems in Pharmacology Credits: 2
Pharmacologic and therapeutic problems of special interest in the practice of dentistry.

BIO-SCI 5760 Physiology of Oral Mineralized Tissues Credits: 2
A study of the physiology of the oral hard tissues with emphasis on the mechanisms of the growth, remodeling, and healing of maxillomandibular bones and on the mechanism of dentinogenesis. This course may not be used to satisfy Cell Biology and Biophysics or Molecular Biology and Biochemistry discipline-specific requirements for the Interdisciplinary Ph.D. program.

BIO-SCI 5780 Teaching Of Dentistry Credits: 1-2
A consideration of the problems of teaching in dental schools. Each department of the School of Dentistry will report on its teaching methods. The student will observe lectures and laboratory teaching in each department.

BIO-SCI 5781 Clinical Student Teaching I Credits: 1-2
This course is designed to give the student teaching experience in conducting and supervising predoctoral students in their clinical practice. Diagnosis and treatment planning in each specialty field will be emphasized.

BIO-SCI 5782 Clinical Student Teaching II Credits: 1-2
A continuation of BIO-SCI 5781.

BIO-SCI 5790 Directed Research In Oral and Craniofacial Sciences Credits: 1-6
Student utilizes beginning research skills to design, conduct and report an individual research project under the direction of the faculty.

BIO-SCI 5799 Research And Thesis Credits: 1-9
The satisfactory completion of an original research project. Results of the research and critical review of the pertinent literature are incorporated into a thesis. Credit is awarded after the student's thesis is successfully defended and accepted by the School of Graduate Studies.

BIO-SCI 5801 Readings in Immunology Credits: 1-3
A detailed study of special topics in immunology. Specific topics to be arranged with the instructor. This course may be repeated by doctoral students for a maximum of 3 credit hours.
Prerequisites: LS-MCRB 435.

BIO-SCI 5802 Immunopathology Credits: 2
A detailed study of selected topics in immunopathology with emphasis on physicochemical barriers such as cutaneous and mucosal immune systems.
Prerequisites: LS-MCRB 435.

BIO-SCI 5805 Molecular Biology of Oral Microflora Credits: 2-3
Lecture and discussion. The course will provide an overview of the ecology of oral microbial flora and its role in oral health and disease. Students will examine the taxonomy and ecology of normal and pathogenic oral microbial flora, acquisition of the oral microbiota and the formation of dental plaque as a biofilm. The course will also explore other aspects of microbial biology, such as; bacterial virulence factors and pathogenesis; host defense mechanisms; systemic complications of periodontal disease; antibiotics and antibiotic resistance.The second part of the course will review the effect of recent advances in molecular biology and protein biochemistry on oral diagnosis and treatment.

BIO-SCI 5830 Structural Characterization of Dental Biomaterials Credits: 3
A detailed study of the techniques commonly used to determine the composition and structure of dental biomaterials. Surface and near-surface characterization techniques will be emphasized. The student will be expected to complete laboratory projects on the scanning and transmission electron microscopies available in the School of Dentistry.

BIO-SCI 5899 Required Graduate Enrollment Credit: 1

Economics (ECON)

Courses

ECON 5501 Advanced Macroeconomic Analysis Credits: 3
Basic theoretical concepts of national income and statistical tools utilized in its measurement. Aggregate demand and supply as problems of economic dynamics. The course includes examination of the primary competing theoretical approaches: neoclassical, Keynesian, new classical, real business cycle, new Keynesian supply side, Austrian, and Post Keynesian. Topics covered include growth, money, labor markets consumption, investment, expectations formation, role of time and uncertainty, equilibrium and disequilibrium analysis, exchanges rates, international trade. and optimal currency areas. Policy implications of the various macroeconomic theories are explored.
Prerequisites: ECON 301 and ECON 302 (or equivalent).

ECON 5502 Advanced Microeconomic Analysis Credits: 3
The course first provides a critical survey of neoclassical microeconomic theory, including methodology, demand theory, production and cost theory, theory of competitive and non-competitive markets, distribution, welfare, and general equilibrium. It then introduces heterodox microeconomic theory, covering its historical origins, methodology, structural organization of economic activity, in-put-output models, flow of funds, agency and institutions, and the business enterprise.
Prerequisites: ECON 302, ECON 5521.

ECON 5503 Advanced Heterodox Economics Credits: 3
The course examines various theoretical approaches and topics, both historically and currently, that constitute heterodox economics. In particular the course deals in depth with the mathematical and economic properties of heterodox production and price models. After reviewing the mathematics of linear production-price models, the module will examine Leontief, Sraffian, and other heterodox price and production models.
Prerequisites: ECON 301, ECON 302, and MATH 210.

ECON 5504R American Economic History Since 1865 Credits: 3
The course deals with the emergence of Industrial America since 1865. It will cover the rise to dominance of the large modern corporation, with the problem of economic and social instability and stability, with the rise of trade associations, cartels, and government regulation in an unstable economy, and with the evolution of American economic policy and national economic planning.
Cross Listings: HISTORY 5566R.

ECON 5504RR American Labor History Credits: 3
This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.
Prerequisites: Graduate standing.

Cross Listings: HISTORY 5566RR.

ECON 5505 Advanced Comparative Economic Systems Credits: 3
Contents vary depending upon the instructor's design for the course.
Prerequisites: ECON 301, ECON 302.

ECON 5506 Advanced History Of Economic Thought Credits: 3
This seminar uses issues raised in the reading of two 'classic' primary texts, Adam Smith's An Inquiry into the Nature and Causes of the Wealth of Nations (1776) and John Maynard Keynes's The General Theory of Employment, Interest and Money (1936), as points of departure for the examination of a series of topics in the history and development of economics and alternative paradigms in the discipline. These investigations will lead us to the study of a number of other seminal articles, representing alternative approaches in the field. Topics include competition, accumulation, path dependence and endogenous technical change, cumulative causation, the laws of return, money and credit, capital theory, and more.
Prerequisites: ECON 301, ECON 302.

ECON 5508 Controversial Issues In Recent Economic Literature Credits: 3
This course will focus on theoretical and policy-oriented controversies that have occurred in economic in the 20th century. The type of controversies covered include, but are not restricted to, money, unemployment, business cycles and economic growth, pricing and administered prices, capital controversy, labor theory of value controversy, and free trade vs. protectionism. While the course concentrates on recent debates, it identifies the origins of the modern disputes in earlier controversies. For each controversy, its real world importance and policy implications are discussed.

ECON 5511 Geographic Information Systems (GIS) for Urban Economic Development Credits: 3
An advanced quantitative methods course featuring the application of Geographic Information Systems (GIS) to the problems of urban economic development. Surveys federal, state, and local geospatial and attribute data resources, including Census Bureau TIGER files, and provides training in geodatabase construction and management. Geospatial processing, editing, and address geocoding are also covered. Formal analytical methods (cartographic aesthetics and visualization, spatial analysis, exploratory data analysis, network analysis, crime analysis, etc.) are all applied in the context of the problematics of urban and regional economic development.
Prerequisites: GEOG 203 or UPD 203.

ECON 5512 Advanced Economic Development Credits: 3
Contents vary depending upon the instructor's design.
Prerequisites: ECON 301, ECON 302.

ECON 5513 Economic Cycles And Growth Credits: 3
A critical review and evaluation of economic analysis and the forces of economic fluctuation and growth; and analysis of statics, dynamics, monopolistic competition, the role of the interrelationships of the market structure and other institutional forces as they relate to fluctuations and growth. An emphasis will be made on the critical evaluation of recent literature in the field of economic analysis related to fluctuations, growth, statics, dynamics, market structure and the reinterpretation of economic fluctuations, growth, forecasting and overall economic behavior. An analysis of the technological, monetary, and fiscal policy implied by economic trends and growth will also be discussed.
Prerequisites: ECON 5501 or equivalent.

ECON 5516L Law And Economics Credits: 3
This course will examine the use of economic principles in the analysis and applications of public and private law. Emphasis will be given to the efficiencies of laws in meeting social objectives, how laws can be modified to become more economically efficient, and the uses of economics in the actual practice of the law. Issues covered will include proofs of liability in antitrust, contracts and employment law using statistical and economic analysis, and the calculation of economic damages in commercial, employment and personal injury/death litigation.. Graduate students will be assigned a specific research paper..
Prerequisites: ECON 302.

ECON 5521 Mathematical Economics Credits: 3
An introduction to mathematical methods as applied to the questions addressed by economists. The principal methods to be applied are matrix algebra and differential calculus in the context of optimization. Other topics may include integral calculus, differential equations, difference equations or linear and nonlinear programming.
Prerequisites: ECON 301, ECON 302 and MATH 110 (or equivalent).

ECON 5525 Econometric Methods Credits: 3
Continuation of ECON 425. The major problems encountered in building and testing economic models are treated and alternative solutions to these problems are discussed. Major topics include corrections for heteroscedasticity and autocorrelation, maximum likelihood and BLUE estimation, simultaneous equations methods, probit and logit analysis and distributed lags. Other topics may include ARIMA or other series analytic methods, three stage least squares and dynamic multipliers or simulation. Work with econometric software is stressed. No programming experience necessary.
Prerequisites: ECON 425 (or equivalent) and ECON 5521.

ECON 5529 Readings In Quantitative Economics Credits: 3
Readings from the economic literature which stress advanced mathematical or econometric tools. A general subject matter is selected by the student with the consent of the instructor.
Prerequisites: ECON 5521, ECON 5525.

ECON 5531 Monetary Theory And Policy Credits: 3
A study of the nature and functions of money and the financial system, with emphasis on monetary theory and its application to current banking and financial problems; recent contributions to monetary theory and current literature.
Prerequisites: ECON 301.

ECON 5535 Theory Of Public Finance Credits: 3
An inquiry into the scope and nature of economics with emphasis on the nature of the public sector including a brief study of welfare criteria along with the study of ability to pay, benefit theory of taxation, and expenditure theories.

ECON 5537 State And Local Government Finance Credits: 3
This course investigates the role, problems and relative importance of municipal governments in the United States. Such areas as the demand for public services, tax and expenditure policies, and intergovernmental fiscal relations will be explored in detail. Case studies of state and local governments will be introduced to emphasize the problems and proposed solutions arising in modern municipal governments.
Prerequisites: ECON 302.

ECON 5538 Economic Policy Credits: 3
Analysis of the confluence of political and economic behavior, the economics of collective action.
Prerequisites: ECON 301 and ECON 302.

ECON 5540 Advanced International Trade Credits: 3
This course emphasizes the global allocation of resources and distribution of income under various commodity market conditions and government trade policies. Major topics include: comparative advantage; terms of trade; the distribution of gains and losses from trade; perfect vs. imperfect competition; tariffs, quotas and other barriers to trade; exchange rates and the balance of payments; preferential trading arrangements; international factor movements and multinational corporations.
Prerequisites: ECON 302 (or equivalent); graduate standing.

ECON 5542 Advanced International Finance Credits: 3
This course emphasizes the global activity and balance of payments implications of government taxation, expenditure and monetary policies under various capital market conditions. Major topics include: exchange rates and the balance of payments; national income determination in an open economy; integrated and non-integrated capital markets; economic growth, stabilization policies and the quest for global economic stability.

ECON 5548 Advanced Socialist Economic Systems Credits: 3
The course will deal with the theoretical analysis of socialist economic theory, Marxian and non-Marxian, and/or of socialist economics systems such as those of Eastern Europe, the Chinese mainland and elsewhere. The emphasis of the course will vary depending upon the instructor’s design for the course.
Prerequisites: ECON 301 and ECON 302.

ECON 5550 Regional Economics Credits: 3
The economics of spatial relations, emphasizing basic location and land utilization theory and the role of transport will be considered at the micro-level. Keynesian and neoclassical growth theories and contemporary policy approaches to regional growth and decline are analyzed.
Prerequisites: ECON 302.

ECON 5551 Advanced Institutional Theory Credits: 3
Evolution, organization and allocation functions of the modern industrial economy. Contributions and limitations of conventional economic concepts. Philosophical and theoretical interpretations of the economy in light of modern developments in philosophy and social science.
Prerequisites: ECON 451.

ECON 5558 Advanced Urban Economics Credits: 3
The study of the city as a dynamic system of interrelated and interdependent markets. Significant markets in cities include land, housing, labor, transportation and public services.

ECON 5560 Industrial Organization Credits: 3
The structure, conduct and performance of American industry. Historical evolution of American industry; alternative industrial systems, antitrust policies and their alternatives. Technological change and industrial performance.
Prerequisites: ECON 301, ECON 302.

ECON 5565 Advanced Health Economics Credits: 3
This course is a critical review and evaluation of the economic analysis of medical markets. An emphasis will be placed on the critical evaluation of recent literature assessing health care systems and institutions, medical care spending, demand estimations for various types of medical services, demand estimation for medical insurance, analysis of medical care productions and costs, analysis of government policy for the deployment of health care resources.
Prerequisites: ECON 465 or equivalent.

ECON 5575 Labor Economics, Institutions and Policies Credits: 3
This course focuses on the economic analysis of labor market phenomena in the context of historical-institutional development and on labor market policies. This course is offered winter semester only.
Prerequisites: ECON 201 and ECON 202.

ECON 5583 Racial Inequality & Public Policy Credits: 3
This course will provoke open debate and discourse about public policy responses to racial inequality. The emphasis is on stimulating participants to think about and to analyze critically the range of strategies offered for reducing racism and racial economic inequality.

ECON 5587 Human Resource Economics Credits: 3
An analysis of the factors determining the productivity of human resource: education, nutrition, job training and work environment. An analysis of work patterns, wage patterns, and the impact of automation. Graduate students will be assigned a specific research paper on a topic to be decided with the instructor.
Prerequisites: ECON 302.

Cross Listings: ECON 487.

ECON 5588 Advanced Political Economy Credits: 3
This course gives students a comprehensive introduction to the history and modern practice of political economy, with particular emphasis on Marxian and Classical political economy. Topics include: value theory, class theory, economic reproduction, economic crisis, the theory of history, and methodology.
Prerequisites: ECON 5521.

ECON 5589 Graduate Seminar In Labor Economics Credits: 3
Content of seminar will vary from semester to semester depending upon the instructor’s design for the course.
Prerequisites: ECON 486.

ECON 5590 Special Topics Credits: 1-3
Selected topics in theoretical and applied economics.

ECON 5590A Special Topics Credits: 1-3

ECON 5590B Special Topics Credits: 1-3

ECON 5590C Special Topics Credits: 1-3

ECON 5591 Research And Planning Seminar Credits: 3
The objective of this research seminar is to apply the quantitative techniques and theoretical constructs of economics to an urban-regional problem. Students are required to formulate and evaluate present economic models, and then complete a research project.
Prerequisites: ECON 5502 and ECON 5521.

ECON 5599 Research And Thesis Credits: 1-6
Directed specialized research.

ECON 5601 Colloquium In Advanced Macroeconomics Credits: 3
The course will deal with analyses of topics in Macroeconomic analysis and Macroeconomic policies and investigation of current literature in divers areas of Macroeconomic analysis. A written report(s) will be made upon the selected assignment(s).
Prerequisites: ECON 5501 or equivalent.

ECON 5602 Colloquium In Advanced Microeconomics Credits: 3
As a continuation of Economics 502, this course deals with the business enterprises-including production, costs, pricing, and investment-markets, market demand, market governance, general price-quantity models of the economy, microfoundations of the heterodox macroeconomics, and social welfare.
Prerequisites: ECON 5502.

ECON 5606 Colloquium on Advanced History of Economic Thought Credits: 3
The course examines advanced topics in history of economic thought.
Prerequisites: ECON 5506.

ECON 5608 Topics In Economic Theory Credits: 3
This course deals with advanced topics in Institutionalism, Post Keynesian, and other heterodox economic theory. May be repeated with different topic.

ECON 5616 History Of Economics In The 20th Century Credits: 3
The history of 20th century economics is concerned with a number of interdependent issues, including the institutional organization of economics at universities; the historical development of the structures and social networks that make-up the economic paradigms of neoclassical economics, Marxian economics, Post Keynesian economics, and other heterodox economics; and the role of institutional and state power to maintain the dominance of the neoclassical paradigm. The aim of the course is to introduce students to this institutional/organizational history.

ECON 5625 Colloquium In Econometrics Credits: 3
This course treats advanced topics in econometrics such as non-linear estimation techniques, model development, simultaneous equation estimation techniques, and simulation. Topics are developed from theoretical and application perspectives. Familiarity with personal computer is necessary.
Prerequisites: ECON 5501, ECON 5502, ECON 5521, ECON 5525, or equivalents.

ECON 5631 Colloquium on Monetary Theory and Policy Credits: 3
This course explores advanced monetary theory and policy, examining recent debates and current research practices, as well as classic articles on monetary theory and policy.
Prerequisites: ECON 5601 or ECON 5501 and ECON 5531.

ECON 5645 Financial Macroeconomics Credits: 3
This course will introduce the student to the central role of financial analysis in macroeconomic analysis and to theories of macroeconomics instability based on the integration of finance and macroeconomics. It will examine modern finance theory and modern approaches to financial analysis, paying particular attention to the contributions made by Fisher and Keynes.

ECON 5660 Evolution Of American Industrial Society Credits: 3
Drawing on economic and organizational theory, the course will concentrate on the evolution of American industrial technology, the American business enterprise, and the organization of American industries and markets since 1870.

ECON 5665 Colloquium In Advanced Health Economics Credits: 3
This course is designed as a seminar with a special emphasis on analysis of econometric methods to assess issues in health care. The topics are developed from a theoretical and applied perspective. Familiarity with personal computers is necessary. Special emphasis will be given in the selection of course topics to the interests and backgrounds of participants.
Prerequisites: ECON 5521, ECON 5525, ECON 5565, or equivalents.

ECON 5680 Teaching Methods And Course Design Credits: 3
This course is designed to prepare students for the challenge of teaching economics. Students will be taught how to write a syllabus; how to prepare for class; how to plan learning activities; how to become skillful in leading discussion; how to present an effective lecture; how to test and assess student learning; how to develop effective group projects; how to motivate their students for lifelong learning. Students will be required to design a course to be taught at the 200-, 300 or 400-level. The student will prepare a complete set of course materials, including a lecture outline, a list of require readings, useful handouts, course materials, including a lecture outline, a list of require readings, useful handouts, course assignments, exams, etc. The course should incorporate an interdisciplinary approach and should emphasize an "active learning" component, designed to promote a "rich learning experience." The student will work closely with an appropriate member of the faculty.
Prerequisites: Must have completed/passed Comprehensive Exams.

ECON 5688 Colloquium On Political Economy Credits: 3
This course is designed as a seminar and will take into account theory and policy analysis from alternative perspectives. The topics covered will include philosophical foundations of contemporary theory and policy, the organization of production information and finance, resource and environment, wealth and income distribution, public and private policy and planning. Stress is placed on contemporary research and students are expected to become involved in research projects.

ECON 5690 Special Doctoral Readings In Economics Credits: 1-3
Special research topics in Economics at the Doctoral level.

ECON 5699 Doctoral Dissertation Credits: 1-12
Directed selected research for Economics in the interdisciplinary doctoral program.

ECON 5899 Required Graduate Enrollment Credit: 1

Education (EDUC)

Courses

EDUC 5552 Advanced Diagnostic And Treatment Procedures In Reading Credits: 3
Significant aspects of reading disability; diagnostic testing; case report writing; interpretation of test data; implications of test data for recommendations.
Prerequisites: EDRD 5510.

Co-requisites: EDRD 5520.

EDUC 5589AA Special Topics in Education Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC 5589AQ Special Topics In Education Credits: 1-6

EDUC 5589B Special Topics In Education Credits: 1-6

EDUC 5589EP Special Topics In Education Credits: 1-6
Special Topics In Education

EDUC 5589ES Special Topics in Education Credits: 1-6

EDUC 5589IT Special Topics in Education Credits: 1-6

EDUC 5589LR Special Topics in Education Credits: 1-6

EDUC 5589MS Special Topics in Education Credits: 1-6

EDUC 5589MT Special Topics in Education Credits: 1-6

EDUC 5589Q Special Topics In Education Credits: 1-6

EDUC 5589R Special Topics in Education Credits: 1-6

EDUC 5589RD Special Topics in Education Credits: 1-6

EDUC 5589RH Special Topics In Education Credits: 1-6

EDUC 5589TL Special Topics in Education Credits: 1-6

EDUC 5589WP Special Topics in Education Credits: 1-6

EDUC 5598 Individual Studies Credits: 1-6
Review of the research trends relative to selected problems in education. By prior arrangement with instructor.

EDUC 5598A Individual Studies In Administration Credits: 1-6

EDUC 5598B Individual Studies In Mathematics Credits: 1-6

EDUC 5598C Individual Studies Curriculum Credits: 1-6

EDUC 5598H Individual Studies Higher Education Credits: 1-6

EDUC 5598J Individual Studies Philosophy Of Education Credits: 1-6

EDUC 5598P Individual Studies Educational Psychology Credits: 1-6

EDUC 5598Q Individual Studies Early Childhood Education Credits: 1-6

EDUC 5598R Individual Studies Education Reading Credits: 1-6

EDUC 5598S Individual Studies Research Credits: 1-6

EDUC 5598SA Individual Studies Research Credits: 1-6

EDUC 5598U Individual Studies History Of Education Credits: 1-6

EDUC 5598X Individual Studies Sociological Foundations Credits: 1-6

EDUC 5599 Research And Thesis Credits: 1-9
Research and Thesis.

EDUC 5621 Practicum In Curriculum And Instruction Credits: 3-6
A field experience which provides an opportunity for the application of current research in the area of curriculum and instruction to an educational setting.

EDUC 5640 Apprenticeship And Conference In College Training Credits: 2-5
Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education.

EDUC 5690 Special Problems Credits: 1-6
Individual studies; thesis exploration, special reading.

EDUC 5695 Doctoral Dissertation: Reading Education Credits: 1-16
Doctoral Dissertation: Reading Education

EDUC 5696 Dissertation Administration And Community Leadership Credits: 1-16
Dissertation Administration And Community Leadership

EDUC 5697 Dissertation Curriculum And Instruction Credits: 1-16
Dissertation Curriculum And Instruction

EDUC 5698 Dissertation General Education Credits: 1-16
Dissertation General Education

EDUC 5899 Required Graduate Enrollment Credit: 1

Electrical and Computer Engineering (E&C-ENGR)

Courses

E&C-ENGR 5316 Artificial Neural and Adaptive Systems Credits: 3
This graduate course is a hands-on introduction to theory and applications of neurocomputing, including: classification, function approximation, supervised and unsupervised learning, time series analysis, and adaptive filtering using different feed-forward and recurrent artificial neural networks.
Prerequisites: E&C-ENGR 341R (or COMP-SCI 5590CI).

E&C-ENGR 5318 Dynamical Systems and Complex Networks Credits: 3
An overview of classical dynamical systems, and its application in different fields such as Electrical Engineering (nonlinear circuits), Network Sciences, Epidemiology, and Ecology will be discussed. Phenomena such as chaos, bifurcation, and limit cycles will be examined. This course will also introduce and develop the mathematical theory of Complex Networks with applications to network-driven phenomena in Um Internet, search engines, social networks, the World Wide Web, information and biological networks; spectral graph theory; models of networks including random graphs, preferential attachment models, and the small-world models.

E&C-ENGR 5501AP Special Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 5501NN Special Topics In Electrical Engineering Credits: 1-4

E&C-ENGR 5512 Microwave Remote Sensing Credits: 3
Basic principles of remote sensing including scattering, absorption, transmission, and reflection of microwave energy. Basic radiative transfer theory. Microwave remote sensing systems including altimeters, scatterometers, radiometers, synthetic-aperture systems. Principle applications of remote sensing systems including imaging, atmospheric sounding, oceanographic monitoring, ice-sheet dynamics, etc.
Prerequisites: E&C-ENGR 414.

E&C-ENGR 5513 Advanced Principles of RF/Microwave Engineering Credits: 3
General aspects of TE, TM and TEM mode propagation in waveguides; circular waveguides; optical waveguides; wave propagation on dielectric backed conductors; wire antennas equivalence principle and aperture antennas; antenna impedance and mutual coupling in arrays; array beamforming; scattering matrix representations; impedance matching; resonators; filters, couplers and power-dividers; microstriplines and striplines; r.f. propagation in wireless and radar systems; conformal mapping techniques ad applications (optional).
Prerequisites: E&C-ENGR 302, E&C-ENGR 380, E&C-ENGR 381, knowledge in Engineering Computation, Technical Writing Skills.

E&C-ENGR 5516 Computer Networks Credits: 3
Concepts and goals of computer networking, structure of computer networks, OSI model and layers, network control, analysis, design and management, data communication techniques including fiber optics, WAN, MAN and LAN architecture and protocols, internetworking, case studies and hand-on studying the performance by analytic modeling and computer simulation.
Prerequisites: E&C-ENGR 424.

E&C-ENGR 5518 Advanced Radar Systems & Techniques Credits: 3
Radar equation; MTI, Pulsed Doppler and Tracking Radars; Detection of and information from Radar Signals; Radar Antennas, Transmitters and Receivers; Radar Propagation and clutter.
Prerequisites: E&C-ENGR 302, E&C-ENGR 380.

E&C-ENGR 5528 Advanced Embedded Systems Credits: 3
This course examines the hardware/software aspects associated with developing microcontroller-based computer systems. The students learn about the architecture and assembly language for popular microcontrollers and how to take advantage of a variety of input/output options that include binary ports, A/D and D/A converters, communication ports, and interfacing techniques for various applications. Graduate students are required to do Embedded Systems lab experiments.
Prerequisites: E&C-ENGR 426, E&C-ENGR 427.

E&C-ENGR 5530 Digital Electronics Credits: 3
Electronic hardware aspects of digital systems. Includes state-of-the-art information on integrated-circuit logic devices and their applications.

E&C-ENGR 5532 Biomedical Instrumentation Credits: 3
Biomedical objectives, physical and engineering principles; optimal equipment design and actual performance of biomedical instrumentation; considers practical instrumentation problem solutions and unsolved problems.
Prerequisites: E&C-ENGR 330.

E&C-ENGR 5533 Analog Integrated Circuit Design Credits: 3
This course will cover the analysis and design of analog and mixed signal integrated circuits, with an emphasis on design principles for realizing state-of-the-art analog circuits. The course will provide the critical concepts by giving physical and intuitive explanations in addition to the quantitative analysis of important analog building block circuits. First-order hand calculations and extensive computer simulations are utilized for performance evaluation and circuit design. Students will be required to complete a final project which will involve the design at the layout level of an analog circuit. Successful designs will be fabricated through the MOSIS Educational Service.
Prerequisites: E&C-ENGR 276, E&C-ENGR 330.

E&C-ENGR 5534 Computer Arithmetic Credits: 3
Computer arithmetic is a sub field of digital computer organization. It deals with the hardware realization of arithmetic functions to support various computer architectures as well as with arithmetic algorithms for firmware/software implementation. A major thrust of digital computer arithmetic is the design of hardware algorithms and circuits to enhance the speed of various numeric operations. Verilog HDL is used as tool to simulate the algorithms and circuits.
Prerequisites: E&C-ENGR 226, E&C-ENGR 5535.

E&C-ENGR 5535 Hdl-Based Digital Systems Design Credits: 3
This course covers hardware design techniques using a Hardware Description Language (HDL). It also discusses several digital system design methodologies, including structural specifications of hardware, HDL-based simulations and testbenches. Courses focus on the synthesis methodologies for use-defined primitives (UPD), data types, operators, Verilog constructs multiplexed datapaths, buses, bus drivers, FSMs, assignments, case, functions, tasks, named events and rapid prototyping techniques with Verlog HDL, ASICs and FPGAs.
Prerequisites: E&C-ENGR 226.

E&C-ENGR 5536 Power Electronics II Credits: 3
Circuit concepts and analysis techniques for transistor switching regulators, thyristor choppers, transistor inverters, self-commutated thyristor investers and cycloconverters.
Prerequisites: E&C-ENGR 436.

E&C-ENGR 5537 Mixed-Signal Integrated Circuit Design Credits: 3
Modern integrated circuit design often requires the integration of analog and digital circuits on the same chip. This integration provides numerous advantages over purely analog or digital approaches. This course will cover the analysis and design of mixed-signal integrated circuits and will address the challenges of having both analog and digital circuits on the same substrate. Important mixed-signal circuits such as data converters and filters will be studied in detail.
Prerequisites: E&C-ENGR 433 (or E&C-ENGR 5533).

E&C-ENGR 5542 Introduction to VLSI Design Credits: 3
With a focus on CMOS Digital technology this course covers the basic concepts of integrated circuits, various methods of designing VLSI circuits, and techniques to analyze performance metrics (speed, area, power and noise). Clocking, interconnect and scaling issues of integrated circuit will also be discussed. It will cover device, interconnect and circuit level implementation issues of both logic and memory circuits. To familiarize students with the realities of design complexities and layout environment they will get exposure to VLSI CAD tools in the following levels - schematic, layout, extraction and circuit simulation through the labs and projects.

E&C-ENGR 5556 Instrumentation and Control Credits: 3
The instrumentation and control of electric generators, power plants, boilers and associated industrial processes and systems. Simulation modeling of systems such as electric generators boilers and associated systems.
Prerequisites: E&C-ENGR 358 (or MEC-ENGR 415).

E&C-ENGR 5558 Automatic Control System Design Credits: 3
Techniques for feedback system design and analysis; computational aids, compensator design and examples, state variable methods, non-linear systems, ad sampled-data control systems.
Prerequisites: E&C-ENGR 226, E&C-ENGR 358.

E&C-ENGR 5560 Electric Power Distribution Systems Credits: 3
Operation and design of utility and industrial distribution systems including distribution system planning; load characteristics; application of distribution transformers; design of subtransmission lines, distribution substations, primary systems, secondary systems, Smart Grid; application of capacitors; voltage regulation and reliability.
Prerequisites: E&C-ENGR 466.

E&C-ENGR 5567 Power Systems II Credits: 3
This course covers power system matrices, power flow analysis, Gauss-Seidel and Newton-Raphson techniques, fast-decoupled load flow, economic dispatch, transient stability and operation, and power system control.
Prerequisites: E&C-ENGR 358, E&C-ENGR 466.

E&C-ENGR 5568 Economics of Power Systems Credits: 3
Transmission loss formula coefficients, incremental costs and losses, economic scheduling of generation, and applications.
Prerequisites: E&C-ENGR 466, E&C-ENGR 467.

E&C-ENGR 5569 Reliability of Electric Power Systems Credits: 3
Development and use of mathematical models for the calculation and estimation of various measures of reliability in electric power systems, Reliability restoration times and cost assessment of generation, transmission, distribution and composite systems are analyzed.
Prerequisites: COMP-SCI 394R.

E&C-ENGR 5570 Principles of Digital Communication Systems Credits: 3
Principles of random processes, information sources and source coding, modulation and demodulation, block and convolutional error control coding, and equalization.
Prerequisites: COMP-SCI 394R (or equivalent), E&C-ENGR 380.

E&C-ENGR 5572 Antennas & Propagation For Wireless Systems Credits: 3
This course introduces the mathematical aspects of the basic antenna parameters such as vector potential, gain, directivity, impedance, radiation patterns, and develops a comprehensive theory of antenna arrays including the effects of mutual coupling. In-depth modeling studies for wire, aperture and microstrip antennas, is presented; diffraction of plane electromagnetic (TE and TM) waves by perfectly conducting half-planes and wedges-applications to site-specific propagation path modeling in wireless systems.
Prerequisites: E&C-ENGR 341R (or equivalent), E&C-ENGR 412 (or equivalent), written communication skills.

E&C-ENGR 5577 Wireless Communications Credits: 3
Principles of the design and analysis of wireless communications, Study of propagation mechanisms, statistical characterization of wireless channels, diversity and MIMO, spread spectrum and CDMA, Orthogonal Frequency Division Multiplexing (OFDM).
Prerequisites: COMP-SCI 394R (or equivalent).

E&C-ENGR 5579 Digital Signal Processing in Telecommunications Credits: 3
Applications of digital signal processing in telecommunications systems; oversampling and quantization, Delta-Sigma modulation, linear predictive speech coding, adaptive filtering, echo canceller, adaptive receivers and equalizers for wireless communication, digital cellular, CDMA.
Prerequisites: E&C-ENGR 474, E&C-ENGR 480.

E&C-ENGR 5580 Digital Signal Processing Credits: 3
Analysis and representation of discrete-time signals and systems including a discussion of discrete-time convolution, difference equations, the z-transform and the discrete Fourier transform. Similarities with and distinctions between discrete-time and continuous-time signals and systems. Digital network structures for implementation of both recursive (infinite impulse response) and nonrecursive) finite impulse response) digital filters. FFT (Fast Fourier Transform) algorithm for computation of the discrete Fourier transform. Graduate students will be expected to successfully complete a number of additional projects as compared with E&C-ENGR 480.
Prerequisites: E&C-ENGR 380.

E&C-ENGR 5586 Pattern Recognition Credits: 3
Decision functions, distance measures, minimum distance classifiers, hard clustering methods, fuzzy clustering methods, statistical pattern recognition methods, Bayesian classifiers, error probabilities, estimation of density functions, perceptrons, least-mean-square algorithms, feature selection, dimensionality reduction and syntactic pattern recognition.
Prerequisites: COMP-SCI 394R (or STAT 436), a course in high-level programming language.

E&C-ENGR 5588 Communication Theory I Credits: 3
Generalized communication systems, signal processing, signals as random processes, optimum receivers.
Prerequisites: COMP-SCI 394R, a statistics course.

E&C-ENGR 5590 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590AC Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590AN Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AS Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AV Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590AW Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590B Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590BB Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590BE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590BI Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590BP Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590C Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CA Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CI Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590CL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CN Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CS Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590CT Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590DC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590DE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590DS Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590EN Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ER Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ES Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ET Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590FC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590HF Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590IC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590IE Special Topics Credits: 1-4

E&C-ENGR 5590IN Special Topics In Electrical And Computer Engineering Credits: 1-4
Special Topics In Electrical And Computer Engineering

E&C-ENGR 5590IP Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590IR Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590MC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590MS Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590MW Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NA Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NG Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NM Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NN Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NR Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590NT Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590ON Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590OT Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590PB Special Topics In Electrical And Computer Engineering Credits: 1-4
Special Topics In Electrical And Computer Engineering

E&C-ENGR 5590PD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PG Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL2 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PL3 Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PQ Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PR Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590PS Special Topics in Electrical and Computer Engineering Credits: 1-4
Special Topics in Electrical and Computer Engineering.

E&C-ENGR 5590PV Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RE Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590RF Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590SC Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590SD Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590SL Special Topics in Electrical and Computer Engineering Credits: 1-4

E&C-ENGR 5590SP Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590T Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590TC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590VL Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WC Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WW Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5590WX Special Topics Credits: 1-3

E&C-ENGR 5590XX Special Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5597 Directed Readings Credits: 1-3
Readings in an electrical and computer engineering areas selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5598 Research Seminar Credits: 1-3
Graduate research and/or readings in an electrical and computer engineering area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5599 Research Credits: 1-6
Independent investigation in field of electrical engineering to be presented in the form of a thesis.

E&C-ENGR 5600 Problems Credits: 2-5
Supervised investigation in electrical engineering to be presented in form of report.

E&C-ENGR 5606 Electromagnetic Scattering and Antenna Theory Credits: 3
Dyadic analysis; integral equations and Green's functions; field theorems-uniqueness, induction equivalence, reciprocity; image and Babinet's Principles; applications to antennas; method of stationary phase and applications to aperture antennas; array antennas and mutual coupling analysis; method of moments; asymptotic techniques and applications to EM scattering from wedges, cylinders, and spheres; RF propagation path loss modeling and conformal antennas.
Prerequisites: E&C-ENGR 412.

E&C-ENGR 5616 Parallel and Distributed Processing Credits: 3
Covers the fundamental issues involved in designing and writing programs for simultaneous execution. Semaphores and monitor constructs are covered to provide a basis for critical section programming. Expansion of these concepts provide a basis for the analysis and design of control systems for multiprocessor devices and computer networks.
Prerequisites: A systems programming course.

E&C-ENGR 5617 Neural Network Based Computing System Credits: 3
The course will consider computing systems based on neural networks and learning models, along with implementations and applications of such systems.

E&C-ENGR 5618 Artificial Intelligence Credits: 3
Concepts, theories, and models pertaining to neural nets, pattern recognition, learning systems, and programmed problem solving.

E&C-ENGR 5619 Theory of Automata Credits: 3
Sequential machines: Turing machines; deterministic and stochastic automata; applications of automata.

E&C-ENGR 5624 Digital Software Systems Design Credits: 3
Characteristics and parameters of various software subsystem including assemblers, compilers, utility programs, special programming packages, interpreters, and operating systems; and principles of organization into efficient systems.

E&C-ENGR 5635 Vlsi Systems Design Credits: 3
Course discuss design of the MOSFETs (nFETs and pFETs), and high speed CMOS cascades in VLSI. It also covers the design of various arithmetic circuits, different fast adders, memories, and chip-level physical designs requirements in the VLSI subsystems are also the focus of this course. It uses Verilog HDL/VHDL as a tool to design VLSI systems.
Prerequisites: E&C-ENGR 5535 (or knowledge of VHDL).

E&C-ENGR 5642 Advanced VLSI Design Credits: 3
Course focuses on the issues and challenges of high performance VLSI circuits and systems. The course will be based on papers published in accredited journals and conference proceedings. The goals of this course: (1) Familiarize students with the current and emerging trends, issues and design alternatives of deep submicron and nanoscale IC technologies; (2) Help students acquire the knowledge and skills required for graduate study and research, and professional careers in IC industry; and (3) Teach students how to collect and survey technical materials, develop new research ideas, write research papers, and present technical contents in front of an audience.

E&C-ENGR 5644 Liapunov and Related Nonlinear Methods in Automatic Control Credits: 3
A study of nonlinear methods in automatic control including phase plane analysis, describing function techniques, basic definitions and theorems of Liapunov, methods of generating Liapunov functions, applications of Liapunov's methods, and Popov's methods.

E&C-ENGR 5645 Optimal Control Theory Credits: 3
Analysis and design of dynamic systems using optimal control theory parameter optimization, dynamic optimization, computational methods, differential games.

E&C-ENGR 5646 Stochastic Optimal Estimation and Control Credits: 3
Surveys random process theory; stochastic control and optimization; estimation and filtering based on Kalman-Bucy techniques; stochastic stability; adaptive and learning control systems.

E&C-ENGR 5660 Power-Systems Stability Credits: 3
Performance of synchronous machines under transient conditions, power system stability, system fault computations using symmetrical components; computer solutions of power system problems.

E&C-ENGR 5661 Solid State Energy Conversion Credits: 3
Solid state direct energy conversion; and design of thermoelectric generators and heat pumps.

E&C-ENGR 5662 Power Electronic Drives Credits: 3
Advanced study of dc and ac motor drives controlled by power electronic methods, including phase controlled rectifier de chopper, cycloconverter, variable frequency inverters.
Prerequisites: E&C-ENGR 5536.

E&C-ENGR 5664 Lightning and Switching Surges in Power Systems Credits: 3
Overvoltage, switching surge and lightning effects of a power system. Use of grounding and lightning arresters. Effects of surges off and on machines.
Prerequisites: E&C-ENGR 466 (or equivalent), E&C-ENGR 467 (or equivalent).

E&C-ENGR 5668 Advanced Computer Methods in Power System Analysis Credits: 3
Power system matrices. Sparse matrix methods. Advanced load flow analysis techniques and concepts. Contingency analysis. State estimation.
Prerequisites: E&C-ENGR 466, strong background in FORTRAN or C.

E&C-ENGR 5670 Direct Current Power Systems Credits: 3
Characteristic and performance analysis of DC transmission lines and associated conversion systems.

E&C-ENGR 5672 Power Systems Relaying Credits: 3
Theory of relaying systems for power system protection, improvement of power system stability. Relay coordination; performance of relays during transient swings and out-of-step conditions.
Prerequisites: E&C-ENGR 466.

E&C-ENGR 5674 Machine Intelligence Credits: 3
Formal languages in relation to natural language processing; formal languages, graphs, and image processing; formal logic and automated theorem proving; natural language processing; aspects of problem solving and heuristic programming.

E&C-ENGR 5675 Introduction to the Modeling and Management of Uncertainty Credits: 3
Theoretical and practical issues in the modeling and management of uncertainty. Topics include probabilistic uncertainty, belief theory and fuzzy set theory. Applications to computer vision, pattern recognition and expert systems.

E&C-ENGR 5676 Advanced Electric Circuit Analysis Credits: 3
Specialized study of mathematical analysis as applied to solutions of circuit networks with fixed and variable parameters.

E&C-ENGR 5677 Network Synthesis Credits: 3
Surveys linear active and nonreciprocal circuit elements, reliability conditions, methods for synthesizing active networks, and practical applications.
Prerequisites: E&C-ENGR 5676.

E&C-ENGR 5680 Digital and Sample-Data Systems Credits: 3
Introduces sampling and quantization, design of digital and sample-data systems, digital filters, adaptive sampling and quantization.
Prerequisites: E&C-ENGR 480.

E&C-ENGR 5681 Applications Of Transforms Credits: 3
Applications of Laplace and other transform methods of solution of circuit and field problems.

E&C-ENGR 5682 Coding Theory II Credits: 3
Further study of error-correcting codes; ring and cyclic codes, linear switching circuits, burst error codes, codes for arithmetic units, etc.
Prerequisites: E&C-ENGR 5579.

E&C-ENGR 5684 Computer Vision Credits: 3
Image processing methods for segmentation, object representation, scene description and scene interpretation.
Prerequisites: E&C-ENGR 484.

E&C-ENGR 5688 Communication Theory II Credits: 3
Probability theory of analog and digital communication in the presence of random process noise. Encoding systems, detection systems, optimum receivers.
Prerequisites: E&C-ENGR 472.

E&C-ENGR 5690 Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690EM Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690ET Advanced Topics In Electrical And Computer Engineering Credits: 1-4

E&C-ENGR 5690ND Special Topics in Electrical and Computer Engineering Credits: 1-3

E&C-ENGR 5697 Advanced Directed Readings Credits: 1-5
Advanced readings in an electrical and computer engineering area selected by the graduate student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5698 Advanced Research Seminar Credits: 1-5
Advanced Graduate research and/or readings in an electrical and computer engineering area selected by the doctoral student in consultation with a faculty member. Arrangements must be made prior to registration.

E&C-ENGR 5699 Dissertation Research Credits: 1-9
Doctoral Dissertation

Endodontics (ENDO)

Courses

ENDO 5701 Endodontology 1 Credits: 1-6
This course is designed to introduce the first year endodontic postgraduate student to the field of advanced endodontics. It will provide introductory information and guidance which will serve as a basis for follow on course work in ENDO 5702 through ENDO 5706.

ENDO 5702 Endodontology 2 Credits: 1-6
This course is designed to continue the transition of the general dentist into a first year endodontic postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.

ENDO 5703 Endodontology 3 Credits: 1-6
This course is designed to complete the transition of the general dentist into a first year endodontic postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new materal to the resident.
Prerequisites: ENDO 5701, ENDO 5702.

ENDO 5704 Endodontology 4 Credits: 1-6
This course is designed to transition the first year into a second year postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.
Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703.

ENDO 5705 Endodontology 5 Credits: 1-6
This course is designed to continue the transition of the general dentist into a more proficient second year postgraduate student in the field of advanced endodontics. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.
Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703, ENDO 5704.

ENDO 5706 Endodontology 6 Credits: 1-6
This course is designed to complete the transition of the general dentist into a fully independently practicing endodontist. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.
Prerequisites: ENDO 5701, ENDO 5702, ENDO 5703, ENDO 5704, ENDO 5705.

ENDO 5721 Endodontology 7 Credits: 1-6
This course is designed to complete the transition of the general dentist into a fully independently practicing endodontist. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.
Prerequisites: ENDO 5706.

ENDO 5722 Endontology 8 Credits: 1-6
This course is designed to complete the transition of the general dentist into a fully independently practicing endodontist. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.
Prerequisites: ENDO 5721.

ENDO 5723 Endodontology 9 Credits: 1-6
This course is designed to complete the transition of the general dentist into a fully independently practicing endodontist. It will build upon material taught in previous courses of instruction as well as introduce completely new material to the resident.
Prerequisites: ENDO 5722.

English Language & Literature (ENGLISH)

Courses

ENGLISH 5500 Introduction To Graduate Study In English Credits: 3
An introduction to historical and contemporary methods of research and scholarship related to English Studies. The course uses a wide spectrum of print and digital materials, library facilities (including archives and Special Collections), databases, and other resources such as microfilm, to explore English studies as an academic discipline.

ENGLISH 5500P Special Topics Credits: 3

ENGLISH 5501 Magazine Editing Credits: 3
A course combining academic study of editorial management, publishing operations, and language skills, with "hands on" experience in article evaluation, editing, magazine production, and legal matters such as copy right and libel. Class work concentrates on authentic and effective language use, with attention given to copy editing, grammar, typography, printing processes, financing and distribution for commercial and small-press publications.

ENGLISH 5502 Magazine Nonfiction Credits: 3
This course emphasizes the origination and execution of nonfiction magazine articles for a variety of publications. Special attention is given to successful queries and the various writing techniques required for different kinds or articles. Students learn re-structuring and revision and the legalities affecting writers. Students are expected to complete three publishable articles.

ENGLISH 5503 Old English Credits: 3
This course is a study of Old English, its grammar, its poetic style, and its literature, both poetry and prose.

ENGLISH 5508 Harlem Renaissance Credits: 3
This course examines the period from 1920 to 1940, known as the Harlem Renaissance, a time of unprecedented literary and cultural creativity by Black artists. This course explores a variety of cultural productions, not only traditional forms of literature such as novels, short stories, plays and poetry, but also nonliterary objects of study such as painting, sculpture, and music.

ENGLISH 5510 Black Women Writers Credits: 3
This course explores the writings of African American Women Writers. The course examines how these writers have interacted with and often revised stereotypical representations of African American womanhood typically found within canonical and African American male literatures. The course will examine literature (which might include fiction, poetry, autobiography, and drama) of the 19th and 20th centuries; the majority of the works will be by modern and contemporary authors such as Nella Larsen, Zora Neale Hurston, Toni Morrison, and Terry McMillan. By placing the works in this sort of cultural and historical context, it will be possible to examine the unique tradition of African American women’s writings as well as individual texts.

ENGLISH 5512 Chaucer Credits: 3
Readings from Chaucer’s most important works, especially "The Canterbury Tales" and "Troilus and Criseyde" with emphasis on them as types of medieval genres and on the Middle English language. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5513 Renaissance Literature I Credits: 3
English literature from the time of Wyatt and Surrey to the beginning of the 17th century, including the works of Spenser, Marlowe, Sidney, Shakespeare and others. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5514 Milton Credits: 3
A study of Milton's prose and poetry, with special attention to "Paradise Lost". Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5515 Restoration And Early 18th-Century British Literature Credits: 3
British literature from the late 17th century to the mid-18th cetury. Selected writers may include Addison and Steele, Behn, Congreve, Defoe, Dryden, Finch, Pope, Rochester, Swift, and Wortley Montagu.

ENGLISH 5516 The Romantic Period Credits: 3
An extensive study of selected writers (such as Austen, Barbauld, Byron, Coleridge, Hazlitt, Hemans, Keats, Gilpin, the Shelleys, Wollstonecraft, and Wordsworth) organized around literary themes and/or cultural issues important to the Romantic period.
Prerequisites: ENGLISH 327.

ENGLISH 5517 Modern Poetry Credits: 3
Study of works by modernist poets such as Hopkins, Yeats, Frost, Stevens, Williams, Moore, Pound, H.D., Eliot, Millay, Hughes. Students will make in class presentations and submit papers requiring research and bibliographic work.

ENGLISH 5518 19th-Century American Literature Credits: 3
An intensive study of either selected major American writers in the 19th century or of 19th-century literary movements. Students will make in class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5519 Teaching Writing: Theories, Histories, Contexts, Practices Credits: 3
This course focuses on issues related to the teaching of English at the high school and college levels, with an emphasis on the teaching of writing. Issues addressed may include assignment design, teaching invention and revision, response to and evaluation of writing, collaborative learning, relationships between reading and writing, classroom uses of electronic media, and institutional contexts within which teachers work. The course is required of Graduate Teaching Assistants in the UMKC Composition Program, to be taken either prior to or concurrently with their first semester of teaching. Secondary English teachers and others interested in English teaching are also welcome.

ENGLISH 5520 Greater Kansas City Writing Project Credits: 3
Studies in methods and objectives for the teaching of English with special attention to secondary school teaching. This course is repeatable for credit with advisor approval.

ENGLISH 5520A Greater Kansas City Writing Project Credits: 3

ENGLISH 5520B Greater Kansas City Writing Project Credits: 3

ENGLISH 5520D Greater Kansas City Writing Project Credits: 3

ENGLISH 5522 Medieval Literature Credits: 3
Western religious and secular verse and prose to the 15th century. Late Middle English works are read in the original; all other selections in translation. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5523 Renaissance Literature II Credits: 3
English literature from 1600 to the beginning of the Restoration, including the works of Donne, Jonson, Milton, and other contemporaries. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5526 The Victorian Period Credits: 3
An intensive study of selected writers (such as Arnold, Braddon, the Brontes, the Brownings, Dickens, Darwin, Eliot, Gaskell, Hardy, Ruskin, and the Rossettis) organized around literary themes and/or cultural issues important to the Victorian period.
Prerequisites: ENGLISH 327.

ENGLISH 5527 Contemporary Poetry Credits: 3
Study of works by contemporary poets (post- World War II), such as Auden, Bishop, Hayden, Berryman, Rukeyser, Larkin, Rich, Plath, Heaney, Boland, and Komunyakaa. Students will make in class presentations and submit papers requiring research and bibliographic work.

ENGLISH 5528 20th Century American Literature Credits: 3
Major American writers or literary movements of the 20th century. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5529 Graduate Seminar: Screenwriting Credits: 3
A seminar on advanced theory in narrative screenwriting, script analysis and constructive story editing. Students draft, revise and workshop a short film script or a feature screen play, and deliver a pitch, treatment, draft and revision of the first act and detailed outline of the whole script. Students workshop feature screenplays in small groups.
Prerequisites: ENGLISH 429B or COMM-ST 454.

Cross Listings: COMM-ST 354.

ENGLISH 5531 Late 18th-Century British Literature Credits: 3
British literature from the mid to late 18th century. Selected writers may include Blake, Burney, Collins, Equiano, Fielding, Gray, Johnson, Sheridan, and Wollstonecraft.

ENGLISH 5532 Advanced Creative Writing: Fiction Credits: 3
A course for advanced students of fiction writing. The class will proceed through analysis of models, discussion of general principles, and critique of student work. Students will simultaneously be encouraged to experiment and to refine the form and subjects best suited to their talents. Emphasis will remain on the short story, though there may be units in other forms--novella, film script, the non-fiction essay. May be repeated once for credit.
Prerequisites: Graduate Standing.

ENGLISH 5533 Histories Of Writing, Reading, And Publishing Credits: 3
A study of selected topics concerning the material practices of writing, reading, and publishing within specific cultural and historical contexts. Issues examined may include authorship, education, information technologies, libraries, literacy, periodicals, popular literature, publishers, and communities of readers.

ENGLISH 5534 Postcolonial Literature Credits: 3
An exploration of postcolonialism through the study of literary and theoretical texts created by or representing peoples whose historical experience has been decisively shaped by the experience or legacies of colonialism. Texts will be drawn from a variety of genres and from several countries. The course will consider several definitions of postcolonialism and related terms such as cosmopolitanism, hybridity, diaspora, and nationalism.

ENGLISH 5535 Advanced Creative Writing: Poetry Credits: 3
An advanced poetry workshop that includes intensive reading of contemporary poetry and aims at each student creating a portfolio of publishable poems. The focus of the course will vary to address a variety of topics such as metaphor and closure; imitation and the line; form and voice. May be repeated once for credit.
Prerequisites: Graduate Standing.

ENGLISH 5536 Poetic Forms Credits: 3
An advanced creative writing course that focuses on intensive study of and practice in metrics and traditional and nonce forms. May be repeated once for credit.
Prerequisites: ENGLISH 315 or equivalent.

ENGLISH 5537 Prose Forms Credits: 3
This course covers techniques for planning and drafting major prose forms. Students will learn how to use content as a guide to inventing new forms (i.e. novella, novel, linked-story collection, episodic novel, essay novel, and creative nonfiction book.
Prerequisites: ENGLISH 432WI, ENGLISH 435WI.

ENGLISH 5540 American Culture Credits: 3
Texts that offer perspectives on key historical themes of American culture. Texts may be grouped around any culturally significant principle (e.g. region, race, gender, class, ethnicity, religion) or theme (e.g. the mythology of the frontier, marriage and domesticity, the American Dream). Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5541 Girls And Print Culture Credits: 3
This course deals with girls' relationships to the continually evolving print culture. Students will examine various literary representations of girlhood by adult writers, explore texts directed at girls (e.g., conduct books, periodicals, textbooks), and study the writing and reading practices of girls themselves.

ENGLISH 5545 History And Principles Of Rhetoric Credits: 3
A study of selected writings of ancient and modern rhetoricians illustrating key issues in the development of Western discourse theory and practice. Issues examined include the relationships between rhetoric and knowledge, orality and literacy, and rhetoric and poetics. Attention will also be given to the implications of rhetorical theory for modern language instruction. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5547 Introduction To Literary Criticism Credits: 3
An introduction to major schools or methods of literary criticism. The first third of the course is an historical overview of criticism from Aristole to Northrop Frye. The remainder of the semester is devoted to a study of genetic, formalist, mimetic, affective, intertextual, and deconstructionist approaches. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5550 Graduate Seminar Credits: 3
Authors, works and intellectual currents which form the basis of these seminars may vary from semester to semester, depending upon the instructor's design for the course. May be repeated for credit. Continued in ENGLISH 5555.

ENGLISH 5550A Graduate Seminar Medieval Literature I Credits: 3

ENGLISH 5550B Graduate Seminar Renaissance Literature I Credits: 3

ENGLISH 5550C Graduate Seminar Neo-Classical Literature I Credits: 3

ENGLISH 5550D Graduate Seminar 19th Century Literature I Credits: 3

ENGLISH 5550E Graduate Seminar American Literature I Credits: 3

ENGLISH 5550F Graduate Seminar Modern Literature I Credits: 3

ENGLISH 5550G Graduate Seminar Literary Criticism Credits: 3

ENGLISH 5550H Graduate Seminar Studies In Fiction I Credits: 3

ENGLISH 5550I Graduate Seminar In Dramatic Literature I Credits: 3

ENGLISH 5550J Graduate Seminar: History Of The English Language Credits: 3

ENGLISH 5550K Graduate Seminar: Creative Writing Prose Credits: 3

ENGLISH 5550M Graduate Seminar In Rhetoric And Composition Credits: 3

ENGLISH 5550MA Greater Kansas City Writing Project: Invitational Credits: 3

ENGLISH 5550MC Greater K.C. Writing Project:Writing & The Teaching Of Literature Credits: 3

ENGLISH 5550MD Greater Kc Writing Project:Critical Thinking & Process Writing Credits: 3

ENGLISH 5550ME Greater K.C. Wrtg Project:Researching The Theories Of Tchng Wrtng Credits: 3

ENGLISH 5550N Graduate Seminar: Criticism Credits: 3

ENGLISH 5550P Graduate Seminar: Sociolinguistics And Dialectology Credits: 3
Seminar focusing on the role of social factors in language use, and on the origin and development of regional and urban dialects in English. Special attention will be paid to sociolinguistic motivations for change, variation and merger in dialects and languages in contact, and Black English.

ENGLISH 5551 Shakespeare Comedies And Histories Credits: 3
A study of Shakespeare’s major comedies and history plays with special emphasis on his dramatic works before 1600. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5552 Early English Drama Credits: 3
English religious and secular drama prior to Shakespeare. Mystery and morality plays are studied with emphasis on their literary and social backgrounds. Close readings of such works as "Everyman," "The Wakefield Second Shepherd’s Play," and "The Spanish Tragedy." Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5553 Modern Drama 1880-1945 Credits: 3
A study of modern drama: Continental, British, and American, including history and development, critical theory, and literary evaluation. This course will focus on the earlier modern playwrights from Ibsen to Shaw, with special attention to naturalism. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5555 Graduate Seminar Credits: 3
Graduate Seminar - second half.
Prerequisites: ENGLISH 5550.

ENGLISH 5555A Graduate Seminar Medieval Literature II Credits: 3

ENGLISH 5555B Graduate Seminar Renaissance Literature II Credits: 3

ENGLISH 5555C Graduate Seminar Neo-Classical Literature I Credits: 3

ENGLISH 5555D Graduate Seminar In 19th-Century Literature II Credits: 3

ENGLISH 5555E Graduate Seminar American Literature II Credits: 3

ENGLISH 5555F Graduate Seminar In Modern Literature II Credits: 3

ENGLISH 5555G Graduate Seminar Literary Criticism Credits: 3

ENGLISH 5555H Graduate Seminar Studies In Fiction II Credits: 3

ENGLISH 5555I Graduate Seminar In Dramatic Literature II Credits: 3

ENGLISH 5555J Graduate Seminar English Language Credits: 3

ENGLISH 5555K Graduate Seminar In Creative Writing:Poetry Credits: 3

ENGLISH 5555M Graduate Seminar: Composition Credits: 3

ENGLISH 5555N Graduate Seminar: Prose Fiction Credits: 3

ENGLISH 5556 Studies In The Novel 1740-1900 Credits: 3
An intensive study of no more than three major novelists of the eighteenth or nineteenth century. The content of the course will change, depending on the instructor. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5560 Special Topics Credits: 1-4
The professor who gives this course determines what its content shall be. All aspects of English studies are within its possible range.

ENGLISH 5561 Shakespeare:Tragedies And Romances Credits: 3
A study of Shakespeare’s major tragedies and late romances with special emphasis on his dramatic literature after 1600. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5562 Restoration And 18th- Century Drama Credits: 3
The drama after the restoration of the monarchy and the reopening of the theatres through the 18th century. Special emphasis is placed on the comedy of manners and the heroic drama in the Restoration and the sentimental comedy in the 18th-century. Includes such playwrights as Dryden, Congreve, Etherege, Wycherley, Steele, Lillo, Cumberland, Sheridan, and Goldsmith. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5563 Contemporary Drama Credits: 3
A study of contemporary drama: Continental, British, and American, including history and development, critical theory and literary evaluation. This course will focus on the more recent writers, including the absurdists, with special attention to experimental drama. Students will make in-class presentations and submit papers requiring research and bibliographical work.
Prerequisites: ENGLISH 5553.

ENGLISH 5564 Medieval Methods & Paleography Credits: 3
This course examines the methodology and historiography of Medieval Studies. Through an introduction to paleography, the study of medieval handwritings, it prepares students for advanced work in Medieval and Renaissance studies. Using an interdisciplinary approach, this course will examine the historical and cultural settings for medieval texts, their physical form and production, as well as the tradition of textural transmission in the medieval world. In addition to gaining familiarity with the many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for practical archival work in various European nations.
Prerequisites: First Year Latin.

Cross Listings: HISTORY 5583.

ENGLISH 5565 Studies In Modern Novel Credits: 3
An intensive study of no more than three major 20th- century novelists. The content of the course will change depending on the instructor. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5566CA Cluster Course: Images Of The Human Body In The Renaissance Credits: 3
Focusing on Renaissance conceptions of the human body, this cluster treats the following topics as they are reflected in Renaissance literature, art, astrology, astronomy, biology, anatomy, medicine, and politics: A) The dignity of the human body B) Microcosm and macrocosm. C) The human body and the heavens D) Stranger manifestations: freaks and beasts E) The humors F) Disorders of the human body G) The body politic H) The human body as an object of study.

ENGLISH 5566CF Courts And Culture In The Middle Ages Credits: 3
This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate not only the "high culture" of the courts but also the interactions of people from various social backgrounds in Western Europe.

ENGLISH 5575 Advanced Creative Writing: Creative Nonfiction Credits: 3
This course is devoted to the study and crafting of the personal essay. Students will explore - and - practice many different varieties of this diverse form. Whether in the guise of aesthetic appreciation, cultural critique, personal history, political reportage, or travelogue, our course readings are first and foremost PERSONAL narratives, both troubled and enriched by their subjectivity (the essay's ' I '). Students will study the many challenges particular to this form (most of which concern notions of truth, and its rendering) and strive to overcome them as they create vivid personal narratives of their own.

ENGLISH 5582 European Literature: 18th Century Credits: 3
The 18th-century course will focus on a representative sampling from authors such as Corneille, Racine, Moliere, Voltaire, Prevost, La Bruyere, La Rochefoucauld, Montesquieu, Diderot, Rousseau, Schiller, Goethe, and Grimmelshausen. Students will make in-class presentations and submit papers requiring research and bibliographical work.

ENGLISH 5591 Research In Selected Fields Credits: 1-3
Individual study under the direction of a senior member of the department, leading to the writing of a formal or scholarly paper. May be repeated for credit.

ENGLISH 5598A MFA Thesis Credits: 3-6
Under the guidance of a graduate MFA faculty member, students completing the MFA must complete and orally defend a publishable or producible manuscript. May be repeated for a maximum of six hours credit.

ENGLISH 5599 Research And Thesis Credits: 1-9
A student, with permission of the graduate committee, may write a thesis for 3 hours credit.

ENGLISH 5600 Introduction To Doctoral Study In English Credits: 3
Introduction to research skills necessary for doctoral work, particularly for writing the thesis; attention will be paid both to traditional skills such as bibliography and to computer skills.

ENGLISH 5601 Culminating Experience in Literature Credit: 1
Under the guidance of a graduate faculty member in English, students following the program of study in Literature must revise and orally defend a 20-30 page paper in Literature on a pass/no pass basis.

ENGLISH 5602 Culminating Experience in Language & Literature Credit: 1
Under the Guidance of a graduate faculty member in English, Students following the program of study in Language Literature must revise and orally defend a 20-30 page paper in Language Literature on a pass/no pass basis.

ENGLISH 5603 Culminating Experience in Manuscript, Print Culture, & Editing. Credit: 1
Under the guidance of a graduate faculty member in English, students following the program of Study in Manuscript, Print Culture, and Editing must revise and orally defend a 20-30 page paper in Manuscript, Print Culture, and Editing on a pass/no pass basis.

ENGLISH 5650 Doctoral Seminar Credits: 3

ENGLISH 5691 Doctoral Research In Selected Fields Credits: 3
Individual study under the direction of a senior member of the department leading to the writing of a formal or scholarly paper. May be repeated for credit.

ENGLISH 5699 Research And Dissertation Credits: 1-15
Research and preparation for the doctoral dissertation.

ENGLISH 5899 Required Graduate Enrollment Credit: 1

Entrepreneurship (ENT)

Courses

ENT 5502 Introduction to Entrepreneurship Credit: 1.5
This course helps students develop insight into what it takes to launch a successful startup. The primary focus is on opportunity identification and evaluation. This is accomplished by examining the characteristics of a good entrepreneurial opportunity and the steps required to get a business up and running.

ENT 5515 Creating the E-Business Experiential Learning Credits: 3
This course guides students through the process, experiences, and requirements for creating a new online e-venture and planning for operations up to the point of securing customers and generating first revenues. Key course actions include developing a business plan for the new venture examining the initial steps for start-up and operational launch, and preparing for securing of customers/revenues.
Prerequisites: ENT 5515.

ENT 5525 Entrepreneurship: Managing Creativity And Innovation Credits: 3
The course examines the nature of creativity and innovation and how entrepreneurship involves the ability to identify market opportunity based on new ideas. Detailed attention is given to the entrepreneurial process: the concepts, skills, know-how and know-who, information, attitudes, alternatives and resources that entrepreneurs need to manage creativity in the process of creating something with tangible economic value.

ENT 5527 Creating the New Venture Experiential Learning Credits: 3
This course guides students through the process, experiences, and requirements for creating a new venture and planning for operations up to the point of securing customers and generating first revenues. Key course actions include developing a business plan for the new venture, examining the initial steps for start-up and operational launch, and taking the initial steps to secure customers/revenues.

ENT 5532 Managing the New Venture Experiential Learning Credits: 3
This course is designed to provide students an experiential learning opportunity in running a new business. In particular, students will run the business that they started in ENT 5527. Students will define and deliver products and services to real business customers and clients; negotiate with suppliers, administrative agencies and other stakeholders; obtain financing for on-going company relations; and be held accountable for cash flows and company budgets.
Prerequisites: ENT 5527.

ENT 5535 Small Business Management And Entrepreneurship Credits: 3
This course focuses on the nature of the entrepreneurial organization; its volatility and flux, where standard operating procedures are lacking and organizational structure, culture and leadership style are created anew each day. Successful small business management requires that a series of developmental challenges be identified and addressed if the venture is to succeed.

ENT 5541 Personal Entrepreneurial Strategy Credits: 3
This course is a cooperative offering between UMKC, University of Kansas, and Rockhurst University and is taught at Kauffman Legacy Park. The course applies the case method to allow the student to learn about the entrepreneur and the entrepreneurial process, understand the sacrifices and benefits of being an entrepreneur, and develop professional skills relevant to entrepreneurial activity.

ENT 5542 Technology and New Ventures I Credits: 3
This course will build skills needed to create successful, high-value technology. Emphasis will be on markets for technology, and venture capital. Case studies will emphasize information technologies and environmental technologies.

ENT 5543 Technology And New Ventures II Credits: 3
This course will draw upon the skills developed in ENT 5542 to enable student teams to prepare business plans for new ventures they might actually like to start. The information technologies and energy/environment will be emphasized, but students are welcome to propose any technologies.
Prerequisites: ENT 5542 (or equivalent).

ENT 5545 Entrepreneurship And New Venture Creation Credits: 3
The objectives of this course are: (1) to build personal appreciation for the challenges and rewards of entrepreneurship in an independent mode by examining/simulating its environment; (2) to present and examine, through the use of complex case studies and high level guest/lectures, economic, legal and managerial mechanisms proven useful in creating new wealth; and (3) to foster continued development of venture ideas, suitable as career entry options or for investments, using a tutorial approach to business plan development, presentation and evaluation.

ENT 5552 Entrepreneurial Marketing Credits: 3
This course exposes students to the objectives, challenges, and requirements for effective, results-oriented marketing activities and sales efforts for the entrepreneur/new venture. Key topics include the selection, design, and budgeting of entrepreneurial marketing and advertising programs, along with effective selling, customer acquisition, and service/retention efforts.

ENT 5561 New Venture Creation and Product Innovation Credits: 2
This course covers the first part of a two-course sequence and brings together several disciplines students have encountered in the first year of the Executive MBA program curriculum. Students will gain experience in new venture creation and product innovation management. A management simulation will serve as a continuing, evolving "case" in which course participants working in teams assume the role of CEO.
Prerequisites: Admission to the Executive MBA program.

ENT 5562 Managing a High-Growth Business Credit: 1
This course constitutes the second part of a two-course sequence and brings together several disciplines students have encountered in the first year of the Executive MBA program curriculum. Students will gain experience in new venture creation and product innovation management. A management simulation will serve as a continuing, evolving "case" in which course participants working in teams assume the role of CEO.
Prerequisites: Admission to the Executive MBA program.

ENT 5567 Innovation & Entrepreneurship I Credits: 2
This course, the first of a two-course sequence, covers the entrepreneurial and innovation process from conception to birth of the new business. It looks at both process and people involved in assessing ideas, exploiting opportunities, and converting concepts into high-growth businesses. Application of the processes will be extended to both start-ups and well as new business groups within existing organizations, with an emphasis on nurturing a climate of innovation. Students will identify opportunities for high-growth potential new enterprises, develop a business plan, and present their plans to a panel of potential investors and/or senior managers.
Prerequisites: Admission to the Executive MBA program.

ENT 5570 Pricing Strategy for New & Ongoing Enterprises Credits: 2
This course focuses on pricing strategy and tactics in both theoretical and applied contexts, concentrating on how firms create value and capture profits in the revenues that they earn with emphasis on pricing dynamics and reaction to competitor pricing at the firm and product level. The materials used are intended to provide a comprehensive exposure to managerial pricing decisions. The course illustrates how common tactical approaches to pricing can undermine a company’s ability to realize its profit potential.

ENT 5571 Advanced Real Estate Finance Credits: 3
This course introduces students to the full spectrum of real estate finance and investment analysis. It helps students quantify the financial implications of various real estate decisions for individual properties as well as more strategic decision-making applied to real estate portfolios. Using a combination of experiential and incremental learning students develop the foundation skills necessary to support more advanced concepts and financial theory. The course explores time value of money, law, leverage, underwriting, discounted cash flow, investment analysis, and capital markets. Students also develop advanced modeling skills and learn how to apply state-of-the art financial packages to support decisions.
Prerequisites: RL-EST 5556.

ENT 5572 MBA Capstone Experience-Business Plan for a Startup Company Credits: 3
Class participants will develop a business plan for a startup company. The plan must demonstrate understanding of the product or service, and appropriate analyses including opportunity assessment for the new product/service, specifying the skills of the management team and the organization that the company will need to develop, the business model, the market, the industry including competitors, alternatives and choices for operations, the information systems and reports the management team will need, the milestones that investors should realistically expect the new entity to meet, and the financial requirements of the company in its early phases.

ENT 5573 Real Estate Market Analysis and Feasibility Study Credits: 3
This course helps students develop entrepreneurial, fact-based approaches to problem-solving and decision support. It incorporates experiential learning to help students deploy quantitative and qualitative approaches that incorporate the perspectives of space users, space producers, and market facilitators. Students learn how to address the goals and objectives of a particular client, while also considering the externalities and impacts such decisions have on the built environment. Students will integrate critical thinking with spatial and financial analytical methods and state-of-the-art tools to quantify market demand and to translate that demand to a spatial solution that is marketable and financially feasible.
Prerequisites: RL-EST 5556.

ENT 5576 Real Estate Property Management Credits: 3
This course explores the complexities and integration of property and portfolio management which are critical to the creation, control and capture of real estate value. Students learn how to approach real estate in a more holistic manner by integrating management functions that range from individual property types to portfolios of properties. Students learn how to incorporate marketplace factors in their decisions and apply modern portfolio theory and other tools to construct and manage properties and portfolios in a socially responsible manner. Using experiential methods students learn to apply critical thinking to solve complex property and portfolio management problems.
Prerequisites: ENT 5571.

ENT 5578 Legal Context of Real Estate Decision Making Credits: 3
This course introduces decisions involved in the development, ownership, and operation of commercial real estate and the legal issues associated with these decisions. Topics covered include: due diligence, loan application/brokerage agreements, zoning, easements, entitlements and condemnation actions, bankruptcy, commercial real estate insurance coverage, choice of business entity, income tax planning, and joint ventures.

ENT 5585 Entrepreneurial Finance and Venture Capital Investment Credits: 3
This course exposes students to the process of financing and investing in a new venture. The primary objective of this course is for students to develop a good understanding of the objectives, strategies, and challenges in financing and valuation of entrepreneurial firms through analyzing unique financial issues these firms and their investors face. Students will develop skills for assessing new venture financial viability, cash needs, funding sources, valuation, and funding structure.

ENT 5587 Seminar In Entrepreneurship Credits: 1-6
A course on advanced and/or new topics. This course is designed to facilitate at least one of two purposes: An initial offering of a new course (prior to formal approval) or an initial and possibly final offering on a new topic. New topics include those that are contemporary, cutting edge, or advanced topics that are not currently covered by existing courses.

ENT 5587A Seminar In Entrepreneurship Credits: 1-6
A course on advanced and/or new topics. This course is designed to facilitate at least one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possibly final offering on a new topic. New topics include those that are contemporary, cutting edge, or advanced topics that are not currently covered by existing courses.

ENT 5587B Seminar In Entrepreneurship Credits: 1-6
A course on advanced and/or new topics. This course is designed to facilitate at least one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possibly final offering on a new topic. New topics include those that are contemporary, cutting edge, or advanced topics that are not currently covered by existing courses.

ENT 5587C Seminar In Entrepreneurship Credits: 1-6
A course on advanced and/or new topics. This course is designed to facilitate at least one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possibly final offering on a new topic. New topics include those that are contemporary, cutting edge, or advanced topics that are not currently covered by existing courses.

ENT 5587D Seminar In Entrepreneurship Credits: 1-6
A course on advanced and/or new topics. This course is designed to facilitate at least one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possibly final offering on a new topic. New topics include those that are contemporary, cutting edge, or advanced topics that are not currently covered by existing courses.

ENT 5587E Seminar In Entrepreneurship Credits: 1-6
A course on advanced and/or new topics. This course is designed to facilitate at least one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possibly final offering on a new topic. New topics include those that are contemporary, cutting edge, or advanced topics that are not currently covered by existing courses.

ENT 5591 Small Business Management Practicum Credits: 3
An integrated management course designed to examine the principles of business management applicable to solving the problems of small and medium size businesses and assisting in their development.

ENT 5595 Internship Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

ENT 5597 Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

ENT 5681 Multivariate Statistical Methods-II Credits: 3
Theoretical and research applications of MANOVA, canonical correlation, multiple discriminant analysis, factor analysis, and introduction to structural equation modeling using appropriate software. Students are expected to undertake a major research project during this class and to apply appropriate multivariate statistical analyses to their chosen academic research topic.

ENT 5682 Structural Equation Modeling Credits: 3
This course presents structural equation modeling. It includes a review of regression, as well as the study of path analysis, including model specification, methods of estimation, recursive and non-recursive models; direct, indirect, and total effects methods of estimation; single and multi-group analyses; moderators; mediators; structural equation model specification; identification, methods of estimation, second-order factor analysis, and the assessment of casual structure. Students are expected to continue a research project started in ENT 5681.

ENT 5683 Mathematical Models For Entrepreneurship Credits: 3
The purpose of this course is to provide an introduction to mathematical models in entrepreneurship and related disciplines. Classes will focus on the use of mathematical models to characterize the nature of various entrepreneurship-related decisions in complex environments. For each topic considered (e.g., RD investment decisions in new product entry, diffusion, and marketing mix variables), students will examine select examples of scholarly articles. Presentations and discussions are designed to help students understand and critique existing models and stimulate the development of new theoretical viewpoints.

ENT 5691 Doctoral Seminar In Theoretical Foundations Of Entrepreneurship I Credits: 3
ENT 5691 is designed as a broad survey of major topics in the field of entrepreneurship. Its objective is to familiarize students with some of the primary theoretical underpinnings of the field as well as some of the common and/or promising methodological approaches to the study of entrepreneurial phenomena. Topics covered in the course include a theoretical overview, entrepreneurs, environment and organizational founding.
Prerequisites: Doctoral standing.

ENT 5692 Foundations Entrepreneurship Credits: 3
ENT 5692 is designed as a continuation of ENT 5691, providing a broad survey of major topics in the field of entrepreneurship. Its objective is to familiarize the student with some of the primary theoretical underpinnings of the field as well as some of the common and/or promising methodological approaches to the study of entrepreneurial phenomena. Topics covered in the course include: entrepreneurship's links with other diciplines, venture capital and venture capitalists, new venture strategy, new venture performance, growth processes and challenges, and entrepreneurial networks and alliances.

ENT 5693 Technology, Innovation, And Entrepreneurship Credits: 3
This seminar will explore academic literature of technology, innovation, and entrepreneurship. Specific topics include emerging technologies, evolutionary theory, building capabilities based on networks, organizational learning, technological innovation, institutional economics, network externalities, knowledge transfer, technological trajectories and path dependencies.
Prerequisites: Doctoral standing.

ENT 5694 Doctoral Seminar In Theories Of The Fim And Strategy Credits: 3
In this course, students will become familiar with and develop an in-depth understanding of the concepts, models, and paradigms that collectively form the foundation for strategic thinking. Students will develop the ability to critically integrate findings from strategic research programs. Employing an appreciation for the interdisciplinary nature of strategic marketing and management, the purpose is to develop a keen awareness of major gaps that exist in the strategic literature. Students will strengthen the skills needed to conduct original strategic marketing research that can be published in the leading academic journals.
Prerequisites: Doctoral Standing.

ENT 5699 Dissertation and Research in Entrepreneurship and Innovation Credits: 1-12
Dissertation research and writing in Entrepreneurship and Innovation Discipline.

ENT 5899 Required Graduate Enrollment Credit: 1

Environmental Sciences (ENV-SCI)

Courses

ENV-SCI 5550 Ecotoxicology Credits: 3
This course addresses the fundamentals of ecotoxicology, integrating the sciences of ecology and toxicology. Students will learn the biological basis for pollutant effects on individuals and populations of plants and animals, how pollutant intensity varies as a function of bioavailability, the basics of risk assessment, and how pollutant effects are modified by ecological interactions within communities and ecosystems. The ultimate goal of ecotoxicology is to predict the effects of pollution within an ecological context.
Prerequisites: BIOLOGY 108, CHEM 211, CHEM 212R.

Euphonium (EUPHNM)

Courses

EUPHNM 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: EUPHNM 300.

EUPHNM 5500A Graduate Euphonium-Secondary Credits: 2

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

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

EUPHNM 5501 Graduate Euphonium - Master's Performance Credits: 4

EUPHNM 5601 Graduate Euphonium - Doctoral Performance Credits: 4

Finance (FIN)

Courses

FIN 5501 Economics For Administration Credits: 3
This course is designed for graduate students in the School of Business and Public Administration. Topics include the theory and determination of national income, fiscal policy, monetary theory and policy, production and cost theory, and market structure.

FIN 5502 Corporate Financial Management Credit: 1.5
This course provides a rigorous, but concise distillation of the major tools and techniques of corporation finance. The three main topic areas covered during the course are the underlying principles of time value of money and stock, bond, and preferred stock valuation, techniques and procedures involved in the estimation of project cash flows and valuation, including net present value, the profitability index, the internal rate of return, the modified internal rate of return, and equivalent annual annuity, and procedures employed to calculate the required rate of return for capital project evaluation.
Prerequisites: ACCTNG 5501.

FIN 5504 Managerial Economics Credit: 1.5
This course applies microeconomic principles to for-profit and not-for-profit enterprises. Topics include: supply, demand, elasticity, equilibrium, cost and production theory, factor pricing, market structure and pricing and public policy toward business.

FIN 5505 Global Macroeconomics Credit: 1.5
Global Macroeconomics examines fiscal and monetary policies in the US as well as other countries. It considers issues of international trade, exchange rates and coordination of economic policies as well as economic integration and fiscal and financial crisis management.

FIN 5507 Strategic Financial Management: Theory & Policy Credit: 1.5
This course teaches students to use state-of-the-art financial and economic theories to make rational executive-level financial decisions. It provides the students with an understanding of the critical inter-relationships between the finance, accounting, production, marketing, and management functions of the firm

FIN 5515 Managerial Economics Credits: 2
This course studies the relationships between the economic theory and system as a whole and the ways in which their functioning is affected by the behavior of the interdependent sectors of which they are composed. Students will explore the major factors and determinants of economic prospects relevant to profit-maximizing production and pricing decisions for the firm.
Prerequisites: admission to executive MBA program.

FIN 5532 Financial Management Credits: 3
An introduction to the role of financial management through the development of a conceptual framework appropriate for financial decision making. Generally, financial management is charged with the responsibility for obtaining and effectively utilizing the funds necessary for the operation of an enterprise. As such, the conceptual framework includes elements of financial planning (financial analysis, cash budgeting and profit planning), capital budgeting (rate of return and cost of capital), and basic considerations of alternative sources of funds.
Prerequisites: ACCTNG 5517, DSOM 5508, and FIN 5501 (or equivalents).

FIN 5550 Advanced Financial Management Theory And Policies Credits: 3
Advanced financial management covering topics such as working capital, financial structure, cost of capital, dividend policy and valuation. Discussions include both financial theory as well as financial policy. Includes exposure to literature central to the development of finance theory.
Prerequisites: Six hours of finance coursework beyond FIN 5532 (or equivalent).

FIN 5551 International Financial Management Credits: 3
This course analyzes present and future international financial market conditions and extends the decision-making tasks of financial management into the context of problems of the international and foreign financial systems. The financial constraints of the international business environment and their effect on standard concepts of financial management are studied along with international currency flows, capital structure problems, working capital management, foreign investment, and international banking practices.
Prerequisites: FIN 5532 (or equivalent).

FIN 5552 Global Financial Markets and Institutions Credits: 3
Students are introduced to global financial markets and institutions. Topics include equity, debt, commodity, housing, and foreign exchange markets both in the U.S. and globally. The course explores the effects of monetary and fiscal policy, with emphasis on past and current global financial crises, financial restructuring and reforms, as well as the interrelationships between financial and real economies.
Prerequisites: FIN 5532 (or equivalent).

FIN 5553 Investment Analysis Credits: 3
Development of a theoretical framework applicable to the solution of problems related to creation and management of the investment portfolio. Consideration is given to the analysis of risk, functions of security markets, sources of information, evaluation of securities, and measurement of investment return.
Prerequisites: FIN 5532 (or equivalent).

FIN 5556 Management Of Financial Intermediaries Credits: 3
This course addresses the management operations of selected financial intermediaries including commercial banks and thrift institutions. Attention is given to asset-liability structure, the development and delivery of financial services, institutional structure, legal and regulatory factors, and the dynamics of the competitive environment.
Prerequisites: FIN 5532 (or equivalent).

FIN 5557 Derivative Securities Credits: 3
This course is designed to introduce students to the basic principles of financial risk management. The student should develop a working knowledge of issues regarding both the theoretical valuation and application of derivative securities. Applications will focus on techniques designed to manage financial risks in the corporate environment. Specifically, the course will focus on using futures, options, and swaps to hedge financial risks. Valuation issues will be explored to identify theoretical pricing fundamentals that can be applied toward valuing newly developed securities.
Prerequisites: FIN 5501, FIN 5532, DSOM 5508, and ACCTNG 5517, or equivalents.

FIN 5559 Strategic Financial Management Credits: 3
This course is designed to introduce students to the basic principles of financial risk management. The student should develop a working knowledge of issues regarding both the theoretical valuation and application of derivative securities. Applications will focus on techniques designed to manage financial risks in the corporate environment. Specifically, the course will focus on using futures, options, and swaps to hedge financial risks. Valuation issues will be explored to identify theoretical pricing fundamentals that can be applied toward valuing newly developed securities.
Prerequisites: ACCTNG 5517, DSOM 5508, FIN 5501, and FIN 5532 (or equivalents).

FIN 5560 Financial Modeling Credits: 3
The primary objective of this course is to introduce students to some of the fundamental quantitative methods used in investment analysis. The student should develop a working knowledge of measuring risk and return, probability theory, sampling and estimation, hypothesis testing, correlation analysis, regression and time series analysis, The course will emphasize experimental learning by applying these concepts to real data in a spreadsheet environment.
Prerequisites: Completion of introductory coursework in accounting, economics, statistics and finance.

FIN 5561 Financial Statement Analysis Credits: 3
Students will take an in-depth look at the external financial statements that are prepared by corporations, including the tools needed to organize, summarize, and understand corporate financial data for use in decision making. Ratio analysis, trend analysis, earnings forecasting, bankruptcy predictors statistical methods important to finance, and financial data bases are among the topics that will be covered.
Prerequisites: Completion of introductory coursework in accounting, economics, statistics, and finance.

FIN 5562 Fixed Income Analysis Credits: 3
The primary objective of this course is to provide an overall view of the role of debt markets in the modern economy. The course will cover the characteristics of instruments traded in money and capital markets; determinants of and the relationships between different security prices; and international aspects of financial markets. Topics include: valuing fixed income securities, managing interest rate risk, interest rate theory, the organization of bond markets and the structure and pricing theory underlying the mortgage-related fixed income market.
Prerequisites: Graduate standing in the Bloch School, FIN 5502 (or equivalent).

FIN 5563 Valuation/Mergers and Acquisitions Credits: 3
The primary objective of this course is to introduce students to techniques used to value both exchange-traded and private firms. Students should apply these techniques to cases involving mergers and acquisitions, initial public offerings private firm valuation and the valuation of a publicly traded stock.
Prerequisites: completion of introductory coursework in accounting, economics, statistics and finance.

FIN 5564 Portfolio Management Credits: 3
The primary objective of this course is to introduce students to some of the fundamental portfolio management tools used by practicing investment professionals. The student should develop a working knowledge of issues regarding portfolio construction, asset allocation, mean-variance optimization, performance measurement, and client relationship management.
Prerequisites: completion of introductory coursework in accounting, economics, statistics and finance.

FIN 5565 Alternative Investments Credits: 3
The primary objective of this course is to introduce students to investing in alternative assets. The student should develop a working knowledge of various types of alternative investments and how they impact the risk-return profile of a portfolio. The course will cover investments in hedge funds, private equity, real estate, commodities, real assets, energy, and infrastructure.
Prerequisites: completion of introductory coursework in accounting, economics, statistics and finance.

FIN 5566 Financial Plan Development Credits: 3
Personal financial planning differs for each of us for a variety of reasons including age, family, wealth, needs, income, and personalities to name a few. Nonetheless the tax, financial, and risk environments which inspire us to set goals are similar for all of us. Financial planners must take all of these financial and nonfinancial factors into consideration as they devise a plan for their clients. Our objectives, therefore, are to study the personal financial planning process and environment, examine the questions of financial planning, learn financial planning techniques, and develop the ability to prepare integrated financial plans for our clients.

FIN 5567 Payment Systems Credits: 3
Payment systems are central to modern economies, underpinning nearly all economic exchange among consumers, businesses, and government entities. Payment systems in the U.S. have undergone fundamental changes recently. yet, these systems are among the least studied and least understood components of our economy. The purpose of this course is to provide an in-depth knowledge of U.S. payment systems and an analytical framework for evaluating and responding to ongoing changes in the payments landscape..

FIN 5568 Organizational Finance Credits: 2
Gives students a thorough introduction to financial management that blends appropriate amounts of relevant theory with practical application.Topics include discounting techniques and applications, evaluating capital expenditures, estimating cost of capital, and valuing stocks and bonds.
Prerequisites: Admission to the Executive MBA program.

FIN 5580 Organizational Valuation & Financial Modeling I Credits: 2
This course will cover the concept of risk and reward and that to eliminate risk is to eliminate reward. We will delve into how management considers the entity's risk appetite in evaluating strategic alternatives, setting related objectives and developing mechanisms to manage related risks.
Prerequisites: Admission to Executive MBA program.

FIN 5582 Seminar In Finance Credits: 3
Advanced work in financial management, investment analysis, and financial markets and institutions will form the basis for the Seminar. Each topic selected will provide the opportunity for an investigative study on the part of the student. Major problems, hypotheses, and cases, together with the literature addressing the specific topic, will serve as the springboard for classroom activity. Both written and oral reports are required.
Prerequisites: FIN 5532 (or equivalent).

FIN 5587 Special Topics Credits: 3
This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

FIN 5595 Internship Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

FIN 5597 Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

FIN 5899 Required Graduate Enrollment Credit: 1

Flute (FLUTE)

Courses

FLUTE 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: FLUTE 300.

FLUTE 5500A Graduate Flute-Secondary Credits: 2

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

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

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

FLUTE 5501 Graduate Flute - Masters Performance Credits: 4

FLUTE 5601 Graduate Flute - Doctoral Performance Credits: 4

Foreign Language (FRN-LNG)

Courses

FRN-LNG 5899 Required Graduate Enrollment Credit: 1

French (FRENCH)

Courses

FRENCH 5500CF Courts and Culture in the Middle Ages Credits: 3
This cluster course offers an interdisciplinary approach to the study of the Middle Ages, focusing on medieval cultures in Europe. Arranged around a series of themes, the cluster will read a variety of documentary and literary texts to investigate not only the "high culture" of the courts but also the interaction of people from various social backgrounds in Western Europe.
Prerequisites: admission to the graduate program in Romance Languages.

FRENCH 5512 17th-century French Literature Credits: 3
Selected readings in the literature of the 17th century, with an emphasis on non-dramatic works.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 412.

FRENCH 5513 18th-century French Literature Credits: 3
Emphasis on philosophical and social significance. Authors may include Marivaux, Beaumarchais, LeSage, L'Abbe Prevost, Montesquieu, Rousseau, Diderot.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 413.

FRENCH 5514 Medieval Literature Credits: 3
Selected readings in various genres including epic, romance, theater and lyric. Emphasis will be placed on the intertextual relations and the cultural and historical context surrounding text production in the Middle Ages.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 414.

FRENCH 5517 16th-century French Literature Credits: 3
Selected readings in prose and poetry from Marot through Astree. Authors may include Rabelais, Ronsard, du Bellay, Montaigne, Marguerite de Navarre.
Cross Listings: FRENCH 417.

FRENCH 5520 Non-Dramatic 17th-century French Literature Credits: 3
Evaluation and reading of the works of Malherbe and contemporaries, of Descartes and Pascal and contemporaries, and of the great authors at the height of the classical period.

FRENCH 5524 19th-century French Literature Credits: 3
Selected readings in various genres from Romanticism through symbolism.

FRENCH 5526 20th-century French Literature Credits: 3
Selected readings from the Belle Epoque to the contemporary period.
Cross Listings: FRENCH 426.

FRENCH 5540 Medieval Romance Credits: 3
The various movements of French medieval romance from the 12th through 15th centuries with an emphasis on the 12th and 13th centuries. Analysis of literary technique and socio-historical context will be stressed. No knowledge of Old French is assumed.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 440.

FRENCH 5543 Early French Theater Credits: 3
An examination of the development of French theater from Late Antiquity through the Renaissance, including religious and secular drama. The focus is on literary analysis of the dramatic texts, with some consideration of theater history and dramaturgy.
Prerequisites: Admission to the MA in Romance Languages Literature program.

Cross Listings: FRENCH 443.

FRENCH 5544 Renaissance Poetry Credits: 3
French Poetry from the Grand Rhetoriqueurs through the Pleiade. Study of poetic forms, major poets and schools, and different approaches to analyzing poetry.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 444.

FRENCH 5545 Epistolarity and the Novel Credits: 3
Explorations of the genre through the analysis of 17th- and 18th- century French novels. Introduced by a theoretical review.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 445.

FRENCH 5546 17th-century French Drama Credits: 3
The classical period: Emphasis on Corneille, Racine and Moliere.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 446.

FRENCH 5547 19th-century French Poetry Credits: 3
The study of the poetry and dominant poetic movements of the 19th century, with special attention given to different approaches to its analysis.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5548 20th century French Theater Credits: 3
Analysis of major currents of French theater of the 20th Century, with emphasis upon the postwar period and its movements.
Cross Listings: FRENCH 448.

FRENCH 5552 Medieval Poetry Credits: 3
A study of medieval poetry including religious and secular poetry, Provencal and Old French lyric, the influence of poetry in other genres such as romance and theater, later medieval poetry of the 14th and 15th centuries, as well as a discussion of the origins of the lyric.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 452.

FRENCH 5553 Lyon, Crossroads of France and Europe Credits: 3
Lyon, Crossroads of France and Europe

FRENCH 5554 The Intellectual Origins of the French Revolution Credits: 3
Study of philosophical and political texts by Montesquieu, Rousseau, Voltaire, Diderot, etc. on government, society, language, freedom and equality. Critical study of the Enlightenment.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5555 Fin-De-Siecle and Belle Epoque Credits: 3
Study of the literary, cultural and historical context of this time period in French history, for example: Symbolism, Decadence, and the years 1900-1914.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 455.

FRENCH 5556 20th-century French Poetry Credits: 3
The study of 20th-century poetry with special consideration given to different approaches to its analysis.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 456.

FRENCH 5561 20th century French Narrative Credits: 3
The analysis of major currents in French 20th-century narrative, especially fiction and film. Courses will be organized around narrative themes or historical events and will include social and cultural components.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 457.

FRENCH 5563 19th-century French Fiction Credits: 3
Studies in the birth, development, and variation of French Romanticism. Readings include de Stael, Senancour, Constant, Hugo, Stendhal and Merimee. The advent of realism and naturalism in France. Readings include Balzac, Flaubert, Daudet, De Maupassant, and Zola.
Cross Listings: FRENCH 463.

FRENCH 5570 Studies in Critical Thought Credits: 3
Various currents of 20th-century literary criticism and their political and historical contexts.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

FRENCH 5571 Autobiography Credits: 3
Analysis of autobiographies and autobiographical texts such as diaries and memoirs together with theoretical texts on the genre. The concentration of different periods or issues may change from semester to semester, i.e. the art of autobiography as practiced by 20th-century writers, especially women.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 471.

FRENCH 5572 Francophone Studies Credits: 3
Study of different national Francophone literatures. Reading may include writers from Quebec, Haiti, Africa, Louisiana, Vietnam, the French Indies, etc.
Prerequisites: Admission to M.A. in Romance Languages and Literature program.

Cross Listings: FRENCH 472.

FRENCH 5580 Special Topics Credits: 1-3
Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

FRENCH 5589 Survey of French Theater Credits: 3
A survey of the major French playwrights and their plays from the 17th through the 21st centuries. Historical and cultural influences will be covered as well as the specificities of the genre from the perspective of how the plays are performed and how we read them.
Cross Listings: FRENCH 449.

FRENCH 5590 Directed Studies in French Literature Credits: 1-3
Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available only when student cannot take regularly scheduled courses.

General Practice (G-PRAC)

Courses

G-PRAC 5710 Principles Of Pedodontics For General Practice Credits: 2
A lecture course presenting the basic concepts of diagnosis and treatment of the child in a general dental practice.

G-PRAC 5716 Special Problems In General Practice Dentistry I Credits: 1-6
Courses designed to provide the student with opportunities to work with consultants and specialists on the faculty of the dental school on cases which require the attention of a specialist.

G-PRAC 5717 Special Problems In General Practice Dentistry II Credits: 1-6
Prerequisites: G-PRAC 5716.

G-PRAC 5718 Special Problems In General Practice Dentistry III Credits: 1-6
Prerequisites: G-PRAC 5717.

G-PRAC 5721 General Practice Clinic I Credits: 1-10

G-PRAC 5722 General Practice Clinic II Credits: 1-10

G-PRAC 5723 General Practice Clinic III Credits: 1-10

G-PRAC 5724 Hospital Residency In General Practice Iv Credits: 2

G-PRAC 5725 Hospital Residency In General Practice V Credits: 4

G-PRAC 5726 Hospital Residency In General Practice Vi Credits: 4

G-PRAC 5727 General Practice Clinical Pedodontics Credit: 1
Clinical training in treating normal and handicapped children at Children’s Mercy Hospital. Training includes providing treatment under general anesthesia at the hospital.

G-PRAC 5728 Dental Implantology Credit: 1
The course is designed to include the following topics: history of implantology, implant materials and designs, fibroosseous and osseo-integration theories, bioinert and bioactive retention, indication and case selection, technique methodology, anatomical considerations and reasons for failure, prosthetic considerations using several systems and necessary radiographic aids, surgical stent and laboratory with simulated insertion of an implant.

G-PRAC 5729 Oral Endosteal Implantology II Credits: 2
Prerequisites: G-PRAC 5728.

G-PRAC 5730 Introduction To Periodontology Credits: 1-2
This course is designed to introduce graduate students who are not enrolled in the periodontics program to various current philosophies and clinical applications of Periodontics including etiology, diagnosis, pathogenesis and various treatment modalities in current use.

G-PRAC 5731 Principles Of Minor Tooth Movement Credits: 2
This lecture and laboratory course gives the non-orthodontic student an introduction to craniofacial growth and development physiology of the stomatognathic system, to etiology, incidence, recognition and unfavorable sequelae of malocclusion, and to the fabrication of removable and fixedbanded appliances necessary for the correction of minor irregularities.

G-PRAC 5732 Intravenous And Inhalation Sedation Credits: 2
A comprehensive study of nitrous oxide and valium sedation combining lectures and clinical problems.

G-PRAC 5740 Interdisciplinary Seminar I Credit: 1
The integration of common areas of concern in the clinical disciplines of Oral and Maxillofacial Surgery, Orthodontics, Pediatric Dentistry, Periodontics and Prosthodontics as they relate to patient cases. Cases are presented that present problems in at least two clinical disciplines in the areas of Diagnosis, Treatment Programming or Therapy. The current literature is reviewed and the case discussed.

G-PRAC 5741 Interdisciplinary Seminar II Credits: 1-6
Prerequisites: G-PRAC 5740.

G-PRAC 5742 Interdisciplinary Seminar III Credit: 1
Prerequisites: G-PRAC 5741.

G-PRAC 5743 Interdisciplinary Seminar Iv Credit: 1
Prerequisites: G-PRAC 5742.

G-PRAC 5799 Research And Thesis Credits: 1-6
The satisfactory completion of an original research project. Results of the research and critical review of the pertinent literature are incorporated into a thesis.

G-PRAC 5899 Required Graduate Enrollment Credit: 1

Geography (GEOG)

Courses

GEOG 5502 Environmental Remote Sensing and Digital Image Analysis Credits: 4
This course will provide students with innovative techniques for landscape-level environmental analysis, geographic and geological studies, earth science research, and environmental resources management using remotely sensed data including satellite images. Students will be taught basic remote sensing concepts and technical skills, including energy radiative transfer processes, in remote sensing, sensors and resolutions, computer-based image processing and classification, and remote sensing/GIS integration.
Prerequisites: GEOG 203.

GEOG 5503WI History and Philosophy of Geoscience Credits: 3
A survey of geoscientific thought since antiquity. The substance of geography will be sought primarily in scholarly treatises, formal analytical systems, and cartography, but the course also addresses geographical principles emerging from the history of such matters as government, law economy, religion, and material culture. Readings, lectures, discussions, research, writing.
Prerequisites: RooWriter.

Cross Listings: GEOG 403WI.

GEOG 5504 Biogeography and Landscape Ecology Credits: 3
Principles and applications of biogeography and landscape ecology, emphasizing distribution of major ecosystems and related plants and animal species on earth, biodiversity, landscape patterns and processes, and physical, biological, and human interactions. The course explores ecosystem and landscape analyses using advanced GIS, remote sensing, and spatial modeling methods for real problem solving in environmental and biological research, ecosystem conservation, and urban planning and studies.
Prerequisites: GEOG 203, GEOG 402 (or GEOG 5502).

GEOG 5506 Global Environmental Change Credits: 3
This course will examine the current rates of global environmental change and potential causes in the context of Earth’s natural climate variability. The course will follow a seminar format. Students will read and discuss published articles on current and emerging theories of forcing mechanisms in the Earth’s systems. Additional in-depth research and written evaluation are required for graduate credit.

GEOG 5507 Advanced Geographic Information Science Credits: 4
Prerequisites: GEOG 203.

GEOG 5508 Archaeological Field Survey Methods Credits: 3
This class offers instruction in the basic skills required to conduct field surveys in archaeology and other geosciences disciplines. In the classroom, students learn about the development of archaeology as a scientific discipline and how to recognize some of the basic field data sought by archaeologists. Students earn about mapping and land navigation techniques. The field phase of instruction includes visits to archaeological sites in the region.

GEOG 5509 Urban Geography Credits: 3
Historical development, morphology and functions of urban places, including intercity relationships and the relationship between cities and their hinterlands; emphasis on American cities. Students will complete a series of reports and a term paper.

GEOG 5510 Landscape, Language, Literature, and Law Credits: 3
An examination of the geographic underpinnings and implications of languages, literatures, and jurisprudence. The course explores languages' historic rootedness in the interactions between human beings and their surroundings; the varying geographic expressiveness and discrimination of languages; the effect and significance of literary evocations of landscapes; and the cultural and environmental geographic content of the language of law. Readings, lectures, discussions, writing.
Cross Listings: GEOG 410.

GEOG 5512 Global Tourism Credits: 3
This course is a regional survey of world tourism. Topics include the uniqueness of place, the marketing of tourist destinations, and the cultural, economic, and environmental impacts on host societies.
Prerequisites: GEOG 105 (or GEOG 200, or GEOG 202).

GEOG 5515 History and Philosophy of Cartography Credits: 3
An examination of the techniques, assumptions, psychology, and cultural implications of mapping from the Stone Age to the age of satellites and the computerized Geographic Information System. Readings, lectures, discussions, writing.
Prerequisites: Baccalaureate degree.

Cross Listings: GEOG 415.

GEOG 5526 Paleoecology: Microfossils and Climate Change Credits: 3
Paleoecology will focus on questions addressing past environments and past climates based on the ecology of microfossils. Micro-organisms are very sensitive to a wide variety of environmental conditions including temperature, precipitation, hydrology, water chemistry, salinity, habitat, and pollution. The fossil remains of these organisms are used as proxy indicators for reconstructiong past environmental conditions, climate change, vegetation dynamics, and human impacts. Students will have the opportunity to process microfossils and make interpretations based on analysis of data.

GEOG 5530 Location Theory Credits: 3
An analysis and evaluation of the basic theories that have been developed to account for the spatial arrangements of economic activity. Emphasis on urban areas as nodes of economic interaction. Three hours lecture and discussion per week.
Prerequisites: GEOG 311, six hours in economics or urban studies.

GEOG 5535 Geoarchaeology Credits: 3
This course examines geomorphological and archaeological methods used in reconstructing sites, settlement patterns, and paleo-environments; evaluating archeological site integrity; and assessing the impact of development, with the emphasis on geomorphological evidence. No archaeological background necessary.
Prerequisites: GEOG 150, GEOG 314.

Cross Listings: GEOG 435.

GEOG 5537 Population Geography Credits: 3
An analysis of human population: how they grow, their changing compositions, and how and why people migrate from one place to another. Basic demographic processes-moratility, fertility, and migrate- and theory and techniques for their study are discussed. The relationships between population growth and population planning, immigration, urbanization and cities, and the environment.

GEOG 5542 Quaternary Environments Credits: 3
This course reviews earth climatic history and focuses on major mechanisms for global and regional climate change. Methods of paleoclimatic reconstruction are examined, including analysis of proxy data and climate modeling. Application of these methods toward prediction of future climate change is also explored.
Prerequisites: GEOG 215, GEOG 314 (or GEOLOGY 314).

Cross Listings: GEOG 442.

GEOG 5544 Spatial Data Analysis Credits: 3
This course will focus on advanced computation methods for the analysis and modeling of complex and often non-deterministic processes in the spatial and environmental sciences. Students will be introduced to innovative techniques for analyzing large datasets with attribute spaces of very high dimensionality, including hyper-spectral remote sensing data.
Prerequisites: GEOG 402.

GEOG 5546 Global Water and Sustainability Credits: 3
This course examines the physical characteristics of water and its role in Earth systems. The challenges facing societies in an era of rapidly changing climate are explored.

GEOG 5548 Satellite Climatology Credits: 4
Use of satellite observations to study the climate system. Discussions consider the development of satellite climatology, sensors, platforms and methodologies use to estimate climate variables from radiance measurements. Aspects of climate that are emphasized include cloud climatologies, cloud systems, atmospheric moisture, radiation budget, and land-surface conditions. Three hours of lecture and one hour of lab per week.
Prerequisites: GEOG 215 (or GEOG 319).

GEOG 5595 Graduate Seminar in Geosciences I Credit: 1
An introduction to graduate research in the Dept. of Geosciences. Students will attend lectures by faculty and become familiar with research techniques, equipment, and thesis opportunities.
Prerequisites: Baccalaureate degree.

GEOG 5597 Graduate Seminar in Geosciences II Credit: 1
Graduate students in the Geosciences Department will explore the different components of a research project through readings, lectures, writing, and oral presentations.
Prerequisites: GEOG 5595, Baccalaureate degree.

GEOG 5598 Special Topics in Geography Credits: 1-3
Advanced independent research in Cultural or Physical Geography.
Prerequisites: Baccalaureate degree.

GEOG 5598A Special Topics in Cultural Geography Credits: 1-3
Advanced independent research in Cultural Geography.
Prerequisites: Baccalaureate degree.

GEOG 5598B Special Topics in Physical Geography Credits: 1-3
Advanced independent research in Physical Geography.
Prerequisites: Baccalaureate degree.

GEOG 5598D Special Topics in Advanced GIS and Remote Sensing Credits: 1-3
Advanced independent reserch in geographic information science (GIS) and remote sensing.

GEOG 5598F Special Topics: Geostatistics and Modeling Credits: 1-3
Advanced independent research in geostatistics and modeling techniques.

GEOG 5598K Issues in Waste Management Credit: 1
This course focuses on the critical problems of managing the waste materials generated in our society. The course includes discussion of various types of waste-municipal solid waste, hazardous (industrial) waste, nuclear and medical wastes. Sources, handling, storage, transportation, treatment and disposal of these wastes are reviewed. Experts from government and the waste management industry give guest lectures.

GEOG 5599 Research and Thesis Geography Credits: 1-9
Students will conduct research and writing in support of a thesis topic, which will have been approved in advance by the appropriate graduate advisory committee. Credit load will also be approved in advance by the student’s graduate advisor.
Prerequisites: Baccalaureate degree.

GEOG 5690 Special Research Topics Credits: 1-3
Student will produce a major research paper suitable for publication under the direction of their instructor.

GEOG 5699R Research And Dissertation Credits: 1-10
Research for dissertation in partial fulfillment of the Geosciences requirements for the Ph.D. degree.

Geology (GEOLOGY)

Courses

GEOLOGY 5507 Archeological Resources Management Credits: 3
This class examines contemporary issues managing archaeological resources. This class is intended for students seeking work in Cultural Resources Management (CRM); those already working CRM, or student anthropology, environmental studies, geology, geography, public administration and other fields likely to deal with archaeological and historical research or employment setting. This class does not require a background in archaeology.

GEOLOGY 5508 Archaeological Field Survey Methods Credits: 3
this class offers instruction in the basic skills required to conduct field surveys in archaeology and other geosciences disciplines. In the classroom, students learn about the development of archaeology as a scientific discipline and how to recognize some of the basic field data sought by archarollllllogists. Students learn about mapping and land navigation techniques. The field phase of instruction includes visits to archarological sites in the region.

GEOLOGY 5509 Field Study in Archaeology Credits: 1-5
This class offers students an opportunity to attend a field school in archaeology. Students will be taught how to: design archaeological research, set-up excavation, keep a wide range of excavation records, make maps and drawings, take photographs related to excavation problems, identify and recover a broad spectrum of artifact and faunal remains, collect samples for specialized analyses and use a wide range of excavation tools. This course will also introduce students to recording and analyzing excavated materials in the archaeological laboratory.

GEOLOGY 5512 Geology and Hazardous Waste Management Credits: 3
Nature, sources and characterization of hazardous waste; collection, transportation and disposal of hazardous wastes. Fundamentals of toxicology and risk assessment. Application of geologic principles and methods in the assessments and remediation of abandoned hazardous waste sites and contaminated aquifers. Review of selected case histories. Experts from government and private organizations will be invited to deliver guest lectures. An out-of-town field trip to a hazardous waste site is required. A term paper based on library research or an approved experimental project is required for graduate credit.
Prerequisites: GEOLOGY 325, GEOLOGY 342, GEOLOGY 350.

GEOLOGY 5513 Advanced Mineral Deposits Credits: 3
Distribution, origin and environmental implications of extractable resources including non-metallic deposits, ores, and selected energy resources.
Prerequisites: GEOLOGY 312, GEOLOGY 325, graduate standing.

GEOLOGY 5521 Advanced Methods for Earth and Environmental Science Credits: 3
This course will provide students with an inquiry-based learning experience that focuses on the application of field methods for understanding surface and subsurface earth processes and environmental issues. Students will collect field data at off campus site, conduct periodic monitoring, and analyze samples using departmental instrumentation.
Prerequisites: GEOLOGY 220 (or ENV-SCI 110R), GEOLOGY 220L (or ENV-SCI 110L).

GEOLOGY 5525 Quaternary Geology Credits: 3
The study of Quaternary processes, surficial deposits, and land forms. Course content will cover both the glaciated and nonglaciated portions of the United States as well as the interrelations between Quaternary geology and urbanization. Three hour lecture. Field trips.
Prerequisites: GEOLOGY 314, baccalaureate degree in geology.

GEOLOGY 5531 X-Ray Diffraction and Fluorescence Methods: X-Ray Mthds Geol/Anly Credits: 2
Theory and practical application of x-ray diffraction and fluorescence methods in characterizing geologic materials. Two hours lecture and one 2-hour lab per week for 8 weeks.

GEOLOGY 5532 Icpms Applications in Geology Credits: 2
Theory and practical application of Inductively-Coupled Plasma Mass Spectrometry in the geosciences and environmental sciences. Two hours lecture and discussion, and one 2-hour lab per week for 8 weeks.

GEOLOGY 5534 Hazardous Waste Operation Management Credits: 2
Overview of federal regulations dealing with hazardous waste management, toxicology, hazard communication, site management, air monitoring, operating procedures, and health and safety. The course includes hands-on training on spill control, equipment use and emergency use and emergency response. Practical training involves physical stress and participants must be in good physical health. This course satisfies OSHA's 40 hour training requirement for hazardous waste personel.
Prerequisites: GEOG 335 (or GEOLOGY 335).

GEOLOGY 5535 Aqueous Geochemistry Credits: 3
This course is directed to two objectives. First it will equip the students with a basic understanding of the geochemical principles and calculations which are directly related to environmental problems and second, it will provide the student with a basic understanding of specific problem areas in environmental geochemistry.
Prerequisites: CHEM 211, CHEM 212R, Baccalaureate degree in geology.

GEOLOGY 5541 Environmental Geophysics Credits: 3
Fundamental theory and near-surface applications of the geophysical methods including seismic methods, potential methods, and electrical methods. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties, and archaeological protection. Course will include a field component illustrating application of selected techniques to a local environmental problem.
Prerequisites: Baccalaureate degree in Geology.

GEOLOGY 5542 Electrical Methods in Environmental Geophysics Credits: 3
Fundamental theory and near-surface applications of the electrical geophysical methods; (1) electrical resistivity, (2) electromagnetics, (3) ground penetrating radar, and (4) induced polarization. Emphasis will be placed on the use of these methods in environmental and engineering investigations, addressing such issues as water resources, contaminant transport, geotechnical properties and archaeological protection. Course will include a field component illustrating application of selected techniques to a local environmental problem.
Prerequisites: Baccalaureate degree in Geology.

GEOLOGY 5546 Petroleum Geology Credits: 3
This course addresses the geological habitat of oil and natural gas, the impacts of petroleum on society, subsurface mapping techniques, and the acquisition and interpretation of subsurface and production data.
Prerequisites: GEOLOGY 220, baccalaureate degree in geology.

GEOLOGY 5551 Geotechnics Credits: 4
Integration of the basic principles and concepts from material sciences, rock and soil mechanics, and civil engineering. Mechanical properties, geologic aspects and engineering classifications of earth materials and the effects of physical forces on their engineering behavior will be emphasized. Three hours of lecture and two hours of laboratory each week. Field trips.
Prerequisites: PHYSICS 210, PHYSICS 220, GEOLOGY 350.

GEOLOGY 5555 Environmental Impact Analysis Credits: 3
A systematic analysis of the spectrum of environmental changes related to human use and occupancy in urban settings. Study of the nature of activities such as industrialization, mining, urbanization and transportation, and their effect on the specific site and general region. Methods of measuring aesthetic and economic quality of the urban areas will be explored in an attempt to facilitate writing environmental impact statements.
Prerequisites: Baccalaureate degree in geology.

GEOLOGY 5559 Inquiry-Based Field Studies for Teachers Credits: 3-6
Inquiry-based studies in environmental science, environmental chemistry and geology involving collaborations between course participants, practicing scientists and professional educators. The course is designed especially for pre- and in-service teachers of all levels and contact areas to enhance critical thinking, problem solving and process skills as defined by state and national standards. Projects will balance field and lab studies with analysis and presentation of results through electronic, oral and written means.

GEOLOGY 5561 Geologic Mapping Credits: 3
Analysis of the stratigraphic section in the greater Kansas City area by field investigation. Compilation of descriptive data and the construction of detailed geologic maps. Practical problems to determine the most beneficial use of the land in an area that is rapidly becoming urbanized. Previous field mapping experience highly recommended.
Prerequisites: Baccalaureate degree in geology.

GEOLOGY 5570 Hydrogeology Credits: 3
Geology and hydrologic factors controlling the occurrence, movement, quality, recovery and development of water supply and distribution. Problems relating to urbanization of flood plains.
Prerequisites: Baccalaureate degree in Geology.

GEOLOGY 5571 Tectonics Credits: 3
A detailed inquiry into plate tectonics and the geophysical and geological data that define the motion of lithospheric plates. Global examples of divergent, convergent, and transform plate boundaries will be studied through lectures, discussions, problem sets, and term papers.
Prerequisites: GEOLOGY 325, GEOLOGY 350.

GEOLOGY 5572 Earthquake Geology Credits: 3
This course is detailed inquiry into the study of present and past earthquakes as they are preserved in the seismological, geophysical, and geological record. Global examples of earthquakes will be studied through lectures, discussions, problem sets,term papers, field trips and field projects.
Prerequisites: GEOLOGY 350.

GEOLOGY 5595 Graduate Seminar in Geosciences I Credit: 1
An introduction to graduate research in the Dept. of Geosciences. Students will attend lectures by faculty and become familiar with research techniques, equipment, and thesis opportunities.
Prerequisites: Baccalaureate degree.

GEOLOGY 5597 Graduate Seminar in Geosciences II Credit: 1
Graduate students in the Geosciences Department will explore the different components of a research project through readings, lectures, writing, and oral presentations.
Prerequisites: Baccalaureate degree.

GEOLOGY 5598 Special Topics in Urban Environmental Geology Credits: 1-3
Individual research into practical geoscience problems in the urban environment. Provides opportunity for individual research in applied geology. Topic and method to be established by student and academic supervisor prior to enrollment.

GEOLOGY 5598A Special Topics In Urban Environmental Geology: Petroleum Geology Credits: 1-3

GEOLOGY 5598B Spec Topics In Urban Environmental Geology: Soil/Rock Mechanics Credits: 1-3

GEOLOGY 5598C Sp Topics In Urban Environmental Geol: Stratigraphy/Paleontology Credits: 1-3

GEOLOGY 5598D Spec Topics In Urban Environmental Geology-Environmental Geology Credits: 1-3

GEOLOGY 5598E Special Topics in Energy and Mineral Resources Credits: 1-3
This course provides students an opportunity for advanced independent research in energy and mineral resources.

GEOLOGY 5598H Special Topics in Urban Environmental Geology - Geochemistry and Mineralogy Credits: 1-3
Special Topics In Urban Environmental Geology - Geochemistry and Mineralogy

GEOLOGY 5598I Special Topics In Urban Environmental Geology Credits: 1-3

GEOLOGY 5598J Special Topics In Urban Environmental Geology: Environmental Sci Credits: 1-3

GEOLOGY 5598K Issues in Waste Management Credit: 1
This course focuses on the critical problems of managing the waste materials generated in our society. The course includes discussion of various types of waste-municipal solid waste, hazardous (industrial) waste, nuclear and medical wastes. Sources, handling, storage, transportation, treatment and disposal of these wastes are reviewed. Experts from government and the waste management industry give guest lectures.

GEOLOGY 5598M Special Topics in Geostatistics and Modeling Credits: 1-3
Advanced independent research in geostatistics and modeling techniques.

GEOLOGY 5599 Research and Thesis: Geology Credits: 1-9
Individual directed research by the student leading to the preparation of a formal written thesis and oral defense.

GEOLOGY 5690 Special Research Topics Credits: 1-3
Student will produce a major research paper suitable for publication under the direction of their instructor.

GEOLOGY 5699R Research And Dissertation Credits: 1-10
Research for dissertation in partial fulfillment of the Geosciences requirements for the Ph.D. degree.

GEOLOGY 5899 Required Graduate Enrollment Credit: 1

Guitar (GUITAR)

Courses

GUITAR 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: GUITAR 300.

GUITAR 5500A Graduate Guitar-Secondary Credits: 2

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

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

GUITAR 5500JA Graduate Applied Jazz Studies Credits: 2
One hour lesson weekly. Jury examination is required.
Prerequisites: Graduate status.

GUITAR 5500JB Special Applied Jazz Studies Credits: 2
One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.
Prerequisites: Graduate status.

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

GUITAR 5501 Graduate Guitar - Masters Performance Credits: 4

GUITAR 5601 Graduate Guitar - Doctoral Performance Credits: 4

Harpsichord (HRPCHD)

Courses

HRPCHD 5500A Graduate Harpsichord-Secondary Credits: 2

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

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

Health Administration (HLTH-ADM)

Courses

HLTH-ADM 5571 Financial Management Issues: Health & Human Services Organizations Credits: 3
This course is intended to provide an overview of the financial management problems of health and human services organizations. A broad range of topics is examined: financial statements, ratio analysis, cost accounting, reimbursement and pricing, management of working capital, budgeting and programming, capital financing, and cash management.programming, capital financing, and cash management.

HLTH-ADM 5577 Health Service Administration And The Health Professions Credits: 3
The development of the health professions and occupations is examined as their internal and external relationships influence the structure of health care organizations and the services provided to clients. The focus of the course is on problems that administrators may encounter as they attempt to negotiate services for clients, build professional coalitions, and provide leadership within or outside health care institutions.

HLTH-ADM 5578 The Evaluation And Control Of Health Services Credits: 3
This course focuses on developing evaluative skills associated with controlling the level and costs of health services. Epidemiologic concepts are introduced using clinical and community health examples. The concepts of "at-risk" clients and populations are reviewed, and various attempts to measure risk are assessed. Issues relating to quality assurance are discussed, along with several examples of cost-effectiveness analysis.

HLTH-ADM 5580 Economics of Health and Medicine Credits: 3
A course designed to discuss economic analysis of the development of the medical market, organized medicine and the structure of the health delivery systems. The problems of the medical market will be analyzed, the role of insurance will be investigated and alternative public policies will be studied.

HLTH-ADM 5581 Health Policy in the United States Credits: 3
This course helps students develop an understanding of the determinants of health, major current health policy issues, and health policy making in the United States. The public policy process and its effects on the organization, financing, and delivery of health care are examined in detail. The roles of key players in health policy formulation and the public policy responses to current health policy are also examined.

HLTH-ADM 5586 Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

HLTH-ADM 5587 Special Topics Credits: 3
This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

HLTH-ADM 5595 Internship Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

Health Professions Education (HPRE)

Courses

HPRE 5500 Leadership and Administration in Health Professions Education Credits: 3
Current approaches to academic leadership within the context of health professions education. Topics include management skills, problem solving, communication, group skills, motivation, managing conflict, and delegating. Attention to developing skill in presenting, interviewing and in facilitating meetings. Focus on application within the context of health professions education.

HPRE 5522 Curriculum Design in Health Professions Education Credits: 3
Examination of the theory and strategies for the development, implementation, and evaluation of of curricula in health professions education. Focus on contextual factors, learner needs, current models, outcome-based approaches, leadership, and faculty development for design and delivery.

HPRE 5530 Current Issues in Health Professions Education Credits: 3
Consideration of the major social, historical, educational, professional, and cultural issues that affect health professions education today. Focus on investigation of various topics as linked to learning and teaching in the health professions. This course will provide the foundations for the Certificate in Health Professions Curriculum and Evaluation.

HPRE 5550 Assessment in Health Professions Education Credits: 3
Focus on the design, implementation and evaluation of tools for assessing student learning and performance in health professions education. Consideration of validity, reliability, writing test items, survey design, checklists, observational assessment, simulations and rubrics. Emphasis on best practices, assessment challenges, and on the effective implementation of comprehensive assessment programs in health professions education.

HPRE 5560 Teaching in Health Professions Education Credits: 3
Emphasis on learning and teaching theories and current research in health professions education as applied to instructional methods, delivery, learning contexts. Focus on individual differences, mentoring and tutoring, and on teaching in clinical, small group and large group situations.

HPRE 5580 Program Evaluation in Health Professions Education Credits: 3
Applied research as linked to program development and evaluation in health professions education. Topics include needs assessment, summative and formative evaluations, evaluation paradigms, methodologies, data collection, data analysis, reporting findings. This course is project-based.
Prerequisites: EDUC-R&P 5508.

HPRE 5590 Advanced Research in Health Professions Education Credits: 3
Consideration of advanced strategies for inquiry in health professions education. In-depth analysis of both advanced qualitative, quantitative and mixed methods approaches. Emphasis on publication and presentation processes.

History (HISTORY)

Courses

HISTORY 5500B Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500BB Special Topics in History for Graduate Students Credits: 3

HISTORY 5500C Special Topics In History For Graduate Studies Credits: 3

HISTORY 5500CL Cluster Course:Nordic Culture Credits: 3

HISTORY 5500CP Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500CY Cluster Course: The Ancient World And The Cinema Credits: 3

HISTORY 5500CZ Special Studies History Credits: 1-3

HISTORY 5500D Special Topics in History For Graduate Studies Credits: 1-3

HISTORY 5500E Special Topics In History For Graduate Studies Credits: 3

HISTORY 5500G Special Topics in History for Graduate Students Credits: 3

HISTORY 5500GB Special Topics in History for Graduate Students Credits: 3

HISTORY 5500GR Special Topics in History for Graduate Students Credits: 3

HISTORY 5500H Special Topics In History For Graduate Students Credits: 1-3

HISTORY 5500JCA Special Topics in History for Graduate Students Credits: 3

HISTORY 5500LA Special Topics in History for Graduate Students Credits: 3

HISTORY 5500P Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500R Special Topics in History for Graduate Studies Credits: 1-3
Cross Listings: HISTORY 400.

HISTORY 5500RC Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500RD Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500RJ Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500SS Special Topics In History For Graduate Studies Credits: 1-3

HISTORY 5500W Special Topics in History for Graduate Students Credits: 3

HISTORY 5500Z Special Studies: Labor In Industrial America Credits: 3
This course examines the history of work and the working class in the U.S. from 1877 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

HISTORY 5501A Religion in America Credits: 3
An in-depth examination of selected aspects of the history of religions in America from the colonial period to the present. Special emphasis will be given to methodological issues in the study of American religious history.

HISTORY 5502 America,1000-1763: The Formative Era Credits: 3
Early American history emcompasses the formative era of many institutions and attitudes which still persist in present-day America. A study of how these patterns and policies emerged will enlighten us as to our current ways our society seeks to adapt to change.

HISTORY 5503 America, 1763-1783: The Revolutionary Heritage Credits: 3
The American Revolution created American history by creating a new nation. What the American Revolution was depends to a large extent upon what Americans think they are or ought to be. The goals of this course, therefore, are twofold: (1) to probe the nature, causes and consequences of the American Revolution; (2) to assess the intentions and behavior of both the Framers of the Constitution in 1763-1783 and the inheritors of modern America.

HISTORY 5504 America, 1783-1828: The National Experience Credits: 3
Cross Listings: HISTORY 304.

HISTORY 5505 America, 1828-1852: The Jacksonian Period Credits: 3
Cross Listings: HISTORY 305.

HISTORY 5506 America, 1850-1877: Civil War and Reconstruction Credits: 3
Cross Listings: HISTORY 306.

HISTORY 5506A History of Christianity to Middle Ages Credits: 3
This course examines the historical and theological development of Christianity from its origins to the High Middle Ages. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional, and intellectual force with a focus on pattern of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

HISTORY 5507 America 1877-1917: Development of Industrial America Credits: 3
Cross Listings: HISTORY 307.

HISTORY 5507A The History of Christianity from the Middle Ages to the Present Credits: 3
This course examines the historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the mechanisms and conditions shaping Christianity's expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.

HISTORY 5508A America 1914-1945: The Era of the World Wars Credits: 3
Cross Listings: HISTORY 308B.

HISTORY 5508B America 1945-Present: Our Times Credits: 3
Cross Listings: HISTORY 308B.

HISTORY 5511 Medieval Civilization I Credits: 3
Medieval Civilization I

HISTORY 5512 Medieval Civilization II Credits: 3
Medieval Civilization II

HISTORY 5512A Medieval Women & Children Credits: 3
This course explores the roles of women in the social, economic, political, and cultural environments of medieval and early modern Europe. We examine the lives of women in all areas of life, from the ordinary to the extraordinary, in urban and rural environments, from the centers of religious and political power to the margins of society. Focus will be on the world of work for urban and peasant women and on the social and legal institutions of marriage, kinship, and the family. The course makes extensive use of primary source by and about women during this period.

HISTORY 5512B The Black Death And Late Medieval Society Credits: 3
This course examines all aspects of late medieval and early Renaissance society in Western Europe. The Back Death of 1348/1349 serves as the entry point into the historical study of the economy, demography, and culture during this transitional period.

HISTORY 5513 Renaissance Credits: 3
Cross Listings: HISTORY 413.

HISTORY 5514 Reformation Credits: 3
Cross Listings: HISTORY 414.

HISTORY 5515B 17Th And 18Th Century European History Credits: 3
This course is designed to present the upper-division undergraduate with a firm grasp of the major intellectual, cultural, political and economic development of 17th and 18th century Europe. It considers the bitter Thirty Years War in Century Europe, the rise of the Netherlands, the fall of Italy and Spain, the rise of constitutional and absolutist styles of government, the scientific revolution, the colonization by Europeans of the Pacific and Indian Ocean Basins, Enlightenment political philosophy, the Agricultural Revolution, and the French Revolution. Also offered for undergraduates as 415B. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.

HISTORY 5516 The French Revolution and Napoleon Credits: 3
Cross Listings: HISTORY 416R.

HISTORY 5517 19th Century European History Credits: 3
This upper-division course will survey significant trends in warfare, politics, economics, social relations and culture in 19th century Europe, paying particular attention to the rise of modern ideologies and identities, world hegemony, and the social technologies of dehumanization that foreshadowed the unprecedented inhumanities of the 20th century. Graduates will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.
Cross Listings: HISTORY 417R.

HISTORY 5518 20th Century European History Credits: 3
This upper-division course traces the history of Europe in the 20th century. It will survey significant trends in warfare, politics, economics, social relations and culture, paying particular attention to the issues of modernity and postmodernity, imperialism and decolonization, dehumanization and genocide as well as the role of ordinary people in these systems of mass destruction. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.
Cross Listings: HISTORY 418R.

HISTORY 5519 Contemporary European History: 1950-2000 Credits: 3
This upper-division course traces the history of Europe in the period of living memory. It will survey significant trends in warfare, politics, economics social relations and culture, paying particular attention to the rise of globalization and the condition of postmodernity, decolonization and neo-colonization, European unification and everyday life. Graduate students will be held to a higher standard in terms of additional, in-depth historiographic research, writing, and discussion.
Cross Listings: HISTORY 419R.

HISTORY 5525R European Criminal Justice History, 500-1900 Credits: 3
This course will survey European crime, criminal procedure, policing and punishment between 500 and 1900. Particular attention will be given to changing methods of proof (oaths, ordeals, juries); changing type of criminal activity (banditry, vagrancy, witchcraft, professional theft) and changing penal strategies (the stocks, breaking on the wheel, the workhouse, the prison, the penitentiary). English experiences are emphasized.

HISTORY 5526 Modern Latin America Credits: 3
This course studies social, political, economic and cultural trends in Latin America in the nineteenth and twentieth centuries. Discussion topics include nation building after Independence with an emphasis on gender and race in the creation of national identities and new forms of social stratification; integration of national economies into the world economic system; the expansion of political participation and citizenship; immigration (national and transnational) and the tensions caused by the forces of modernization and tradition. Although the purpose of the course is to provide a general background for a large and diverse region (more than 20 countries), case studies from Argentina, Mexico and Brazil will illustrate the above-mentioned themes and will provide the basis for a comparative regional perspective.

HISTORY 5526R The Scientific Revolution 1500-1700 Credits: 3
Cross Listings: HISTORY 426R.

HISTORY 5527 The Darwinian Revolution, 1650-1900 Credits: 3
Cross Listings: HISTORY 427R.

HISTORY 5528A History Of The Body Credits: 3
This advanced course will explore the new field of the history of the body, with particular attention to sexuality and gender. Topics will include the history of sexualities, the body and society, body disciplines, medical practices and representations of illness, beauty, and fashion, and the relationship between sexualities and nationalisms.

HISTORY 5528B Women & Medicine:Patients & Practitioners From Antiquity-Present Credits: 3
This course explores, in a selective fashion, the role of women in Western Medicine both as health care providers and patients. The subject of the history of medicine is too broad to be covered comprehensively in a semester, and so we will focus on diseases or physical conditions which were believed to be limited to women-childbirth, certain mental health conditions, reproductive health, breast cancer-as well as the increasing marginalization of women within the profession of health care providers to those branches concerned primarily with "women’s problems.

HISTORY 5531 Medieval England, 1066 to 1485 Credits: 3
Cross Listings: HISTORY 431R.

HISTORY 5532 Tudor-England, 1485-1688 Credits: 3
This course covers the history of England from the accession of Henry VII in 1485 to the crowning of William and Mary in the Glorious Revolution. Its main emphasis is the Tudor dynasty 1485-1603 with special reference to the transformation of England into a modern state, Re-Reformation, the role of Parliament, etc. The course concludes with the major characteristics of the early Stuart period.

HISTORY 5533 History of Britain 1603-1832 Credits: 3
This course analyzes the rise and fall of the Stuart dynasty and the effects of civil war, rebellion, and religious turmoil on the peoples of Britain. The domination of politics and culture by the aristocracy in the eighteenth century is examined. The rise of the Navy due to constant warfare and the exploration of the Pacific are discussed. The monarchy of George III, the loss of the American colonies, and the wars with Napoleon are examined. Finally, the Agricultural and early Industrial Revolutions are considered through an analysis of the social changes they brought in Britain and the Empire

HISTORY 5536 Modern German History: 1890-1990 Credits: 3
This course traces history of Central Europe from the fall of Bismarck to the reunification of Germany one century later. It will ask students to think critically about the relationship between state and society, elites and 'ordinary' Germans, in the various German-speaking regimes that existed over the course of this era: two empires, two interwar republics, two fascist dictatorships, and three post-fascist republics. All assigned readings will be in English; a background knowledge of European history is recommended.

HISTORY 5537 Nazi Germany Credits: 3
Nazi Germany

HISTORY 5544 Islam & the Arabs: The Formative Period Credits: 3
Cross Listings: HISTORY 444R.

HISTORY 5545 The Ottoman Empire in the Middle East to WWI Credits: 3
Cross Listings: HISTORY 445.

HISTORY 5546 The Middle East from World War I to the Present Credits: 3
Cross Listings: HISTORY 446R.

HISTORY 5552 Latin American History through the Movies Credits: 3
This course explores the national cinemas and film industries of various regions in Latin America. Students will analyze films both as artistic endeavors and as sociological documents that provie a window into the socio-historical context of the nation in question. This course will also examine the history of Latin American cinema from the beginnngs of sound to present.

HISTORY 5554 Women in Modern America Credits: 3
Cross Listings: HISTORY 354R.

HISTORY 5556 Rise of the City in the U.S. Credits: 3
Cross Listings: HISTORY 356.

HISTORY 5556R Kansas City: History of a Regional Metropolis Credits: 3
Cross Listings: HISTORY 356R.

HISTORY 5557 The American West Credits: 3
Cross Listings: HISTORY 357.

HISTORY 5558R History of the American South Credits: 3
History of the American South

HISTORY 5559R The Confederacy and the Myth of the Lost Cause Credits: 3
The Confederacy and the Myth of the Lost Cause

HISTORY 5561R American Foreign Relations Credits: 3
Cross Listings: HISTORY 361.

HISTORY 5562J Japanese Civilization Credits: 3
A survey of Japanese civilization and cultural history from the prehistorical period to the present. Emphasis on the interplay between religion, the arts, politics, and social structure.

HISTORY 5563R Military History of the U.S. Credits: 3
Military History of the U.S.

HISTORY 5566R American Economic History Since 1865 Credits: 3
The course deals with the emergence of Industrial America since 1865. It will cover the rise to dominance of the large modern corporation, with the problem of economic and social instability and stability, with the rise of trade associations, cartels, and government regulation in an unstable economy, and with the evolution of American economic policy and national economic planning.

HISTORY 5566RR American Labor History Credits: 3
This course examines the history of work and the working class in the U.S. from 1750 to the present. We will focus on the transformation of the workplace, the rise of the union movement, the nature of cultural and political organizations, workers' relationships with other social groups, and the role played by gender, race, and ethnicity in uniting or dividing the working class.

HISTORY 5570 Introduction to Material Culture Credits: 3
Cross Listings: HISTORY 370.

HISTORY 5570R Ancient Egypt Credits: 3
Cross Listings: HISTORY 470.

HISTORY 5571R Ancient Greece Credits: 3
Cross Listings: HISTORY 471.

HISTORY 5572R Ancient Rome Credits: 3
Cross Listings: HISTORY 472.

HISTORY 5573R History of Astronomy Credits: 3
History of Astronomy

HISTORY 5575 Ancient Israel Credits: 3
Judaism has had a tremendous impact on our civilization and yet most Americans are only dimly aware of its origins and development. This course will trace the roots of the Jewish religion in its historical context from its beginning through the formation of rabbinic culture. The rise of Christianity will be examined in its original Judaic context, and recent discoveries, particularly those pertaining to the Dead Sea Scrolls, will be interpreted.

HISTORY 5575R The History of Ancient Israel Credits: 3
The History of Ancient Israel

HISTORY 5576R Medieval Jewish History Credits: 3
Cross Listings: HISTORY 476.

HISTORY 5577R Modern Jewish History Credits: 3
Cross Listings: HISTORY 477.

HISTORY 5578R The Holocaust and the State of Israel Credits: 3
The Holocaust and the State of Israel

HISTORY 5580 The History Of The American South I Credits: 3
A study of the political, intellectual, cultural, economic, and social development of the American South up to and including the Civil War. Special topics discussed will e the plantation system , slavery, abolition, secession, the Confederacy and the interaction of the region with the nation.

HISTORY 5581 Research Methodologies Credits: 3
An introduction to a variety of research tools and techniques including such topics as evidence, critical method, verification, bibliography, book review, computers, statistics, and archival methods.

HISTORY 5581GR How To - History I Credits: 3
This foundational course in the doing of history will use the "great books" of historical scholarship to introduce graduate students to historical questions, methods, theories, and rhetorical strategies. The goal of the course is for the student to learn how to engage in historical criticism and formulate historical questions for themselves. This required course must be taken in the first year of graduate study in history.

HISTORY 5582 Colloquium In American History I Credits: 3
These courses are designed to acquaint the graduate student with the writings and theories of major American historians. Faculty lectures are combined with student bibliographical essays and the reading of important historical works in order to prepare the student for the final examination taken upon completion of M.A. course work. Books read in the course compose a large proportion of the departmental reading list.

HISTORY 5582GR How To - History II Credits: 3
This foundational course in the doing of history will introduce graduate students to professional obligations and research methodologies of academic historians. Pragmatic in focus, it will prepare students for all stages of research and teaching through all aspects of an historical career from graduate school to full professorship or other directions. This required course must be taken in the first year of graduate study in history and it fulfills the SGS recommendation for ethical instruction.
Prerequisites: HISTORY 5581GR.

HISTORY 5583 Colloquium In American History II Credits: 3
These courses are designed to acquaint the graduate student with the writings and theories of major American historians. Faculty lectures are combined with student bibliographical essays and the reading of important historical works in order prepare the student for the final examination taken upon completion of M.A. course work. Books read in the course compose a large proportion of the departmental reading list.

HISTORY 5583GR Medieval Methods & Paleography Credits: 3
This course examines the methodology and historiography of Medieval and Renaissance Studies. Through an introduction to paleography, the study of handwritings, it prepares students for advanced work in these fields. Using an interdisciplinary approach, this course examines the historical and cultural settings for texts, their physical form and production, as well as the tradition of textual transmission in the medieval and early modern world. In addition to gaining familiarity with many different types of primary sources, such as literary, artistic, legal, and notarial sources, students will be exposed to methods for archival work in various European nations.

HISTORY 5584R Colloquium In European History I Credits: 3
The European History Colloquium I will examine some of the crucial problems or watersheds in European history from antiquity through the Reformation. Course requirements include weekly discussions on specific topics and a research paper or project due by the end of the semester.

HISTORY 5585 Colloquium In European History II Credits: 3
The European History Colloquium II will examine some of the crucial problems or watersheds in European history from the Reformation through the 20th century. The course seeks to provide an in-depth study of specific topics and of the associated bibliography.

HISTORY 5585GR Colloquium in U.S. History Credits: 3
Students read broadly in the historiography of a particular historical problem, place, period, or specialization in U.S. History in order to master the relevant literature and hone their skills of historical criticism.
Co-requisites: HISTORY 5581GR.

HISTORY 5586GR Colloquium in World History Credits: 3
Students read broadly in the historiography of a particular historical problem, place, period, or specialization in world history in order to master the relevant literature and hone their skills of historical criticism.
Co-requisites: HISTORY 5581GR.

HISTORY 5587R Research Seminar Credits: 3
Students in this course will produce a major research paper under the direction of the instructor: a self-contained thesis chapter, an article for publication or the equivalent.

HISTORY 5587RA Research Seminar Credits: 3

HISTORY 5587RB Research Seminar Credits: 3

HISTORY 5590 History Of The American South II Credits: 3
A study of the political, intellectual, cultural, economic, and social development of the American South since the Civil War. Topics discussed will be the molding of a "New South,: twentieth century internal developments and the interaction of the region with the nation.

HISTORY 5591 Archival Methods Credits: 3

HISTORY 5592 Public History Internship Credits: 1-3

HISTORY 5593 Museum Studies Credits: 3
This course is designed to acquaint students with specific careers in museums and historical agencies; to introduce students to the wide range of operating issues facing those working in the museum profession on a day-to-day basis; and to familiarize students with the organizations, reference works and resources available to develop the skills and training required for those who choose to make this their profession.

HISTORY 5597 Non-Thesis Research/Reading Credits: 1-6
Individual direction of student reading or research by selected, consenting faculty. This course can be taken only when faculty supervision is unavailable in colloquia or seminars.

HISTORY 5599R Thesis Credits: 1-6
A contribution to knowledge based upon extensive research and reflective of careful analysis. Before writing a thesis, the student must clear the topic and research design with the Supervisory committee.

HISTORY 5680 Doctoral Colloquium Credits: 3
This course will examine the writings and theories of major historians in a particular field of history. The authors, works and intellectual currents which form the basis of the colloquium will vary from semester to semester, depending upon the professor’s expertise and design for the course.

HISTORY 5687 Doctoral Research Seminar Credits: 3
Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

HISTORY 5687RB Doctoral Research Seminar Credits: 3
Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

HISTORY 5697 Doctoral-Level Independent Reading Credits: 1-6
Individual reading under the supervision of members of the History Doctoral Faculty in preparation for the Comprehensive Examination for the Ph.D.

HISTORY 5699R Dissertation Credits: 1-15
Course credits in dissertation.

HISTORY 5899 Required Graduate Enrollment Credit: 1

Horn (HORN)

Courses

HORN 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: HORN 300.

HORN 5500A Graduate Horn-Secondary Credits: 2

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

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

HORN 5501 Graduate French Horn - Masters Performance Credits: 4

HORN 5601 Graduate Horn - Doctoral Performance Credits: 4

Humanities (HMNTY)

Courses

HMNTY 5510 Methods in Critical Theory Credits: 3
Course introduces students to influential modern techniques of reading and interpretation, not only of literature but also of culture or visual art. Methods will themselves be seen in historical and social context, and theoretical texts may be subject to rhetorical analysis. Undergraduates only with instructor's permission

Kansas University Medical Center (KUMC)

Courses

KUMC 5999A Credit From Kansas University Medical Center I Credits: 99

Law (LAW)

Courses

LAW 8501 Contracts I Credits: 3
Formation and performance of simple contracts; consideration; express and constructive conditions, excuse of conditions; remedies for breach; contracts for benefit of third parties; assignment; impossibility of performance and discharge.

LAW 8502 Contracts II Credits: 3
Prerequisites: LAW 8501.

LAW 8511 Torts Credits: 3
Wrongs to the person and to property; legal remedies through which compensation or other relief may be obtained.

LAW 8513 Defamation, Privacy, Relational & Emotional Torts Credits: 2-3
A focus on word torts, emotional injuries, and torts stemming from relational duties of care. Defamation topics covered will include private and public official and public figure plaintiffs, as well as tactical aspects of defamation actions and privileges. Privacy torts explored will be false light, public disclosure of private facts, intrusion and seclusion, and appropriation of name or likeness. The majority of the course will involve coverage of special or limited duties of care arising from contractual or professional relationships (such as medical and legal malpractice), landowner liability, sexual harassment in employment, familial and governmental immunities, prenatal injuries, negligent infliction of emotional distress, as well as theories of vicarious liability for the torts of others.

LAW 8521 Civil Procedure I Credits: 3
Pleading; joinder of parties and claims; pre-trial motions; discovery; summary judgment; pre-trial and trial procedure; post trial motions.

LAW 8522 Civil Procedure II Credits: 2-3
Court systems; personal jurisdiction and venue; federal jurisdiction; choice of law; preclusion; appellate procedure

LAW 8522D Discovery Practice in Civil Litigation Credits: 1-2
This course focuses on the various discovery techniques which are commonly used in federal civil practice, and also compares state procedures. General topics include the uses of discovery, informal discovery, building the discovery plan, ethical issues, privileges and protections, the discovery tools, electronic discovery, experts, motions to compel discovery, and sanctions.

LAW 8522L Civil Procedure Skills Lab Credits: 1-2
Students are trained in practical skills necessary for pre-trial litigation, including client interviewing and drafting pre-trial documents such as pleadings. Course work includes observations of court proceedings and aspects of discovery. Pre or
Co-requisite: Civil Procedure I.

LAW 8531 Lawyering Skills I Credits: 3
Introduction to legal reasoning; case analysis and synthesis; case research; structure and style in legal writing with emphasis on expository writing, including office memoranda.

LAW 8531F Intro. to Law & Lawyering Proc. I/Part II Credits: 2
Introduction to case research; structure and style in legal writing with emphasis on expository writing, including office memoranda.
Prerequisites: LAW 8531S (immediately previous semester).

LAW 8531I Common Law, Legal Analysis & Writing Credits: 3
Introduction to legal reasoning; case analysis and synthesis; case research; structure and style in legal writing with emphasis on expository writing, including office memoranda.

LAW 8531S Lawyering Skills I/Part I Credit: 1
Introduction to legal reasoning; case analysis and synthesis. This course is taken in the semester immediately following LAW 8531F.

LAW 8532 Lawyering Skills II Credits: 2-3
Introduction to advocacy; introduction to interviewing, counseling and negotiation; statutory and computerized research; writing to and on behalf of a client, including a trial or appellate brief; oral advocacy.

LAW 8532F Intro to Law & Lawyering Processes II-Family Law Credits: 2-3
Introduction to advocacy; introduction to interviewing, counseling, negotiation; statutory computerized research; writing to and on behalf of a client, including a trial or appellate brief; oral advocacy. Problems and exercises will be drawn from family and child law.

LAW 8532I Introduction to American Legal Skills Credits: 2-3
Introduction to oral and written advocacy; interviewing, counseling and negotiation; and alternative dispute resolution. This course is intended for students in the LLM Program for Chinese and Foreign Lawyers.

LAW 8532R American Legal Research Credit: 1
American Legal Research

LAW 8541 Property I Credits: 3
Introduction to the nature of property; basic personal property law; adverse possession; possessory estates; basic future interests; marital and concurrent interests; landlord-tenant relationships.

LAW 8542 Property II Credits: 3
Licenses, easements, real covenants, equitable servitudes; nuisances; basic water law; brokerage; financing, mortgages, deeds of trust; contract of sale, deeds, closing; title insurance, warranties; recording; eminent domain; zoning.

LAW 8552 Federal Taxation Credits: 3
Theory, history, and principles of federal income taxation; basic concepts of income, classification of income and deductions.

LAW 8601 Business Organizations Credits: 3
Partnership, limited liability company and corporation law; choice of business forms, formation of partnerships, limited liability companies and corporations; rights, duties, and powers of partners, members, shareholders, directors, and officers; closely held corporations; proxy regulation; derivative suites; dividends and stock redemptions; introduction to the Securities Act of 1933 and Securities Exchange Act of 1934.

LAW 8601C International Criminal Tribunals Credit: 1
This course will examine the types of international criminal tribunals available for the prosecution of individuals accused of war crimes, the crime of aggression, crimes against humanity, and genocide. The course will begin with an introduction to the history of international criminal law and a comparative examination of various international criminal tribunals, including the Nuremberg trials, ad hoc criminal tribunals (ICTY and ICTR), the permanent International Criminal Court in The Hague, and hybrid criminal tribunals (Cambodia, Lebanon, and Sierra Leone). The course will then focus more specifically on the International Criminal Court (ICC), including the ICC's formation and jurisdiction and examples of individuals and situations investigated and prosecuted thus far by the court.
Prerequisites: Part of the Ireland Law Program.

LAW 8601L Transactional Lawyering Skills Lab Credit: 1
Students are trained in counseling clients and negotiating business formation, dissolution, and liability issues as well as drafting appropriate documents.
Co-requisites: LAW 8601.

LAW 8601R Doing Business In Ireland, Part I Credit: 1
A survey of International Trade Law and European and American Competition Law that impact on American multinational companies operating in the Republic of Ireland.

LAW 8601S Doing Business in Ireland, Part II Credits: 0.5
A survey of the Ireland Company Law and comparative United States Corporate Law and a survey of United States corporate taxation of multinational companies operating in Ireland.

LAW 8601T Introduction to International Trade Credit: 1
The course will examine the structure and workings of the major global trade regimes, including the World Trade Organization ("WTO") and the North American Free Trade Agreement (the "NAFTA") The role of international trade in such areas as the environment, labor rights, national security, the developing world, and non-market economies will also be considered. The course will also focus in depth on United States domestic trade remedies, including antidumping, countervailing duties, section 301 and 337 actions as well as on other international trade restricting practices.

LAW 8601W Comparative War Crimes Tribunals Credit: 1
The course will discuss the need for war crimes tribunals, evaluate historical models for tribunals (including the Nuremberg trials and the International Military Tribunal for the Far East), and then examine and compare domestic and international tribunals, including military courts-martial systems, military commissions, ad-hoc tribunals such as the ICTY and ICR, hybrid tribunals, issues of was crimes tribunals, including sovereignty, effectiveness, complementarity, jurisdiction, and the problem of victor's justice.

LAW 8603 Taxation Of Business Organization Credits: 2-3
Survey course of the taxation of business enterprises, particularly partnerships, corporations and subchapter S corporations.
Prerequisites: LAW 8552, LAW 8601.

LAW 8605 Antitrust And Competition Law Credits: 2-3
This course studies how antitrust laws work to create an environment in which free and open competition thrives. Course examines how antitrust laws seek to prevent unreasonable horizontal (competitors) and vertical (supply chain) restraints that harm consumers and to deal with markets where one competitor has attained monopoly power, conduct that is specifically exempted from antitrust regulation, who is entitled to seek redress for antitrust violations, and particular issues unique to antitrust litigation.

LAW 8609 Ethical Issues In Family Law Representation Credits: 1-2
Advanced study of the ethical obligations of public and private attorneys in estate, family, and juvenile law representation. Topics may include identification of the client, ethical and legal obligations of confidentiality and disclosure, competence and client communication, respect for third persons (particularly obligations toward children of clients) and other related subjects. Paper and presentation required. When offered for 2 credit hours, the course fulfills the Schools Professional Responsibility graduation requirement.
Prerequisites: (or concurrent) LAW 8611, LAW 8751.

LAW 8611 Estates And Trusts Credits: 3-4
Intestate succession; testamentary dispositions; execution, modification, and revocation of wills; will contests; advancements, ademption, and exoneration; family allowances; rights of estate creditors; express, implied, resulting, and constructive trusts; basic tax aspects of estates and trusts; rule against perpetuities; will substitutes.

LAW 8612R Tax Planning With Life Insurance Credit: 1
An examination of the various tax consequences of using life insurance, including issues relating to the income, gift and estate tax consequences of life insurance ownership by an individual, and irrevocable trust, or business entity.

LAW 8614 Estate Planning and Drafting Credits: 3-4
Continuation of Estates Trusts I using problems and cases as a basis for class discussion. Working in teams, students engage in the planning of estates for actual clients, proceeding through the entire process and culminating in the execution of wills, trusts or other appropriate instruments. Course is not open to students who have taken Estate Planning.
Prerequisites: LAW 8611.

LAW 8614R Estate Planning For Retirement Plan Benefits Credit: 1
The income, gift, estate and generation-skipping transfer tax consequences and rules related to the ownership, distribution and withdrawal of retirement plan benefits, including minimum required distributions, designating beneficiaries, spousal rights and rollover options

LAW 8615 Estate Planning and Practice Credits: 3-4
Tax-oriented examination of contemporary estate planning problems for the larger estates, with emphasis on issues of direct concern to practitioners. This course is designed for LL.M. students.

LAW 8615R Estate Planning For Charitable Giving Credit: 1
Survey of federal income tax and transfer tax laws governing gifts to charitable organizations, charitable remainder trusts and charitable lead trusts; procedural requirements to assure deductibility; and planning and drafting considerations.

LAW 8617R Elder Law For Estate Planners Credit: 1
An examination of the legal tools available for the elderly client for decision-making, both health care and financial, in the event of incapacity, and asset preservation, including Medicare and Medicaid qualification. The course will cover the use of trust; durable powers of attorney, and advance directives for health care and living wills and the relationship to court guardianship.

LAW 8621 Evidence Credits: 3
General principles relating to proof of facts in civil and criminal trials; presumptions; order of proof; relevancy; judicial notice; real and demonstrative evidence; authentication; best evidence rule; hearsay; competency; impeachment; rehabilitation.

LAW 8631 Constitutional Law Credits: 4
Core issues relating to the U.S. Constitution, including the doctrine of judicial review, the powers of Congress and the President, limitations on state power, and judicial protection of individual rights.

LAW 8632 Constitutional Law II - Powers Of Government Credits: 2-3
State and Federal constitutions; separation of powers; executive powers, legislative powers; the federal system; powers of Congress, residual powers of the states; relations between the States including extradition and interstate commerce.

LAW 8633 First Amendment Law Credits: 2-3
Basic themes and advanced problems relating to the law of the First Amendment to the United States Constitution, including exploration of the values behind the protection, subversive advocacy, regulation of speech in the public forum, access to the media, regulation of the press, symbolic expression, libel, obscenity, commercial speech, picketing, right of association, loyalty oaths, legislative investigations and government demands for information, separation of church and state, free exercise of religion, state aid to the religious schools, regulation of religion-based conduct.

LAW 8634 Criminal Law Credits: 3
Introduction to substantive criminal law, its role and purpose in our society; principles of liability, common law and statutory offenses; defenses; punishment.

LAW 8634I International Criminal Law Credits: 1-2
An introductory course in International Criminal Law focusing on the criminal prosecution of individuals under international law, primarily by international tribunals (or "hybrid" international/national tribunals) and secondarily by national tribunals applying international law. The course will include a consideration of aspects of criminal law that are common to most criminal legal systems, with a particular focus on those crimes that are "international;" will revisit the concept of criminal jurisdiction, how it is acquired, and its limitations, such as immunity for heads of state and diplomats; and will examine the elements of war crimes, crimes against humanity, and genocide, as well as a few other crimes of international concern; and excuses or justifications under international law, such as self-defense and insanity.

LAW 8634K International Contract Law under the CISG Credit: 1
A study of the United Nations Convention on Contracts for the International Sale of Goods (the CISG), which provides a uniform system of contract principles for international sales transactions among the approximately 70 countries that have ratified the treaty. The class focuses on the applicability of the CISG, identifying for students how to avoid applicability by default; it also examines the basic contracting principles of formation, interpretation, and enforcement of contracts as governed by the CISG, utilizing both the treaty language as well as important recent decisions applying the CISG provisions.

LAW 8635 Criminal Procedure I Credits: 3
Introduction to the administration of criminal justice; constitutional rights of the accused; due process; privilege against self-incrimination; right to counsel; arrest, search, and seizure; wire-tapping; police interrogation and confessions; pre-trial identification procedures.

LAW 8635S Wrongful Convictions Credits: 2-3
An examination of the causes of wrongful convictions, a consideration of systemic reforms that might minimize convicting the innocent and a focus on recurring ethical issues that confront prosecutors and criminal defense lawyers. Students also will work with The Midwestern Innocence Project on cases of possible actual innocence.This course provides an insider’s look into the operation of the criminal justice system and is designed to help students gain insight into features of the criminal justice system that have a tendency to produce wrongful convictions. It should be of particular interest to any student interested in working in a prosecutor’s office, public defender’s office or for a firm doing defense work. It is a prerequisite for any student wishing to enroll in the Innocence Project clinic. Limited enrollment (normally, up to 16 students)

LAW 8635T Wrongful Convictions II Credits: 2-3
A follow-up class to Wrongful Convictions I, open only to students who have completed Wrongful Convictions I. The course will involve "hands on" work with cases that have passed through the first level of screening in Wrongful Convictions I with students receiving the transcripts and case documents in addition to the briefs and opinion in the case. Students will receive these documents and report on the likelihood that an inmate is innocent and the strategies available for pursuing the claim of innocence.

LAW 8636 Criminal Procedure II Credits: 2-3
Continuation of the study of the administration of criminal justice; exclusionary rules; bail; prosecutor’s discretion; grand jury; preliminary hearing; jurisdiction, venue; joinder and severance of offenses and defendants; right to speedy trial; pleas of guilty; discovery; trial by jury; publicity; double jeopardy.

LAW 8636A Federal Trial Practice Credits: 2-3
A practical skills course involving consideration and application of the rules of procedure and evidence to civil and criminal cases brought in federal court, including, but not limited to the legal requirements of federal jury instructions, motions in limine, pretrial preparation, pretrial conferences, notice requirements, voir dire, opening statements, direct and cross, evidentiary foundations for exhibits, computerized and computer-related evidence, character and related evidence, witnesses (lay, lay opinion, summary, character, experts), and closing arguments.

LAW 8637R U.S. Attorney’s Office Law Clinic Credits: 2-3
Up to four students, under supervision of an Assistant United States Attorney, are selected as interns to work in the United States Attorney’s Office for the Western District of Missouri with members of the Strike Force, Narcotic Unit, General Crimes Unit or Civil Division. Activities include, legal research and writing, consisting of memoranda, motions and briefs; observations and participation in trials, pre-trial hearings and motions, as appropriate; and assistance with litigation. Students are expected to work a pre-approved schedule of six hours a week for fourteen weeks with a minimum of eighty hours a semester and to attend regular conferences with their supervising attorney and faculty supervisor.

LAW 8638R Entrepreneurial Lawyering: Solo And Small Firm Practice Credits: 2-3
Course will focus on law practice management for solo and small firms. Topics include organizational structure, firm management, fee setting and allocation, and effective and ethical marketing. Course includes attendance at the Missouri Bar Solo and Small Firm Conference.

LAW 8641R Legislation Credits: 2-3
This course explores a variety of topics under the broad heading of "Legislation." Included among them are: electoral and representational structures, legislative drafting, canons of statutory interpretation, identifying and utilizing legislative history, the role of referendums and initiatives as a supplement to representative institutions, public choice theory, and other theories of legislation. The course also includes an opportunity for students to participate in the drafting of legislation for the Kansas for Missouri State legislatures. Paper optional.

LAW 8643F Advanced Legal Research: Foreign, Comparative and International Law Credit: 1
The course is designed to familiarize students with the basic resources of international law by taking an in-depth look at foreign and comparative law resources, teaching students how to utilize and think systematically about those resources and instructing students in the strategies and processes necessary to conduct scholarly research and practice international law. Students taking the course will improve their research competency in authorizing scholarly papers with a comparative or international perspective.

LAW 8643L Advanced Legal Research-Litigation Credit: 1
Prepares students who wish to focus on advocacy and litigation (including students in litigation with respect to Family Law and Urban, Land Use and Environmental law). The course is also intended to facilitate research for the student's legal research and writing requirement. the course will refresh and refine research skills, help students to think systemically about legal research, and familiarize students with applicable resources. As the final project, students will have the opportunity to develop an in-depth research "path finder" or guide for an approved topic of their own choosing.

LAW 8643T Advanced Legal Research: Transactional Law Credits: 1-2
Prepares students who wish to focus on transactional law. The course is also intended to facilitate research for the student's legal research and writing requirement, although it does not satisfy the writing requirement. The course will refresh and refine research skills, help students to think systemically about legal research, and familiarize students with applicable resources relevant to transactional law including business organizations, tax, pension, labor and employment, competitive business intelligence, real estate, securities, sale of businesses, etc. As the final project, students will have the opportunity to develop an in-depth research "path finder" or guide for an approved topic of their own choosing.

LAW 8650 Race and the Law Seminar Credits: 1-3
In-depth examination of the role that race plays in American society as a whole and in judicial decision-making in particular. Course will examine the effect of race on representative democracy, employment, education, housing, hate crimes, the legal profession, sex, popular culture, and other aspects of the law. Research paper.

LAW 8656 Public Defender Trials Clinic Credits: 3
As permitted by Missouri Supreme Court Rule 13, senior law students, under supervision, handle cases referred from the Public Defender. Students enroll for two semesters and are required to devote at least 10 hours per week to applied skills, weekly conferences, and lectures. Limited enrollment.
Prerequisites: LAW 8634.

Co-requisites: LAW 8635, LAW 8621, LAW 8731.

LAW 8656A Missouri Attorney General's Office Clinic Credits: 2
As Permitted by Missouri Supreme Court Rule 13, second and third year law students, under supervision, work at the Attorney General's Office in Kansas City assisting with the duties and functions of the office provides the community. Students are required to devote at least 6 hours per week to formalized instructions, individual mentoring, and instruction and guidance from assistant attorney generals. Limited enrollment.
Prerequisites: Rule 13 certification.

LAW 8656C Jackson County Prosecutor Clinic-Family Law Prosecution Credits: 2-3
As permitted by Missouri Supreme Court Rule 13, senior law students, under supervision, appear in court and assist the Jackson County Prosecutors Office, Child Support Division, in prosecuting cases involving paternity establishment and child support. Support services are provided without charge to custodial parents living in Jackson County. Students enroll for two semesters and are required to devote at least 10 hours per week to formalized instructions, individual mentoring, and instruction and guidance from assistant prosecutors. Limited enrollment.
Prerequisites: LAW 8621, LAW 8635, LAW 8731, LAW 8751, Rule 13 certification.

LAW 8656F Federal Public Defender Externship Clinic Credits: 2-3
Up to three students will be assigned to work in the Federal Public Defender's Office. Under the supervision of the Federal Public Defender, a student will prepare pleadings and represent federal ndigent criminal defendants. Students will be expected to perform legal research, to write memoranda, motions and briefs, to observe and to appropriately participate in trials,pre-trial hearings, motion hearings and, in general, to assist in litigation. Students must meet eligibility requirements and be certified in compliance with the Local Federal Rules of Court. Student will work a pre-approved schedule totaling 6 hours a week for 14 weeks with a minimum of 80 hours a semester for two academic credit hours and to attend regular conference with their Supervising Attorney and with their Faculty Supervisor. Students must have completed three semesters of law school and must be in the upper half of their class. Ungraded. Pass/Fail.

LAW 8656P Jackson County Prosecutor Clinic Credits: 1-3
As permitted by Missouri Supreme Court Rule 13, senior law students, under supervision, appear in court and assist the Jackson County Prosecutor's Office with the duties and functions the office provides the community. Students enroll for two semesters and are required to devote at least 10 hours per week to formalized instructions, individual mentoring, and instruction and guidance from assistant prosecutors. Limited enrollment.
Prerequisites: Rule 13 certification.

LAW 8662 Federal Court Internship Credits: 2-3
Second or third-year students serve in a clerkship with a judge or magistrate of the U.S. District Court for the Western District of Missouri, or the U.S. Court of Appeals for the Eighth Circuit. Students work at least 70 hours at the court, and attend review conferences over the course of the semester.

LAW 8662F Family Court Clerkship Credits: 2-3
Second or third-year students will serve as law clerks to judges and commissioners in the family court of Jackson County. Students work at least 80 hours at the court and attend review conferences over the course of the semester. Pass/Fail.

LAW 8662M Missouri Court of Appeals Internship Credits: 2-3
Second or third-year students with a GPA of at lease 3.0 serve in a clerkship with a judge of the Missouri Court of Appeals. Students work at least 70 hors at the court, and attend review conferences over the course of the semester. Ungraded. Pass/Fail.

LAW 8665A Animal Law Credits: 2
This course will begin with a brief overview of the philosophical and cultural issues underlying human/animal relationships, including basic theories of the legal systems's responses to social change. Legal issues relating to food animals, companion animals, laboratory animals, wild animals, and performing animals will be examined with reference to: (1) federal statues (Animal Welfare Act, Endangered Species Act, Marine Mammal Protection Act, Wild Horses and Burros Act, Animal Damage Control Act, National Wildlife Refuge System Administration Act, Refuge Recreation Act, National Environment Police Act, and Humane Slaughter Act); (2) state statues (anti-cruelty, wills and trusts, hunting, racing and fighting statues); (3) local animal control regulations; and (4) extensive common law (standing, rights, free exercise of religion, property, landlord-tenant disputes, torts, marital dissolution and custody, and bailment).

LAW 8700 Trial Advocacy I Credits: 2
A practical skills course in advocacy which introduces students to the fundamental components of a typical civil and criminal trial and requires students to perform exercises involving each component and try a mock civil or criminal case from provided problem materials.
Co-requisites: LAW 8621.

LAW 8702 Conflict of Laws Credits: 2-3
Domicile; jurisdiction and limitations on the exercise of jurisdiction; judgments; full faith and credit; choice of law; conflicts problems in federal and international settings; conflicts problems in selected areas.
Prerequisites: LAW 8521.

LAW 8703 Trial Advocacy II Credits: 2-3
A practical skills course in the art of trial advocacy with an emphasis on technique, style, and methods of persuasion. During class sessions, students perform exercises involving the various stages of a law suit, and are critiqued on their performances. Following performance of the exercises, students are divided into teams and try a mock case in a trial competition, from which the Law School's National Trial Competition Teams are selected. The trials are evaluated by trial lawyers and federal or state judges. Limited enrollment.
Prerequisites: LAW 8700.

LAW 8704 Lawyering Skills Credits: 2-3
Interviewing and counseling; fact investigation; discovery; negotiation. Simulated videotaped exercises and drafting assignments.
Prerequisites: LAW 8521, LAW 8621.

LAW 8704A Lawyreing Skills Competition-Appellate Credits: 1-2
This course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competitions. These competitions require application of lawyering skills in a range of substantive law areas and intensive practice of lawyering skills, judged by faculty and practitioners in the field. Students enrolled in this course will be representing the school in various moot court appellate advocacy competitions. Students will research and draft briefs or equivalent advocacy documents, develop oral arguments, conduct practice oral arguments before a range of student, faculty, and practitioner judges, and represent the law school in regional national or international competitions.

LAW 8704C Lawyering Skills Competition-Client Counseling Team Credits: 1-2
The course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competitions. Students enrolled in this course will be representing the school in the client counseling competitions. Students will research a problem from a range of areas of law and develop problem solving and client counseling strategies and documents and conduct mock client interviews.

LAW 8704I Lawyering Skills Competition Credits: 1-2
This course provides an overview of international commercial arbitration and focuses with more specifically on international investment protection law and bilateral investment treaty provisions. The course will provide preparation for the International LL.M. Commercial Arbitration Competition, but it is open to J.D. students.

LAW 8704N Lawyer Skills Competition-Negotiation Team Credits: 1-2
The course is limited to students who represent the law school in faculty supervised regional, national and international lawyering skills competitions, Students enrolled in this course will be representing the school in various negotiation competitions. Students will research a problem from a range of law and develop negotiation strategies and documents and conduct mock negotiations.

LAW 8704T Lawyer Skills Competition-Transactional Practice Teams Credits: 1-2
The course is limited to students who represent the law school in faculty supervised regional, national or international lawyering skills competition. Students enrolled in this course will be representing the school in various negotiation competitions and meets, Students will research a problem involving business transactions or tax and prepare analysis and problem solving strategies.

LAW 8705 Trial Advocacy III Credits: 2
Students, under the supervision of trial advocacy faculty, participate in trial competitions. Enrollment by invitation only.
Prerequisites: LAW 8700, LAW 8703.

LAW 8705I Comparative Advocacy in Ireland Credit: 1
This course will look into the comparative role of Advocacy both in the courtroom and the boardroom for European and U.S. systems. The course will introduce students to a comparative look at the basic structure and legal systems in Ireland and the US. The field of Advocacy is rapidly expanding as evidenced by the adoption of affirmative advocacy programs in Ireland as well as the U.S. An example of the topics covered include: A comparative overview of the Barrister/Solicitor and U.S. systems of justice. The students will be introduced to “access to justice” which is a comparative look at European and US approaches. The course will also focus on the prosecutions under both the European and US systems as well as a discussion of the influence of crimes on international trade, business and a comparative look at the role of advocacy in those systems. Students will be exposed to advocacy for persons with disabilities that include a comparative look at the Ireland and US systems with resulting effects on business and trade. Finally the course will involve review and discussion of the global considerations for Advocacy.
Prerequisites: Part of the Ireland Law Program.

LAW 8706 Complex Litigation Credits: 2-3
As related to litigation of complex cases, study of special issues of party joinder and intervention, class action requirements and limitations, discovery, case management, and estoppel by verdict or judgment.
Prerequisites: LAW 8521, LAW 8522.

LAW 8707A Advanced Legal Writing: Practical Skills Development Credits: 2-3
Preparation of students for writing problems commonly encountered in the first two years of law practice: jury instructions, general correspondence, opinion letters, simple contracts, litigation motions and pleadings including a complaint, answer and some discovery documents. Individual feedback provided.

LAW 8707B Advanced Legal Writing: Business Contract Drafting Credits: 2-3
Preparation of transactional documents including, for example, confidentiality agreements, consulting agreements, employment agreements, technology licensing agreements.
Prerequisites: LAW 8501, LAW 8502, LAW 8601.

LAW 8707C Advanced Legal Writing: Litigation Drafting Credits: 2-3
Preparation of litigation documents and pleadings, including complaint or petition; cross-claim, counterclaim or third-party petition; answer; discovery documents such as a set of interrogatories or requests to admit; dispositive motions; and settlement agreements.
Prerequisites: LAW 8521, LAW 8522.

LAW 8707E Advanced Legal Writing: Scholarly Writing Credit: 1
Preparation of students for scholarly writing including independent study, law review, and seminar papers. Focus will be on topic identification and refinement; developing a thesis; research strategies including reiterative and mediated searching, systemic evaluation of resources, problem typing and solving, and resources for specific topics in the law; proper attribution and use of authority; developing a working draft; and creating a balanced, thorough, and carefully reasoned and supported analysis.

LAW 8707F Advanced Legal Writing: Appellate Brief Writing Credit: 1
Preparation of federal and state court appellate briefs, including the jurisdictional statement; statement of the case; statement of facts; points relied on; statement of the issues presented; summary of the argument; argument; and responses and replies to arguments. Prepares students to outline and organize arguments; edit and revise written work; and finalize an appellate brief.

LAW 8707R Advanced Legal Research Administrative Regulations/Legislative History Credit: 1

LAW 8708 Master Clinical Advocacy Course Credits: 3-4
This semester-long intensive course will introduce students to the law, advocacy and execution of trial strategy in active litigation. The course will function as a unique clinical course, with a law school professor and local counsel serving as the supervising attorneys. The professor will select an active case in local litigation, preferably in its early stages. The students will be reponsible, with supervision, for all areas of the litigation process from drafting pleadings, motions, discovery and taking and attending depositions and trial.

LAW 8710 Advanced Lawyering Processes Credits: 1-3
Legal analysis, research and writing; instruction and discussion of the research and writing process and related topics in legal method and legal education; supervised production of an expository writing, advocacy writing and scholarly writing; development of research and writing exercises for use in the first-year Legal Writing Program and service as Teaching Assistants in the Program; limited enrollment.

LAW 8710B Legal Analysis & Methods Credits: 2
Preparation of students for the bar review and exam process with a focus on improving analytical skills to approach and do well on practice bar exam questions, including essay, multiple-choice, and performance questions. The course will cover specific topics tested on the bar exam with additional emphasis on refining memorization skills and learning how to self-assess understanding of concepts.

LAW 8711 Remedies Credits: 2-3
Remedies for violation of legally protected interests; history and development of equity jurisdiction and modern equity practice; injunctions; declaratory judgments; rescission; reformation; restitution; contempt; damages.
Prerequisites: LAW 8521.

LAW 8712 Problems And Issues In The Death Penalty Credits: 1-2
Issues and problems in the administration of the death penalty; the Missouri capital sentencing scheme; constitutional limitations, statutory schemes, state review systems, procedural matters and collateral review of death sentences.

LAW 8713 Death Penalty Clinic Credits: 1-2
The post-conviction process of collateral review in death penalty cases; training in legal representation of the postconviction petitioner.
Co-requisites: LAW 8712.

LAW 8713C Capital Punishment in the Modern World: Constitutional & Human Rights Perspectives Credit: 1
A consideration of problems and issues in the death penalty, including the following topics: the historical and constitutional perspectives on the death penalty; the practical application of the death penalty in the United States; capital punishment and human dignity; and the future of capital punishment

LAW 8713P Innocence Project Credits: 1-3
Students, under supervision, provide investigate and legal assistance to prisoners with persuasive actual innocence claims. Students meet weekly with the director of the program for training and evaluation. Assigned tasks depend on the needs of the Innocence Project, and may include interviewing potential clients, gathering records, investigating actual innocence claims, consulting with experts, drafting post-conviction and/or clemency pleadings, and appearing at court hearings. Clinical students work in conjunction with law and journalism students enrolled at the University of Missouri-Columbia and are required to work 240 hours a semester or roughly eighteen (18) hours a week on their clinic cases. Limited enrollment (normally, 8 students).
Prerequisites: LAW 8634, LAW 8635, LAW 8635S.

LAW 8714 Gender and Justice Credits: 2-3
Students will examine and discuss legal issues of special importance to women. Topics will include (among others) sexual discrimination, sexual harassment, domestic violence, reproductive autonomy, and pornography. The course seeks to present each topic in its social context by supplementing legal readings with materials drawn from the social sciences, literature, and film. Paper required. Enrollment limited to fifteen students.

LAW 8714C Gender and Justice: Selected Topics Credit: 1
Students examine and discuss, from a comparative perspective, legal issues that have a substantial impact on the construction of gender, paying particular attention to the laws of Ireland and the United States. Topics will include selected portions of some of the following issues: sex discrimination from an historical perspective in each country the constitutional standards for evaluation of sex discrimination; sexual harassment; domestic violence; reproductive rights; familial rights (same-sex marriage, divorce, and custody); feminist theory (equal treatment theory, cultural feminism, radical feminism, lesbian theory, racial essentialism, and theories of global gender equality); and depictions of gender in popular culture. The course seeks to present each topic in its social context by supplementing legal readings with materials drawn from the social sciences and literature.

LAW 8714G Gender, Race, Sexual Orientation, Religion & Film Credit: 1
A focus on the ways in which facets of identity (e.g., gender, race, sexual orientation and religious beliefs) are illuminated in films and other popular media that have implications for law and public policy, including how public sentiments are influenced by movies and other media and how movie portrayals of these identity characteristics shape popular conceptions of what the law should be in relation to them. Readings and discussions illuminate the ways various media both feed, and at times test, societal assumptions about identity characteristics.

LAW 8714R Assisted Reproduction Seminar Credits: 2-3
An in-depth examination of assisted reproduction from a legal perspective. The course will include interdisciplinary study of the development of reproductive technologies and the implications for law and regulation. The course will attempt to situate the legal discussion within the context of the changing science and the nature of the industry. Discussion will therefore consider the international development of the industry, the importance of determination of parenthood to its viability, potential exploitation of vulnerable patients, and the impact on the resulting children,. Course topics will include consideration of the constitutional, family law and regulatory frameworks, posthumous reproduction, embryonic stem cell a research and human cloning.

LAW 8714S Sexuality and the Law Credit: 1
An examination of sexual orientation,sexuality,and the law. This course will introduce students to existing and emerging jurisprudence in these areas by examining case law with an eye toward how holdings in specific cases can be expanded or restricted in future litigation. The five-day course will examine the manner in which constructions of sexuality and sexual orientation have impacted the development of law in the areas of constitutional law (including speech and the right to privacy),employment,marriage,parenting,violence and military service.

LAW 8716 Cyberlaw and Information Policy Credits: 2-3
Survey of the areas of the law with existing or potential application to computers (such as contract law, intellectual property law, criminal law, tort law and constitutional law) highlighting the legal issues involved in the areas studied.

LAW 8720 Secured Transactions Credits: 3
Secured Transactions in personal property under Article 9 of the Uniform Commercial Code, function and form of a security agreement, process of perfecting a security interest, priority among unsecured parties; secured sales of goods under Article 2 of the Uniform Commercial Code.

LAW 8721 Commercial Transactions Credits: 3
Law of negotiable instruments; bank collections; Articles 3 and 4 of the Uniform Commercial Code; electronic funds transfers.

LAW 8723 Banking Law Seminar Credits: 2
Federal and state law governing banking activities; regulation of bank holding companies; formation of banks; the FDIC and FSLIC; interstate banking; deregulation of banking transactions; banking activities by non-banks; regulation of securities activities of banks. Paper required.
Prerequisites: LAW 8721.

LAW 8725 Water Law Credits: 2-3
Private acquisition of water rights through riparian ownership and prior appropriation; public rights to water existent in bed ownership easements and trusts; ground water management; water distribution organizations; federal allocation and control of water resources; interstate allocation.

LAW 8725E Energy Law Credits: 3
The course will deal with the legal, economic and environmental issues of energy production on federal lands and/or under federal jurisdiction. It will focus on a number of energy sources including: oil, coal, natural gas, oil shale, coal bed methane, geothermal, water, wind, and solar. It will also cover the special problems of hydraulic fracturing, air and water pollution, climate change spills, collapses, meltdowns and other disasters as well as liability for cleanup and reclamation.

LAW 8728 Law And The American Indian Credits: 2-3
An anthropological, historical and legal study of the American Indian, including a focus on American Indian traditional law and values, federal policy and current legal issues.

LAW 8729 Preservation Law Credits: 2-3
An exploration of the legal and economic issues impacting preservation of land, wilderness, buildings and archeological and historical sites, including a study of various federal and state preservation legislation, and private land use preservation measures.

LAW 8729C Cultural Preservation Law Credits: 3
This course will focus on Federal, State, and Local Law, directed at the preservation of Prehistoric, Historic, and Modern Culture. It will include sections on: The Values and Philosophy of Preservation, Archaeological Protection Law, the Native American Grave Protection and Reparation Law, Sacred Site Protection, Historic Protection in State and Local Government, the Takings Clause, Land trusts and Conservation Easements, Public-Private Partnerships and Modern Ethnic and Socio-economic Communities.

LAW 8730I Introduction to American Law & Culture Credits: 2-3
Introduction to the American legal system, including government structure, sources of law, common law development, and core substantive areas. Available to LL.M. International students only.

LAW 8731 Professional Responsibility Credits: 2
Code of Professional Responsibility and the Model Rules of Conduct; role of the lawyer as a professional; confidentiality; conflict of interest; zeal within the bounds of the law; competency; providing legal services.

LAW 8732 Lawyers and Dispute Resolution Credits: 2-3
An overview of the emerging trend towards alternative forms of dispute resolution and some reasons for it, methods of dispute settlement, such as negotiation, mediation, arbitration and adjudication, the roles lawyers play in these various modes, problems and possibilities of non-adversarial methods of resolving conflict, particularly mediation.

LAW 8732C Cross-Cultural Dispute Resolution Credits: 2-3
This course examines the impact of culture on the dispute resolution process. Cultural differences are most pronounced in the international arena, but are also seen in the domestic setting, especially in the US jurisdiction. Students will begin to develop a "cultural fluency" in their law and dispute resolution practice. The subject is timely, and discussion thereof will benefit especially international LLM students, and J.D. students with interests in alternative dispute resolution or international practice. Cross-cultural Dispute Resolution is a blend of both a "course" and a "seminar," as it includes lecture, skills discussion, small-group exercises, independent research and intensive writing. Successful completion of the required research paper will satisfy the research and writing requirement.

LAW 8732R Intro to the Resolution of International Commercial Disputes Credit: 1
This course will introduce students to international commercial dispute resolution. While all forms of dispute resolution will be considered, the course will focus on introducing the fundamentals of arbitration, the use of arbitration between European Union members to resolve commercial disputes, and the use of arbitration between EU members and non-member states to resolve commercial disputes.

LAW 8733 Children In The Law Credits: 2-3
The ways in which the legal system treats children differently from adults and the justifications for such treatment, who should make decisions for the child, decisional authority that should be granted to parents, children and the state in various contexts (e.g., abuse and neglect, health care for the child, foster care, adoption and education).

LAW 8733E Elder Law Credits: 2-3
A course providing a basic foundation for legal practice with older persons, including the following substantive topics: The Older Americans Act, the delivery of legal services to the elderly,ethical considerations,consumer protection, discrimination, Social Security and Supplementary Security Income, Medicare, Medicaid, capacity issues, guardianship and alternatives to guardianship,elder abuse and neglect, adult protective services, nursing homes, long term care, housing, healthcare decisions, end-of-life decisions,estate planning and grandparents' rights.

LAW 8733R Juvenile Offenders & The Law Credits: 2-3
An examination of our justice systems's historical treatment of juvenile delinquent and status offenders, and how the goals and objectives of the past have evolved into today's juvenile offender laws; the rights of juvenile offenders in contrast to those of adult criminals; pre-trial and trial procedural issues under the juvenile code; certification of the juvenile offender as an adult; dispositional/treatment alternatives for juvenile offenders; schools and the juvenile offender.

LAW 8734 Mediation Credits: 2
The process in which a neutral third party assists others in resolving a dispute or planning a transaction; introduction to the nature of the process, its possibilities and limitations, its current and future uses, and how lawyers can and should be involved in it; public policy and political issues surrounding the mediation movement; professional responsibility and malpractice.

LAW 8735 Seminar In Famous Trials Credits: 2-3
Historical and jurisprudential issues involved in a number of "political trials.

LAW 8735P Seminar in Pre-Twentieth Century Famous Trials Credit: 1
This seminar will explore six or seven of the most famous trials from ancient times to the end of the nineteenth century. The trials covered will vary from year to year, but will be taken from a list that includes the trials of Socrates,Jesus, Joan of Arc,Sir Thomas More,Galileo,the Salem witches,John Peter Zenger,the British soldiers charged in connection with the Boston Massacre,Aaron Burr,the slaves of the Amistad,John Brown,the Lincoln Assassination conspirators,Susan B. Anthony, the Haymarket rioters,Lizzie Borden,and Oscar Wilde. Each trial will be examined from many perspectives,both with an eye to deepening students' appreciation for history and their understanding of the tactical and ethical questions faced by attorneys involved in these famous cases. Materials for the seminar can be found on the Famous Trials website. Grades for the seminar will be based both on an in-class objective examination and a short paper addressing an issue raised in a famous pre-twentieth century trial.

LAW 8735R Law Of The European Union (Part I) Credit: 1
An in-depth study of the legal and political framework and institutions of the European Union; the Commission, Council of Ministers, Court of Justice, Court of Auditors, and the European Parliament. Course will examine the interlocking web of European treaties, the expansion of the European Union, the European Union as a trade block and Ireland as a gateway to the European Union for non-bloc nations.

LAW 8736 Debtor-Creditor Rights Credits: 2-3
Creditors' remedies and debtors' rights; provisional remedies; secured transactions (Article 9 of the Uniform Commercial Code); liens and exemptions; overview of bankruptcy law.

LAW 8737B Bioethics and Assisted Reporduction Credit: 1
This course will examine the regulation of assisted reproduction, focusing, in particular, on the determination of legal [parenthood. The course will consider the legal determination of the status and disposition of embryos, the possibilities of transfer or donation, use of donor gametes, surrogacy, nuclear transfer, and interjurisdictional conflicts. In addressing these topics, the course will compare Ireland, a relatively conservative country on reproductive issues, with the UK with a mix of liberal and conservative approaches in the United States.

LAW 8737R Law Of The European Union (Part II) Credits: 2
An examination of the substantive and procedural law governing the member states of the European Community including such topics as the nature and application of European Union Law, the relationship between European Union and national laws, remedies in national courts, enforcement actions, damages and money claims, free movement of goods and workers competition laws, intellectual property, equal treatment of women and men, and non-discrimination.

LAW 8738 Immigration Law And Process Credits: 2-3
Admission, exclusion, deportation, and naturalization of aliens; structure and powers of relevant federal agencies; categories of immigrant and non-immigrant visas and visa application procedures; asylum, extradition, and refugee status; rights of aliens; public policy issues and proposals for reform; practical problems in immigration.

LAW 8738C Employer Immigration Compliance Plans, Policies & Procedures Credits: 1-2
A practical lawyering skills course in which students learn how to help employers comply with employer immigration compliance requirements in order to avoid possible non-compliance fines, forfeiture of business and personal assets, and jail terms. This course includes an overview of the applicable immigration law and instructs in such matters as corporate client interviewing; Form I-9 Employment Eligibility Form; E-Verify and FAR E-Verify for federal contractors; ICE Best Employment Practices, drafting employer immigration compliance plan, policies and procedures; I-9 Self-Audits, and defending a corporate client in I-9 inspections/investigations by ICE/DHS.

LAW 8738P Immigration Law and Policy Credits: 2-3
A focus on the historical development of immigration law in the United States and fundamental questions of immigration policy. Immigration bills in Congress have been the subject of heated debate, particularly in recent years. This course provides a historical,statutory, and theoretical background for evaluating such proposals. Students will evaluate proposed federal and state legislation across the country and immigration reforms in foreign countries. Particular emphasis will be placed on post-9/11 reforms and the relationship between immigration law and the war on terrorism. The subject matter is useful for the student who intends to practice immigration law, as well as for the non-specialist interested in Immigration law as a policy matter.

LAW 8738R Chinese Law Credits: 4.5
A summer abroad program in Chinese law taught at the University of Peking, Peoples Republic of China by Chinese Professors. Subjects include such topics as: Cultural History and Political Systems of China, Organization of the Chinese Legal System, Chinese Contract Law, Civil Law, Trial Practice Rules of Evidence, Criminal Law Procedure, Family Law, Human Rights Issues, Business Organizations, Taxation, Intellectual Property Law, Banking and Finance, Real Estate Law, Investment Law Practice in China, and Alternative Dispute Resolution.

LAW 8738V Immigration Law & The Violence Against Women Act Credit: 1
A practical lawyering skills course in which students learn how to help abused immigrant women and children to apply for permanent residence inthe united States, and how to help victims of violent crimes to apply for legal status. The course includes a short overview of the applicable immigration law and instructs in such matters as client interviewing; analysis of cases; working with victim advocates and experts; drafting affidavits, evidence indexes, petitions, motions and supporting documents; preparation of checklists for clients, case flowcharts, and case tinelines; the review and development of evidence; and the drafting of letters to clients and the government.

LAW 8740C The Missouri Supreme Court & Constitution Credit: 1
In four of the five sessions, students will study a single case that is currently pending before the Missouri Supreme Court or has very recently been decided by it. Each case will be selected because it raises important issues under the Missouri Constitution or because it illustrates an important aspects of the Supreme Court's function in our judicial system. The students will read the briefs and (in some cases) a small amount of related material before the class session. The class will discuss the issues raised by the briefs and listen to the actual oral argument of the case. As part of the discussion, students will be introduced to the way the Supreme Court functions. One session will ordinarily consist of a trip to the Supreme Court in Jefferson City to observe the Court (if it is in session) and to meet with one or more its members. This session will be scheduled on whichever day best fits with the Court's schedule.

LAW 8740M Missouri Civil Procedure Credits: 2-3
Selected problems in Missouri civil procedure under Missouri statute and rules. Topics may include venue and personal jurisdiction, pleading and motion practice rules on joinder of parties and claims, statutes of limitation, trial procedure, post-trial motions appellate procedure, discovery, and preclusion.

LAW 8743 Global Legal Systems Credits: 1-3
A study of different legal traditions and systems, mainly within the Civil and the Common Law traditions, focusing on each tradition's history, legal structures, legal actors, procedures, and sources of law. Non-Western Legal traditions such a s Islamic, Jewish, Hindu and Indigenous Law may also be considered, time permitting.

LAW 8743C Comparative Criminal Law Credit: 1
A comparative analysis of criminal law jurisprudence in the United States and Europe (especially Ireland and the United Kingdom) with respect to the exclusionary rule, the death penalty, the jury system and the reintegration of ex-offenders into society.

LAW 8743L Comparative Health Law Credit: 1
An examination of how the legal systems of several other nations address particular aspects of health law. Specifically, the focus of this course is on patent rights with respect to the health care they receive. This will include,l for example, consideration of patient rights when the care received has caused injury due to professional negligence. If time permits, it will also look at how other legal systems address the controversial issues surrounding the "right to die" as well as assisted suicide and euthanasia.

LAW 8745 Law Review Credits: 1-3
Editorial work in connection with the "UMKC Law Review." Open to students selected on basis of scholarship. Ungraded.

LAW 8745R Law Review Board Credits: 1-5
The members of the Law Review Editorial Board edit articles and student notes and comments for publication in the University of Missouri Kansas City Law Review; and shepherd the articles and student pieces through the production process.

LAW 8745S UMKC All Journal Staff Credits: 1-4
Staff members of all UMKC School of Law journals (The Urban Lawyer, Law Review, Journal of the Academy of Matrimonial Lawyers, etc.) received credit for writing case notes, annotations, and statutory developments, for editing articles, for editing comments and book reviews, and for participation. Ungraded.

LAW 8746 Research & Writing Requirement Credits: 2
Completion of a paper of publishable quality, demonstrating intensive research and analysis under faculty supervision.

LAW 8746B Bridging the Research Gap: From Classroom to Practice Credit: 1
Research training,including firsthand observation at a courthouse of how a case moves through the legal system and hands-on use of print and electronic research tools for problem solving and analysis of results to help students make the transition from doing legal research for the classroom to the practice setting. Students will use Lexis' Total Litigator package of resources; Westlaw sources for transactional research; sources for legislative history, administrative law and secondary sources;and learn to develop research strategies and how to analyze the results for each.

LAW 8746I Internship Credits: 3

LAW 8746R Independent Study Credits: 0.5-3
Independent study, including research and writing projects, under faculty supervision.

LAW 8746W Introduction to Workers' Compenstation Law and Practice Credits: 1-2
An introduction to the general history and purpose of the workers' compensation laws with a particular emphasis on Missouri law. Students will be presented with and guided through actual workers' compensation problems which will introduce them to the practical aspects of the practice in this specialized area. With permission from Jefferson City and the Department of Labor and Industrial Relations,the students will be exposed to actual workers' compensation hearings,mediations and other courtroom practices held at the law school and presided over by an Administrative Law Judge.

LAW 8747 Appellate Advocacy II Credit: 1
Preparation of memorandum (points relied on and summary of argument); presentation of two arguments before practicing attorneys. Ungraded.

LAW 8748 Appellate Advocacy III Credits: 2
Ellison Moot Court Competition; preparation of an appellate brief and presentation of two oral arguments before federal and state judges. Open to the 16 finalists from Appellate Advocacy II. Ungraded.

LAW 8750 Urban Lawyer Staff Credit: 1
Staff members of the Urban Lawyer receive credit for writing case notes, annotations, and statutory developments, for editing articles, for editing comments and book reviews, and for participation in urban legal conferences. Research Editors of the Urban Lawyer receive additional credit for writing a major article or comment for publication in the journal. Ungraded.

LAW 8750B Urban Lawyer Board Credits: 1-5
Members of the Urban lawyer Editorial Board, articles that are submitted and coordinates student written case digests and comments for publication in The Urban lawyer. The members of the board ensure the articles and student pieces conform to publication standards and work the articles through the production process. Board members must take at least one credit in the fall semester and can carry over the remaining allocated credits to the winter semester. Ungraded.

LAW 8751 Family Law Credits: 2-3
Pre-marital contracts; marriage; annulment; paternity; parent and child; divorce; alimony; division of property; separation agreements; adoption.

LAW 8751D Divorce Procedure and Practice Credits: 1-3
This course will focus on basic doctrine and procedure of divorce, child custody and related financial issues using Missouri law as the template. Students will perform a simulation of a divorce from initial client interview to judgement, including trial and mediation of the issues. Course includes attendance at the Missouri Bar Family Law Conference.

LAW 8751F Family Law & Film Credit: 1
An exploration of the function of family law and lawyers in society by examining legal decisions, statutes and legal commentaries in the context of films, including classic, contemporary mainstream, foreign, documentary and independent films. The seminar entails participants viewing a film followed by discussion. During the discussion session students will critique the film in light of assigned reading materials. Using films as analytical tools, the seminar examines the ways in which pop culture products (such as film and television) both reflect and change the social views about family law and lawyers. A pass/fail course.

LAW 8751S Family Violence Credits: 2-3
An in-depth examination of family violence from a legal perspective. Course topics will include interdisciplinary study of the dynamics and psychology of family violence, of historical and social policies, specialized problems of family violence (including intimated partner violence, child abuse and neglect, gay and lesbian battering, and elder abuse) and legal responses. Students will receive practical training in safety planning, intake, review of community resources, case logistics, and advocacy for temporary orders.

LAW 8752G Guardian Ad Litem Workshop Credits: 1-2
Advanced study of guardian ad litem practice. (GAL). Topics may include adult and child orders of protection, requirements for guardian ad litem appointments, role of the GAL, ethical considerations, working with social workers and other professionals, and best practices in investigation, recommendation, and representation. Students will partner with volunteer attorneys to act as guardians ad litem in order of protection cases.
Prerequisites: Rule 13 certification.

LAW 8752R Family Law Practice Credits: 2
A practical skills course in family law in which students participate in all phases of family law practice, including the initial client interview; the drafting of questionnaires, pleadings, motions custody and discovery plans, support and maintenance proposals, orders and other documents; negotiation, and preparation for litigation. Students work in teams and perform exercises which simulate "real world" situations.
Prerequisites: LAW 8751.

LAW 8752S Child & Family Services Clinic Credits: 2-3
Students represent the Missouri Department of Family Services in representing children in foster care or otherwise under the authority of the Department. Students work under the supervision and direction of clinic faculty and faculty directors, receiving classroom instruction in the substantive law and procedure governing juvenile court actions.
Prerequisites: Rule 13 certification.

LAW 8753 International Law Credits: 2-3
Survey of international legal studies; nature and role of international law, its effectiveness in dealing with international problems and its application in domestic jurisdictions.

LAW 8753L Transnational Litigation & Arbitration Credits: 2-3
Legal issues involved when litigation crosses international borders, including such issues as: International service of process, international discovery, extraterritoriality, sovereign defenses and foreign legal environments (courts, lawyers, clients, laws).

LAW 8754 International Business Transactions Credits: 2-3
Legal problems encountered in international business; jurisdiction and choice of law; enforcement of judgments; methods of protecting foreign investments; extra-territorial application of United States regulations, e.g. anti-trust law.

LAW 8757 Business Planning Credits: 2-3
Problem-method study of choice of entity and various other legal issues and planning challenges in forming a closely held business entity and in private and public financing of an existing enterprise. The course includes practical training from drafting organizational documents to conducting simulated client interviews and providing written advice concerning hypothetical transaction. Limited enrollment.

LAW 8757L Special Topics In Entrepreneurial Lawyering Credits: 2
Examination of issues related to ethical and effective management and marketing of law practice, emphasizing solo and small firm practice. Topics will vary from year to year, but will generally address issues such as forms of practice, dissolution of practice, practice management systems (including technology assistance), human resources management, advertisement and solicitation, insurance and malpractice.

LAW 8757N Entrepreneurship & New Venture Creation Credits: 3
Jointly-taught by Law School and Bloch (Business) School faculty, this interdisciplinary course provides education in entrepreneurship to a combined class of students from law, business, engineering and perhaps other graduate-level disciplines. Using a combination of readings lectures, electronic blackboard discussions, team business planning projects and presentations, and individual presentations on selected topics, the Course is designed, from a law student's perspective, to both (1) familiarize the student with substantive knowledge of issues from multiple disciplines involved in creating a new venture to commercialize technology and (2) train law students in techniques designed to effectively communicate and resolve legal issues inherent in such projects in a collaborative manner with clients and their advisors from other disciplines.

LAW 8757R Entrepreneurial Law & Practice Clinic Credits: 2-3
Under faculty supervision, students will counsel start-up companies and their owners and implement business planning advice by drafting articles of incorporation and organization, by-laws, partnership agreements and other business contracts. Other business-related matters ranging from regulatory, consumer, licensing, and taxation requirements; copyrights, trademark, and patent creation; and 501(C)(3) applications for non-profits may also be covered in this course. Clinic students will also receive classroom instruction in the areas of client counseling and business planning and drafting of business documents.
Prerequisites: LAW 8721, Rule 13 certification.

Co-requisites: LAW 8731.

LAW 8757V Social Entrepreneurship Ventures Credit: 1

LAW 8758S Securities Regulation Credits: 2-3
Problem and policy method study of the Securities Act of 1933 and selected aspects of the Securities Exchange Act of 1934; financing of an enterprise; reorganizations; tender offers; proxy regulation; and securities fraud claims.

LAW 8760 Insurance Credits: 2
Life, fire, accident, and liability insurance; nature of insurance; nature of insurance contract; special rules of construction; standard policy provisions; regulation of insurance industry.

LAW 8761M Law, Medicine & Bioethics Credits: 2-3
A study of bioethics and selected legal and ethical issues in medicine with focus on decision-making at the beginning and end of life; reproductive rights and assisted reproductive technologies; the patient-provider relationship (fiduciary, treatment, confidentiality, and disclosure obligations); physician obligations of informed consent and patient care issues; potential hospital and physician liability for medical malpractice; and end of life decision-making (withdrawal and refusal of life sustaining treatment by individuals and their surrogates) and physician-assisted suicide.

LAW 8763 Labor Law Credits: 2-3
Regulation of labor relations pursuant to the national Labor Relations Act, focusing on the establishment of collective bargaining relationships, unfair labor practices, collective bargaining, strikes, picketing and pre-emption.

LAW 8764 Administrative Law Credits: 1-3
Introduction to the administrative process; role, function, and processes of administrative agencies; policy issues of administrative government; judicial review.

LAW 8764D Food, Drug & Biotechnology Law Credits: 2-3
This course will focus primarily upon the regulation of food, drugs and the products of biotechnology, such as biologic drugs and genetically modified plants and animals. Much of the course will pertain to FDA law, but will also consider the roles of other regulatory agencies such as the EPA and USDA, and the interaction of state and federal law. This area of the law provides an interesting vehicle for exploring the adoption of interpretation of statutory law, the notice and comment rule-making process, administrative law and judicial review of administrative decisions, and the interplay of science, policy and the law.

LAW 8765 Federal Jurisdiction Credits: 2-3
Federal court system and jurisdiction of the federal courts; diversity of citizenship; removal of cases from state to federal courts; conflicts between state and federal judicial systems; original and appellate jurisdiction of the Supreme Court.
Prerequisites: LAW 8521.

LAW 8766 Land Use Law Credits: 2-3
Legal and administrative aspects of land use and the problems and techniques of urban planning; statutory anti-nuisance devices; controlling land use by private methods (restrictive covenants, easements, and servitudes); zoning; subdivision controls; public acquisition of land; building and housing; urban renewal and redevelopment; environmental quality control (air, water, and conservation); relationship of lawyers, planners, private builders, and owners to governmental policies.

LAW 8768 National Labor Relations Board Clinic Credits: 2-3
One-semester clinic in which students will be assigned to the Kansas City Office of the National Labor Relations Board. Under the direction and supervision of the Regional Director, the students will participate in the investigation and prosecution of unfair labor practice charges filed by employers, unions and employees. The students may participate in conducting elections to determine whether employees shall be represented by a union. The students will also assist in Federal District Court litigation to obtain injunctions against NLRA violations. Tasks will include document review, witness interviewing, research and case preparation. Bi-weekly conferences with faculty supervisor and log of clinic activities also required.
Prerequisites: LAW 8763.

LAW 8768R Department Of Labor Clinic Credits: 2-3
Students work with the solicitor's Office of the United States Department of Labor assisting attorneys enforcing federal labor statues, including the Fair Labor Standards Act, OSHA, ERISA, and the Davis-Bacon Act. Under the supervision of the Deputy Regional Solicitor, students perform legal research relating to enforcement actions, draft discovery requests review documents, participate in client and staff conferences, and assist in the investigation of violations. Clinic participants maintain a log of their activities and have bi-weekly conferences with the faculty supervisor to review and evaluate their clinic experiences and research work product.

LAW 8770 State And Local Government Law Credits: 2-3
Structure, powers, and divisions of local governments in metropolitan areas; role and powers of cities, counties, towns, school and special districts; decentralized and neighborhood governmental units and other local governmental units; legislative, home-rule, and constitutional sources of power; sovereign immunity; boundary adjustments; public employee relations; citizen participation; reapportionment; licensing and permits; ethics and public access to records; regional governance; intergovernmental cooperation; interstate compacts and authorities; function of local government with reference to solution of problems created by urban growth; role of judicial, administrative, and political processes.

LAW 8771 Public Finance Credits: 2-3
Fiscal, economic, and taxation problems and powers of local government in metropolitan areas; constitutional limitations; spending and public finance; property taxes; special assessments and exactions; interstate tax acts; local income taxes; debt financing; debt adjustment; public expenditures and contracts; financing education.

LAW 8773 Environmental Law Credits: 2-3
This course covers law developed to control pollution and to protect our country's physical environment. The course provides introductions to ecological theories and to early common law efforts to protect the environment. But the course mainly focuses on current environmental statues (for instance, the Superfund Act, the Resourse Conservation and Recovery Act, the Clean Air Act, and the Clean Water Act) and on current federal constitutional issues involving the environment. (Priorities in this mix may vary from year to year, depending on current events and related course offerings). Enforcement policies, citizen activism the needs of private industry, and the administrative process are also considered.

LAW 8773C Environmental Compliance Auditing and Permitting Credits: 3
This course provides students with an overview of the key federal environmental statutes and their inter-relationships, including consideration of the Clean Water Ace, the Clean Air Act, the Emergency Planning and Community Right ti Know Ace and the Resource Conservation and Recovery Act. Students will learn about inspections, enforcement and liability; environmental management systems and auditing; and generally, how Congress and the EPA formulate environmental laws and regulations and about the roles in the process of the legislature, the regulators, the regulated communities, citizens and public interest groups.

LAW 8773R Environmental Law Clinic Credits: 2-3
Students perform clinic activities at the United States Army Environmental Office, including performing legal research, writing position papers, attending state and federal regulatory hearings, participating in planning conferences and assisting with litigation. Students are supervised by the Central Regional Environmental Chief Coordinating Attorney and attend regular conferences with a faculty supervisor who reviews copies of all clinic written work that may be so reviewed under the United States Army Environmental Office rules.
Prerequisites: LAW 8773 (or LAW 8764).

LAW 8773T Environmental & Toxic Torts Credits: 2-3
An advanced torts course about compensation for damages caused by toxic contamination. It will address advanced theories of nuisance, trespass, negligence and strict liability. Particular emphasis will be given to proof and causation problems, and to novel and evolving legal theories for recovery. The course will also consider the problems posed by multiple parties, vicarious liability, and the interaction between common law and statutory remedies. The content will be tailored to supplement the environmental law curriculum.

LAW 8775 Appellate Advocacy IV Credits: 1-2
Participation on National Moot Court competition team. Ungraded.

LAW 8778 American Academy Matrimonial Lawyers Board Credits: 2
Under direction of professor, students provide editorial assistance in publishing Journal of the American Academy of Matrimonial Lawyers, write a paper on selected topics and prepare summaries and bibliography of current works. Limited enrollment.

LAW 8782R U.S. Environment Protection Agency Law Clinic National Agricultural Compliance Assistance Center Credits: 2-3
Students will be assigned to work with EPA's National Agriculture Compliance Assistance Center (AG Center). Under the supervision of an attorney with the Ag Center, a student will be expected to perform legal research, write memoranda, develop compliance assistance materials, respond to inquiries from the regulated community, and participate as appropriate in meetings, conferences, and training sessions with EPA, other federal agencies, trade associations, etc., and, in general, assist in the activities of the Ag Center. Students must have completed three semesters of law school. Preference will be given to students who have completed Environmental Law or administrative Law. Eligible interested students will then be screened and selected.

LAW 8782S U.S. Environmental Protection Agency Clinic, Region VII Credits: 2-3
Students will be assigned to work at the EPS's Region VII Headquarters in Kansas City, Ks. Under the supervision of an EPA attorney, students will be expected to perform legal research, write memoranda, develop compliance assistance materials,respond to inquiries from the regulated community, and participate as appropriate in meetings, conferences, and training sessions with the EPA. Students will attend regular conferences with their Supervising Attorney and Faculty Supervisor, and will produce a final written project based on their experience. Students mush have completed two semesters of law school. Preference will be given to students who have completed an environmental course at the Law School. Eligible students will be screened and selected. Positions limited. Ungraded, pass/fail.

LAW 8783 Federal Public Land & Resource Law Credits: 2-3
Exploitation and conservation of natural resources; management of federal lands; water law; energy law; federal wildlife preservation; resolution of disputes involving use of natural resources.

LAW 8783B Buffalo National River: Issues in National Park Law & Management Credit: 1
Specialized study of topics in natural resources law as it relates to the Buffalo National River in northern Arkansas. Students will explore the history of the Buffalo River; the state and federal laws in operation governing the park (e.g., the wild and scenic rivers act, the endangered species act, national historic preservation, etc.); and planning and management issues presented by the multiple uses of the area and its surroundings.

LAW 8783P Preservation Law of Fed. Public Lands & Natural Resources Credits: 3
This course will focus on federal land reservations devoted to preservation and recreation. It will include coverage of National Parks, Wilderness Areas, Wild and Scenic Rivers, National Rivers, the National Recreation Areas, National Monuments, Federal Wildlife Refuges, and the Endangered Species Act. These systems have extensive statutory treatment, regulatory implementation, and case law. The course will deal with the authority of Congress, the executive and the agencies, the policies for management, cooperation with state and local governments, as well as not-for-profit organizations, problem areas, and judicial review.

LAW 8788A Introduction to Arbitration & Selected Topics Credits: 1-2
Exploration of selected topics in the field of commercial arbitration in the united States, including the doctrinal foundation of arbitration in the common law as modified by Federal and State statutes, the comparative benefits and drawbacks of arbitration as compared to litigation, the legal requirements for enforcing arbitration agreements in the resolution of employment, consumer, healthcare and commercial disputes, the standards for compelling arbitration, and confirming, correcting or vacating arbitration awards, the role of substantive law in determining the outcome of arbitrated disputes, and consideration of how the arbitration process can be customized to meet special needs.

LAW 8790 Legal Aid Clinic Credits: 1-3
Internship at offices of Legal Aid of Western Missouri. Students receive instruction in basic poverty law representation and techniques for experiential learning and, depending on placement, are given supervised instruction and practice opportunities in client counseling, fact investigation and discovery, case preparation and pleadings, community advocacy and trial techniques. Faculty and Legal Aid attorney supervision. Limited enrollment.

LAW 8791 Civil Rights Credits: 2-3
Elements of a Section 1983 case, enforceable rights and available defenses; procedural aspects of civil rights cases; suits against federal and state governments.
Prerequisites: LAW 8631.

LAW 8792S Seminar on Gun Law & Policy Credits: 1-3
This course examines legal and public policy issues relating to firearms and the role they play in the United States, with a particular emphasis on debates about the meaning of the Second Amendment and attempts to hold gun manufacturers and sellers liable under tort law. Research paper required.

LAW 8793A Health Law 1: Liability and Quality Issues in Health Care Credits: 2-3
Health Law 1: Liability and Quality Issues in Health Care

LAW 8793B Health Law II: Regulation, Organization and Finance Credits: 2-3
Health Law II: Regulation, Organization and Finance

LAW 8796 Economics And The Law Credits: 2-3
Tools of economic analysis which have particular application in the law; equity and efficiency are weighed in regulation, pollution, discrimination, monopoly, financial markets, human resources and government expenditure and taxation policy. Principles will be introduced and expanded upon using both lecture and case study techniques.

LAW 8798 Copyright Law Credits: 2-3
Protection extended to works of authorship including literacy works, computer programs, works of applied art, sound recordings, photographs, etc. under U.S. copyright law. How protection for works is achieved, the nature of rights protected, transfer of rights, and infringement actions. Related common law rights that may exist under doctrines such as implied contract, unfair competition, right of privacy, and right of publicity.

LAW 8798A Art Law Credits: 2-3
This course examines several key topics related to the protection of visual arts, including copyright and moral rights and their intersection with First Amendment protection.

LAW 8800 Legal Research Thesis Credits: 1-8
Research for LL.M. thesis.

LAW 8808 Intellectual Property Law Credits: 2-3
Substantive and procedural law of intellectual property. Coverage includes copyrights and patents and other areas at the option of the instructor.

LAW 8808I International Intellectual Property Credit: 1
This course focuses on the main principles of protection and obligations of the signatories to the World Trade Organization Trade Related Intellectual Property Agreement (GATT/TRIP's) - in particular focusing on the main intellectual property and Industrial property rights, including (1) Copyright, (2) Performers Rights, (3) Patents, (4) Trade Marks, and (5) Related rights such as unfair competition and the protection of geographical indications; and addresses what the obligations are that are imposed on signatories in respect of protection and enforcement of these rights.

LAW 8808L Intellectual Property Licensing Credits: 2-3
This course provides for advanced engagement with intellectual property concepts while also providing training in practical skills. The course will first entail reminding students of the differences among the three essential areas of intellectual property law (copyright, patent, and trademark) and indentifying how these differences translate into different standard license agreements. Additionally, students will consider the challenges in drafting a consolidated license agreement that transfers interests in multiple types of intellectual property. Second, the course will include considerable practice for students in drafting contract language.

LAW 8808S Intellectual Property Remedies Credits: 2-3
This course will explore the remedies available to intellectual property owners and the protections available to those accused of infringing copyrights, trademarks, trade secrets and patents. The course will delve into issues of how rapidly advancing technology has made it more difficult to apply the current remedies and explore whether they go too far or not far enough in protecting owners of intellectual property. It will also help students recognize that case evaluation does not end after analyzing whether liability exists.

LAW 8813 Employment Discrimination Law Credits: 2
Substantive and procedural aspects of Equal Employment Opportunity Act and related matters.

LAW 8814E Appellate Practice Clinic Credits: 2
Students represent appellants before the western district court of appeals in their appeals from denial of unemployment compensation. Students attend training sessions to learn relevant substantive and procedural law of unemployment compensation, and then assist in reviewing files to select cases for appeal and contacting potential clients, review records and transcripts of the selected cases, meet with the clients, research and write the brief and reply briefs, and argue the cases on appeal.
Prerequisites: LAW 8747, Rule 13 certification.

LAW 8814R Employment Law Credits: 2-3
Survey of legal doctrines regulating the employment relationship, including the regulation of wages, hours and benefits; privacy in the workplace; workers' compensation; suits for unjust dismissal; drug and polygraph testing; and sexual harassment. May be offered as a seminar.

LAW 8815 Products Liability Credits: 2-3
Theory and practice in products liability cases; negligence; misrepresentation; strict liability; theories of product defect; applicability of the Uniform Commercial Code including warranties and disclaimers; actions among members of the distribution chain.

LAW 8815R Disabilities And The Law Credits: 2-3
An interdisciplinary study of the law relating to disabled persons in the areas of employment, education, and access to transportation, health, welfare and social services to provide an understanding of how the law affects individuals with disabilities and public and private entities. Legislation considered include the American with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, the individuals with Disabilities Education Act, the Family and Medical leave Act, the Fair Housing Act, the Voting Accessibility for the Elderly and Handicapped Act, and the Title VII of the Civil Rights Act of 1964. The enrollment of graduate students from other disciplines, such as education, business, and health sciences is encouraged to allow for interdisciplinary discussion of the topics involved.

LAW 8815S Leadership In Disability Studies: A Multidisciplinary Approach Credits: 3-4
An overview of the history of disability issues, some individualized perspectives of persons with disabilities, the rationale for interdisciplinary approaches regarding disability studies, and opportunities for leadership development with regard to disability issues. The students will participate in a forum that encourages reflection, exchange of ideas, interaction with persons with disabilities and persons from various fields of study, and case analysis. After an orientation to the study of disabilities, various aspects of community membership for persons with disabilities will be addressed, particularly with regard to the workplace, the neighborhood, and the home. Emphasis with placed on vital leadership roles that facilitate community membership and contribution of persons with disabilities to society.

LAW 8820 Criminal Trial Techniques Credits: 2
Strategy and tactics in handling a criminal case; effective representation of the accused at various stages of the criminal process; securing pre-trial release; plea bargaining; motion practice; discovery; voir dire; opening and closing statements; examination of witnesses; use of the expert; sentencing; appeal; collateral attack.

LAW 8822 Post Conviction Remedies Credits: 2-3
Federal and state remedies for collateral attacks on criminal convictions; vacation of sentences and convictions; federal habeas corpus and similar devices. Paper required when course is offered as a seminar.
Prerequisites: LAW 8635.

LAW 8826 Seminar in Constitutional Interpretation Credits: 2-3
Current issues in constitutional law. Paper required.
Prerequisites: LAW 8631.

LAW 8831R International Human Rights Law Credits: 1-3
Study of the law protecting individuals and groups against govermental violations of internationally guaranteed rights; historical antecedents and theoretical underpinnings; human rights in national law (the United States); post World War II developments; principal international human rights instruments; regional human rights arrangements; human rights of women, refugees, ethnic minorities; implementation of rights; international obligations of the United States; selected civil, political, ecomomic and social rights.

LAW 8832 Law Of International Trade And Finance Credits: 3
Study of the World Trading System, focusing on policy and application, including the WTO, the NAFTA, U.S. trade remedies, foreign direct investments controls, and export controls.

LAW 8832I Introduction to International Trade Credits: 1-3
An examination of the structure and workings of the major global trade regimes, including the World Trade Organization ("WTO") and the North American Free Trade Agreement (the "NAFTA"). The role of international trade in such areas as the environment, labor rights, national security, the developing world, and non-market economies will also be considered. The course will also focus in depth on United States domestic trade remedies, including antidumping, countervailing duties, section 301 and 337 actions as well as on other international trade restricting practices.

LAW 8834 Tax Procedure Credits: 2
Problem-method study of procedures and taxpayers' rights when deficiencies are assessed by the Internal Revenue Service; tax liens; commencement of litigation in Tax Court, Federal District Court, and Court of Claims.

LAW 8834R Tax Clinic Credits: 1-4
Students in the Kansas City Tax Clinic represent low-income clients before the IRS and in United Stated Tax Court under the supervision of the Clinic Directors. Cases may include delinquent filers, examinations, administrative appeals, Tax Court litigation, innocent spouse, and collection cases including due process, installment agreements, and offers-in-compromise. Students also receive classroom instruction in tax procedure subjects and in client counseling. There is a ten hour orientation prior to the beginning of classes. There is also an additional five hour lecture held during the course of the semester.

LAW 8837 Negotiating Mergers And Acquisitions Credits: 2-3
Problem-method study of corporate, tax, securities, and business problems entailed in buying and selling a corporation; fundamental corporate changes: recapitalizations, mergers, sale of assets, sale of stock, and tender offers; corporate finance and rehabilitation of financially distressed corporations.

LAW 8838L Legal Accounting Credit: 1
Accounting as it relates to the work of a lawyer. Understanding financial statements (balance sheet, income statement, cash flow, shareholder's equity), analysis of financial statements; defferal concepts (inventory, depreciation, prepaid expenses), understanding accounting principles, valuation (present value, future value.).

LAW 8838R Tax Practicum I Credits: 1-3
Practical skills training in the sources and methods of tax research (including electronic database sources) using problem method approaches; analytical and planning skills are developed through in-depth case study research.

LAW 8843 Federal Income Taxation Of Estates And Trusts Credits: 2
Income tax problems of the fiduciary; grantor's trusts; income, estate, and gift tax problems relating to optional or discretionary acts of the fiduciary in retention and/or distribution of income or corpus.

LAW 8845 Deferred Compensation Credits: 2-3
Problem-method study of deferred compensation arrangements; qualified pension and profit sharing plans; individual retirement accounts; qualified stock option plans; other methods of deferred compensation.

LAW 8846 Professional Malpractice Litigation Credits: 2-3
Negligence by those in professions; consideration of the practice components of litigating legal malpractice claims, including investigation, jurisdiction, legal theory and defenses, pleading, discovery, trial, expert testimony, jury instructions and judgment.
Co-requisites: LAW 8731.

LAW 8848R State And Local Taxation Credits: 2-3
State and local taxation of income, sales and property, including the apportionment of tax obligations to multiple states. Restrictions imposed by constitutional doctrines such as the uniformity and equality requirement and the prohibition on interfering with interstate commerce.

LAW 8850 Applied Evidence Credits: 1-3
Problems and simulations in evidence; application of the rules of evidence in many of the following topic areas: objections to the form of the question; hearsay; lay and expert opinion; authentication, the introduction of real and demonstrative evidence, rules of relevance, cross-examination and impeachment.

LAW 8858 Consumer Protection Credits: 2-3
Protection of consumers from false advertising, unfair sales practices, and consumer credit and debt collection abuse. Topics which may be covered are Truth-in-Lending Act, Uniform Consumer Credit Code, Fair Debt Collection Practices Act; Interstate Land Sales Disclosure Act, Federal Trade Commission and Missouri Attorney General activity, Missouri consumer credit legislation, consumer warranties, consumer class actions, abusive collection practices.

LAW 8858L Consumer Protection Lab Credit: 1
This course provides students with skills needed for reviewing and investigating consumer complaints; developing problem solving strategies and drafting Attorney General letters, pleadings, and other documents necessary for the enforcement of the complaint. Students work with the Missouri Attorney General's office to screen consumer complaints and recommend actions.
Prerequisites: LAW 8858.

LAW 8861 Real Estate Finance Credits: 2-4
Real estate investment and development; basic financing instruments (e.g., mortgages, deeds of trusts, contracts for deed); foreclosure remedies; home finance, national housing market; financing of commercial and industrial properties; construction financing; mechanic's liens; priority disputes; bankruptcy issues affecting real estate security interests.

LAW 8867R Social Security Administration Law Clinic Credits: 2-3
Students assist an Administrative Law Judge in performing duties handled by the Social Security Administration, including reviewing files of pending cases; conducting legal research; attending hearings and participating in conferences, as assigned; preparing recommendations for the disposition of motions and for on the record decisions; and preparing draft decisions. Students are supervised by an attorney advisor and attend regular conferences with a supervising faculty member who reviews copies of all clinic written work that may be so reviewed under Social Security Administration rules.
Prerequisites: LAW 8764.

LAW 8868 Trusts: Planning, Drafting, Administering & Litigating Credits: 2-3
Focus on advanced planning and drafting of inter vivos private express trusts for individuals, including proper use of readily available forms (tax-related drafting limited to marital and charitable deduction forms), consideration of trustee's duties, powers and liabilities pursuant to the Missouri Trust Code and related cases, and special emphasis on the recently-adopted Uniform Investor Act and the significant changes it has introduced to Missouri trust investment law.
Prerequisites: LAW 8611.

LAW 8870R Education Law: Government & Legal Aspects Of Education Credits: 2-3
This course is designed to give students an introduction to the major legal doctrines that affect K-12 schools, as well as the policies that underlie or are changing those doctrines. Students should gain a working understanding of the impact of federal and state law on the operation of schools, the rights and responsibilities of teachers and administrators, and the rights of the students who attend those schools.

LAW 8874 Tax-Exempt Organizations Credits: 2
An in-depth examination of the state and federal laws that govern the formation and operation of tax-exempt organizations, with emphasis on Sec. 501 (c) (3) charities; criteria for tax-exempt status; IRS application and reporting procedures; unrealted business income tax issues.

LAW 8875 Real Estate Transactions Credits: 2-3
Practice-oriented course, including the development of drafting skills, in which questions involving basic residential and commercial real estate sales and civil and leasing transactions are considered, such as title, title insurance, contract conditions, contract remedies, commercial leasing (office and shopping center issues) and issues concerning and confronting brokers; special emphasis on Missouri and Kansas law.

LAW 8875D Commercial Lease Drafting Credits: 1-2
Students learn terms common to commercial leases and how to draft documents. Issues and drafting assignments include letters of intent; timing issues; rent provisions; use clauses; environmental and maintenance issues; transfers; insurance; remedies; subordination and atonement; negotiation; professionalism and ethics.

LAW 8875L Legal Context of Real Estate Decision Making Credits: 2-3
A study of fundamental matters involved in real estate decision making, including an understanding of basic real estate terms of art; the unique attributes of commercial real estate the distinction between office, retail and industrial property leases; the significant business and legal issues that arise in lease negotiations; financing issues, including the negotiation of construction and permanent loan documents; loan application/brokerage agreements; the impact of bankruptcy on real estate transactions; an explanation of different types of insurance coverage applicable to commercial real estate; and construction issues, including how buildings are constructed and the "green" movement impact on current construction practices.

LAW 8877 Bankruptcy Court Clerkship Credits: 2
The United States Bankruptcy Courts have jurisdiction over claims arising under federal bankruptcy law. Cases in these courts present issues arising not only under the Bankruptcy Code, but also in many other areas, such as secured transactions, contract law, labor law, and tax law. Student interns will, among other duties, observe court proceedings, assist in writing legal memoranda, and draft opinions. Enrollment in the Bankruptcy Court Clerkship Program is limited to students who have completed both Secured Transactions and Debtors Creditor's Rights. Students work at least 70 hours at the court; and attend monthly conferences with the professor in charge of the program's over site.

LAW 8880 Consumer Bankruptcy Credits: 2
Comprehensive analysis of the options available to consumer debtors under chapters 7 and 13 of the Bankruptcy Code. While the primary focus will be on the debtor's options, creditor strategies will also be considered.

LAW 8881 Seminar on the Supreme Court Credits: 2-3
Students simulate the work of the Supreme Court on nine cases presently pending before that court. The student justices study the briefs and related material filed in each case, discuss and vote on the cases, and write majority and dissenting opinions. Enrollment in the seminar is limited, fittingly, to nine justices.

LAW 8881P Seminar in Presidential Power Credits: 2
In this course students will examine unsettled and often controversial questions regarding the extent of presidential power in sensitive contexts. Emphasis is placed on how these issues are implicated in current national life. Students will examine-and will be expected to actively discuss during class sessions-issues such as the president's authority to decline enforcing federal law, the extent of the president's authority to engage in overseas military action without congressional approval (and, assuming approval is required, what form that "approval" must constitutionally take), presidential authority to indefinitely detain "enemy combatants" at Guantanamo Bay, Cuba (or similar locations), the legal effect of presidential signing statements, the extent of presidential oversight authority over administrative agencies. and the propriety of the Court's invocation of the "political question doctrine" when confronted with sensitive questions regarding presidential power.

LAW 8882 Patent Law Credits: 2-3
This course will focus primarily on substantive U.S. patent law, including the laws governing the patentability of particular inventions, the patent procurement process, the rights granted by a patent, and patent enforcement and litigation. As time permits, the course will explore policy issues raised by the current patent system, discuss proposals for reform and international harmonization, and consider alternatives to patent protection such as trade secret and regulatory exclusivity.

LAW 8882R Patent Prosecution Credits: 2-3
This course will focus primarily on the practical application of substantive U.S. patent law, including the laws governing the patentability of particular inventions, the patent procurement process, the rights granted by a patent, and patent enforcement and litigation. In particular, this class will focus on teaching students how to draft a patent application and how to prosecute the application in the U.S. Patent and Trademark office. This class will be designed to mirror the substantive patent law being taught in the Patent Law course. For example, the Patent Law course will present the law and theory of obviousness or novelty; the Patent Prosecution course will instruct in how to deal with and respond to an obviousness or novelty rejection from the U.S. Patent and Trademark Office.
Co-requisites: LAW 8882.

LAW 8883 Seminar In National Security Law Credits: 2-3
Consideration of lawyer involvement in the formulation and execution of national security policy. Concentration will be upon the practice of law in the public sector. In an interdisciplinary undertaking, this course will define national security and examine its historic and theoretical roots. Domestically, Constitutional principles and rules will be studied. Use of force will be explored from the vantage point of ethics, international law, and the law of war. Legal issues surrounding problems of control of international terrorism, low intensity conflict, planning and using rules of engagement, and supporting international peace-keeping and peace-making missions will be discussed.

LAW 8884 White Collar Crime Credits: 2-3
Examines substantive federal law in the areas of fraud, public corruption, financial crimes and conspiracy; it also includes examination of procedural and policy issues related to business and white-collar investigations.
Prerequisites: LAW 8634.

LAW 8885 Seminar In Philosophy And Law Credits: 2
An examination from a philosophical perspective of the historical and conceptual relationships present in the evolution, development and analysis of law, including natural law theory, legal positivism and legal realism, and focusing on a specific area of controversy in the law.

LAW 8885H The Quest for a Satisfying Career in Law Credits: 1-2
An examination ot what research suggests about the likelihood that a career in law will prove satisfying, including an exploration of the specific types of firms and work environments that are most likely to produce happy lawyers; a consideration of what studies from the fields of neuroscience and psychology suggest about steps that lawyers, law firms, and law schools can take to improve prospects for career satisfaction; and a consideration of how high happiness should rank among life's goals.

LAW 8886 Corporate Taxation I Credits: 2-3
Tax treatment of corporations and shareholders with respect to formation, non-liquidating distributions, stock dividends, redemptions and liquidations. The course will also cover the personal holding company tax, the accumulated earnings tax, collapsible corporations, multiple corporations and an overview of S corporations.

LAW 8887 Corporate Taxation II Credits: 3
Tax consequences of corporate reorganizations; survival of tax attributes; acquisition of loss corporations; and a survey of consolidated return reporting.
Prerequisites: LAW 8886.

LAW 8888A Advanced Partnership Taxation Credits: 1-2
A study of selected topics in tax planning and in negotiating and drafting organizational documents (e.g. partnership agreements and operating agreements) for entities that will be classified as partnerships for tax purposes, including advanced exploration of issues relating to special allocations and book/tax disparities, optional adjustments to basis, payment to retiring and deceased partners, the impact of I.R.C. Section 751 on partnership distributions and on sales and exchanges of partnership interests, partnership mergers and divisions, partnerships with tax-exempt partners, and tiered partnerships.
Prerequisites: LAW 8888R.

LAW 8888R Partnership Taxation Credits: 3
An in depth examination of the tax principles governing partnerships limited liability companies and other unincorporated organizations classified as partnerships for tax purposed, including questions involving the tax consequences of the formation of such organizations, operating distributions, basis computations, liquidating distributions, and sales of ownership interests.

LAW 8889 International Taxation Credits: 2-3
An introduction to the taxation of income of U.S. citizens, residents and corporations from foreign sources and the income of foreign residents and non-residents from U.S. sources. Topics may include sources of income rules, foreign tax credit provisions, the earned income exclusion for foreign source income, income tax treaties and a survey of the tax treatment of U.S. investments made offshore.

LAW 8890A Sports Law I, Amateur Sports Law Credits: 2-3
Coverage of various amateur sports law issues with a focus on the regulation of interscholastic, intercollegiate sports, Olympic and international sports, and sports broadcasting; including such topics as constitutional law, tort law, contract law, and Title IX gender discrimination; and a consideration of federal disability discrimination laws, the status of collegiate athletes who participate in big time sports programs, the regulatory authority of the National Collegiate Athletics Association, The National High School Athletic Association, international and Olympic sports organizations.

LAW 8890B Sports Law II, Professional Sports Law Credits: 2-3
A focus upon the multitude of legal issues and unique relationships in the sports industry, including, among other issues, professional team sports, other professional sports, facilities management in professional sports, legal implications and the practical realities of the unique labor-management relationships in professional sports. The most significant areas to be studied in the context are antitrust, labor, communications, taxation, contracts law, and intellectual property law.

LAW 8890I Selected Topics in International and Comparative Sports Law Credit: 1
The course introduces students to the basic structure and techniques of dispute resolution utilized in international sports law. The field of international sports law is an ever-expanding area of the law and the term "international sports law" refers to an emerging and distinctive body of rules that govern transnational sports and sporting activities. Distinct bodies of international sports law have developed under the aegis of the Olympic Charter that applies to international sports competition well beyond Olympic competition itself, and encompasses both traditional Olympic sports and non-Olympic sports. Many international sports law disputes are now resolved in the Court of Arbitration For Sport (CAS), a body that may rightly be referred to as a Supreme Court for a very wide array of international sports disputes involving such matters as doping, eligibility, cheating, violence, discrimination, commercialization and intellectual property.

LAW 8890R Entertainment Law Credits: 2-3
An examination of the legal issues affection the print and broadcast media. Topics covered may include copyright, antitrust, spectrum allocation, right of privacy, first amendment issues (prior restraint, obscenity, commercial speech, defamation and access to both information and judicial proceedings), licensing and new technologies including and beyond cable television.

LAW 8890S Advanced Sports Law & Regulation Seminar Credits: 2
This course will explore advanced topics in the regulation of professional and amateur athletics, risk management in sports across a variety of settings, including professional and amateur, national and international and regulation of doping in professional, amateur and Olympic sports.

LAW 8890X Sports Law Internship Credits: 2
Through internship in not-for-profit and for-profit sectors of the sports industry, students will learn about the legal and business aspects of various organizations within the amateur and professional sports industries. Students will observe and assist legal counsel with such activities as providing legal research, planning and conducting negotiations, and drafting contracts and other legal documents. Students will complete a significant legal research memorandum on an issue related to their internship. Faculty and Legal Aid attorney supervision. Limited enrollment.
Co-requisites: LAW 8890A (or LAW 8890B).

LAW 8892R Taxation Of Estates, Gifts And Trusts Credits: 2-3
Problem method study of estate, gift and generation skipping transfer taxes and the income taxation of estates and trusts. Emphasis on lifetime and post-mortem planning as well as compliance requirements.

LAW 8893R Taxation Of Property Transactions Credits: 2-3
Income taxation of property transactions. Detailed study of capital gains and losses, passive losses, the at-risk rules, and the alternative minimum tax.

LAW 8895S Jury Selection Credit: 1
Students study the purpose of voir dire and the law pertaining to jury selection and receive hands-on experience in selecting a jury role-playing as lawyers; jurors, and presiding judge in a concluding 2 1/2 hour courtroom simulation (where a jury is selected after making challenges for cause and exercising preemptory strikes); and learn that jury selection is an artnot a science-which needs to be tailored to the facts of the case and the witnesses the attorney expects to present. An actual case involving a badly injured young plaintiff and a large corporate defendant-where liability is questionable-is used for the simulation. Students learn active listening skills and how to interpret non-verbal behavior. Examples form prominent, practicing lawyers are presented. The course is graded on a pass/fail basis.

LAW 8897 Seminar In Analytical Strategies Credits: 1-2
Pedagogical philosophy of legal education; common themes in first-year legal education; techniques of cooperative learning of legal materials. Students may act as study group leaders for various first-year course subjects. Ungraded.

LAW 8897E Introduction to Law Study Credits: 0
This course is designed to help incoming law students navigate the challenging transition to law study. The course is a rigorous, five-day introduction to law school. Each day focuses on a "stage" of law school learning; orientation, class preparation, class, after class review, exam preparation, and exam taking. The course addresses the skills of reading, writing, and thinking at each of these stages through simulated classes, direct teaching of study skills, written and oral exercises, and individual meetings with faculty.

LAW 8897R Governmental and Legal Aspects of Education (K-12 Schools) Credits: 3
Study of legal issues within higher education. Focus is on state and federal law and regulations as they pertain to issues from academic freedom to governance and administration. Focus on strategies for preventive law is a major component of the course.

LAW 8898 Construction Law Credits: 2
The Construction Law course would emphasize state and federal construction law and would provide the students with practical experience in drafting contracts, negotiating disputes, and conducting a mock arbitration. The course would cover the contract responsibilities and remedies of contractors, subcontractors, design professionals, sureties and owners, including the United States Government. The course would emphasize the controlling state and federal statutes and regulations, as well as case law which illustrates the application of the statutes and other areas of law not covered by statute. The classroom sessions will include discussion of the practical aspects of legal practice in the construction industry, with instruction and examples regarding the drafting of documents and contracts, negotiation of disputes, and decision-making regarding the type of dispute resolution forum to recommend to a client.

LAW 8900 Takings Law Credits: 1-2
An examination of all aspects of takings law including the historical and constitutional basis for eminent domain, the public use requirement, regulatory takings, development exactions, and alternatives to takings. Comparisons between U.S. and state regimes and comparative takings law.

LAW 8900L Land Trusts and Conservation Easements Credit: 1
The course will consider the law formation and utilization of land trusts and conservation easements as tools for conservation and preservation of land and water; tax planning; and regional land use planning. It will also deal with land management and restoration of trust properties as tools for habitat preservation and management and improved land productivity and marketability, The course will include on-site visitation to area trust lands.

LAW 8901 Advising Life Sciences and Technology Entrepreneurs Credits: 1-2
A condensed study of the key legal issues for the entire cradle-t-grave (founding-to-exit transaction) life cycle of high-growth technology and life sciences ventures, focusing on these critical phases: structuring and organizing the high-growth venture; relationships with key constituencies; acquiring, protecting and licensing intellectual property assets; financing transactions and realizing wealth through exit transactions.
Prerequisites: LAW 8601.

LAW 8902 Topics and Cases Related to In-House Counsel Credit: 1
This course surveys a wide range of legal issues from the in-house counsel perspective, including those related to professional responsibility, corporate governance, transactions, compliance, risk management, intellectual property and litigation. Through the use of case studies, students will use legal principles and business judgement to analyze scenarios in various corporate settings.
Prerequisites: LAW 8601.

LAW 8903 Fundamentals of Legal Investigations Credits: 2
This course focuses on skills and methods needed to fully obtain facts so as to determine strategies and analyze possible outcomes for all stages of litigation, both criminal and civil. Detailed information on searching public records, Internet sites, and other document retrieval, as well as methods to locate and interview people, will be provided to students through an interactive format. Using an investigation on parallel tracks approach, i.e., paper and people, students will learn the relationship between documents/physical evidence and thorough, reliable interviewing of clients and witnesses.

LAW 8903B Business Investigations Credits: 1-2
The course will cover the practical aspects of conducting fact investigations in the business environment, with a focus on planning, staffing and managing business investigations, understanding and developing investigative techniques appropriate for the business environment and communicating the results of investigations and related recommendations to management and others. A theme throughout the course will be how the lawyer of business manager who is charged with the responsibility of conducting an investigation can maintain independence and avoid being compromised by pressures from management, media or other external sources of influence. Guest lecturers will include professionals with experience in the discipline.
Prerequisites: LAW 8601, LAW 8757, LAW 8813, LAW 8884.

LAW 8904 Multicultural Lawyering and Spanish for Lawyers Credit: 1
In this course, students acquire skills and knowledge needed to represent Spanish speaking clients, including mastering selected Spanish legal vocabulary, working with translators, conducting initial client interviews, and identifying cultural impacts on communication. Ethical dimensions of cross-linguistic and cross-cultural counseling are examined and students receive training in counseling skills.

LAW 8905 Intellectual Property Litigation Credits: 2
Advanced engagement with intellectual property concepts and practical skills in litigation of these cases. The course will address the three essential areas of intellectual property law concept (copyright, patent, and trademark) and explore how these differences translate into different procedural and substantive considerations in litigation. Simulations of various stages of litigation will focus on litigation strategy and drafting skills.

LAW 8906 Corp. Governance, Com & Soc Resp. Mult. Co. Credits: 2-3
This course examines the mechanisms available to corporate executives, auditors, attorneys and boards to comply with state, federal and international laws related to compliance and governance. Students study and examine the impact of a conflict between these laws and cultural norms; Federal Sentencing Guidelines, Securities and Exchange Commission Regulations, Department of Justice policies, Dodd-Frank Act, and other pertinent legislation and regulations; and consider how reputational factors, pressures from institutional investors, shareholders and shareholder service organizations, activists, organized labor and nongovernmental organizations impact corporate behavior and decision-making.

LAW 8907 Seminar in Advanced Trademark Credits: 2-3
This course examines advanced substantive topics in various trademark areas, some of which are not covered in prior classes and some of which explore areas of controversy in greater depth. Students will also be exposed to the trademark administrative process in greater depth.

LAW 8908 Family Tax Law Credit: 1
The study of federal tax issues relevant to attorneyswho practice family law.
Prerequisites: LAW 8552.

LAW 8909 State and Local Government Law in a Nutshell Credit: 1
This course will examine the laws and structures through which Kansas City local government operates. Topics will include the context for local government functions, the city charter and structure of local government, and examination of the particular topics such as economic development tools, property tax abatement, and local agency interactions.

LAW 8910 Intellectual Property Clinic Credits: 2-3
Under the supervision of faculty who are licensed attorneys, students will counsel start-up companies and their owners and assist with intellectual property matters related to Trade Secrets, Copyright Trademark, Patent and planning in connection with concepts related to Business Torts. Students will conduct patentability and trademark searches, prepare patent landscape reports, trademark registrations, opposition and cancellation responses and assist Clinic clients in identifying trade secrets and potential patentable inventions and preparing intervention disclosures as well as provide general intellectual property information and advice to Clinic clients.

LAW 8911 Winning Voir Dire Credit: 1

LAW 8912 Client Interviewing Credits: 1-2
Students will be trained to conduct intake interviews with potential clients of the nonprofit CORE Legal Referral Services housed in the UMKC Incubator. In addition to gathering basic information and providing program information, students will be allowed the opportunity to follow the case by assisting the volunteer attorney representing clients accepted by CORE staff. Training will include the following components: a) Passive vs. Active Listening b) Forms of Questions c) Preliminary Problem Identification d) Techniques for conducting Initial Interviews e) Providing Information the Supervising Attorney Wants/Needs

LAW 8913 Mental Health Investigation Credits: 1-2

LAW 8914 Selected Reading in Legal Scholarship Credit: 1
Students and faculty will read and discuss a substantial book by a legal scholar examining a contemporary issue in law and society from a historical, comparative, or jurisprudential perspective. The course will include discussions with the author and students will complete a short project related to the book topic.

LAW 8915 Social Venture Creation Credit: 1

LAW 8916 International Legal Response to Climate Credit: 1

LAW 8917 Law and Human Trafficking Credit: 1

LAW 8918 International Commercial Arbitration Credit: 1
This course provides an overview of international commercial arbitration and focuses with more specifically on international investment protection law and bilateral investment treaty revisions. The course will provide preparation for the International LL.M. Commercial Arbitration Competition, but it is open to J.D. students.

LAW 8919 The Insanity Defense Credit: 1
This course will review several aspects of the insanity defense: its history, how it works, and the public perception of the defense. The course will focus on the trial of John Hinckley Jr. for attempted murder of President Ronald Reagan as a vehicle for discussing how the defense is presented, the changes in the defense that the verdict in that trial brought about, recent significant cases and possible future changes in the defense.

LAW 8920 Introduction to Islamic Law Credits: 1-2
This course will provide a basic overview of Islamic law from its origins to the present. Students will study both primary and secondary sources of Islamic law. The course will also compare Islamic legal concepts to those in common law countries.

Life Sciences (LIFE-SCI)

Courses

LIFE-SCI 5899 Required Graduate Enrollment Credit: 1

Life Sciences - Cell Biology and Biophysics (LS-CBB)

Courses

LS-CBB 5501 Graduate Biophysical Principles Credits: 3
The focus of this course is on the theoretical principles underlying the biophysical methods used by a wide range of biological chemists. The approaches covered include thermodynamics, chemical kinetics, molecular interactions, transport properties, quantum mechanics, optical spectroscopy, and molecular structural approaches involving nuclear magnetic resonance spectroscopy, X-ray diffraction, and Mass spectrometry.

LS-CBB 5504 Gradute Virology Credits: 3
Survey of the molecular biology of animal, plant, and bacterial viruses. The course will emphasize the molecular mechanisms of virus replication, viral pathogenesis, and the use of virus as model systems to study mammalian cells.

LS-CBB 5505 Molecular and Cellular Neurobiology Credits: 3
The molecular basis of chemical and electrical communication between nerve cells. Topics will include: neurotransmitters, neuropeptides, receptors, channels, second messengers, cytoskeleton, cell adhesion, development, neuronal plasticity and psychopharmacology.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5520 Cell and Molecular Biology II Credits: 3
A presentation of the cellular and subcellular organization and function of eukaryotic cells. Discussions will emphasize basic concepts by which structure and functions are integrated.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5530 Cell and Molecular Biology I Credits: 3
Molecular aspects of gene structure and function in prokaryotic and enkaryotic organisms and their viruses. Emphasis in genome structure and organization and regulation of gene expression.
Co-requisites: LS-MBB 5561.

LS-CBB 5538 Molecular Recognition in Cellular Biology Credits: 2
Graduate Research Seminar. Studies of the latest development leading to an increased understanding of cellular biology processes when the experimental tools for structure biology analysis and molecular genetics are applied.
Co-requisites: LS-MBB 5561.

LS-CBB 5566 Membrane Biochemistry and Biophysics Credits: 3
Structure and function of biological membranes including architecture, dynamics, models, biochemical compartmentation, energy transduction, transport mechanisms, membrane protein structures, and cell surface receptors.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5569 Structural Biology, Methods and Strategies Credits: 3
Analysis of strategies and methodologies such as X-ray crystallography, nuclear magnetic resonance and advanced microscopy procedures including imaging analysis for the study of relationships of higher order macromolecular structures to biological functions.
Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5583 Current Topics in Cell Biology and Biophysics Credits: 1-3
Current topics and recent developments in cell biology and biophysics with emphasis on rapidly developing research areas.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5591 Directed Individual Studies in Cell Biology and Biophysics Credits: 1-6
Intensive reading and/or research in an area selected by the graduate student in consultation with the instructor.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5596 Advanced Experimental Cell Biology I Credits: 2
Structured laboratory work with individual tutorial sessions designed to familiarize first year Interdisciplinary Ph.D. students with concepts and techniques of modern cell biology research. 1-2 hr/wk tutorial and 15-20 hr/wk of laboratory work.
Co-requisites: LS-MBB 5561.

LS-CBB 5597 Advanced Experimental Cell Biology II Credits: 2
Continuation of LS-CBB 5596.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5599 Thesis Research in Cell Biology and Biophysics Credits: 1-12
Research and thesis preparation for M.S. degree candidates.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5612 Seminar in Cell Biology and Biophysics Credit: 1
Presentation and discussion of selected areas in cell biology and biophysics. This course may be repeated by doctoral students for a maximum of 3 credit hours.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5690 Analytical Methods in Cell Biology and Biophysics Credits: 1-4
A course that emphasizes the development of skills in experimental design, analytical methods and instrumentation as applied to problems of interest to modern cell biology and biophysics, and analysis of results. Can be repeated up to a maximum of eight hours total.
Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-CBB 5699 Dissertation Research in Cell Biology and Biophysics Credits: 1-12
Research and dissertation preparation for interdisciplinary Ph.D. degree students who have Cell Biology and Biophysics as a discipline.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

Life Sciences - Molecular Biology and Biochemistry (LS-MBB)

Courses

LS-MBB 5503 Eukaryotic Molecular Biology Credits: 3
Molecular aspects of gene structure and function in eukaryotic organisms and their viruses. Emphasis on genome structure and organization, gene expression and regulation and the molecular basis of growth and development.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5509 Graduate Developmental Biology Credits: 3
Principles of development and differentiation of structure during embryology in animals. Molecular, cellular and organismal level concepts and mechanism will be considered.

LS-MBB 5510 Graduate Biochemistry for Nurse Anesthetists Credit: 1
This course will present the fundamentals of biochemistry necessary for the practice of nurse anesthesia, specifically, the structure and characteristics of biomolecules found in the cell, how molecules are metabolized to generate biochemical energy, and the basic mechanisms to regulate metabolic processes with regard to the nutritional state of the organism. The course is limited to graduate students in the nurse anesthetist program or in other disciplines where a fundamental understanding of biochemistry would be useful.

LS-MBB 5538 Molecular Recognition in Molecular Biology Credits: 2
Graduate Research Seminar. Analysis of the impact of most recent developments in molecular genetics and structural biology as related to fundamental molecular recognition events.
Co-requisites: LS-MBB 5561.

LS-MBB 5561 General Biochemistry I Credits: 3
The first semester of a two-semester sequence in general biochemistry. This course will emphasize the structure of biological molecules, thermodynamics and kinetics of biological reactions, and selected aspects of energy metabolism and metabolic pathways.
Prerequisites: CHEM 322R.

LS-MBB 5562 General Biochemistry II Credits: 3
The second semester of a two-semester sequence in general biochemistry. This course will emphasize selected aspects of the biochemistry of metabolism and macromolecular assemblies. The molecular basis of genetic and metabolic regulation will be discussed.
Prerequisites: LS-MBB 5561.

LS-MBB 5565 Structure And Function Of Proteins Credits: 3
This course will discuss structure-function relationships of proteins. Topics will include: methods of structure-function analysis, catalytic mechanisms, and regulation of enzyme activity.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5567 Physical Biochemistry Credits: 3
Application of physical and chemical principles to elucidate structure and function of biochemical systems. The various modes of interactions between biologically important molecules and the specificity of their interaction will be examined through selected literature examples.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5569 Current Topics in Molecular Biology and Biochemistry Credits: 1-3
Current topics and recent developments in biochemistry and molecular biology with emphasis on rapidly developing research areas.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5591 Directed Individual Studies In Molecular Biology And Biochemistry Credits: 1-6
Intensive readings and/or research in an area selected by the graduate student in consultation with the instructor.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5596 Advanced Experimental Molecular Biology I Credits: 2
Structured laboratory work with individual tutorial sessions designed to familiarize first year Interdisciplinary Ph.D. students with concepts and techniques of modern molecular biology research. 1-2 hr/wk tutorial and 15-20 hr/wk of laboratory work.
Co-requisites: LS-MBB 5561.

LS-MBB 5597 Advanced Experimental Molecular Biology II Credits: 2
Continuation of LS-MBB 5596.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5599 Thesis Research in Molecular Biology and Biochemistry Credits: 1-12
Research and thesis preparation for M.S. degree candidates.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5611 Seminar in Molecular Biology and Biochemistry Credit: 1
Presentation and discussion of selected areas in biochemistry and molecular biology. This course may be repeated by doctoral students for a maximum of 3 credit hours.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5690 Analytical Methods in Molecular Biology and Biochemistry Credits: 1-4
A course that emphasizes the development of skills in experimental design, analytical methods and instrumentation as applied to problems of interest to modern molecular biology and biochemistry, and analysis of results. Can be repeated up to a maximum of eight hours total.
Prerequisites: LS-MBB 5561, LS-MBB 5562.

LS-MBB 5699 Dissertation Research in Molecular Biology and Biochemistry Credits: 1-12
Research and dissertation preparation for interdisciplinary Ph.D. program students who have Molecular Biology and Biochemistry as a discipline.
Co-requisites: LS-MBB 5561, LS-MBB 5562.

Management (MGT)

Courses

MGT 5501 International Business Environment Credit: 1.5
The aim of this course is to provide a broad introduction of the international business environment. Students will develop understanding of different economic, cultural political and legal environments affecting international business activities. They will further explore why international trade and government interventions occur among and across countries and how world financial institution have developed historically.
Prerequisites: completion of introductory coursework in accounting, economics, statistics and finance.

MGT 5502 Leadership in Organizations Credit: 1.5
This course focuses on how organizations work and how leaders can help them work better, Its goal is to provide ideas, tools, and tactics that will help students become more effective leaders. The course is designed to challenge students conceptually through readings, discussions, and developmental assessments, and to challenge at the level of self-awareness and action through teamwork, reflective activities, role plays, case applications, ad "leadership challenges".

MGT 5503 Leadership Residency Credits: 3
This course introduces students to fundamentals of business and effective leadership practice by looking at two different academic areas. Team and Community Building focuses on the fundamentals of collaborative teamwork and basic concepts in the program’s leadership curriculum. The other area, Financial Decisions and Societal Goals, overviews approaches to management strategy rooted in financial modeling and analysis.
Prerequisites: Admission to Executive MBA Program.

MGT 5504 Immersion in Legal and Ethical Managment of the Enterprise Credit: 1.5
This course will introduce students to some of the common legal and ethical issues that confront entrepreneurial businesses and non-profit organizations. Students will be exposed ti the major differences between U.S. and international approaches regarding these issues. Working individually and in groups, students will be asked to solve problems regarding business formation, employment, intellectual property, contract formation and dispute resolution. Students will demonstrate their understanding by writing about real-world examples involving the legal and ethical concepts covered in the course.

MGT 5505 Organizational Behavior Credits: 3
A study of individual, group, and organizational behavior and processes. This course examines social and behavioral sciences methods and theories which apply to the understanding of administrative social systems. Classroom activities will utilize lectures, laboratory training, and clinical cases.

MGT 5506 Contract Negotiation And Dispute Resolution Credits: 3
This course surveys the conceptual framework for negotiating legally binding contracts and examines contemporary institutions and processes for resolving contractual disputes. Particular attention will be given to identifying and appreciating strategies, practices, and specific rules by which binding contractual rights and duties are determined in the United States and in international jurisdictions. Working independently and in teams, students will assimilate the legal rules and negotiation strategies and apply them to common business transactions and disputes.

MGT 5507 Human Capital Management Credit: 1.5
This course seeks to provide managers with knowledge, skills, and resources to effectively manage human capital in organization of all sizes. It presents an overview of the theory, research, and practices used to strategically align HR policies and practices with the organization's overall business goals. The course highlights how HR policies and practices can support business objectives in a diverse, global environment while supporting ethical principles. Within a strategic HRM framework, functional areas of staffing, training and development, performance management, total rewards (compensation and benefits), and managing employment relationships are covered.

MGT 5509 Strategic Management Credit: 1.5
This course covers the classic and contemporary conceptual models in the Strategic Management domain. Students study, compare, and critique the models as they apply them to written, live, and videoed cases. The selected set of cases includes companies focused on both domestic and international markets.
Prerequisites: FIN 5507, DSOM 5507, MKT 5501.

MGT 5510 Legal And International Environment Of Business Credits: 3
This course provides an essential introduction to the domestic and international environment of business. Particular attention is given to the comparative historical development, cultural, economic, legal and political context for the conduct of business in the U.S. and abroad. Topics include international trade; international management; alternative modes of international operations; international finance and exchange rates; international marketing; international human resources; international business strategy and protection of property interest, including worldwide protection of intellectual property, private contracts, multilateral agreements, dispute resolution systems and the influence of government trade.

MGT 5513 Economic Policy And Managerial Control Credits: 3
Students will study the analysis of the industrial foundations and economic institutions of modern times; the politics of industrial control, including power relationships in economic nationalization and planning and theory of managerial industrialism and business enterprise.

MGT 5516 Leading Teams Credits: 3
This course is designed to enhance the student's understanding of designing, forming, developing, leading, and evaluating high-performing teams in traditional and virtual organizations. In-class projects will facilitate students' assessment and application of their own talents to the arts of member selection, coaching, and trust building to engage team members in productive and ethical group processes to achieve successful outcomes. Cases will be used to diagnose and potentially solve team difficulties considering intra-team, organizational, and extra-organizational factors.
Prerequisites: MGT 5505 (or equivalent).

MGT 5517 Leading Through Influence and Persuasion Credits: 3
This course challenges students to think about power dynamics in organizations and the array of influence approaches leaders develop and use to build support for their ideas and strategies. Using reading, case studies, and self-reflection tolls, this course engages students in critical thinking about business scenarios that require a variety of leader influence strategies beyond traditional "command and control" approaches. Through exploration of concepts such as mapping the terrain, building social capital, and managing across, students develop a toolkit of ethical strategies for enhancing their organizational credibility and influence.
Prerequisites: MGT 5502.

MGT 5518 Leadership & Motivation Credits: 3
The course explores leadership as a relationship between leaders and those they are leading that enables people to work together in the service of shared goals. The course focuses on five basic tasks of leadership: (1) diagnosis-understanding what's happening; (2) shaping purpose and values; (3) enlisting and engaging people (including coaching, building high-performance cultures, motivating and inspiring); (4) sustaining momentum; (5) reflection and assessment.

MGT 5519 Conflict Management and Negotiation Strategies Credits: 3
This course explores the nature of successfully managing conflict in organizational settings, as well as the skills needed to be an effective negotiator. In this course, students will learn the difference between functional and dysfunctional conflict, how to stimulate functional conflict, various styles for managing conflict, ways to identify the desired outcomes of conflict, how to prepare for negotiations, various dispute resolution techniques, and the characteristics of effective negotiators. The course uses a variety of tools - readings, case studies, videos, and guest speakers - to engage students in real business scenarios related to managing conflict and negotiation strategies.
Prerequisites: MGT 5502.

MGT 5520 Strategic Benefits Management Credit: 1.5
This course provides a foundation for understanding how benefit plans can be strategically designed to attract, retain, and motivate workers. In addition to traditional health and welfare, and paid time off benefits, offerings related to work/life balance, wellness, benefit flexibility, and organizational culture will be included. Regulatory issues, such as tax and statutory compliance will be discussed.
Prerequisites: MGT 5507.

MGT 5521 Building Human Capital Credit: 1.5
This course presents strategies managers can utilize to enhance workers' knowledge, skills, and abilities in order to provide the talent needed to achieve the organization's mission and goals. Included are effective performance management techniques, training and development systems, and methods of effective supervision.
Prerequisites: MGT 5507.

MGT 5531 Leadership, Strategy and Human Resources Credits: 2
Focuses on the leader as a catalyst in developing high-performance, market -based cultures and as a human resource strategist in marshalling the workforce. Geared to the general manager, the course presents ideas and tools for building, bonding, and linking the workforce to accomplish the organization's mission. Topics include ideas and tools for identifying, recruiting, and retaining talent; developing and coaching subordinates; appraising and rewarding performance; and delegating to balance control and risk.
Prerequisites: Admission to Executive MBA program.

MGT 5533 Leading and Managing Change Credits: 3
This course provides students with analytical skills and insights to more effectively manage and lead change, especially within those organizations characterized by complexity and/or uncertainty. Using a variety of vehicles-including case studies, articles, and speakers-the course engages students in timely, real change scenarios and associated management challenges, such as adaptation in changing markets; turnarounds in troubled businesses; integrative change in acquisitions, and process change in stable businesses.
Prerequisites: MGT 5502.

MGT 5537 Competitive Strategies Credits: 3
Study of the processes of formulating and implementing competitive management strategies. Analytical techniques appropriate to the firm, the market or the industry will be emphasized. Major individual and/or group papers analyzing existing organizations will be required. Must be taken in the student's final semester of the program.

MGT 5538 Stategic Management Credits: 2
The study of the formulation and evaluation of strategy, including industry analysis, strategic positioning, and the boundaries of the firm. Students address the capacity of executive leadership to create and communicate a clear direction for a company's future.
Prerequisites: Admission to the Executive MBA Program.

MGT 5545 International Management Credits: 3
Examination of the management of contemporary international business organizations through a study of the political, economic, social and technological factors and their relationship and impact upon the administrative activities and strategies of the international firm.

MGT 5546 Seminar in International Management Credits: 3
This course focuses on the issues that business organizations face in a global economy. The instructor will introduce global strategic decisions via case studies.
Prerequisites: MGT 5545.

MGT 5547 Global Initiatives in Management Credits: 3
Examines the management of contemporary international business organizations in the global economy. The course overviews the interrelationship and impact of political, economic, social, and technological factors, together with the complex challenges of strategy and execution in global companies. It includes a period of international residency.
Prerequisite: Admission to the Executive MBA program

MGT 5552 International Study in Business Credits: 3
This course is designed to provide a study-abroad experience for the student. The course involves three components: study if international business through on-campus lectures and discussions; travel to a foreign country for visitations to business firms, government organizations, and cultural sites; and critique sessions of the international learning experience after travel completion.
Prerequisites: special application and selection process.

MGT 5557 Leadership And Organizations Credits: 2
Focuses on how organizations work and how leaders can set direction, marshal resources, and build support to move initiatives forward. The course provides tools and tactics for assessing organizations needs and constraints through multiple lenses, and assessing one's own leadership strengths and weaknesses for development and alignment with organization needs.
Prerequisites: Admission to Executive MBA Program.

MGT 5560 Strategic Human Resources Credits: 3
This course will provide an overview of the theory, research and practices used to strategically align human resource policies and practices with the overall goals and objectives of organizations. The course will highlight ways in which HR policies and practices affect and are affected by organizations' environments and culture. Emphasis will be placed on high performance and innovative work practices. Particular attention will be given to assessing internal and external conditions and contexts in which HR policies and practices maximize effectiveness.

MGT 5566 Strategic Staffing Credit: 1.5
This course presents frameworks and applications for achieving optimal person-organization fit and person-job fit within organizations. The importance of strategically planning and implementing recruitment and selection processes will be addressed as it relates to various organizational contexts, including environmental threats and opportunities, organizational size, structure, and climate.

MGT 5567 Total Rewards Management Credit: 1.5
Total Rewards Management presents both theory and practice for designing effective rewards systems within organizations. The development of base pay and incentives and how they can be linked to performance will be covered. Characteristics of the work environment, such as recognition and development opportunities will also be considered in terms of their contribution to the total reward system.

MGT 5569 Leadership Accountability and the Legal Implications Credits: 2
Highlights the accountability of leaders and the challenges they face in the rapidly changing business environment. The course studies the political, social, ethical, and global environment in which American business organizations operate and the impact on today's leaders. Topics include creating and maintaining affiliate relationships and joint ventures, as well as prohibitions in anti-competitive behavior, protection of intellectual property, operating within a regulated environment, and securities law.
Prerequisites: Admission to Executive MBA Program.

MGT 5570 MBA Capstone-Global Management Consultancy Credits: 3
An integrative global management consulting experience for a real world organization that applies analytical skills in the areas of finance, marketing, information systems, supply chain management, human resources, leadership, innovation, international, and strategy.Course deliverables include written and oral reports for the client organization. The course requires travel to visit client organization's operations. Students in their last semester of the MBA Program, MS in Accounting, Master of Public Administration, MS in Finance, MS in Entrepreneurial Real Estate, or MS in Global Entrepreneurship. Students must apply to the program, admission is competitive; there is no guarantee of acceptance.
Prerequisites: MGT 5501 or MGT 5545.

MGT 5571 Influence, Persuasion and Change Credits: 2
Presents ideas, strategies, and tools for leading change in complex organizations. This course challenges students to think about the execution of change strategies through assessment or organizational power dynamics and appropriate influence styles for achieving results. Emphasis is placed on analyzing these attributes and skills most critical for building influence, especially in change initiatives, and on defining an ethical approach to leading, influencing, and persuading others.
Prerequisites: Admission to the Executive MBA program.

MGT 5572 MBA Capstone-The Capstone Consulting Project Credits: 3
An integrative management consulting experience for a real world organization that requires application of conceptual models and analytical skills in multiple disciplines including areas such as finance, marketing, information systems, supply chain management, human resources, leadership innovation, international, and strategy. Course deliverables include written and oral reports for the client organization. The course requires interaction with senior managers in the client organization with anticipation of in-person or virtual visits to the firm. Course is to be taken in the student's final semester of the MBA program.
Prerequisites: MSA, MPA, MSF, MSERE, or MSGE program student.

MGT 5574 MBA Capstone-Leading and Managing Change Credits: 3
This course challenges students to apply concepts and models of leadership and strategy to timely, real-world issues and problems across business and functional areas in organizations. Using readings, class discussion, field-based leadership projects, and peer consulting, the course will emphasize the integrating perspective of the general manager and will explore cross-functional vision, decision-making, and execution for leadership effectiveness.
Prerequisites: student in the MSA, MPA, MSF, MSERE or MSGE programs.

MGT 5595 Internship Credits: 1-3
An opportunity for students to integrate their academics studies via employment with a business/organization in the community.

MGT 5597 Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

MGT 5899 Required Graduate Enrollment Credit: 1

Management Information Systems (MIS)

Courses

MIS 5503 Management Information Systems Credit: 1.5
A survey of topics concerning information technology management in the twenty-first century. The course examines information technologies as they influence the structure and processes of organizations, and economies, and as they influence the roles and techniques of management.

MIS 5529 Decision Support Systems Credits: 3
Information systems to support decision makers in organizations. This course focuses on influences of cognitive biases and group think on decision makers. Identification of both potential uses of information technology to support decision makers and potential effects of information technology on the decision making processes, and may include a number of computer-oriented assignments.

MIS 5540 Information Technology as a Strategic Tool Credits: 2
This course examines the critical linkage between an organization's business, cultural, and information technology (IT) strategies. In organizations today, information technology has become a key component in accomplishing strategic and operational goals. The course provides concepts and a framework for understanding and enhancing the role IT can play in innovation, change, and continuous organizational learning.
Prerequisites: Admission to the Executive MBA program.

MIS 5552 Data Base Management Credits: 3
Data administration, including theory of relational databases and projects using relational data management packages. The course looks at data modeling and information engineering, entity-relationship modeling, database design, normalization, data dictionaries, distributed databases, database servers, data quality assurance, data integrity, SQL, and may include a number of computer-oriented assignments.

MIS 5554 Systems Analysis, Design And Engineering Credits: 3
This course introduces tools for documenting information system requirements and design and implementation methods; organization of software projects; system specifications, doumentation and diagramming standards;programming languages and methodology; costs and schedule estimation, project management; program verification,and internal control issues.

MIS 5558 Management of Information Technology Credits: 3
Topics to be covered include procurement and management of computer systems, economics of hardware and software, software acquisition, RFQs, RFPs, contract terms and conditions, end-user computing.;capacity planning, contribution of computing to business objectives, control, audit, and security of information technology; legal and ethical perspectives; and international issues.

MIS 5587 Special Topics Credits: 3
This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

MIS 5597 Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

MIS 5899 Required Graduate Enrollment Credit: 1

Marketing (MKT)

Courses

MKT 5501 Marketing Management Credit: 1.5
This course goes beyond the explanation of basic concepts of marketing. The goal is to present a strategic and integrative perspective of marketing in the contemporary digital, global and competitive marketing environment. The emphasis is on the interface between an organization's objectives, capabilities, resources and marketplace needs and opportunities. Examples of major topics to be covered are market-oriented philosophy and corresponding strategy, customer relationship management, branding and brand equity, services marketing, marketing ethics, defensive and offensive marketing strategies, product positioning, distribution and pricing strategies.

MKT 5531 Contemporary Marketing Management Credits: 3
An advanced survey course that emphasizes the core marketing decision variables: product, price, place, and promotion. The emphasis is on the interface between an organization's objectives, capabilities, resources and marketplace needs and opportunities. The subject matter is applicable to firms that produce and/or services, and for-profit and non-profit organizations. Topics include market-oriented problem solving, consumer behavior, marketing ethics, competitive strategy, and product management in domestic and global environments.

MKT 5539 Digital (and Direct) Marketing Credits: 3
This course focuses on front-end and back-end marketing activities using digital as well as direct marketing tools. Major topics include developing an overall digital marketing strategy that includes inline and traditional media, online marketing, affiliate marketing, social media, web analytics and mobile marketing. The course also focuses on developing and maintaining relationships between the firm and customers and between the firm and other suppliers.
Prerequisites: MKT 5501 (or equivalent).

MKT 5555 International Marketing Credits: 3
This course focuses on marketing problems confronting international business managers and the ways they may be analyzed and resolved. The course content includes concepts and techniques useful in international marketing; effects of national differences on marketing practices; organization for international marketing; and strategy formulation for international markets.
Prerequisites: MKT 5501, MGT 5501 (or equivalent).

MKT 5560 Buyer Behavior Credits: 3
A review of behavioral science concepts applicable to an understanding of constituent decision making. Special emphasis is placed on applications of these concepts, by the student, to problems of offer planning, pricing, distribution and promotion.
Prerequisites: MKT 5501 (or equivalent).

MKT 5561 Promotional Strategies In Marketing Credits: 3
Emphasis will be placed on the organization's persuasive communications to customers and prospective customers within a framework of the system of distribution. The central focus concerns how marketing management allocates the promotional mix within the organization's total marketing program. Topics will include the following: 1) promotional mix, 2) campaign strategies, 3) campaign coordination and 4) follow-up control of promotional programs.
Prerequisites: MKT 5501 (or equivalent).

MKT 5562 Marketing Research Credits: 3
This course acquaints the student with the special problems of understanding and applying various measurement techniques to marketing problems. Specific topics to be investigated will depend upon the instructor and the students' areas of interest and specific competencies.
Prerequisites: DSOM 5505, MKT 5501 (or equivalents).

MKT 5565 Marketing Management Credits: 2
Examines the role of marketing in driving profitable revenue growth in companies The focus is placed on tools and approaches to analyzing and understanding customer needs- including the roles of market research and brand equity- and the development of integrated marketing plans to deliver to those needs.
Prerequisites: Admission to Executive MBA Program.

MKT 5570 MBA Capstone-Developing and Maintaining a Customer Centric Organizational Culture Credits: 3
This course begins by providing students a historical view of developing and maintaining a customer centric organizational culture and the impact of same on employees, suppliers, strategic partners and customers. Students are provided practical guidelines and actions and are required to develop an organizational culture plan.
Prerequisites: MSA, MPA, MSF, MSERE, or MSGE program student.

MKT 5575 Advanced Marketing Strategy Credits: 3
This course focuses on advanced marketing skills and practical techniques for defining and meeting the needs of the chosen market. The emphasis is on key drivers of marketing effectiveness, including creating a market-oriented culture, customer-focused information systems, the relationship of various components of marketing, and the response to marketing variables. A variety of pedagogical approaches, including applied projects, may be employed.
Prerequisites: MKT 5501 (or equivalent).

MKT 5587 Special Topics Credits: 3
The study of a contemporary topic of interest. This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

MKT 5595 Internship Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

MKT 5597 Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

MKT 5899 Required Graduate Enrollment Credit: 1

Mathematics (MATH)

Courses

MATH 5509 General Algebra I Credits: 3
Groups, rings, modules, homology, fields and Galois theory, valuations, matrices, and multilinear algebra. Continued in MATH 5519.
Prerequisites: MATH 410, MATH 420.

MATH 5510 Complex Variables I Credits: 3
The group of linear fractional transformations, complex integration, Cauchy's theorem, the maximum modulus theorem, analytic continuation, Riemann surfaces. Continued in MATH 5520.
Prerequisites: MATH 402, MATH 407.

MATH 5513 Real Variables I Credits: 3
Theory of measure with applications to analysis. Riemann and Lebesgue integration. Continued in MATH 5523.
Prerequisites: MATH 402, MATH 412.

MATH 5514 Mathematics for Secondary Teachers: Algebra and Analysis Credits: 3
Designed for secondary-school teachers. Examine high school mathematics from a higher point of view. Real and complex numbers, functions, algebraic structures of equations, integers and polynomials, number system structures; analyses of alternate approaches, extensions and applications of mathematical ideas, discussion of historical contexts and connections between ideas that may have been studied separately in different courses, relationships of ideas studied in secondary-school to those students may encounter in later study. When taken for graduate credit as MATH 5514, an extra project is required.
Prerequisites: MATH 300.

MATH 5517 Matrix Theory I Credits: 3
Unitary matrices, normal matrices, Jordan canonical form, nonnegative matrices and their applications, the symmetric eigenvalue problem.
Prerequisites: MATH 420.

MATH 5519 General Algebra II Credits: 3
Prerequisites: MATH 5509.

MATH 5520 Complex Variables II Credits: 3
Prerequisites: MATH 5510.

MATH 5521 Differential Equations Credits: 3
This course offers an introduction to the qualitative theory and applications of ordinary differential equations (ODE). The presentation of the course will be a blend of fundamental theory and examples. The basic results will be proved rigorously and more advanced results will be only illustrated by examples that demonstrate when and how they may be applied.
Prerequisites: MATH 345, MATH 412, MATH 420.

MATH 5523 Real Variables II Credits: 3
Prerequisites: MATH 5513.

MATH 5524 Mathematics for Secondary Teachers: Geometry Credits: 3
Designed for secondary-school teachers. Examine high school mathematics from a higher point of view. Congruence, distance and similarity, trigonometry, area and volume, axiomatics and Euclidean geometry; analyses of alternate approaches, extensions, and applications of mathematical ideas, discussion of historical contexts and connections between ideas that may have been studied separately in different courses, relationships of ideas studied in secondary-school to those students may encounter in later study. When taken for graduate credit as MATH 5524, an extra project is required.
Prerequisites: MATH 300, MATH 301.

MATH 5527 Matrix Theory II Credits: 3
Prerequisites: MATH 5517.

MATH 5532 Advanced Numerical Analysis I Credits: 3
Error Analysis, Solving Systems of Linear Equations, Solutions of Nonlinear Equations, the Least-Squares Problems, and Approximating functions. Continued in MATH 5542.
Prerequisites: MATH 402, MATH 420.

MATH 5542 Advanced Numerical Analysis II Credits: 3
Eigenvalues and Eigenvectors, Linear Programming, Optimization, Numerical Differentiation and Integration, Numerical Solution of Ordinary and Partial Differential Equations.
Prerequisites: MATH 5532.

MATH 5545 Mathematical Methods In Science And Engineering Credits: 3
This course offers applied linear algebra and Fourier analysis which are indispensable tools in science and engineering. It is designed for beginning graduate students with moderate background in linear algebra and real analysis. Many of the results that are presented in the course will be proved rigorously from mathematical point of view.
Prerequisites: MATH 402, MATH 406, and MATH 420.

MATH 5557 Functional Analysis Credits: 3
Hilbert spaces, linear operators, compact operators, Banach spaces, the Hahn-Banach theorem, the open mapping and closed graph theorems, the principle of uniform boundedness, locally convex spaces.
Prerequisites: MATH 402 and MATH 420.

MATH 5575 Stochastic Calculus for Finance Credits: 3
This course presents the basic idea and theory of stochastic calculus with the focus on the applications to finance. Topics include Brownian motion, Ito integral, Ito formula, Black-Scholes equation and formula, risk-neutral pricing, connections with partial differential equations, exotic options, American derivative securities, and term structure models for interest rates.
Prerequisites: MATH 402 and STAT 436.

Cross Listings: STAT 5575.

MATH 5590 Special Topics Credits: 1-3
Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

MATH 5699 Research And Thesis Credits: 1-16
Doctoral dissertation.

MATH 5899 Required Graduate Enrollment Credit: 1

Mechanical Engineering (MEC-ENGR)

Courses

MEC-ENGR 5500 Problems Credits: 1-6
Supervised investigation in mechanical engineering to be presented in the form of a report.

MEC-ENGR 5501AC Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501BI Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501E Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501EC Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501EM Advanced Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5501FA Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501GS Advanced Topics in Mechanical Engineering Credits: 3
Advanced Topics in Mechanical Engineering

MEC-ENGR 5501H Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501HP Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501ID Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501IF Advanced Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5501J Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501L Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501M Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501MB Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501MM Advanced Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 5501MS Advanced Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5501N Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501NE Advanced Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5501OE Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501P Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501PL Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501PL1 Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501PL2 Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501R Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501RE Advanced Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5501SB Advanced Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5501SM Advanced Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 5501TC Advanced Topics in Mechanical Engineering Credits: 1-3

MEC-ENGR 5501TS Advanced Topics In Mechanical Engineering Credits: 1-3

MEC-ENGR 5501VA Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5501Z Advanced Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5505 Imaging Techniques in Materials Science Credits: 3
Introduction to imaging techniques, including x-rays, neutron beams, electron beams and acoustic energy, to study material properties and structure.
Prerequisites: MEC-ENGR 324.

MEC-ENGR 5511 Introduction to Biomechanics Credits: 3
This course is to provide students with an introduction to the engineering principles of biomechanics. Following a general introduction to anatomical terminology, students will be exposed to three primary sub-disciplines of biomechanics including kinetics and kinematics of human movement, muscle mechanics, and biomaterials. Students will become familiar with measurement techniques and current research being done within each of these units through lectures and in-class discussions and presentations of relevant journal articles, A final semester project, culminating in a NIH-style research proposal, will be developed throughout the semester in one of the three units presented.

MEC-ENGR 5512 Biodynamics Credits: 3
Introduction to musculoskeletal biomechanics including: computational biomechanics, movement simulation, motor control and musculoskeletal tissues.
Prerequisites: MEC-ENGR 5511.

MEC-ENGR 5513 Bioinstrumentation of Human Motion Credits: 3
The purpose of this course is to provide an opportunity for students to gain a hands-on, in-depth understanding of the kinematic, kinetic, and electromyography measurement and analysis techniques used to quantify biomechanics of human motion. Students will also be introduced to neurological measurement techniques used to quantify brain activity related to the biomechanical components of human motion. To prepare for these topics, a review of data sampling and signal processing theory will be provided.
Prerequisites: MEC-ENGR 5511.

MEC-ENGR 5514 Material Science for Advanced Application Credits: 3
Study of the physical and mechanical metallurgy of alloy systems of interest in engineering applications.
Prerequisites: MEC-ENGR 324.

MEC-ENGR 5525 Failure Analysis Credits: 3
Organize and perform a failure investigation. In addition, the course will cover the general procedures for a failure investigation and various failure mechanisms such as ductile fracture, brittle fracture, fatigue, wear, corrosion and elevated temperature.
Prerequisites: MEC-ENGR 324, MEC-ENGR 380.

Cross Listings: MEC-ENGR 425.

MEC-ENGR 5526 Introduction to Manufacturing Management Credits: 3
The objective of this course is to expose the student to various manufacturing management tools and techniques. Focus is on both the technical tools used in manufacturing as well as on the management tools needed to implement change in the manufacturing environment. As part of this course, students will research a successful company and present an analysis of manufacturing tools and techniques used.
Cross Listings: MEC-ENGR 426.

MEC-ENGR 5533 Statistical Thermodynamics Credits: 3
Statistical methods of evaluating thermodynamic properties. Elements of quantum mechanics, statistical mechanics and kinetic theory applied to topics of engineering thermodynamics.
Prerequisites: MEC-ENGR 360, MEC-ENGR 399.

MEC-ENGR 5542 Introduction to Computational Fluid Dynamics and Heat Transfer Credits: 3
Introduction to the principles and development of the finite-difference approximations to the governing differential equations of viscous and inviscid fluid flow, as well as heat transfer. Introduction to discretization methods and the calculation of flow fields, convection, diffusion and conduction.
Prerequisites: MEC-ENGR 399, MEC-ENGR 441.

MEC-ENGR 5543 Industrial Refrigeration Credits: 3
Introduction to and analysis of the thermodynamic cycles and equipment used in Industrial Refrigeration. Applications of Industrial Refrigeration are also discussed.

MEC-ENGR 5545 Instrumentation Theory Credits: 3
Applied theory of dynamical and energizing systems for analyzing, computing, control devices.
Prerequisites: MEC-ENGR 362.

MEC-ENGR 5547 Contracts and Law for Engineers Credits: 3
Law of contracts, including types, construction, interpretation, performance, and termination. Construction and Engineering service contracts: Proposals, general and financial conditions, specifications and drawings. Corporate and professional and personal liability, insurance and bonds, property, evidence, arbitration and mediation.

MEC-ENGR 5549 Environmental Compliance, Auditing & Permitting Credits: 3
Statutes, regulations and permitting for air hazardous wastes and storage tanks. Asbestos, radon, EMF, and emerging areas of regulatory concern. Siting issues. Criminal and civil enforcement.
Prerequisites: CIV-ENGR 211, MEC-ENGR 285.

MEC-ENGR 5554 Power Generation Systems Credits: 3
Fundamentals of the power industry in a format suitable for all engineering disciplines. Survey of electric power systems, including fossil and nuclear steam cycles, combustion turbines, combines cycles, and renewable such as solar and wind. Introduction to major machinery components, systems, controls, and an overview of fuels, emissions, and emission control technologies.

MEC-ENGR 5557 Mechatronics System Design Credits: 3
Theory and application of mechatronic systems through course instruction, laboratory activities, and student projects.
Prerequisites: MEC-ENGR 352WI and MEC-ENGR 415.

Cross Listings: MEC-ENGR 457.

MEC-ENGR 5558 Dynamical Theory Credits: 3
Engineering principles and application in mathematical expression of energy, force,inertia system.
Prerequisites: MATH 345.

MEC-ENGR 5560 Electromechanical Conversion Credits: 3
Basic principles of energy conversion; magnetic circuitry in general and in machinery; DC machine theory, transformer operation and circuit application; synchronous machine theory; electric system operation; introduction to power electronic principles and practices.
Prerequisites: MEC-ENGR 220 (or equivalent).

Cross Listings: MEC-ENGR 460.

MEC-ENGR 5563 Construction Law Credits: 3
Broad concepts in law as related to business, industry, and the processes of design, procurement, construction, and the role of the design professional.

MEC-ENGR 5565 Project Finance Credits: 3
This course introduces students to the financial concepts faced by engineers. Students will learn how to read and apply financial statements and how to use these same financial concepts in developing pro formas to evaluate and support major capital investments. The effect of time on the value of money, appropriate discount factors, and the internal rate of return are explored in the class. All students will be required to develop a comprehensive financial model to evaluate/justify a real world capital project.

MEC-ENGR 5567 Fuel Cells and Renewable Energy Systems Credits: 3
This course will provide an overview of the fundamental phenomena that govern the design and operation of fuel cells. The thermodynamics of fuel cell systems will be explored including operation of ideal fuel cells and the physical and chemical phenomena that lead to losses within the fuel cell. The course will provide the methods and techniques required to analyze the performance of low, medium, and high temperature fuel cells within an overall energy system. The fueling of fuel cells from renewable resources will also be discussed.
Prerequisites: MEC-ENGR 399.

Cross Listings: MEC-ENGR 467.

MEC-ENGR 5568 Introduction to Nuclear Engineering Credits: 3
This course provides an overview of nuclear engineering for non-nuclear engineers. The course deals primarily with nuclear reactors including topics dealing with nuclear and reactor physics, reactor kinetics and controls and radiation environment. The general reactor types are covered in some detail with other topics dealing with licensing, waste management, quality assurance, balance of plant systems (turbine island), and significant nuclear accidents are also covered. Recent design innovations including small modular reactors and fusion are discussed.
Prerequisites: MEC-ENGR 399.

Cross Listings: MEC-ENGR 468.

MEC-ENGR 5570 Experimental Design & Analysis Credits: 3
Presentation of concepts and methods of statistical analysis and the design of experiments. Concepts, techniques, interpretation, and use of results are stressed. Focus is on experimental strategy and objectives, and the application of the methods discussed, rather than the mechanics of derivation. Major sections include: a review of hypothesis testing and basic analysis of variance techniques; single factor experiments including 2k and 3k design, confounding, and Taguchi philosophy; nested and split plot designs; analysis of covariance and an introduction to response surface methods.

MEC-ENGR 5572 Advanced Statistics Credits: 3
The objective of this course is to review the concepts and methods of undergraduate first course in statistical analysis and extend the students understanding to cover topics typically covered in a second course in applied engineering statistics.
Prerequisites: CIV-ENGR 319 (or equivalent).

MEC-ENGR 5574 Linear Programming for Engineering Optimization Credits: 3
This course will cover techniques and applications of engineering optimization using linear programming techniques. The main topics will be the simplex algorithm, sensitivity analysis, duality, network models, and integer programming. Main applications will include transportation, shipments, and utility planning. Stochastic models, game theory, non-linear programming, and heuristic optimization techniques will be briefly mentioned, but not explored in detail. At the conclusion of the course the student should be able to formulate and solve optimization problems in several areas of engineering.

MEC-ENGR 5586 Applied Finite Element Analysis Credits: 3
The study of advanced simulation techniques for the solution to engineering problems. The use of Finite Element Method toward solving mechanical, structural, vibration and potential flow problems will be explored. The use of current commercial simulation tools will be used extensively.
Prerequisites: CIV-ENGR 275, MATH 5517, MEC-ENGR 130.

MEC-ENGR 5595 Microscale Heat Transfer Credits: 3
Review of existing models. Concept of thermal lagging and the second-law admissibility. Applications to low temperatures, thermal processing of thin-film devices; amorphous materials; advanced composites.
Prerequisites: MEC-ENGR 399.

MEC-ENGR 5599 Research Credits: 1-99
Independent investigation in field of mechanical engineering to be presented as a thesis.

MEC-ENGR 5601 Doctoral Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5601AC Doctoral Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5601C Doctoral Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5601F Doctoral Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5601G Doctoral Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5601H Doctoral Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5601J Doctoral Topics in Mechanical Engineering Credits: 3

MEC-ENGR 5601R Doctoral Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5601SA Doctoral Topics In Mechanical Engineering Credits: 3

MEC-ENGR 5603 Directed Readings in Mechanical Engineering Credits: 1-3
Faculty supervised readings course.
Prerequisites: Graduate standing.

MEC-ENGR 5610 Seminar Credit: 1
Review recent investigations, projects of major importance in mechanical engineering.

MEC-ENGR 5616 Theory of Plasticity Credits: 3
Plastic yield conditions and stress-strain relations. Behavior of elastic-perfectly plastic members. Plain strain in plastic members.
Prerequisites: MEC-ENGR 5621, MEC-ENGR 5622.

MEC-ENGR 5618 Advanced Dynamics Credits: 3
Fundamental principles of advanced rigid body dynamics with applications. Special mathematical techniques including Lagrangian and Hamiltonian methods.

MEC-ENGR 5621 Continuum Mechanics Credits: 3
Introductory course in the mechanics of continuous media. Basic concepts of stress, strain, constitutive relationships; conservation laws are treated using Cartesian tensor notation. Examples from both solid and fluid mechanics investigated.
Prerequisites: CIV-ENGR 276, MATH 345, MEC-ENGR 351.

MEC-ENGR 5622 Theory of Elasticity Credits: 3
Stress and strain at a point. General equations of elasticity. Plane stress, plain strain problems; torsion of prismatic bars. Energy methods.
Prerequisites: MEC-ENGR 5621.

Cross Listings: CIV-ENGR 5622.

MEC-ENGR 5623 Theory Of Plates And Shells Credits: 3
Bending of plates with various loading and boundary conditions. Deformations,stresses in thin shells.
Prerequisites: MEC-ENGR 5621.

Cross Listings: CIV-ENGR 5623.

MEC-ENGR 5624 Theory of Elastic Stability Credits: 3
Buckling of columns, beams,rings, curved bars, thin plates, shells.
Prerequisites: MEC-ENGR 5621.

Cross Listings: CIV-ENGR 5624.

MEC-ENGR 5627 Dynamics of Machinery Credits: 3
Dynamic balancing or rotating and reciprocating components of turbo-machinery and internal combustion engines. Gas torque analysis, vibration stress analysis and equivalent systems. Numerical and graphical techniques.
Prerequisites: MEC-ENGR 484.

MEC-ENGR 5630 Boundary Layer Theory Credits: 3
Fluid motion at high Reynolds Number. Derivation of Navier-Stokes equations and boundary layer equations. Methods of solution. Transition to turbulent flow. Completely developed turbulent flow.
Prerequisites: MEC-ENGR 441.

MEC-ENGR 5636 Heat Transfer-Convection Credits: 3
Principles of heat transfer by convection, review of boundary layer theory, laminar and turbulent heat transfer, temperature-dependent fluid properties, high velocity heat transfer and an introduction to mass transfer.
Prerequisites: MEC-ENGR 399, MEC-ENGR 5630.

MEC-ENGR 5637 Heat Transfer-Radiation Credits: 3
Advanced study of engineering radiation heat transfer. Concepts of electromagnetic theory. Development of thermal radiation laws from thermodynamic laws. Analysis of grey and non-grey systems with intervening gases. Study of recent literature.
Prerequisites: MEC-ENGR 399.

MEC-ENGR 5639 Introduction to Two Phase Flow Credits: 3
An introduction to the analysis of the mechanics and transport processes in two phase flows.
Prerequisites: MEC-ENGR 441.

MEC-ENGR 5643 Industrial Refrigeration Credits: 3
Introduction to and analysis of the thermodynamic cycles and equipment used in Industrial Refrigeration. Applications of Industrial Refrigeration are also discussed.

MEC-ENGR 5660 Combustion Credits: 3
Study of advanced topics in flames and combustion. Detonation and deflagrations, supersonic combustion, air pollution.
Prerequisites: MEC-ENGR 441.

MEC-ENGR 5679 Dynamics of Structures Credits: 3
Study of the dynamic behavior of structures. Analysis of equivalent lumped parameter systems for the design of structures in a dynamic environment.
Prerequisites: CIV-ENGR 276 (or CIV-ENGR 421), MEC-ENGR 484 (or MATH 345, MEC-ENGR 285).

MEC-ENGR 5685 Advanced Vibration Analysis Credits: 3
Advanced topics in vibration theory and its application to Mechanical systems. Topics include vibration analysis of multi-degree of freedom, distributed and nonlinear systems, random vibration analysis, and vibration control.
Prerequisites: MEC-ENGR 484.

MEC-ENGR 5699 Research And Dissertation Credits: 1-9
Doctoral dissertation research.

Medical Bioinformatics (MEDB)

Courses

MEDB 5501 Biostatistics I Credits: 3
Introduction to statistical concepts and analytic methods as applied to health science. Course includes lectures and hands on computer laboratory.
Prerequisites: an advanced math course (i.e., Calculus, statistics).

MEDB 5502 Biostatistics II Credits: 3
The second course in the Biostatistics sequence for Master of Science in Bioinformatics; students gain knowledge and experience with advanced biostatistical methods.
Prerequisites: MEDB 5501.

MEDB 5510 Clinical Research Methodology Credits: 3
Introduction to clinical research methodologies, conducts, and applications. Course provides overview of use of clinical epidemiology and bionformatics in health care.

MEDB 5511 Principles and Applications of Epidemiology Credits: 3
This course will provide an introductory overview of the principles of epidemiology and illustrate applications in specialized topic areas. Course lectures will introduce measures of effect used to study disease in human populations, epidemiological study designs, concepts of causal inference, and threats to study validity. Specialized lectures will demonstrate the application of these concepts in select health and disease conditions.

MEDB 5512 Clinical Trials Credits: 3
Clinical Trials explores the knowledge and skills required to conduct clinical trials, and implications of clinical trials on practice in medicine and allied health.

MEDB 5513 Overview of Health Services Research Credits: 3
Provides an overview of the U.S. health care and public health systems including issues about cost, access, and quality of health care. This course focuses on the role of research and information in the process of redesigning of health care delivery in the U.S. for the purpose of improving the value of health services.
Prerequisites: Acceptance into the Bioinformatics MS or Certificate in Clinical Research Program.

MEDB 5514 Human Genome Epidemiology Credits: 3
Designed for biological researchers and clinicians interested in studying common human diseases using state of the art genomics/genetics epidemiological approaches. Comprehensive introduction to concepts and methodologies of quantitative/statistical genetics, emerging technologies and analytical methods for genomic science, basic study design, utilization of software packages for analyses of genomic data, successful examples of using human genome epidemiology information to improve health, and ethical, legal and social issues in the design and conduct human genome epidemiology research.

MEDB 5520 Intro-Medical Informatics Credits: 3
Introduction to concepts of medical informatics and overview of the use of computers and information technologies in health care.

MEDB 5521 Clinical Bioinformatics Credits: 3
Clinical bioinformatics will provide the foundation required for effective communication between computational, biological and clinical experts. This class uses a series of exercises to enable participants to independently perform gene and protein-based bioinformatics queries and analyses. Throughout the course, core biological principles are explained, as are the foundational technology and computational topics. Students will become proficient with public bioinformatics resources. This course will prepare students to apply the techniques to their research or participation in interdisciplinary clinical terms.

MEDB 5525 Social Determinants of Health Credits: 3
This course will describe how social, economic and political factors affect health. It will examine strategies to address social determinants of health to reduce health inequities. Students will explore how specific social determinants like socioeconomic status, race ethnicity, and lifestyle influence health, use a "life course" approach to look at different stages of life and the effect of social determinants on specific populations.

MEDB 5530 Independent Study I Credits: 1-3
Focused readings and/or special research project in an area selectred by the graduate student in consultation with the advisor.

MEDB 5531 Independent Study II Credits: 1-3
Focused readings and/or special research projects in an area selected by the graduate student in consultation with the advisor.

MEDB 5535 Quantitative Aspects of Epidemiologic Research Credits: 3
This course introduces conceptual models of aspects of epidemiologic research methodology, including various forms of bias and imprecision. These conceptual models will be used to obtain deeper understanding of epidemiologic measures and causal inference. on completion of the course, students should be better prepared to contribute to the design and interpretation of epidemiologic research.
Prerequisites: MEDB 5501, MEDB 5511.

MEDB 5540 Multidisciplinary Graduate Seminar Credit: 1
This course will be a combination of discussion, presentations, and didactic presentations that will allow students and faculty to exchange information and explore current research across the disciplines that make up the bioinformatics degree program. The course is designed to help student develop critical skills for evaluating published research, designing research projects, and communicating research findings.
Prerequisites: MEDB 5510.

MEDB 5550 Health Outcomes Seminar Credit: 1
The course content is guided by a series of seminars presented by researchresearchers who are actively engaged in health outcomes studies. It explores multiple topics that are unique relevant to clinical investigators. Faculty and peer discussion forums highlight key concepts and applications.

MEDB 5560 Medical Decision Making Credits: 3
This course will introduce the concept of medical decision making under uncertainty through an examination of disease probabilities and how they are altered by the characteristics of the diagnostic test being studies or used clinically. Decision trees will be introduced as a mechanism for communicating complex medical decisions and introductory level decision analysis will be presented. The measurement of patient values for alternative outcomes will be introduced as they pertain to direct payoff values as well as modifiers to cost payoffs.

MEDB 5561 Responsible Conduct of Research Credits: 3
An interdisciplinary course which covers principles and day-to-day practicalities of research ethics, information about regulatory requirements for conducting research including safety issues and the use of humans, animals and radioactive biohazardous materials; discuss current issues in the ethical aspects of research, such as scientists' obligations with respect to public policy and advocacy.

MEDB 5589 Special Topics Credits: 1-3
An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

MEDB 5591 Internship I Credits: 1-3
Opportunity to apply knowledge and skills in clinical, computational, or genomics research and gain insight into potential career options. Students develop appreciation for teamwork and commitment in professional environments.
Prerequisites: MEDB 5501, MEDB 5502, MEDB 5510, MEDB 5513.

MEDB 5592 Internship II Credits: 1-3
Opportunity to apply knowledge and skills in clinical, computational, or genomics research and gain insight into potential career options. Students develop appreciation for teamwork and commitment in professional environments. Internship II is applicable to students who have previously completed 3 hours of internship.
Prerequisites: MEDB 5501, MEDB 5502, MEDB 5510, MEDB 5513, MEDB 5591.

MEDB 5595 Capstone Experience Credits: 3
This course is designed for the non-thesis student to demonstrate that they have mastered key learning objectives expected of the graduating master's student in the Clinical Research emphasis area. After completion of the core courses in the Masters of Bioinformatics curriculum, students will apply their learning to developing, implementing and presenting results from a project that demonstrates integration of the knowledge, abilities and values emphasized in the degree program.

MEDB 5599 Research and Thesis Credits: 1-6
Research for thesis.

MEDB 5899 Required Graduate Enrollment Credit: 1

Medical Technology (MED-TECH)

Medicine (MEDICINE)

Courses

MEDICINE 9110 Fundamentals of Medical Practice I Credits: 5
Introduces students to professional values, attitudes and skills required to practice medicine competently. Develops student competence in basic communication, relationship-building and patient centered interviewing skills. Provides self-awareness and personal growth strategies that facilitate the acquisition of professional behavior affecting honesty and integrity, compassion and altruism, as well as the management of stress. Explores non-biological factors influencing health and the appreciation of different value systems and life styles. Promotes ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior. Emphasizes the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine.

MEDICINE 9110A Fundamntl Med Prac I Credits: 3
Fundamental Med Prac I.

MEDICINE 9115 Medical Terminology Credit: 1
1 credit hour/twice weekly each semester. Methodical introduction to the language of medicine and its usage in modern clinical documentation. Introduces word elements in a logical, graduated sequence correlated with laboratory practice. Encourages skills in etymological analysis based on the word elements presented to facilitate interpretation of composite medical terms.

MEDICINE 9119 Learning Basic Medical Sciences Credit: 1
1 credit hour/1 hour per week. Provides students with an understanding of their own learning processes and those study strategies that promote maximum learning efficiency. Active participation in course increases achievement in both science and non-science courses, smoothes transition to college-level work, and further develops reasoning and thinking skills that apply to medical school

MEDICINE 9120 Fundamentals of Medical Practice II Credits: 5
Introduces students to professional values, attitudes and skills required to practice medicine competently. Develops student competence in basic communication, relationship-building and patient centered interviewing skills. Provides self-awareness and personal growth strategies that facilitate the acquisition of professional behavior affecting honesty and integrity, compassion and altruism, as well as the management of stress. Explores non-biological factors influencing health and the appreciation of different value systems and life styles. Promotes ethical considerations relating to professional behavior and student conduct as a forerunner to professional behavior. Emphasizes the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine.

MEDICINE 9120A Fundamntl Med Prac II Credits: 3
Fundamental Med Prac II.

MEDICINE 9210 Fundamentals Of Medical Practice III Credits: 5
5 credit hours, 3 hours per week onsite, 2 hours lecture. Reinforces important concepts in diversity and professionalism. Continues the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experience.

MEDICINE 9210A Fundamntl Med Prac III Credits: 3
Fundamental Med Prac III.

MEDICINE 9220 Fundamentals Of Medical Practice IV Credits: 5
5 credit hours, 3 hours per week onsite, 2 hours lecture. Reinforces important concepts in diversity and professionalism. Continues the team approach in solving medical problems through direct small group activities as part of weekly onsite docent experiences. Integrates patient interviews and examinations with sciences fundamental to clinical medicine, including biochemistry, anatomy, physiology, biochemistry and social sciences. Exposes students to a series of interviews with seasoned professionals who address issues of professionalism and career development.

MEDICINE 9220A Fund of Medical Practice IV ALT Credits: 3

MEDICINE 9221 Hospital Team Experience Credit: 1
1 credit hour/2-week assignment in hospital. Teaches students to make good observations, interact appropriately with patients, family, and hospital staff, assist with non-physician duties, and perform technical skills appropriate to assigned departments. Facilitates understanding of allied health care personnel roles in patient care, communication among health care professionals and its influence on the delivery of health care and patient outcomes, and the hospital process and structure of authority within the hospital.

MEDICINE 9310 History of Medicine Credit: 1
In this course students will learn the ways disease has altered history and that conceptions of disease undergo constant change. Topics covered include diseases and their relationships to other medical sciences, as well as the historical and scientific developments which led to our present understanding of diseases and medicine.

MEDICINE 9312 General/Clinical Pathology Credits: 8
Course consists of lectures, laboratories with case studies, special projects including integrated questions, clinical patient presentations, and examinations. Content areas emphasized include cytogenetics, infectious diseases and neoplasia.

MEDICINE 9313 Anatomic/Systemic Pathology Credits: 12
Course consists of lectures, laboratories with case studies, special projects including integrated questions, clinical patient presentations, autopsy review with paper, and examinations. Content areas emphasized include cardiovascular, lymphatic, hematologic, gastrointestinal, renal, hepatic, and genitourinary systems.

MEDICINE 9380 Clinical Skills Credits: 5
Challenges students to achieve competencies in patient history taking, physical examination, selected diagnostic studies and procedures, and other abilities. Statements of competencies in above areas specify the attitudes, knowledge and skills students will be expected to demonstrate.

MEDICINE 9383 Continuing Care Clinic Credits: 5
Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9385 Introduction to Pharmacology Credits: 2
Consists of self-paced, independent learning, computer-based instruction. Introductory principles of pharmacology are covered that provide students with basic knowledge and skills necessary for upcoming didactic and clinical curriculum. Students become familiar with drug information resources, pharmaceutical calculations, and prescription writing skills, and learn basic mechanisms of drug action, preventive therapeutics and pharmacokinetic principles.

MEDICINE 9386 An Interdisciplinary Approach to Patient Care: CUES to Healing Credits: 3
3 credit hours. CUES (Communication, Understanding, Education, and Self-care) is designed to enhance physician/patient communication skills CUES increases the cultural competence of students, for example in providing care to older people and people from ethnically diverse populations.

MEDICINE 9387 Extended Clinic I Credits: 5

MEDICINE 9390 Clinical Correlations Credits: 5
5 credit hours. Case-based discussions provided by clinicians that serve to reinforce basic science concepts provided during BMS 9296, BMS 9297, and BMS 9298.

MEDICINE 9401 Internal Medicine/Docent Instruction Yr 4 Credits: 5
Students spend this two-month rotation on the medical wards at Truman Medical Center, each working as a integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9408 Pharmacology Credits: 10
Introduces the study of the interaction of drugs with biological systems. Provides the medical student with relevant basic pharmacology of the model drugs under clinical investigation and in use today. Includes extensive small group activities.

MEDICINE 9471 Family Medicine Credits: 5
Exposes students to the unique specialty that focuses on the family. Students experience the act of medicine as well as science, working with patients in the context of their family and community. Includes care of the child, the adolescent, pregnant women, young and middle aged adults, and the elderly. Addresses ambulatory medicine, prevention and health maintenance.

MEDICINE 9472 Behavioral Science in Medicine Credits: 5
Teaches the basic taxonomy, assessment methods and treatment interventions of chemical dependence and major psychiatric disorders. Serves as preparation for the psychiatry rotation. Examines relevant ethical issues commonly faced in current medical practice. Utilizes case studies and a problem-centered approach in addition to clinical experience including home health care visits, supervised interviewing, and time on an inpatient chemical dependency unit. Challenges the student to achieve an integrated theoretical understanding of various approaches in behavioral sciences as a background for meeting patients needs. Teaches communication skills including education of older patients.

MEDICINE 9482 Patient, Physician, Society I Credits: 2
Introduces students to a 7-week unit emphasizing medical decision making. Introduces students to a 6-week unit which focuses on public health. Activities include lecture, problem sets, small group projects.

MEDICINE 9483 Continuing Care Clinic Credits: 5
Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9483RC Year Four Repeat Clinic Credits: 5
Prerequisites: Year 3 clinic.

MEDICINE 9484 Patient, Physician, Society II Credits: 2
Introduces students to a unit emphasizing medical ethics and palliative care. Activities include lecture, small group sessions, and assigned readings.

MEDICINE 9485 Ambulatory Care Pharmacology Credits: 2
Consists of a self-paced, independent learning, computer-based instruction. Focuses on integration of patient-related data with basic science data. Students obtain skills in assessing patient risk or disease staging and selecting appropriate pharmacotherapy based on such information. The selected topics focus on outpatient pharmacotherapy of common disease states for which there are established treatment guidelines, such as hypertension, heart failure, diabetes mellitus, asthma, pain, and hyperlipidemia.

MEDICINE 9487 Extended Clinic II Credits: 5

MEDICINE 9501 Internal Medicine/Docent Instruction Yr 5 Credits: 5
Students spend this two-month rotation on the medical wards at Truman Medical Center, each working as an integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, Year 4 and 6 students are paired together in the junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9503 Pediatrics Rotation Credits: 10
This two-month rotation is designed to help students master t skills necessary in assessing normal and abnormal development and behavioral variation in the newborn, infant and child in the outpatient clinical setting. History-taking and physical examination of infants, children and adolescents are emphasized.

MEDICINE 9503BR Peds Rotation Credits: 5

MEDICINE 9505 General Surgery Rotation Credits: 10
Introduces students to the field of general surgery. Emphasizes the indications, contraindications, types of operative management, and the mortality and morbidity of various operations. Involves the student in several different kinds of learning experiences, such as preoperative and postoperative care, work in the operating room, outpatient clinic visits, night call, student conferences and resident conferences. Covers skills in surgical scrub, putting on gown and gloves, knot tying, vena puncture, proctoscopy, and suturing of the skin. Students assist in performing skills such as insertion of CVP catheters, insertion of a chest tube, thoracentesis, paracentesis and Swan-Ganz catheters.

MEDICINE 9506 Obstetrics-Gynecology Rotation Credits: 10
Provides the student with an opportunity to gain basic competence in obstetrics and gynecology, including proficiency in the history and physical examination related to the obstetric and gynecologic patient. Emphasizes outpatient gynecology, family planning and techniques for early detection of gynecologic cancer. Provides basic information in reproductive physiology and endocrinology, infertility, gynecologic oncology, and the psychologic aspect of diseases of women. Covers concepts of prenatal care and fundamentals of normal labor and delivery, and pregnancy complications.

MEDICINE 9506BR Obset-Gynecol Rotation Credits: 5

MEDICINE 9514 Medicine, War & the Arts Credits: 5
This course considers the continually evolving relationship between medicine, war, and the arts, from the slaughter of the American Civil War (1861-65) to today's conflicts in Iraq. Our focus is on the extraordinary difficult medical and ethical decisions faced by physicians in times of war, and the ways in which those experiences are reflected in the arts. Topics include the effects of disease on armies, biological warfare, the development of ambulance and hospital services in the Civil War, battlefield medicine, the diagnosis and treatment of shellshock victims in WWI, chemical warfare, the pioneering of plastic surgery, triage techniques in WWII, nuclear warfare, and the personal experiences of physicians in the Vietnam and Iraq wars.

MEDICINE 9515 Medicine and Music Credits: 5
This course will explore ways in which music and medicine interact, including the following topics: therapeutic applications of music (music therapy), current research on how the brain processes music, the treatment of medical themes (including illness and disease, patients, physicians, and human experimentation) in musical works, and how certain composers? medical conditions affected their creative output.

MEDICINE 9515A1 Independent Readings Month Credits: 5
Independent Readings Month

MEDICINE 9516 Medicine and Film Credits: 5
Movies are narratives that record, instruct, motivate, entertain and transform. This course investigates the ways in which physicians, patients, and medical students have been portrayed in Hollywood films over the course of the twentieth and the early twenty-first centuries. Compassion, idealism, and heroism were common traits in early doctor moviesbut there was also a recurrent theme of the greedy callous doctor who valued research over patient welfare, and profits over ethics. We discuss how films reflected, changed,and molded perceptions of physicians and patients in the past, and examine whatcontemporary portrayals of the medical profession can tell us about the expectations andfears of patients today.

MEDICINE 9517 Medicine and Literature Credits: 5
The aim of this course is to engage students in the process of self-reflection about their roles as health care professionals through the lens of literature. Reading about the ways in which people interact with professionals, patients, and disease can enrich our understanding of cultural, economic, and social issues. Medical literature is a diverse field and it increases our awareness of the different reactions to medicine and illness. This course is intended to improve our empathy for patients and peers.

MEDICINE 9518 Medicine, Law and Bioethics Credits: 5
Lecture, discussion and writing about legal and ethical issues related to the practice of medicine. For students in Year 6, it not only fulfills the requirement for a Medical Humanities course in year 5 or 6 but also offers preparation for the assumption of the responsibilities of the M.D. degree.

MEDICINE 9570 Family Medicine Preceptorship Credits: 5
Provides work experience with a rural Missouri physician. Helps students understand the responsibilities and importance of family physicians in the provision of health care. Provides continuing emphasis on the need for and importance of family practice.

MEDICINE 9571 Psychiatry Rotation Credits: 5
Gives each medical student a clinical assignment that involves responsibility for patient care under supervision on the adult inpatient service and experience in the clinic. Includes seminars in psychopathology, psychiatric syndromes, mechanisms of defense, psychopharmacology, drug and alcohol abuse and specific psychosocial assessment.

MEDICINE 9578 Medicine and Art Credits: 5
Lecture, discussion.

MEDICINE 9583 Continuing Care Clinic Credits: 5
Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9583RC Year Five Repeat Clinic Credits: 5
Monthlong course in which students repeat or complete outstanding requirements of Year 5 Continuing Care Clinic.

MEDICINE 9585 Prescribing for Special Populations Credits: 2
Consists of a self-paced, independent learning, computer-based instruction. Teaches principles of prescribing for special populations. Students learn to recognize special patients and to assess risks and benefits and individualize drug therapy in special patient situations. The course addresses concepts of pharmacology in five commonly-encountered special populations: pediatrics, elderly, patients with liver or kidney disease, and pregnant or breast-feeding patients.

MEDICINE 9587 Extended Clinic III Credits: 5

MEDICINE 9594 Medicine and Body Image Credits: 5
Lecture, discussion, writing about ethical issues related to death.

MEDICINE 9601 Internal Medicine/Docent Instruction Yr 6 Credits: 5
Students spend this two-month rotation on the medical wards at Truman Medical Center, each working as an integral member of a docent team that includes the docent, residents and attending health care staff. Year 3 and 5, and Year 4 and 6 students are paired together in a junior-senior partnership. Rounds, conference and consultations.

MEDICINE 9678 Emergency Medicine Credits: 5
Based at Truman Medical Center Hospital Hill or Saint Luke’s Hospital of Kansas City, the major affiliated adult hospitals for the School of Medicine. Emphasizes principles, concepts and skills necessary for the initial evaluation and care of medical and surgical emergencies. Teaches management of simple lacerations, burns, contusions, sprains, and infections, and recognition of life threatening emergencies and initiation of emergency care in response.

MEDICINE 9683 Continuing Care Clinic Credits: 5
Provides ambulatory and continuous care experience in general medicine clinics. The docent teams are assigned to a clinic in which students see and follow a panel of patients on a continuous basis for up to four years, where necessary, under the supervision of docents. Provides continuity of care from inpatient hospitalization to outpatient care, allowing longitudinal experience for the student and personalized care for the patients. Allows students to observe the natural progression of disease and experience the rewards and challenges of an ongoing doctor-patient relationship.

MEDICINE 9685 Rational and Safe Drug Prescribing Credits: 2
Consists of self-paced, independent learning, computer-based instruction. Teaches principles of clinical pharmacology that will assist the student in responsibly prescribing medications. Students develop skills in making informed clinical decisions through studying topics such as literature evaluation, medication errors, adverse drug reactions, drug allergies, drug interactions, overdose management, alternative therapies, and therapeutic drug monitoring.

MEDICINE 9687 Extended Clinic IV Credits: 5

MEDICINE 9714A2 Academic General Year I Credit: 1

MEDICINE 9715A1 Independent Readings Month Credits: 5

MEDICINE 9716A1 Independent Study Month Credits: 5

MEDICINE 9731 Academic Clinical Epidemiology Credits: 5

MEDICINE 9732 Academic-Biomedical and Health Informatics Credits: 5

MEDICINE 9816C11 Family Practice Sub-Internship Credits: 5
Sub-internship in Family Medicine

MEDICINE 9842-C21 Internal Medicine Sub-Internship Credits: 5

MEDICINE 9850-C31 Neurology Sub-Internship Credits: 5

MEDICINE 9870C41 Obstetrics and Gynecology - Sub-Internship Credits: 5

MEDICINE 9898-C61 Internal Medicine/Pediatrics-Sub-Internship Credits: 5
Prerequisites: Successful completion of the core Internal Medicine and Pediatrics clerkships.

MEDICINE 9899-C61 Internal Medicine Pediatrics Clinic Credits: 5

MEDICINE 9921-C61 Pediatrics Sub-Internship Credits: 5

MEDICINE 9922-C61 Neonatal Intensive Care Sub-Internship Credits: 5

MEDICINE 9923-C61 Pediatrics-Rehabilitation Credits: 5

MEDICINE 9924-C61 Pediatrics-Dermatology Credits: 5

MEDICINE 9925-C61 Pediatrics-Opthalmology Credits: 5

MEDICINE 9926-C61 Pediatrics-Genetics Credits: 5

MEDICINE 9927-C61 Pediatrics-Neurology Credits: 5

MEDICINE 9928-C61 Pediatrics-Child and Adolescent Psychiatry Credits: 5

MEDICINE 9929-C61 Pediatrics-Plastic Surgery Credits: 5

MEDICINE 9930-C61 Pediatrics-Orthopedic Surgery Credits: 5

MEDICINE 9940-C61 Pediatrics-Allergy and Immunology Credits: 5

MEDICINE 9945-C81 Anesthesiology-Sub-Internship Credits: 5

MEDICINE 9972-C81 Surgery-General Sub-Internship Credits: 5

MEDICINE 9973-C81 Surgery Orthopedics Sub-Internship Credits: 5

MEDICINE 9974-C81 Surgery Neurological Sub-Internship Credits: 5

MEDICINE 9975-C81 Surgery-Trauma Credits: 5

MEDICINE 9976-C81 Surgery - Oral and Maxillofacial Surgery Credits: 5

MEDICINE 9977-C81 Surgical Oncology Credits: 5
Elective in Surgical Oncology.

MEDICINE 9992 Medical Topics in Health Care I Credit: 1

MEDICINE 9993 Medical Topics in Health Care II Credit: 1

Nursing (NURSE)

Courses

NURSE 5508 Advanced Growth and Development Credit: 1
This course is designed to provide students with advanced comprehensive knowledge regarding the physical growth and psychosocial development from birth to 21 years of age within the context of the child's family and community. Analysis and interpretation of growth and development patterns will be examined as they relate to primary health care of children, birth to 21 years of age aiding in the determination of the health status.

NURSE 5509 Technical Foundations of Advanced Practice Credit: 1
This course will provide students with the advanced informatics skills necessary to develop an evidence-based reflective practice. Self-paced progressive modules will allow students to use advanced health care technologies to develop and apply informatics skills so that they can manage and communicate advanced clinical information and knowledge.

NURSE 5515NE Role of the Nurse Educator Credits: 2-3
This course will explore the role of the nurse educator within the academic, acute care, and outpatient settings. Emphasis will be on the development, evaluation, differences and implementation of the nurse educator in the functional roles. Students are introduced to the NLN Core Competencies of Nurse Educators to evaluate their own practice. Ethical and legal issues related to practice as a nurse educator are discussed.

NURSE 5516 Curriculum Development in Nursing Credits: 3
This course prepares the nurse educator to develop, review, and evaluate nursing curricula. Emphasis will be placed on theoretical foundations, principles of program evaluation, and issues in curriculum design.
Prerequisites: NURSE 5515NE.

NURSE 5517 Teaching Strategies in Nursing Credits: 3
This course examines principles, techniques, and evaluation methods in teaching nursing. Techniques concerning classroom management, writing objectives, test creation, clinical analysis and item analysis will be discussed. Emphasis will be placed on respecting the diverse learning needs of students in the educational environment.
Co-requisites: NURSE 5515NE.

NURSE 5526 Health Promotion Across the Lifespan Credits: 3
This course is designed to provide students with a strong knowledge base related to concepts of health promotion and health protection for clients across the life span. Clients are conceptualized as individuals, families and populations. An application of various developmental theories for the child, adult, older adult and family will provide the basis to individualize health-care needs for various age and family groups. Core concepts for the course include: theories of health and health promotion and protection, reasoned action, health belief model, epidemiology, disease and injury privation, health education, growth and development, nutrition, and family systems theory.
Co-requisites: NURSE 5550.

NURSE 5527 Cultural Diversity & Values Credits: 3
This course explores how each individual's life context and social, cultural, political, historical, and economic influences (that is, one's culture) shape or, "construct" that individual's values, beliefs and behaviors. Applying concepts and theory from anthropology, philosophy, sociology, and nursing, the course expands students' basic knowledge of cultural diversity, approaches to culture and cultural competency, culture and values assessment skills, for clinical practice. Theoretical concepts for the course include: cultural awareness, cultural knowledge, cultural skill, cultural encounter, cultural desire, and culture emergent.

NURSE 5528 Healthcare Policy & Advocacy Credits: 3
This course is designed to locus on the integral relationship between health care policyand advocacy as a graduate prepared nurse. The student will employ best evidence, technology, political statistics, and engagement and leadership in public and organizational policy and advocacy processes to effect positive change in relation to particulur and complex problems. Content will include principles and processes related to U.S. health policy and IJolitics in relation to the overall system and issues oreost, quality and access; interrelationships between policy, politiealtrcnds, and quality of care and access at the point of service; elimination of health care disparities, ethical and obligatory values related to the role of the graduate prepared nurse.
Prerequisites: Admission to Graduate Program.

NURSE 5546 Foundations of Family Psychiatric Nursing Advanced Practice Credits: 2
This foundational course focuses on factors impacting mental health and the development of psychiatric disorders. The scope of practice and roles if the Family Psychiatric Mental Health Nurse Practitioner will be introduced. Exploration of the foundations of therapeutic modalities both pharmacologic and non-pharmacologic is included. Comprehensive psychiatric evaluation skills will be developed. Attention will be given top the development of therapeutic relationships, assessment considerations across the lifespan, crises evaluation and different types of diagnostic tools and approaches. Diagnostic reasoning skills will be applied to mental illness and students will begin to integrate assessment finding into diagnoses found in the Diagnostic and Statistical Manual if Mental Disorders.
Co-requisites: NURSE 5547M.

NURSE 5547A Diagnostic Reasoning/Advanced Assessment Credits: 4
This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals. This course builds on basic health assessment skills and emphasizes utilizing advanced assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis.

NURSE 5547C Diagnostic Reasoning/Advanced Assessment Credits: 4
This course is designed to provide an evidence-based systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals. The course builds on basic health assessment skills and emphasizes advanced assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings to further develop an evidence-based practice.

NURSE 5547F Diagnostic Reasoning/Advanced Assessment Credits: 4
This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals. This course builds on basic health assessment skills and emphasizes utilizing advanced assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of finding through diagnostic reasoning to develop and process differential diagnosis.

NURSE 5547M Diagnostic Reasoning/Health Assessment Credits: 3
This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, socio-cultural, developmental and spiritual assessment of individuals. The course builds on basic health assessment skills and emphasizes utilizing advanced assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis. Comprehensive and symptom focused examination and diagnostics will be covered with an emphasis on relationship of physical health and mental health. The course consists of two hours of didactic/discussion and one hour of clinical/lab credit (75 clock hours).
Prerequisites: NURSE 5548.

Co-requisites: NURSE 5546.

NURSE 5547N Advanced Assessment of the Neonate Credits: 3
This course is designed to provide a systematic approach to advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of the fetus, the mother during the prenatal period, and the neonate. This course builds on basic health assessment skills and emphasizes advanced assessment skills, diagnostic test interpretation, validation, documentation and analysis of prenatal, genetic and embryological factors impacting neonatal health and development. This three credit hour course consists of two hours of didactic / discussion per week and forty hours of clinical/lab per semester.
Prerequisites: Admission into the MSN NNP program.

NURSE 5547NE Health Assessment & Clinical Reasoning for Nurse Educators Credits: 4
This course is designed to provide a systematic approach to teaching physiological, psychological, sociocultural, developmental and spiritual assessment. This course builds on basic health assessment skill and emphasizes 1) comprehensive assessment skills, interpretation of laboratory skills, validation of findings, documentation and analysis of assessment findings; and 2) teaching strategies- teaching methodologies, clinical application, and student evaluation. This course consists of 2 hours of lecture/discussion and 1 hour of lab credit (45 contact hours).
Prerequisites: NURSE 401, NURSE 5548.

NURSE 5547PM Diagnostic Reasoning/Advanced Assessment Credits: 2
This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, development and spirtual assessment of individuals. The post-MSN student will build on previous advanced assessment skills and content with emphasis on adding advanced physical assessment skills, lab work interpretation, validation, documentation and analysis of assessment findings appropriate to their desired role area. Students will meet the same outcome standards of the track in which they are currently enrolled.

NURSE 5547W Diagnostic Reasoning/Advanced Assessment Credits: 4
This course is designed to provide a systematic approach to the advanced assessment of physiological, psychological, sociocultural, developmental and spiritual assessment of individuals. This course builds on basic health assessment skills and emphasizes utilizing advanced assessment skills, interpretation of diagnostic testing and lab values, validation, documentation and analysis of findings through diagnostic reasoning to develop and process differential diagnosis.

NURSE 5548 Advanced Pathophysiology Across the Lifespan Credits: 3
Advanced pathophysiology is the study of the alterations of normal physiological functioning in cellular, tissue, organ and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on clients across the life-span. Advanced pathophysiology deals with both generalized processes and major organ system dysfunctions. This course consists of three hours of lecture/discussion per week.

NURSE 5548N Physiology/Pathophysiology Of The Neonate Credits: 2
Concepts of embryology, neonatal physiology and pathophysiology are used to provide an in-depth study of normal functioning and alteration of normal physiological functioning in cellular, tissue, organ, and organ systems. Alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on neonates. Both generalized processes and major system dysfunctions are addressed. This three credit hours course consists of three hours of lecture and discussion each week.
Prerequisites: Admission into the Neonatal Nurse Practitioner Track/Master of Science in Nursing.

NURSE 5549 Pharmacology for Advanced Nursing Practice Credits: 3
This is a course in clinical pharmacotherapeutics that builds on prior knowledge of drug classification, actions, interactions and adverse drug reactions. The major focus of the course is the pharmacotherapeutic use of medications for primary health care management by advanced practice nurses. Emphasis is placed on the clinical critical thinking process used to prescribe drugs in the management of specific illnesses. The Missouri laws for advanced practice nurse prescriptive authority will be addressed. Core concepts include pharmacodynamics, pharmacokinetics, pharmacotherapeutics, health-related information, medication compliance and issues that pertain to the prescribing of medications in advanced nursing practice. This course consists of three hours of lecture/discussion/in-class clinical module work per week.
Prerequisites: NURSE 5548.

NURSE 5549N Pharmacology for the Neonate Credits: 3
This course in clinical pharmacotherapeutics builds on prior knowledge of drug classifications, actions, interactions and adverse drug reactions in the neonatal population. The major focus of the course is the pharmacotherapeutic use of medications for management of neonates by advanced practice nurses. Emphasis is placed on the clinical critical thinking process used to prescribe drugs in the management of specific neonatal illnesses. Various state laws pertaining to prescriptive authority for advanced practice nurses will be addressed. Core concepts include: pharmacodynamics, pharmacokinetics, health related information and issues that pertain to the prescribing of medications in advanced nursing practice.
Prerequisites: NURSE 5547N, NURSE 5548N.

NURSE 5549R Pharmacokinetics & Pharmacodynamics: Application for Graduate-Prepared Nurses Credit: 1
This course builds on prior knowledge of anatomy, physiology, chemistry, microbiology, pathophysiology and pharmacology. Drug classes are reviewed in preparation for advanced clinical judgment. The principles for decision-making about drug selection, use and monitoring are explored. General principles of pharmacokinetics and pharmacodynamics are discussed. Pertinent patient education concerning select pharmacotherapeutics agents is reviewed.
Prerequisites: Admission to UMKC School of Nursing.

NURSE 5550 Theoretical Foundations in Nursing Credits: 3
This course focuses on critical analysis of theory and the utilization of various levels of nursing and related theories as a base for nursing at the graduate level. It further examines the inter-relationship of theory, research and practice in the development of a scientific body of nursing knowledge. The student will analyze methods by which knowledge is gained and validated. Students will synthesize several different theories from which to form the basis of their practice. Relationships of theory, practice and research will be discussed.
Prerequisites: Completion of BSN.

NURSE 5551A Pharmacology for Women’s Health: Lifestyle and Preventive Healthcare Credits: 2
This course in clinical pharmacology builds on current knowledge of drug classifcation, actions, interactions and adverse drug reactions. The focus is the use of medications by advanced practice providers in the management of preventive healthcare and lifestyle choices in women’s health. Emphasis will be placed on the evidence based pharmacological magament, benefits, effectiveness, and adverse effects on selected vitamins, immunizations and alternative therapies such as herbs and botanical products. Drugs to promote optimum weight loss, nicotine replacement therapies and drugs of abuse will also be discussed. This four-wekk course consists of online discussion, case studies and quizzes.
Prerequisites: NURSE 5549.

NURSE 5551B Pharmacology for Women’s Health: Common Medical Conditions Credits: 2
This course in clinical pharmacology builds on current knowledge of drug classification, actions, interactions, and adverse drug reactions. The focus is the use of medications by advanced practice providers in the management of common medical conditions in women’s health. Emphasis will be placed on the evidence based pharmacological management of women with medical conditions such as cardiovascular conditions, autoimmune disorders, diabetes, gastrointestinal conditions, lower urinary tract disorders, drugs that promote mental health, dermatological conditions, and an overview of chemotherapeutics. This four-week course consists of online discussion, case studies and quizzes.
Prerequisites: NURSE 5549.

NURSE 5551C Pharmacology for Women’s Health: Gyn/Preg/Lact/Postpart Credits: 2
This course in clinical pharamacology builds on current knowledge of drug classification, actions, interactions, and diverse drug reactions. The focus is the use of medications by advanced practice providers in the management of specific gynecollogic and obstetrical conditions assosciated with the female reproductive organs such as contraception, sexually transmitted infections, pelvic and menstrual disorders, vaginal and vulvar disorders, sexual dysfunction, and postmenopause. Discussions wil also include the pharmacologic management of a variety of conditions that can occur during pregnancy, lactation, and postpoartum. This four-week course consists of online discussion, case studies, and quizzes.
Prerequisites: NURSE 5549.

NURSE 5555 Nursing Research Credits: 3
This course is designed to prepare graduate nursing students to utilize research findings in order to provide high quality health care and improve nursing practice. This knowledge includes fundamentals of research methods, procedures for the evaluation of research and the application of research findings to clinical practice and organizational decision making.
Prerequisites: NURSE 5550, a graduate level statistics course.

NURSE 5556 Program Evaluation Credits: 3
This survey course is designed to introduce students to the philosophy, theory, and methodology of program evaluation. The end point of this course is that graduate students will be able to design, implement, and evaluate research, education and/or social programs within the context of their primary focus of study (i.e. clinical or role).

NURSE 5557 Qualitative Methods in Nursing Research Credits: 3
This course is designed to provide the student with the skills necessary to the understanding and conduct of qualitative research. Various methods, including ethnographic, phenomenologic, historic, grounded theory and aesthetic inquiry are presented and discussed. Emphasis is placed upon the appropriateness of each method for different research problems. This course consists of three hours of lecture/discussion per week.
Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5558 Research Design Credits: 3
This course is designed to provide the student with experience in the development of a research proposal. Research skills acquired in previous courses will be synthesized to produce the componets of a proposal.
Prerequisites: NURSE 5555.

NURSE 5564A Primary Care of Adults I Credits: 5
This course is designed to prepare nurse practitioner students to manage common health problems of adults. The focus is on developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies.
This course consist of 3 credit hours of didactic and 2 credit hours of clinical (165 hours). Clinical practice and clinical seminar comprise the clinical experience.
Prerequisites: NURSE 5526, NURSE 5548, NURSE 5550.

Co-requisites: NURSE 5549, NURSE 5555.

NURSE 5564C Primary Care of Children I Credits: 4
This course is designed to prepare nurse practitioner students to manage common pediatric health problems. The focus is on evidence-based developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies. This course consist of 2 credit hours of didactic and 2 credit hours of clinical (165 hours). Clinical practice and clinical seminar comprise the clinical experience.
Prerequisites: NURSE 5526, NURSE 5547C, NURSE 5550.

Co-requisites: NURSE 5549, NURSE 5555.

NURSE 5564F Primary Care of Families I Credits: 5
This course is designed to prepare nurse practitioner students to manage common health problems across the life span. The focus is on developmentally appropriate preventive health care and management of common acute/episodic illnesses. Students will integrate role competencies, professional standards, and legal requirements essential to the NP role. Core content includes differential diagnosis, therapeutic management, adherence, anticipatory guidance, patient/family education, legal and professional issues, standards of practice, and advanced practice role competencies. This five credit hour course consistis of three didactic / discussion per week and 165 hours (two credit hours) of clinical/lab per semester.
Prerequisites: NURSE 5526, NURSE 5547F, NURSE 5550.

Co-requisites: NURSE 5549, NURSE 5555.

NURSE 5564M Family Psychiatric Nursing Advanced Practice I Credits: 5
This course is designed to prepare students to manage psychiatric illness in individuals. Emphasis will be given to psychiatric disorders commonly encountered such as thought disorders, mood disorders, anxiety disorders, personality disorders and substance abuse. Special attention will be give to illnesses occurring in childhood and older age. Focus will be on strengthening mental health diagnostic skills and management of psychiatric illness in individuals. Students will learn to identify and treat short term mental health issues, chronic disorders and acute exacerbations. Psychotropic medication management skills will be developed. Students will begin their clinical hours during this course with a minimum of 165 in total. Patients seen in clinical settings will be across the lifespan. The course consist of three hours didactic/discussion and two hours of clinical/lab credit (165 clock hours).
Prerequisites: NURSE 5526, NURSE 5546, NURSE 5547M, NURSE 5548, NURSE 5550.

Co-requisites: NURSE 5549.

NURSE 5564N Neonatal Nursing I Credits: 3
This course integrates the physiologic, pharmacological, and assessment skills and principals in determining appropriate care of the ill neonate. This course covers case management of the respiratory, cardiovascular and neurologic disorders while the concurrent course, NURSE 5566N, covers the gastrointestinal, renal, endocrine, hematologic, orthopedic, dermatolotic and immune system disorders. Current research and evidence based practices are used as the course framework. The effects of clinical conditions on the growth and development of the neonate, including subsequent chronic health problems as well as the short and long term consequences to the child's family are emphasized. The use of specific interventions and diagnostic procedures are demonstrated and applied in laboratory / clinical settings during the forty hours of required clinical activities.
Co-requisites: NURSE 5566N.

NURSE 5564NE Clinical for Nurse Educators Credits: 5
This clinical course provides students an opportunity to develop advanced knowledge and clinical skills in an acute care clinical setting. Clinical practice hours will be spent in a variety of settings providing the students the opportunity to provide clinical education and advanced patient care in a specialty population. The students demonstrate their clinical development by evaluating the process of nursing care (assessment, intervention/management, evaluation) from an evidence-based perspective incorporating advanced pharmacologic concepts. The course will include two hours of didactic and three hours of clinical practice which includes a minimum of 180 clinical hours.
Prerequisites: All required courses except NURSE 5572 and NURSE 5598.

NURSE 5564W Primary Health Care of Women Credits: 5
This course is designed to prepare the woman's health nurse practitioner student to manage the primary health care of women. This course will focus on the etiology, symptomatology, diagnosis and management of gynecologic and non-gynecologic primary health care problems throughout the lifespan. Emphasis will be placed on caring for women within a holistic framework and recognizing how the changing roles of women in today's society can affect their lives and their health status. Concepts, theories and evidence-based practice related to health promotion, health maintenance and restoration, illness prevention and collaboration will be addressed. Core content: differential diagnosis, management, adherence, anticipatory guidance, patient/family education, adaptation and crisis, legal and professional issues, standards of practice, and advanced practice role competencies. This course will consist of three credit hours of didactic/discussion and two credit hours of clinical practice for a minimum of 165 hours.

NURSE 5566A Primary Care of Adults II Credits: 4
This course is designed to prepare adult nurse practitioner (NP) students in the care and management of adults and adult population with chronic health problems. The focus of the course is on the differentiation and therapeutic management of chronic health problems encountered by adult NP's in various health care setting. Emphasis is given to those chronic health issues most commonly encountered by adult NP's. Students will be expected to apply cumulative knowledge acquired from previous graduate courses. This course enables students to develop a research and theory based practice for disease state management of health care for adults. Core concepts: theories, grief and loss, chronicity and pain; and advanced nursing skills. This four credit hour course consists of two of didactic/discussion per week and 165 hours (2 credit hours) of clinical/lab semester.
Prerequisites: NURSE 5549, NURSE 5564A.

NURSE 5566C Chronic Child Health Care (Clinical II) Credits: 4
This course is designed to provide students with the opportunity to apply knowledge and skill from advanced assessment, pathophysiology, pharmacology, health promotion, research and theory to advanced nursing care of patients and families experiencing complex or chronic health problems. Emphasis is placed on using models and theories that guide advanced practice and on determining the current research base on nursing assessment and management in several specific areas of knowledge. The organizing framework for this course is case management of chronic health states. Students will apply several theoretical models to acute and chronic health states of children at various developmental stages representing various socioeconomic and cultural groups, either in primary or specialized care settings. Core concepts are stress and coping, adaptation, pain management, grief and loss, nutritional support, ethical decision-making, case management, and symptom management.

NURSE 5566F Primary Care of Families II Credits: 4
This course is designed to provide students with the opportunity to apply knowledge from previous family nurse practitioner courses to advanced primary care nursing of individuals and families across the life span. The focus of the course is on the application of the nursing process in the differentiation and therapeutic management of stable chronic health problems encountered by family nurse practitioners in the primary health care setting. Emphasis is on the integration of advanced nursing concepts and pharmacokinetic principles in the care of individuals and families. Core content includes stress and coping, adaptation, pain management, and grief and loss. This four hour course consists of two hours of didactic/discussion per week and 165 (two credit hours) of clinical/lab per semester.
Prerequisites: NURSE 5549, NURSE 5564F.

NURSE 5566M Family Psychiatric Nursing Advanced Practice II Credits: 4
In this course, management of mental health problems will expand beyond the individual to include families, groups and the greater community. This course will emphasize development of psychotherapy skills by the advanced practice nurse. Theoretical foundations and intervention approaches for individuals, group and family therapies will be explored. Unique or modified approaches for pediatric and older adult populations will be covered. Students will be exposed to the common psychotherapy modalities and will begin to identify which approaches they will adopt and utilize in psychotherapy clinical experiences. Clinical management will also be expanded from outpatient settings to include crisis evaluation and inpatient care. A minimum of 165 clinical hours are required in this course. Patients seen in clinical settings will be across the lifespan. The course consist of three hours didactic/discussion and two hours of clinical/lab credit (165 clock hours).
Prerequisites: NURSE 5549, NURSE 5564M.

NURSE 5566N Neonatal Nursing II Credits: 3
This course integrates the physiologic, pharmacological, and assessment skills and principals in determining appropriate care of the ill neonate. This course covers case management of the gastrointestinal, renal, endocrine, hematologic, orthopedic, dermatolotic and immune system disorders while the concurrent course, NURSE 5566N, covers the respiratory, cardiovascular and neurologic disorders. Current research and evidence based practices are used as the course framework. The effects of clinical conditions on the growth and development of the neonate, including subsequent chronic health problems as well as the short and long term consequences to the child's family are emphasized. The use of specific interventions and diagnostic procedures are demonstrated and applied in laboratory / clinical settings during the forty hours of required clinical activities. This three credit hour course consists of two hours of didactic / discussion and one hour of clinical experience.
Co-requisites: NURSE 5566N.

NURSE 5566W Care of the Childbearing Woman Credits: 4
This course is designed to prepare the woman's health nurse practitioner students in the care and management of the childbearing woman. The focus of the course is on the normal adaptation and pathologic alterations throughout the childbearing period. Emphasis is placed on management of women and families from preconception through the puerperium. Concepts, theories and evidence-based research related to the biopsychosocial and cultural aspects of childbearing will be addressed. Core concepts include adaptation, stress and coping, grief and loss, pain and symptoms management. This course will consist of two credit hours of didactic/discussion and two credit hours of clinical experience to consist of a minimum of 165 hours in the clinical setting.
Prerequisites: NURSE 5564W.

NURSE 5572 Advanced Nursing Practice: Synthesis Practicum Credits: 5
This course is a concentrated, experiential, supervised clinical opportunity to function in an advanced practice nursing role. The focus of this intensive clinical practicum is on the synthesis and application of previous theory and clinical courses under the guidance of a preceptor. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include advanced nursing practice, functional role responsibilities, ethical, legal and health policy issues, and activities with the emphasis on their relationship to patient outcomes. The patient systems for this experience include individuals and families within the context of community. Students will obtain a minimum of 330 hours of clinical/conferences (4 hours) and one hour of didactic content for the semester.
Prerequisites: All required courses except NURSE 5598, NURSE 5599, and electives.

NURSE 5572II Preceptorship II Credits: 5
This course provides oppertunities to apply knowledge and skills from advanced nursing role, theory, research and noenatal clinical courses to the advances therapeutic management of hish-risk neonates. This is the first of two preceptorships courses. The other course, NURSE 5572NI, can be taken concurrently or in consecutive semesters. Emphasis is placed on therepeutic measures within a conceptual framework or model applying findings from research relevant to comprehensive care of neonates. The client system will be the neonate and family. This course consists of five credit hours of clinical experiences consisting of a minimum of 300 hours of pratice and clinical seminars.
Co-requisites: NURSE 5572NI.

NURSE 5572M Advanced Nursing Practice: Synthesis Practicum Credits: 5
This course is a concentrated, experimental, supervised clinical opportunity to function in a psychiatric advanced practice nursing role. The focus of this intensive clinical practicum is on the synthesis and application of previous theory and clinical courses under the guidance of a preceptor. Students will be expected to apply advanced clinical decision making skills and evidence based practice guidelines to the assessment, management, and evaluation of complex healthcare problems. Core concepts include advanced nursing practice, functional role responsibilities, ethical, legal and health policy issues, consultation/collaboration and activities with the emphasis on their relationship to patient outcomes. A minimum of 330 clinical hours is required. Patients seen in clinical settings will be across the lifespan. The course consists of one hour didactic/discussion and four hours of clinical/lab credit (330 clock hours).
Prerequisites: All required courses except NURSE 5598.

NURSE 5572NE Synthesis Practicum for Nurse Educators Credits: 3
This course provides the student a concentrated, experiential opportunity to function in the role as a nurse educator. Core concepts include functional role responsibilities, teaching strategies and theory utilization. Emphasis is placed on professional role development and the concept of lifelong learning. This course consists of three hours of clinical which requires a minimum of 180 clinical hours.
Prerequisites: All required courses except NURSE 5598.

NURSE 5572NI Preceptorship I Credits: 5
This course provides opportunities to apply knowledge and skills from advanced nursing role, theory, research and neonatal clinical courses to the advanced therapeutic management of high-risk neonates. This is the first of two preceptorships courses. The other course, NURSE 5572NII, can be taken concurrently or in consecutive semesters. Emphasis is placed on therapeutic measures within a conceptual framework or model applying findings from research relevant to comprehensive care of neonates. The client system will be the neonate and family. This course consists of five credit hours of clinical experiences consisting of a minimum of 300 hours of practice and clinical seminars.
Prerequisites: NURSE 5564N, NURSE 5566N.

NURSE 5587 Research Utilization in Nursing Credits: 3
This course will prepare nurses to implement a research utilization model to validate practice. The theoretical basis for research utilization and practical instances of its application in nursing will be examined. Opportunities will be provided to develop a research utilization plan to address a clinical area of practice.
Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5597A Independent Study in Nursing/Patient Care-Elective Credits: 1-6
Guided study of selected topics and/or areas in nursing and/or patient care.
Prerequisites: NURSE 5550.

NURSE 5597AS Independent Study In Nursing Credits: 1-6
Independent Study In Nursing

NURSE 5597B Independent Study in Nursing/Patient Care-Equivalent Credits: 1-6
Guided study of selected topics and/or areas in nursing and/or patient care.
Prerequisites: NURSE 5550.

NURSE 5597EPR Independent Study in Nursing Credits: 1-6

NURSE 5597HA Independent Study in Nursing Credits: 1-6

NURSE 5597LS Independent Study In Nursing Credits: 1-6

NURSE 5597P1 Independent Study in Nursing Credits: 1-6

NURSE 5597P2 Independent Study in Nursing Credits: 1-6

NURSE 5597PCF Independent Study In Nursing Credits: 1-6

NURSE 5597PF Independent Study In Nursing Credits: 1-6

NURSE 5597PN Independent Study Nursing Credits: 1-6

NURSE 5597ST Independent Study In Nursing Credits: 1-6

NURSE 5597WLA Indep Study in Nursing Credits: 1-6
Indep Study in Nursing

NURSE 5597WLB Indep Study in Nursing Credits: 1-6
Indep Study in Nursing

NURSE 5597WLC Indep Study in Nursing Credits: 1-6
Indep Study in Nursing

NURSE 5598 Directed Research Credits: 1-6
Individual research project for students to utilize beginning research skills in designing and conducting independent studies under the direction of the faculty.
Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5599 Research Thesis Credits: 1-9
Individual study under the direction of a member of the faculty leading to the preparation and oral defense of a thesis.
Prerequisites: NURSE 5550, NURSE 5555.

NURSE 5601 Clinical Institute I Credit: 1
This course provides an introduction to the knowledge and skills essential to becoming an advanced practice nurse (APRN). Students utilize theory, evidence based practice/research, and clinical expertise to become expert practitioners in their population foci. Content includes relevant UMKC policies and procedures, technology utilization to conduct library literature searches, access to course content on electronic platforms, and planning for success in graduate school. The literature review search progresses to application of the content, through written and verbal communication. Techniques building on critical thinking skills to start clinical diagnostic reasoning skills are introduced along with graduate school expectations and outcomes.
Prerequisites: Admission to the DNP program.

NURSE 5602 Healthcare Systems & Leadership Credits: 3
This course focuses on the DNP as leader within the complex health care industry. Utilizing information technology, an in-depth study of the socio-political, economic, cultural and historical background of the American health care system the system of health professions will form the foundation for exploration of leadership needs the DNP leadership role.
Prerequisites: Admission to the DNP program.

NURSE 5603 Research Institute I Credits: 2
This course will provide a hands-on introduction to the process of becoming a research scientist. Content will include the responsible conduct of research, its core element, the emerging guideline, relevant UMKC policies and procedures, and the impact to the Researcher in his/her day-to-day activities. This course also includes literature reviews, scholarly writing, technology in the Research process, developing a program of scholarship and effective time management.
Prerequisites: Admission to the PhD Nursing Program.

NURSE 5604 Research Institute II Credits: 2
This course will provide interactive sessions to develop skills necessary for the synthesis of research findings, the identification of funding sources and the initiation of the grant writing process. Also included will be the opportunity to develop and present research findings in multiple venues.
Prerequisites: NURSE 5603, six credit hours of Ph.D. coursework.

NURSE 5606 Healthcare Policy & Advocacy Credits: 3
This course is designed to focus on the integral relationship between health care policy and advocacy as a graduate prepared nurse. The student will employ best evidence, technology, political statistics, and engagement and leadership in public and organizational policy and advocacy processes to effect positive change in relation to particular and complex problems. Content will include principles and processes related to U.S. health policy and politics in relation to the overall system and issues of cost, quality and access; interrelationships between policy, political trends, and quality of care and access at the point of service; elimination of health care disparities, ethical and obligatory values related to the role of the graduate prepared nurse.
Prerequisites: Admission to Graduate Program.

NURSE 5607NA Health Care Policy and Leadership for the Nurse Anesthetist Credits: 2
This course provides an in-depth study of the health care policy process, emphasizing ways that Doctor of Nursing Practice (DNP) prepared Certified Registered Nurse Anesthetists (CRNAs) can incorporate health policy advocacy into their practice. The content prepares DNP CRNAs to be effective, innovative leaders in nurse anesthesia and health care. Students will participate in a leadership experience in one of four areas: education, research, administration, or politics.
Prerequisites: Active status in both UMKC SoNHS BSN-DNP NA program and the TMC School of Nurse Anesthesia

NURSE 5608 Theory Development I Credits: 3
Selected readings in philosophy of science will be used as the context for exploring the philosophical underpinnings of nursing and the rise of nursing science. Students will discuss how changes and shifts occur in paradigms, world views,and bodies of knowledge. The discipline of nursing and the relationship among nursing theory, research, and practice will be discussed. Integration of theory into the development of research-based nursing knowledge will be explored, with emphasis on empirical evidence, hypothesis development, study design, research design, and translation into clinical practice.
Prerequisites: NURSE 5550, NURSE 5555, six additional master’s level credit hours.

NURSE 5609 Clinical Institute II Credit: 1
This course will provide interactive sessions to develop skills necessary to develop evidenced based practice projects. Literature search strategies, focused on the synthesis and integration of evidence (literature) that supports the problem, intervention, and outcome measurement will be presented. Institutional Review Board (IRB) and essential ethical components will be discussed.

NURSE 5610 Theory Development in Nursing II Credits: 3
Nursing and non-nursing models,frameworks and theories will be analyzed and critically evaluated using a variety of criteria. Students will identify the range of applicable theories for their area of research. Appropriate application of theories to independent and dependent variables,mediators, moderators, cofactors, correlates, and outcomes will be explored. Students will develop hypotheses, research goals and objectives that extend the implications and application of an identified theory in clinical nursing practice.
Prerequisites: NURSE 5608.

NURSE 5611 Healthcare Economics & Quality Credits: 3
This course focuses on the principles of, and complex relationship between cost and efficiency and effectiveness and health care quality outcomes. Economic perspectives and needs from industry, organizations, providers and consumers will all be examined. Throughout the course, issues regarding the inextricable link between cost and quality within the complex healthcare environment will be examined and addressed, with emphasis on DNP nurse intervention and leadership.
Prerequisites: Admission to the DNP program.

NURSE 5612 Statistics I Credits: 3
This graduate statistics on-line course is designed for students in the Ph.D. nursing program. The course provides a comprehensive understanding of: describing data,logic of sampling and test statistics; hypothesis testing,type 1 and 2 errors; power; one-way ANOVA (analysis of variance); planned comparison,post-hoc tests and trend analysis; factorial ANOVA; repeated measures designs and mixed randomized repeated designs; simple and multiple regression; ANCOVA (analysis of co-variance).
Prerequisites: a graduate level statistics course.

NURSE 5613 Application of Evidence-based Practice Credits: 3
This course is designed to provide an analytic and systematic approach to evaluate evidence-based research used in clinical practice. The course builds on methods of evidence-based practice, theoretical foundations, ethical principles, cultural considerations, and statistical analysis. The course enables the student to develop an evidence-based approach to solving a critical clinical question through an integrative literature review. The student will analyze evidence-based practice guidelines and research translation to develop an Evidence-Based Practice (EBP) project proposal. The student will design and implement the EBP improvement plan. Technology and information systems provide support to the EBP based improvement plan.
Prerequisites: NURSE 5602, NURSE 5606, NURSE 5608.

NURSE 5614 Health Policy & Ethics Credits: 2
This course examines health policy and ethics as they intersect with other public policies. Legal, financial, and ethical issues associated with policy development and evaluation are critically examined.
Prerequisites: Admission into the Ph.D. in Nursing Program.

NURSE 5615NA Chemistry and Physics for the Nurse Anesthetist Credits: 2
This course is designed to provide the nurse anesthesia student a foundational knowledge needed for the provision of anesthesia. This course will review elements of general and organic chemistry pertinent to understanding metabolic pathways and pharmacology routinely administered during the anesthetic period. Pertinent laws and principles of physics will be presented. The student will be prepared to apply pertinent laws and principles of physics to the provision of anesthesia services.
Prerequisites: Admission to the DNP-CRNA program

NURSE 5617 Application of Evidence-based Practice II Credits: 3
This course is designed to provide an analytic and systematic approach to evaluate evidence-based research used in clinical practice. The course builds on methods of evidence-based practice, theoretical foundations, ethical principles, cultural considerations, and statistical analysis. The course enables the student to develop an evidence-based approach to solving a critical clinical question through an integrative literature review. The student will analyze evidence-based practice guidelines and research translation, to develop an Evidence-Based Practice (EBP) project proposal. The student will design and implement the EBP improvement plan incorporating the ethical principles of Human Subject Review. Critical analyses of methods and design are incorporated into the project proposal. Technology and information systems provide support to the EBP based improvement plan.
Prerequisites: NURSE 5613.

NURSE 5619NA1 Principles of Nurse Anesthesia Practice I Credits: 2
This course introduces the nurse anesthesia student to concepts necessary to plan and execute safe individualized anesthetics. Content includes assessment of co-morbid conditions and patient populations in anesthesia, appropriate plans of care, anesthetic techniques, prevention of complications, fluid management, monitoring and utilization of anesthesia equipment. Fundamental concepts and techniques essential to clinical anesthesia practice focus on theoretical, practical and professional considerations involved in the administration of general anesthesia, conscious sedation and regional anesthesia, inside and outside the operating room. Content includes evidence based student led conferences, anesthetic literature, morbidity and mortality, inter-disciplinary and intra-disciplinary conferences and use of informatics systems.
Prerequisites: NURSE 5619NAB.

NURSE 5619NA2 Principles of Nurse Anesthesia II Credits: 3
This course is designed to provide the nurse anesthesia student a broad knowledge base in multiple concepts, topics and techniques. This course builds on concepts learned in Principles I and delineates techniques of anesthesia management that are considered more situation specific with specialized diagnostic and anesthetic procedures. Primarily focused on patients and existing co-morbidities, the course intensively covers more advanced concepts and principles of anesthetic management including neurosurgical, thoracic, vascular and trauma procedures. Content includes evidence based student led morbidity and mortality conferences, inter-disciplinary and intra-disciplinary conferences, use of informatics systems and simulation based learning.
Prerequisites: NURSE 5619NA1.

NURSE 5619NA3 Principles of Nurse Anesthesia Practice III Credits: 3
The course covers advanced concepts and principles of anesthetic management with emphasis on cardio-thoracic anesthesia and anesthetic emergencies. The course builds on Principles I and II and focuses more on critical thinking, skill development, specific procedures utilized in anesthetic practice including advanced airway techniques and placement of invasive monitoring modalities as well as crisis management in anesthesia. Content includes evidence based student led conferences, utilization of anesthetic literature, morbidity and mortality, inter-disciplinary and intra-disciplinary conferences, use of medical informatics systems and simulation based learning.

NURSE 5619NAB Basic Principles of Nurse Anesthesia Practice Credits: 2
This course is designed to build on topics introduced in orientation and provides the student with the knowledge needed to begin the delivery of anesthesia. This course encompasses a variety of topics including pharmacology and equipment utilized in the provision of anesthesia, airway anatomy and management, commonly administered fluid, colloids, non-colloids, and blood products and an overview of anesthesia and trauma. Lecture topics will be assimilated into high fidelity simulation scenarios to prepare the student for clinical residency courses.
Prerequisites: NURSE 5619NAO.

NURSE 5619NAO Orientation to Nurse Anesthesia Practice Credits: 2
This course is designed to give the first year nurse anesthesia student a broad field orientation to anesthesia topics. The course will provide a foundation of knowledge for the safe practice of anesthesia. This will be an initial introduction to the art and science of anesthesia. The course content will include: patient preparation for anesthetic procedures along with current medication options, anesthetic equipment and workplace safety. The anesthesia machine is incorporated into the learning process to reinforce principles introduced in class.
Prerequisites: Admission into the DNP-CRNA program.

NURSE 5620 Advanced Practice V - DNP Clinical Credits: 5
This course is designed to increase the clinical expertise of the student by fostering the development of a specific area of focus. It allows the student to investigate specific procedures, skills, or clinical knowledge that will be later utilized in the DNP practicum course. The course is designed to be self-directed allowing the student to focus on her/his own specific clinical interests and/or area of expertise.
Prerequisites: All DNP coursework except NURSE 5624.

NURSE 5622 Statistics II Credits: 3
This graduate statistics on-line course is designed to provide a conceptual understanding of the statistical procedures associated with: advanced multiple regression; moderators and mediators in multiple regression; path analysis; logistic regression; factor analysis; MANCOVA; MANOVA; cluster analysis; and canonical correlation.
Prerequisites: NURSE 5612.

NURSE 5624 Advanced Practice VI-DNP Capstone Credits: 5
This course is designed to synthesize all previous coursework through the implementation and evaluation of a " tangible and deliverable academic product that is derived from the practice immersion experience" (DNP essentials, p.20). Individual student work may take a variety of forms, but will include the elements of evidence evaluation and utilization, systems analysis, and dissemination of best practice information.
Prerequisites: NURSE 5620.

NURSE 5627NA Regional Anesthesia Credit: 1
This course is designed for graduate nurse anesthesia students to review anatomy, pharmacodynamics, pharmacokinetics and physiological effects of local anesthetics and to learn techniques to administer various types of regional anesthesia.
Prerequisites: NURSE 5619NAB.

NURSE 5628NA1 Advanced Physical Health Assessment for the Nurse Anesthetist I Credit: 1
This course is designed to teach the nurse anesthesia student a systematic focus on advanced health assessment with an emphasis on the patient preparing to undergo anesthesia throughout the lifespan. Through patient interview, physical assessment, and interpretation of pertinent laboratory and testing, appropriate anesthesia management will be prepared.
Prerequisites: NURSE 5619NAB.

Co-requisites: NURSE 5619NA1.

NURSE 5628NA2 Advanced Physical Health Assessment for the Nurse Anesthetist II Credits: 2
This course is designed to further teach the nurse anesthesia student a systematic focus on advanced health assessment with an emphasis on the patient preparing to undergo anesthesia throughout the lifespan. Through patient interview, physical assessment, and interpretation of pertinent laboratory and testing, appropriate anesthesia management will be prepared.
Prerequisites: NURSE 5628NA1.

NURSE 5630 Health Care Systems Credits: 3
This course is a guided, in-depth exploration, analysis and evaluation of selected health care systems literature. Other nursing literature will be reviewed as appropriate.
Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5631 State of the Science Credits: 3
This course is a guided in-depth exploration of literature on a selected focus area. Appropriate contextual system literature will be reviewed as appropriate. Scholarly writing for a variety of contexts will be presented.
Prerequisites: Admission into a doctoral program, completion of a doctoral level theory course.

NURSE 5632 Health Restoration & Support Credits: 3
This course is a guided, in-depth exploration, analysis and evaluation of selected health restoration support literature. Other nursing literature will be reviewed as appropriate.
Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5636NA Obstetrical Anesthesia Credit: 1
This course is designed to provide the graduate nurse anesthesia student with a broad knowledge base in the field of obstetrical anesthesia. Anatomy and physiology of pregnancy, co-morbidities in the pregnant patient and anesthesia procedures for the pregnant patient will be presented. Lecture topics will be assimilated into high fidelity simulation scenarios to prepare the student for clinical residency courses.
Prerequisites: NURSE 5619NA1.

Co-requisites: NURSE 5619NA2.

NURSE 5637 Healthcare Outcomes and Epidemiology Credits: 2-3
This course is an introduction to and application of basic epidemiologic principles for the nurse anesthetist. This course provides the foundation for assessment and evaluation of health outcomes in a variety of populations, clinical settings, and systems. Concepts introduced include fundamentals of epidemiology, determinants of health, screening, outbreak investigation, and disease surveillance. The course includes content on descriptive and analytic epidemiology.
Prerequisites: Enrollment in BSN-DNP CRNA program; NURSE 5612, NURSE 5555.

NURSE 5638NA1 Pharmacology of Anesthesia I Credit: 1
The course is the first in a two semester sequence designed to provide the graduate nurse anesthesia student with the knowledge of pharmacology and the human physiologic responses to pharmacologic agents when administered to the patient perioperatively.
Prerequisites: NURSE 5619NA3.

NURSE 5638NA2 Pharmacology of Anesthesia II Credits: 2
This course is the second in a two semester sequence designed to provide the graduate nurse anesthesia student with the knowledge of pharmacology and the human physiologic responses to pharmacologic agents when administered to the patient perioperatively.
Prerequisites: NURSE 5638NA1.

NURSE 5640NA Pediatric Anesthesia Credit: 1
This course is designed for the graduate nurse anesthesia student to learn anatomy and physiology specific to the pediatric patient. The most common pathophysiologic states found in the pediatric surgical patient will be discussed as well as fluid management and pharmacology as it relates to the pediatric patient. The goal of this pediatric course is to give the student the basic knowledge of pediatric anesthesia as a foundation, prior to their pediatric clinical rotation.
Prerequisites: NURSE 5619NA2.

Co-requisites: NURSE 5619NA3.

NURSE 5641NA Acute and Chronic Pain Management Credit: 1
The student will develop a basic understanding of pain management as it relates to the field of anesthesia. Advantages and disadvantages of various pain management approaches, as well as general physiologic and anatomic concepts as they relate to pain will be covered. Through the course, various pain management approaches will be implemented and evaluated. Students will be required to demonstrate proficiency in managing acute pain in patients of all ages and varying stages of wellness.
Prerequisites:NURSE 5619NA2.

NURSE 5643NA Professional Practice for the Nurse Anesthetist Credits: 2
This course is designed to explore a range of non-clinical issues in nurse anesthesia practice. Students will gain an appreciation of the professional ideals of the Doctor of Nursing Practice (DNP) prepared Certified Registered Nurse Anesthetist (CRNA) through both online and on-site group discussion. In addition, students will attend professional meetings including: Student Registered Nurse Anesthetist (SRNA) Leadership Luncheon, Missouri Association of Nurse Anesthetists (MoANA) Lobby Day; Wellness in the Workplace, an event highlighting the risks of chemical dependency in nurse anesthesia practice; and one additional state or national professional meeting.
Prerequisites: Active status in both the UMKC SONHS DNP-NA Track and TMC School of Nurse Anesthesia.

NURSE 5650NA1 Clinical Anesthesia I Credits: 0
The first of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.
Prerequisites: NURSE 5650NAO, NURSE 5619NAB.

NURSE 5650NA2 Clinical Anesthesia II Credits: 0
The second of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.
Prerequisites: NURSE 5650NA1.

NURSE 5650NA3 Clinical Anesthesia III Credits: 0
The third of three clinical anesthesia practicums designed to provide the nurse anesthesia student simulated learning and complete hands on, supervised clinical practice on adult patients. The foci are skill development and safe anesthetic practice throughout the perioperative period. Students are assigned day experiences and call shifts at Truman Medical Center. Experiences progress in acuity and include, but are not limited to, general, gynecological, orthopedic, oral maxillary facial, urologic, dental, ophthalmic and endoscopic procedures. Core content includes formulation and management of perianesthesia plan of care, utilization of technology, application of EBP, technical skill development and advanced practice role competencies.
Prerequisites: NURSE 5650NA2.

NURSE 5650NA4 Clinical Anesthesia IV Credits: 0
This course is the first of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.
Prerequisites: and NURSE 5619NA3 and NURSE 5650NA3.

NURSE 5650NA5 Clinical Anesthesia V Credits: 0
This course is the second of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.
Prerequisites: NURSE 5650NA4.

NURSE 5650NA6 Clinical Anesthesia VI Credits: 0
This course is the third of a three semester nurse anesthesia residency/practicum designed to provide concentrated, experiential, supervised, high acuity, perioperative experiences. The focus is on the synthesis and application of all previous courses. Students will be expected to apply advance clinical decision-making skills and evidence-based practice guidelines to the assessment, management and evaluation of complex procedures and patients across the lifespan. Students attend specialty rotations at up to 9 different sites. Core concepts include nurse anesthesia practice, technical skill development, integration of technology and evidence based practice to the patient and/or healthcare system, and ethical, legal and professional issues.
Prerequisites: NURSE 5650NA5.

NURSE 5650NAO Clinical Anesthesia Orientation Credits: 0
Orientation to clinical practice during which students participate in hands on, supervised clinical practices and simulated clinical learning experiences. Students orient to the Hospital, OR, and Anesthesia department. Clinical education focus is on safe anesthetic practice and skill development throughout the entire perioperative period. Experiences include basic airway management, equipment procurement, anesthesia assessment process, induction and emergence from anesthesia. Clinical orientation experiences include multiple patient populations, ages and sub specialties within anesthesia practice.
Prerequisites: NURSE 5619NAO.

Co-requisites: NURSE 5619NAB.

NURSE 5659NA Health Systems, Economics and Quality in Nurse Anesthesia Practice Credits: 2
This course is designed to introduce the nurse anesthesia student to the fundamental principles of healthcare economics and healthcare systems. The effects of economics will be discussed from a broad viewpoint and from the various perspectives of anesthesia care delivery models. This course will also discuss the impact of quality indicators on anesthesia practice. The course will begin with a leadership summit and continue with online content and discussion forums.
Prerequisites: NURSE 5674NA1.

NURSE 5661NA1 Anesthesia & Co-Existing Dieseases I Credits: 2
This course is the first in a two semester series designed to provide senior nurse anesthesia students with the knowledge of pathophysiology of various disease states and their anesthesia implications.
Prerequisites: NURSE 5619NA3.

NURSE 5661NA2 Anesthesia & Co-Existing Diseases II Credit: 1
This course is the second in a two semester series designed to provide senior nurse anesthesia students with the knowledge of pathophysiology of various disease states and their anesthesia implications.
Prerequisites: NURSE 5661NA1.

NURSE 5662 Psychometrics Credits: 3
This course focuses on application of psychometric theories and practices related to instrumentation in nursing research. The basic methodologies and techniques for constructing, testing, and evaluating instruments will be discussed and applied by students. Content will focus on theoretical foundations of measurement, item construction, instrument design, item analysis, validity and reliability assessment. Criteria for evaluating existing instruments will also be discussed.

NURSE 5664 Concepts & Approaches of Epidemiology & Statistics in Research Credits: 3
This course introduces principles, concepts, and application of epidemiological and statistical methods in research. The course will cover epidemiological principles and concepts, measurement of the occurrence of disease and disease association, types of study designs, and interpretation and evaluation of epidemiologic research. Students will have hands on experience by creating data variables using the Statistical Package for the Social Science (SPSS). Students will develop skills to analyze research data using appropriate statistical methods to calculate the measurements of disease association. This course will help students to evaluate health care studies with respect to study design, statistical analysis, interpretation and evidences of association, During this course students will develop an epidemiologic study proposal using appropriate statistical methods.
Prerequisites: NURSE 5612.

NURSE 5666 Designing Nursing Research Credits: 3
This doctoral level course directs the student to develop research writing skills necessary for developing their dissertation and future program of research. Critical analyses of methodologies and design are accomplished. The strengths and weakness of various research designs (non-experimental, quasi-experimental, experimental and randomized clinical trial) are evaluated via in-depth discussions.
Prerequisites: NURSE 5610, NURSE 5612, NURSE 5622, NURSE 5662, NURSE 5668, NURSE 5670.

NURSE 5668 Quantitative Research Credits: 3
Quantitative reserach methods used to build nursing's body of knowledge are explored. Experimental, quasi-experimental, and correlational designs and clinical trials are analyzed. Emphasis is placed on design, data generation, analysis, and dissemination of findings. Issues pertaining to the use of quantitative methods will also be explored.
Prerequisites: NURSE 5610, PSYCH 5516.

NURSE 5670 Qualitative Research Methods Credits: 3
Qualitative research methods used to build nursing's body of knowledge are explored in this seminar course. Emphasis is placed on design, data generation and analysis, and dissemination of findings. Issues regarding qualitative research are identified and analyzed.
Prerequisites: Admission to the Nursing Ph.D. program.

NURSE 5671 Advanced Qualitative Research and Mixed Methods Credits: 3
This graduate level course is designed for students who have had an introduction to qualitative research methods and want to pursue more in-depth study of these methodologies, with emphasis on a chosen methodology that they hope to use in their own research. Appropriateness of methodological choice in relation to research question, application of theory, rhetorical style and author presence, and criteria for judging quality will be among the topics explored for various methodologies and data generation (collection) and data analysis skills will be practiced. The course will also acquaint students with the growing literature on mixed methods research.
Prerequisites: Admission to the Nursing Ph.D. program, an introductory qualitative research course.

NURSE 5674NA1 Scholarly Project in Nurse Anesthesia I Credits: 2
This is the first in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This is a distance education course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.
Prerequisites: NURSE 5637.

NURSE 5674NA2 Scholarly Project in Nurse Anesthesia II Credits: 2
This is the second in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This is a distance education course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.
Prerequisites: NURSE 5674NA1.

Co-requisites: NURSE 5659NA.

NURSE 5674NA3 Scholarly Project in Nurse Anesthesia III Credits: 2
This is the third in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This course is a face-to-face course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.
Prerequisites: NURSE 5674NA2.

Co-requisites: NURSE 5643NA.

NURSE 5674NA4 Scholarly Project in Nurse Anesthesist IV Credits: 2
This is the fourth in a series of four courses that culminate in a scholarly project in nurse anesthesia that demonstrates the scholarship of integration and application. This course is a face-to-face course. The student will identify a complex problem in their area of interest and expertise, design, implement, and evaluate an innovative solution to this problem. The student will use the breadth of knowledge and scholarship skills gained through their program of study to improve practice and/or patient outcomes. It validates the student's ability to translate research evidence into practice. This project lays the foundation for future scholarship.
Prerequisites: NURSE 5674NA3.

NURSE 5697A Special Topics Nursing Elective Credits: 1-6
This course consists of the guided study of special topics in areas of nursing theory and/or research.
Prerequisite: Admission into PhD in Nursing Program

NURSE 5697APP Special Topics Nursing Credits: 1-6

NURSE 5697AR Special Topics Nursing Credits: 1-6

NURSE 5697B Special Topics Nursing-Equivalent Credits: 1-6
This course will cover guided study of course equivalent topics in areas of nursing theory and/or research.
Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5697CI Special Topics Nursing Credits: 1-6

NURSE 5697CP Special Topics Nursing Credits: 1-6

NURSE 5697CR Special Topics Credits: 1-6
This course will cover guided study of course equivalent topics in areas of nursing theory and/or research.
Prerequisites: Admission into Ph.D. in Nursing program.

NURSE 5697DP Special Topics Nursing Credits: 1-6

NURSE 5697HER Special Topics in Nursing Credits: 1-6

NURSE 5697RD Special Topics Nursing Credits: 1-6

NURSE 5697WLA Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5697WLB Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5697WLC Special Topics in Nursing Credits: 1-6
Special Topics in Nursing

NURSE 5699 Dissertation Research Credits: 1-12
Individual directed research leading to preparation and completion of doctoral dissertation.

NURSE 5899 Required Graduate Enrollment Credit: 1

Oboe (OBOE)

Courses

OBOE 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: OBOE 300.

OBOE 5500A Graduate Oboe-Secondary Credits: 2

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

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

OBOE 5501 Graduate Oboe-Master Performance Credits: 4

OBOE 5601 Graduate Oboe - Doctoral Performance Credits: 4

Oral & Craniofacial Sciences (OR-BIO)

Courses

OR-BIO 5699 Dissertation Research Credits: 1-12
Ph.D. dissertation research.

OR-BIO 5702 Biomechanics of Mineralized Tissue Credits: 3
The physical principles underlying mineralized tissue biomechanics will be presented at multiple hierarchies. Details of bone, tooth and joint (with a special emphasis on the TMJ) anatomy and function will be outlined as related to mechanical loading.

OR-BIO 5899 Required Graduate Enrollment Credit: 1

Oral Diagnosis & Medicine (OR-D&M)

Courses

OR-D&M 5702 Advanced Oral Diagnosis/Oral Medicine III Credits: 2
Advanced Oral Diagnosis/Oral Medicine III

Oral Surgery (OR-SURG)

Courses

OR-SURG 5700 Principles Of Oral Surgery I Credit: 1
A conference on diagnosis, treatment planning, surgical technique.

OR-SURG 5701 Principles of Oral Surgery II Credit: 1
Prerequisites: OR-SURG 5700.

OR-SURG 5702 Principles of Oral Surgery III Credit: 1
Prerequisites: OR-SURG 5701.

OR-SURG 5703 Principles of Oral Surgery Iv Credit: 1
Prerequisites: OR-SURG 5702.

OR-SURG 5704 Clinical Oral Surgery I Credit: 1
The clinical application of the principles of diagnosis, treatment planning, and surgical techniques.

OR-SURG 5705 Clinical Oral Surgery II Credit: 1
Prerequisites: OR-SURG 5704.

OR-SURG 5706 Clinical Oral Surgery III Credit: 1
Prerequisites: OR-SURG 5705.

OR-SURG 5707 Physical Diagnosis For The Oral & Maxillofacial Surgeon I Credit: 1
Basic physical diagnosis and review of systems as it relates to the practice of Oral and Maxillofacial Surgery.

OR-SURG 5708 Physical Diagnosis For The Oral & Maxillofacial Surgeon II Credit: 1
Advanced physical diagnosis and review of systems as it relates to the practice of Oral and Maxillofacial Surgery.

OR-SURG 5709 Physical Diagnosis For The Oral & Maxillofacial Surgeon III Credit: 1
Oral and Maxillofacial Surgery and the medically compromised patient.

OR-SURG 5710 Physical Diagnosis for the Oral & Maxillofacial Surgeon Iv Credit: 1
Prerequisites: OR-SURG 5709.

OR-SURG 5711 Physical Diagnosis for the Oral & Maxillofacial Surgeon V Credit: 1
Prerequisites: OR-SURG 5710.

OR-SURG 5712 Physical Diagnosis for the Oral & Maxillofacial Surgeon Vi Credit: 1
Prerequisites: OR-SURG 5711.

OR-SURG 5713 Advanced Physical Diagnosis For Oral & Maxillofacial Surgeon I Credit: 1
Advanced physical diagnosis and review of systems as it relates to the practice of Oral and Maxillofacial Surgery.

OR-SURG 5714 Advanced Physical Diagnosis for Oral & Maxillofacial Surgeon II Credit: 1
Prerequisites: OR-SURG 5713.

OR-SURG 5716 Special Problems In Oral And Maxillofacial Surgery I Credit: 1

OR-SURG 5717 Special Problems In Oral And Maxillofacial Surgery II Credit: 1

OR-SURG 5719 Special Problems - Oral & Maxillofacial Surgery IV Credit: 1
Special Problems - Oral Maxillofacial Surgery IV

OR-SURG 5720 Oral Surgery Hospital Residency I Credit: 1
Two calendar years of hospital residency in an affiliated teaching hospital. The residency provides additional training in major oral surgery and didactic education in oral surgery and science areas, including anesthesiology, diagnosis, pathology, and radiology.

OR-SURG 5721 Oral Surgery Hospital Residency II Credit: 1
Prerequisites: OR-SURG 5720.

OR-SURG 5722 Oral Surgery Hospital Residency III Credit: 1
Prerequisites: OR-SURG 5721.

OR-SURG 5723 Oral Surgery Hospital Residency Iv Credit: 1
Prerequisites: OR-SURG 5722.

OR-SURG 5724 Oral Surgery Hospital Residency V Credit: 1
Prerequisites: OR-SURG 5723.

OR-SURG 5725 Oral Surgery Hospital Residency Vi Credit: 1
Prerequisites: OR-SURG 5724.

OR-SURG 5727 Major Oral Surgery I Credit: 1
A comprehensive study of major oral surgery. Lectures are correlated with surgical exercises which are performed in the anatomy laboratory.

OR-SURG 5728 Major Oral Surgery II Credit: 1
Prerequisites: OR-SURG 5727.

OR-SURG 5729 General Anesthesiology And Pharmacology I Credit: 1
The pharmacological principles of the various anesthetic agents and allied medications.

OR-SURG 5730 General Anesthesiology and Pharmacology II Credit: 1
Prerequisites: OR-SURG 5729.

OR-SURG 5731 Clinical General Anesthesiology And Pharmacology I Credit: 1
The clinical application of various anesthetic and pharmacological agents.

OR-SURG 5732 Clinical General Anesthesiology and Pharmacology II Credit: 1
Prerequisites: OR-SURG 5731.

OR-SURG 5733 Clinical General Anesthesiology and Pharmacology III Credit: 1
Prerequisites: OR-SURG 5732.

OR-SURG 5734 Clinical/Major General Anesthesiology And Pharmacology I Credit: 1
The clinical/major surgical application of various anesthetic and pharmacological agents.

OR-SURG 5735 Clinical/Major General Anesthesiology and Pharmacology II Credit: 1
Prerequisites: OR-SURG 5734.

OR-SURG 5736 Clinical/Major General Anesthesiology and Pharmacology III Credit: 1
Prerequisites: OR-SURG 5735.

OR-SURG 5737 Pediatric General Anesthesiology And Pharmacology I Credit: 1
The pharmacological principles of various anesthetic agents and allied medications in the pediatric patient.

OR-SURG 5740 Oral & Maxillofacial Surgery Independent Study Credits: 1-6
An advanced study and/or elective course in Oral and Maxillofacial Surgery related field(s) which enhances the compulsory curriculum.

OR-SURG 5752 Seminar In Oral Surgery I Credit: 1
A discussion of current literature and research relating to oral surgery.

OR-SURG 5753 Seminar in Oral Surgery II Credit: 1
Prerequisites: OR-SURG 5752.

OR-SURG 5754 Seminar In Oral Surgery III Credit: 1

OR-SURG 5755 Seminar in Oral Surgery Iv Credit: 1
Prerequisites: OR-SURG 5754.

Organ (ORGAN)

Courses

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

ORGAN 5500A Graduate Organ-Secondary Credits: 2

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

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

ORGAN 5501 Graduate Organ - Masters Performance Credits: 4

ORGAN 5601 Graduate Organ - Doctoral Performance Credits: 4

Orthodontics (ORTHOD)

Courses

ORTHOD 5704 Orthodontics And Dentofacial Orthopedics I Credits: 1-6
Orthodontic theory, treatment techniques and treatment of patients; includes current and historical concepts.

ORTHOD 5705 Orthodontic and Dentofacial Orthopedics II Credits: 1-6
Prerequisites: ORTHOD 5704.

ORTHOD 5706 Orthodontics and Dentofacial Orthopedics III Credits: 1-6
Prerequisites: ORTHOD 5705.

ORTHOD 5707 Orthodontics and Dentofacial Orthopedics Iv Credits: 1-6
Prerequisites: ORTHOD 5706.

ORTHOD 5708 Orthodontic and Dentofacial Orthopedics V Credits: 1-6
Prerequisites: ORTHOD 5707.

ORTHOD 5709 Orthodontic and Dentofacial Orthopedics Vi Credits: 1-6
Prerequisites: ORTHOD 5708.

ORTHOD 5710 Orthodontic and Dentofacial Orthopedics Vii Credits: 1-6
Prerequisites: ORTHOD 5709.

ORTHOD 5711 Orthodontics and Dentofacial Orthopedics Viii Credits: 1-6
Prerequisites: ORTHOD 5710.

ORTHOD 5726 Cephalometric I Credits: 2
An introductory lecture and laboratory course in the principles of radiographic cephalometry and integrated cephalometric analysis.

ORTHOD 5727 Cephalometric II Credits: 2
An advanced lecture and laboratory course with emphasis on the use of a computer in cephalometric analysis.

Pediatrics (PEDS)

Courses

PEDS 5700 Principles Of Pediatric Dentistry I Credits: 1-3
Lecture and discussion of the principles of children's dentistry. The subject matter consists of the prevention of disease, child cooperation, diagnosis and treatment planning, treatment and post-treatment procedures.

PEDS 5701 Principles of Pediatric Dentistry II Credit: 1
Prerequisites: PEDS 5700.

PEDS 5720 Pediatric Dentistry Hospital Residency I Credit: 1
(1). The clinical activities of the program are conducted at Children's Mercy Hospital. Students spend 24 months (6 semesters) as residents in the Department of Pediatric Dentistry. Patient care is provided both in the outpatient clinic and to hospital inpatients. Rotations in anesthesia, pediatrics, and the emergency room are included in the residency. Residents participate on several multidisciplinary teams at the hospital including the Cleft Palate Team, Crainiofacial Anomalies Team, Hemophilia Team, Cancer Care Team, Sickle Cell Anemia Team, and the Newborn Intensive Care Follow-up Clinic.

Percussion (PERCSN)

Courses

PERCSN 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: PERCSN 300.

PERCSN 5500A Graduate Percussion-Secondary Credits: 2

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

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

PERCSN 5500JA Graduate Applied Jazz Studies Credits: 2
One-hour lesson weekly. Jury examination is required.
Prerequisites: Graduate standing.

PERCSN 5500JB Special Applied Jazz Studies Credits: 2
One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.
Prerequisites: Graduate standing.

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

PERCSN 5501 Graduate Percussion - Masters Performance Credits: 4

PERCSN 5601 Graduate Percussion - Doctoral Performance Credits: 4

Periodontics (PERIO)

Courses

PERIO 5700 Periodontic Residency I Credits: 1-2
Didactics, Seminars in Basic Periodontics with Clinical Practice.

PERIO 5701 Periodontal Residency I Credits: 1-6
Clinical Periodontics with Related Didactics and Seminar. This first year course introduces the incoming advanced education student to the principles and techniques in the field of advanced peridontics.

PERIO 5702 Periodontal Residency II Credits: 1-6
Clinical Periodontics with Related Didactic and Seminar. This first year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics.
Prerequisites: PERIO 5701.

PERIO 5703 Periodontal Residency III Credits: 1-6
Clinical periodontics, with related didactics and seminar. This first year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics, and builds upon the material taught in previous courses as well as introduces new information.

PERIO 5704 Periodontal Residency IV Credits: 1-6
Clinical periodontics with related didactics and seminar. This second year course is designed to transition the first year student into a second year advanced education student and builds upon the material taught in previous courses as well as introducing new information.
Prerequisites: PERIO 5701, PERIO 5702, PERIO 5703.

PERIO 5705 Periodontal Residency V Credits: 1-6
Clinical Periodontics with Related Didactics and Seminar. This second year course continues the instruction of the advanced education student to the principles and techniques in the field of advanced periodontics, and builds upon the material taught in previous courses as well as introducing new information.
Prerequisites: PERIO 5704.

PERIO 5706 Periodontal Residency VI Credits: 1-6
Clinical Periodontics with Related Didactics and Seminar. This second year course is designed to build upon the In-depth knowledge base of the advanced education student, as well as introducing new information, transitioning the student into a more proficient student in advanced periodontics.
Prerequisites: PERIO 5705.

PERIO 5707 Periodontal Residency VII Credits: 1-6
Clinical Periodontics with Related Didactics and Seminar. This third year course serves to transition the student into a clinician who by repeated action exhibits in depth levels of knowledge and skill. It builds upon material previously taught.
Prerequisites: PERIO 5706.

PERIO 5708 Periodontal Residency VIII Credits: 1-6
Clinical Periodontics with Related Didactics and Seminar. This third year course builds upon information previously taught and completes the transition of the student into a proficient specialist in Periodontology.
Prerequisites: PERIO 5707.

PERIO 5709 Periodontal Residency IX Credits: 1-6
Clinical Periodontics with Related Didactics and Seminar.
Prerequisites: PERIO 5708.

PERIO 5719 Implantology Credits: 2
This 2 credit hour seminar is designed for a student in the Advanced Education Program in Periodontology to develop in-depth knowledge of the concepts and theories of implant dentistry as they relate to periodontist. It will provide basic and advanced information and guidance which will serve to complement course work in PERIO 5702 through PERIO 5709, and the clinical implant dentistry experience offered in the program,at a minimum to a level of competency.

PERIO 5720 General Anesthesia Credit: 1
A rotation to the Department of Anesthesiology of K.C. Veterans Administration Medical Center. Students become familiar with operating room procedures, medical emergencies, venipuncture, airway maintenance and pharmaco-physiology of sedative, analgesic and anesthetic agents as well as drug interactions.

PERIO 5727 Introduction To Internal Medicine And Diagnosis I Credit: 1
A seminar on internal medicine, physical diagnosis, laboratory medicine, dermatology and allergy. This course is designed to give the resident a broad knowledge of the above.

PERIO 5728 Introduction to Internal Medicine and Diagnosis II Credit: 1
Prerequisites: PERIO 5727.

PERIO 5729 Children’s Periodontics Credits: 2
Children’s periodontal disorders, etiology, diagnosis, and treatment. Emphasis is placed on preventive periodontics and on education of parents and children in oral physiotherapy.

PERIO 5730 Biology Of The Periodontium Credits: 1-2
Biology of the Periodontium covers the embryology, histology, ultrastructure and biochemistry of stratified squamous epithelium, fibrous connective tissue, bone and cementum. These four tissues are studied in health and during inflammatory disease and healing of surgical wounds. Major emphasis is placed on immune system interactions with bone and fibrous connective tissue components during inflammatory periodontal disease.

PERIO 5799 Research And Thesis Credits: 1-6

PERIO 5899 Required Graduate Enrollment Credit: 1

Pharmacy (PHARM)

Courses

PHARM 5507 Basic Pharmacology Credits: 3
Basic pharmacological concepts and important classes of pharmacologic agents.
Prerequisites: LS-ANATO 118, LS-BIOC 365, LS-PHYS 117.

PHARM 5509 Clinical Toxicology Credits: 3
Principles of general toxicology and toxicology of industrial and household chemicals, agricultural agents, social poisons, and selected therapeutic agents. Prrequisites: Successful completion of prior professional program coursework or course coordinator's permission.
Cross Listings: PHARM 7463.

PHARM 5519 Pharmacology I Credits: 2
Basic pharmacological principles of drug absorption, distribution, metabolism and elimination; concept of drug-receptor interactions; dose-response relationships and mechanism of action; and signaling mechanisms.
Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

Cross Listings: PHARM 7361.

PHARM 5520 Pharmacology II Credits: 4
Principles of and advances in chemotherapy;, biology, mechanism of action; clinical applications and adverse effects of various drug groups.
Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

Cross Listings: PHARM 7362.

PHARM 5521 Advanced Organic Medicinal Chemistry Credits: 3
The focus of this course is an examination of the physical-chemical basis of drug action, particularly focusing on the formation of drug-target complexes. This includes the mathematical description of this binding, as well as an advanced description of the physical forces responsible for binding. In addition we will examine the energetic and entropic factors that contribute to complex stability, examining real world examples when possible.

PHARM 5527 Analytical Methods Credits: 3
A detailed study of the methods used to detect, identify, and quantitate drugs, small molecules, enzymes, proteins, and biological molecules. The statistical foundation, core concepts, and practical implementation of analytical methods are areas of emphasis. State-of-the-art instrumentation and recent technological developments are also presented, including biotechnology based methods such as proteomics methods and quantitative PCR.

PHARM 5530 Pharmacology III Credits: 4
Mechanism of action; therapeutic uses; and adverse effects of drugs affecting different organ systems.
Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

Cross Listings: PHARM 7363.

PHARM 5531 Physical Pharmacy Equilibria Credits: 3
Advanced principles of aqueous solutions, acid-base equilibria, solubility and complexation. Mathematical solutions and state-of-the-art research applications.
Prerequisites: B.S. in pharmacy.

PHARM 5533 Advanced Pharmacokinetics and Biopharmaceutics Credits: 3
This course involves the study of the rates at which drug absorption, distribution, metabolism, and excretion occur in the body following medication administration. The student will be expected to kinetically model a given physiological process associated with the disposition of a drug in any tissue, write a series of equations, and then solve those equations to produce a final set of equations that can be used to predict the concentrations of drug in the biological matrix of interest. Knowledge of derivation of equations is expected, along with real-world application of resulting equations. Offered fall semester of odd-numbered years.
Prerequisites: A grade of "B" of better in PHARM 7303 (An Introduction to Pharmacokinetics and Biopharmaceutics) and a grade of "B" or better in a course of the student's choosing in ordinary differential equations (ODE) offered by a mathematics department, e.g., MATH 345 at UMKC.

PHARM 5550 Stability of Pharmaceuticals Credits: 3
The course provides instruction in the processes responsible for instability of pharmaceuticals. Course content includes, but is not limited to, instability due to light, oxygen, and metal ions; the effect of temperature on the rate of drug decomposition; the effect of dielectric constant and ionic strength on degradation; and physical and chemical instability of newer polypeptide drugs. In addition, practical strategies to prevent instability of the active compound and excipients used in pharmaceutical formulations is provided.
Prerequisites: MATH 210, PHARM 7202, PHARM 7203.

PHARM 5555 Religion, Culture and Health Credits: 3
This course addresses the impact of religious beliefs on the culture practices of contemporary society, and aims at examining the relationship between these beliefs, modern sciences and health.

PHARM 5560 Discussions in Pharmacology Credit: 1
Discussions in Pharmacology (also called Pharmacology Journal Club), is a graduate course. It is designed to provide graduate student the opportunity to read, interpret and present literature to fellow peers, post-docs and faculty. The Journal Club presentations promote active and lively discussion and exchange of ideas. The class is a mandatory requirement for all graduate students in the Division of Pharmacology Toxicology.
Prerequisites: B.S. (or equivalent) in biology, chemistry, pharmacy or related biomedical sciences.

PHARM 5580A Seminar in Pharmaceutical Sciences Credit: 1
Enrollment and participation required of all graduate students in the School of Pharmacy during each semester of graduate study.

PHARM 5580C Seminar in Pharmacology/Toxicology Credit: 1
Enrollment and participation required of all graduate students in the School of Pharmacy during each semester of graduate study.

PHARM 5588 Techniques in Biotechnology Credits: 3
In this graduate course, the principle theories, techniques and strategies to conduct experiments using common biotechnology/molecular biology techniques will be discussed. The course material has been designed to provide up to date information on techniques in biotechnology. Knowledge on these basic biotechnology/molecular biology techniques will be useful in diverse fields like biochemistry and pharmaceutical sciences to work with nucleic acid and proteins.
Prerequisites: B.S. (or equivalent) in biology, chemistry, pharmacy or related discipline.

PHARM 5590A Special Topics Pharmacy Credits: 1-3

PHARM 5599A Research And Thesis Pharmacy Credits: 1-9

PHARM 5599C Research And Thesis Pharmacology Credits: 1-9

PHARM 5615 Methods In Pharmacology And Toxicology Credits: 3
Exposure to some of the techniques employed in research in pharmacology and toxicology. There are eight one-hour introductory lectures for the course, followed by six hours of laboratory per week.

PHARM 5630 Cytochrome P450: Drug Metabolism, Bioavailability, Interactions and Toxicity Credits: 3
This course is designed to provide students up-to-date scientific facts on drug metabolism, bioavailability interactions, and toxicity (DMBIT) in perspective of cytochrome P450 (CYP) and the factors that affect DMBIT. The course will also include prospects of CYP applications for various purposes in reference to drug metabolism. The course will include lectures, lab experience, and student seminar/report.
Prerequisites: B.S. (or equivalent) in chemistry, biology, pharmacy, or related subject.

PHARM 5631 Pharmaceutical Formulations I Credits: 3
Advanced theory and practice of Pharmaceutical formulations, including classical and current research. This course will introduce the principles of biomaterial based drug delivery systems and unify knowledge from the fields of biology, materials science, and pharmaceuticals.
Prerequisites: B.S. in Pharmacy.

PHARM 5632 Novel Drug Delivery Systems Credits: 3
The course offers up-to-date information about drug transport mechanisms and drug absorption processes across various absorptive membranes ie., buccal, nasal, dermal, corneal, pulmonary, and oral mucosae. The course material has been designed to provide current ideas and thinking about gene delivery, drug targeting to tumor cells and lipid and carrier mediated drug delivery. It provides unique information about cell culture models as a predictor of drug delivery as well as physical chemistry of surfaces in various microparticulates and lipid emulsion systems.

PHARM 5633 Receptor Pharmacology and Signal Transduction Credits: 3
Molecular characterization of drug receptors involving quantitative description of functional studies with agonists and antagonists and binding of ligands to receptors; the molecular structure of receptors and the signaling systems that couple receptors to their pharmacologic functions.
Prerequisites: LS-BIOC 370, PHARM 5519, PHARM 5520, PHARM 5530.

PHARM 5634 Protein and Nucleic Acid Drug Delivery Credits: 3
In the graduate course, the principle theories, techniques and strategies in developing protein and nucleic acid drugs will be discussed. The course material has been designed to provide up to date information in protein and nuclear acid drug delivery. It offers unique information on how to combine knowledge of chemistry, molecular biology and pharmaceutical sciences to achieve successful therapeutic application of protein and nucleic acid.
Prerequisites: B.S. in bioengineering, biology, chemistry, pharmacology, or pharmacy.

PHARM 5640 Biochemical and Molecular Toxicology Credits: 3
This course will provide students with a comprehensive mechanistic understanding of various molecular events that lead to and/or are associated with chemically/environmentally induced degenerative of proliferative diseases. The course will include lectures student presentations of recent advances in biochemical and molecular toxicology and student report on a topic of interest as it pertains to the subject being taught. The title of the report has to be approved by the course coordinator.
Prerequisites: B.S. (or equivalent) in biochemistry, biology, chemistry, or molecular biology.

PHARM 5645 Cancer Biotechnology I Credits: 3
This course is designed to provide a basic understanding of tumor progression, molecular events and signaling mechanisms underlying tumor formation. Epidemiological approaches, etiology, and current methods of detection and diagnosis of cancer will be discussed. Current pharmacological management strategies of cancer and future therapeutic interventions will also be reviewed.
Prerequisites: BIOLOGY 202 (or equivalent).

PHARM 5690BB Special Topics Toxicology Credits: 1-3

PHARM 5690C Special Topics Pharmacology Credits: 1-3

PHARM 5699 Research and Dissertation Credits: 1-16
Available for Doctorate program with the following emphasis areas: (A) Pharmacy, (B) Pharmaceutical Chemistry, (C) Pharmacology, (AA) Pharmacy Administration, and (BB) Toxicology.

PHARM 5699A Research And Dissertation - Pharmacy Credits: 1-16

PHARM 5699B Research And Dissertation Pharmaceutical Chemistry Credits: 1-16

PHARM 5699BB Research And Dissertation Toxicology Credits: 1-16

PHARM 5699C Research And Dissertation Pharmacology Credits: 1-16

PHARM 5899 Required Graduate Enrollment Credit: 1

PHARM 7100A Introductory Topics in Pharmacy I Credit: 1
These courses include presentations and discussions on the profession of pharmacy including: the roles and responsibilities of the pharmacist, educational requirements to obtain the degree, career opportunities, student life, legal and ethical issues, and study skills development.

PHARM 7100B Introductory Topics in Pharmacy II Credit: 1
These courses include presentations and discussions on the profession of pharmacy including: the roles and responsibilities of the pharmacist, educational requirements to obtain the degree, career opportunities, student life, legal and ethical issues, and study skills development.
Prerequisites: PHARM 7100A.

PHARM 7100C Introductory Topics in Pharmacy III Credits: 0.5
This course is a continuation of the four semester course series. Continuation of Pharmacy 7100B.
Prerequisites: PHARM 7100B.

PHARM 7100D Introductory Topics Pharmacy IV Credits: 0.5
This course is a continuation of the four semester course series.
Prerequisites: PHARM 7100C.

PHARM 7101 Introduction to the Professional Degree Program and Pharmacy Practice Credit: 1
This course introduces students to the profession of pharmacy and professional responsibilities and roles of a pharmacist. Students will examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth. This course will also assist students to assume responsibility for their own learning. One 1-hour class session is held per week.
Co-requisites: PHARM 7101L

PHARM 7101L Applied Skills Lab: Introduction to the Professional Degree Program and Pharmacy Practice Credit: 1
Students enrolled in this applied skills lab will complete a series of self-assessments as well as begin developing a portfolio that will provide documentation of the students' progressive achievement of the competencies throughout the curriculum, including the practice experiences. Students will begin to develop a curriculum vitae that compliments information included in the student's portfolio. One 2-hour lab session is held weekly.
Co-requisites: PHARM 7101.

PHARM 7110 Professional Skills II: Pharmacy Calculations Credits: 2
This course provides instruction in performing and applying the necessary calculations involved in pharmacy practice and the dispensing, manufacturing and preparation of dosage forms. Topics covered include but are not limited to: fundamentals of pharmaceutical calculations, exponents, ratios, percentages, proportions and fractions); International System of Units; pharmaceutical measurements; interpretations of medication orders and prescriptions; density, specific gravity and specific volume; patient specific parameters involved in dosing (surface area, weight and age); isotonicity and buffer solutions; milliequivalents, millimoles and milliosmoles; dilution, concentration and allegation; and reduction/enlargement of formulas. Students must have an understanding of mathematical principles to include algebra and calculus.
Prerequisites: MATH 210.

PHARM 7125 Medical Terminology Credit: 1
This course will provide the necessary information for proficiency in reading and understanding the meaning of common medical terminology. This ability will provide a foundation for student learning in courses that rely on medical terminology to explain physiologic and clinical processes.

PHARM 7151 Introduction to Pharmacy Law Credit: 1
This course will provide an introduction to the federal and state laws that pertain to the practice of pharmacy.

PHARM 7199 Pharmacy Grand Rounds Credits: 0.25
The School of Pharmacy offers Grand Rounds seminars for the student body regarding timely and important topics and issues facing the profession of the School.

PHARM 7202 Pharmaceutics I Credits: 3.5
Physicochemical properties of drug systems with consideration of incompatibilities and stabilization of pharmaceutical dosage forms, and physicochemical properties affecting drug action, degradation and bio availability.
Prerequisites: PHARM 7110.

PHARM 7203 Pharmaceutics II Credits: 3
Discussion of pharmaceutical processes, equipment and material used in drug delivery systems and the preparation and evaluation of solid delivery systems and parenteral products.
Prerequisites: PHARM 7202.

PHARM 7203L Pharmaceutics II Lab Credit: 1
In this lab course, students will perform hands-on pharmaceutical processes, use manufacturing equipment, and prepare formulations in which selected dosage forms are manufactured and evaluated. This is aprofessional elective option for Pharm.D. students.
Prerequisites: PHARM 7202.

Co-requisites: PHARM 7203.

PHARM 7233 U.S. Health Care System and Marketing Credits: 3
U.S. Health Care System and Marketing is a required course for the doctor of Pharmacy degree program at The University of Missouri -Kansas City School of Pharmacy. It consists of two modules: U.S. Health Care System and Medication Safety (Module I) , and Health Care Marketing (Module 2). The goals of the course are to (1) understand U.S. health care system at the macro level, (2) discuss medication errors and management within U.S. health care system, and (3) learn about marketing process for healthcare products and services. This course provides the context and builds the knowledge base for future required courses such as Pharmacy Practice Management.

PHARM 7244 Introduction to Drugs of Abuse Credits: 2
As a health professional in training, it is important to know the mental and behavioral effects of abusing both prescription and illicit substances. This knowledge will help the health professional to be more understanding of their patients who may be suffering with a substance abuse problem. Introduction to Drugs of Abuse will focus on both the physical and psychological effects of substances such as hallucinogens, amphetamines, alcohol, and nicotine among others. The course will also be discussing important topics such as behavioral modification, the controversies of treatment, and the role of the pharmacist in the treatment of substance abuse. A substantial focus will also be placed on patient experiences and the psycho-social aspects of substance abuse.
Prerequisites: LS-ANATO 118, LS-ANATO 118L.

Co-requisites: LS-PHYS 399, LS-PHYS 400.

PHARM 7245 Top 200 I Credits: 0.5
This course requires the student to develop and demonstrate basic drug knowledge for the top 200 most commonly dispensed medications.

PHARM 7266 Medical & Medication Error Evaluation & Management Credit: 1
A course designed to discuss the current body of evidence with respect to medical quality, medication errors, and strategies used to improve quality minimize error rates. At the completion of the course, the student should be able to (1) review and synthesize evidence within the literature; (2) describe te policy framework designed to improve health care quality; (3) describe characteristics and factors that enable encourage providers to improve the quality of care; (4) describe common causes of medication errors; (5) differentiate strategies to prevent errors; (6) correlate medication errors and specific disease states.

PHARM 7275 The Pharmacists' Role in Global Health Credits: 2
This course is designed to introduce students to the global context of public health. "Global Health" is defined as the application of principles of public health to health issues and challenges that transcend geopolitical boundaries, and to the complex array of global and local forces that affect these health issues.

PHARM 7277 Zoonotic Illnesses Credit: 1
A zoonotic illness is a disease that can be transmitted from animals to humans – over 60% of all human infections are zoonotic. The purpose of this course is to increase student knowledge relative to infectious diseases caused by zoonotic transmission/pathogens. Topic discussion will include background evolution of the disease, diagnostic considerations, management, monitoring and reporting of the infectious diseases to the local health department. This course will serve to reinforce the principles of infectious diseases pharmacotherapy and further expose students to diseases encountered in rural Missouri (i.e. tick bites, farm animals). Classes are didactic in nature.
Prerequisites: Microbiology course from any accredited college or university.

PHARM 7279 Introductory Pharmacy Practice Experience Credits: 0.5
This Introductory Pharmacy Practice Experience (IPPE) provides students the opportunity to develop a health profile for a patient utilizing knowledge and skills gained in the didactic curriculum. This experience involves small group instruction and guided reflection, direct patient contact, opportunities to employ and develop essential practice skills and techniques, and assessment by active participation, guided reflection, and portfolio review. This IPPE compliments didactic instruction and allows students to apply knowledge to patient care and demonstrate readiness for the next level of curricular pharmacy practice experiences.

PHARM 7280 Introductory Pharmacy Practice Experience II Credits: 0.5
This Introductory Pharmacy Practice Experience (IPPE) provides students the opportunity to develop a health profile for a patient utilizing knowledge and skills gained in the didactic curriculum. This experience involves small group instruction and guided reflection, direct patient contact, opportunities to employ and develop essential practice skills and techniques, and assessment by active participation, guided reflection, and portfolio review. This IPPE compliments didactic instruction and allows students to apply knowledge to patient care and demonstrate readiness for the next level of curricular pharmacy practice experiences.
Prerequisites: PHARM 7279.

PHARM 7303 Pharmacokinetics and Biopharmaceutics Credits: 3
Study of pharmacokinetic models and equations; the concepts of the rate processes associated with, and the physical and physiological factors affecting absorption, distribution, and elimination of dosage forms. The concepts of bioavailability will be presented so as to prepare the student to evaluate bioavailability data.

PHARM 7307 Advanced Pathophysiology Credits: 4
Advanced pathophysiology is the study of the alterations of normal physiological functioning in cellular, tissue, organ, and organ systems. These alterations form the basis for understanding a variety of pathophysiological conditions and the manifestations and impact of abnormal physiological functioning on patients across the life span. Advanced pathophysiology deals with both generalized disease processes and major organ system dysfunction. Students will have the opportunity to identify clinical signs and symptoms for various disease states, associate the pathophysiologic abnormality responsible for the sign or symptom, and understand how drug therapy targets disease state management and treatment.
Prerequisites: LS-BIOC 370, LS-PHYS 400.

Co-requisites: PHARM 7361.

PHARM 7310 Academic Service Learning I Credit: 1
Academic Service Learning is a professional elective course where students are assigned to either an area clinic in Kansas City or the MedZou program in Columbia. A minimum of 30 contact hours must be completed during the assigned semester. Health education will be the primary focus.

PHARM 7311 Pharmacy in the 21st Century Technology Credits: 2
This course allows students to develop the skills to evaluate and use Health Care Information Technology (HCIT) in contemporary pharmacy practice. The elective course is offered in the winter semester only.
Prerequisites: Third year status or higher in the Pharm. D. program.

PHARM 7313 Career Planning Credit: 1
This course enables students to engage in the study of career opportunities in the areas of industry, hospital/clinic practice, retail and managed care settings. Pharmacy opportunities are explored through lecture and discussion, guest speakers in the various areas and student exploration with business contacts and research. Topics include understanding career opportunities, achieving one’s professional goals, compensation packages and negotiations, and designing a path to accomplish career objectives.

PHARM 7316 Introduction to Pharmaceutical Policy Analysis Credits: 2
This course addresses multiple key influential pharmaceutical policy areas shaping pharmacy practice, and will teach critical thinking skills required to measure both federal and state level policy impact in patient safety and access to medications.
Prerequisites: PHARM 7151, PHARM 7325.

PHARM 7317 Drug Induced Diseases Credits: 2
Drug-induced disease is an unintended effect if a drug that results in mortality or morbidity with symptoms sufficient to prompt a patient to seek medical attention and/or require hospitalization. This course will aid students in the identification, management, and prevention of drug-induced diseases.
Prerequisites: PHARM 5519, PHARM 7307.

PHARM 7325 Patient Assessment and Professional Communication Credits: 2
In this course, students will continue developing necessary skills to provide patient-centered care. Students will be introduced to health informatics and an electronic medical record. Students will be taught the four components of a SOAP note, a method of documentation used by healthcare providers. Students will learn how to physically assess patients and document findings in SOAP format in a patient’s record. Students will also learn how to effectively communicate with other healthcare professionals and document the interactions.
Prerequisites: PHARM 7101, PHARM 7414.

Co-requisites: PHARM 7325L.

PHARM 7325L Applied Skills Lab: Patient Assessment and Professional Communication Credits: 0.5
This applied skills lab is associated with the Patient Assessment and Professional Communication course. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students are expected to perform physical assessments on each other while under supervision and document patient information accurately and periodically within the electronic medical record system. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination. One 2-hour lab session is held every other week or weekly but no more than 10 sessions per semester.
Prerequisites: PHARM 7101, PHARM 7414.

Co-requisites: PHARM 7325.

PHARM 7326 Evidence Based Medicine Credits: 5
Pharmacists, if they are to assume the role of “medication expert,” must learn how to integrate existing drug information using rigorous problem-solving tools that deliver efficient and safe decision making that benefits patients, consumers and other healthcare providers. This course provides students with an evidenced-based, disciplined approach to evaluate literature from multiple sources in a critical manner in order to make complex healthcare-related patient/population recommendations and decisions. Application of key EBM concepts incorporates lectures, interactive labs, self-study tutorials, facilitated/online retrieval of activities and traditional assessments.
Prerequisites: PHARM 7325, PHARM 7405.

Co-requisites: PHARM 7420.

PHARM 7331L Applied Skills Lab: Aseptic Technique and Sterile Product Prep Credits: 0.5
This half credit hour course introduces students to the regulations and proper practice of sterile compounding and focuses on development and assessment of aseptic technique skills used in the preparation of parenteral admixtures and injections. The course uses in-class and prerecorded video instruction, small-group demonstration and instruction, instructor-guided practice, and assessment of skills. The knowledge and skills obtained in this course prepare students for the hospital-based Introductory Pharmacy Practice Experience (IPPE).
Prerequisites: Successful completion of prior professional program coursework and OSHA Bloodborne Pathogen Safety Training.

PHARM 7334 Pharmacy Based Immunization Delivery Credit: 1
Pharmacy-based Immunization Delivery is an interactive training program that teaches pharmacists and student pharmacists the skills necessary to become a primary source for vaccine information and administration. The program teaches the basics of immunology and focuses on practice implementation, administration technique (pk) and legal/regulatory issues.

PHARM 7341 Medicinal Chemistry I Credits: 3
This course is the study of medicinally active substances, both natural and synthetic, which describes their chemical properties, their mode of action, their structure-activity relationships and their metabolic rate. Starting with their origin, it is shown how drugs in a series are developed by chemical modification, quantitative structure activity relationships and receptor theory. The chemical properties of a drug are described and explained. The mode of action of the drug is explained on a biochemical basis whenever possible. Once a drug has had its medicinal effect, it is excreted or metabolized. Reasons for excretion or metabolism are explained.
Prerequisites: CHEM 322R.

Co-requisites: LS-BIOC 365.

PHARM 7344 Medicinal Chemistry II Credits: 3
This course is a continuation of PHARM 7341. This course will focus on major drug classes, both natural and synthetic, including their chemical properties, their mode of action, their structure-activity relationships and their metabolic fate. Structure-activity relationships and the influence of organic functional groups on physicochemical properties of drugs and their pharmacological activities will be emphasized. Drug metabolism will also be covered, with a focus on organic functional group transformations.
Prerequisites: PHARM 7341.

PHARM 7345 Top 200 II Credits: 0.5
In addition to the basic drug knowledge gained through the prerequisite course, the student will be required to develop and demonstrate more advanced drug knowledge for the top 200 most commonly dispensed medications.

PHARM 7353 Investigative Toxicology Credits: 2
The science of investigative toxicology is an emerging science that plays a central role in forensic toxicology and pathology regarding conditions of and for exposure of many different kinds of environmental, biological, chemical, or physical agents. Investigative toxicology may include criminal or civil legal matters. The duties of an investigative toxicologist include the qualitative and quantitative analysis of drugs or poisons in biological systems and other physical evidence collected at the scene of the investigation. This also includes the interpretation of the exposure scene evidence and findings in regard to the physiologic and behavioral effect of those exposed to the detected/suspected chemical(s) at time of exposure. The complete investigation of the cause or causes of sudden or chronic chemical exposure and its potential aftermath is an important civic responsibility. The use of toxicologic information in investigation assessment requires careful field and laboratory analysis, evaluation of data.

PHARM 7361 Pharmacology I Credits: 2
Basic pharmacological principles of drug absorption, distribution, metabolism and elimination; concept of drug-receptor interactions; dose-response relationships and mechanism of action; and signaling mechanisms.
Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

Cross Listings: PHARM 5519.

PHARM 7362 Pharmacology II Credits: 4
Principles of and advances in chemotherapy;, biology, mechanism of action; clinical applications and adverse effects of various drug groups.
Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

Cross Listings: PHARM 5520.

PHARM 7363 Pharmacology III Credits: 4
Mechanism of action; therapeutic uses; and adverse effects of drugs affecting different organ systems.
Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

Cross Listings: PHARM 5530

PHARM 7364 Concepts of Epidemiology and Statistics In·Research Credits: 3
This course introduces students to study design, principles, concepts, and application of epidemiological and statistical methods in research. First part of the course will cover understanding the epidemiological principle, measuring the occurrence of disease, measures of disease association, and types of study designs, interpretation and evaluation of epidemiologic research. Second part will provide hands-on experience for students on developing skills to analyze research data using appropriate statistical methods by means of statistical software to calculate the measures of disease association. This course will help students to evaluate health care studies with respect to study design, statistical analysis, interpretation, and evidences of association. During this course students will develop an epidemiologic study proposal. Students will learn to analyze and interpret the output of these analyses using the Statistical Package for the Social Science (SPSS).
Prerequisites: STAT 436 (or equivalent).

PHARM 7366 Oncology and Hematology Pharmacotherapy Credits: 3
This course provides disease-oriented and pharmacy-oriented insight into the pathophysiology, diagnosis, and rational drug treatment of malignancy. The pharmacist's role in selecting drug products, individualizing dosages, supportive care, and monitoring patients is emphasized, with additional emphasis on safety and handling.
Prerequisites: PHARM 7361, PHARM 7420.

PHARM 7377 Principles of Nutrition Support Credits: 2
Clinical nutrition, a multidisciplinary field, has become an important practice area for the hospital pharmacist. Its growth has been the result of an awareness of the high incidence of malnutrition among hospitalized patients and its effects on morbidity and mortality. Nutrition support is an important therapy provided to patients in the acute care, homecare and long term care settings. This course will introduce the student to the fundamentals of nutrition support and prepare him/her for future involvement in this important practice area.

PHARM 7378 Introduction to Community Pharmacy Practice Credits: 2
This course is a required Introductory Pharmacy Practice Experience (IPPE) in which students will spend two weeks during the summer after their third professional year providing patient-centered care in a community pharmacy practice setting. The experience will emphasize application of knowledge gained in didactic coursework at the student's level in the curriculum. Activities focus on the delivery of care to patients rather than relying on a product-centered model of practice. The Introductory Pharmacy Practice Experiences seek to establish a solid practice foundation on which students will continually build as they progress through the Doctor of Pharmacy curriculum. Successful completion of of prior professional program coursework and submission of required Experiential Programs documentation.

PHARM 7379 Introduction to Health Systems Pharmacy Practice Credits: 2
This course is a required Introductory Pharmacy Practice Experience (IPPE) in which students will spend two weeks during the summer after their third year providing patient-centered care in a health systems pharmacy practice setting. The experience will emphasize application of knowledge gained in didactic coursework at the student's level in the curriculum. Activities focus on understanding the medication use system and delivering care to patients in a hospital setting. The Introductory Pharmacy Practice Experiences seek to establish a solid practice foundation on which students will continually build as they progress through the Doctor of Pharmacy curriculum. Successful completion of prior professional program coursework and submission of required Experiential Programs documentation.

PHARM 7389 Advances In Drug Therapy Credits: 2
Study of the advances in drug delivery and therapy; the concepts of advanced and novel drug delivery systems, modern drug analysis tools, role of efflux protein in drug kinetics, and transporter/receptor mediated drug delivery.
Prerequisites: PHARM 7303.

PHARM 7397 Home Health Care Credits: 2
Anything a patient does in the home concerning their healthcare is considered Home Health Care. All aspects of Home Health Care are covered in this class. Diabetic Ostomy products care, Durable Medical Equipment (Wheelchair, cane, crutches, etc.), home Renal Dialysis, Wound Care, Respiratory Therapy, IV accesses, Home Infusion Therapy, Hospice Care, and Enteral Nutrition are presented and discussed. Reimbursement issues are not discussed due to constantly changing regulations. This is a "hands-on" class with participation in, for example, ostomy fitting, crutches fitting, enteral nutrition taste testing, and a tour of a Home Infusion Pharmacy.
Prerequisites: PHARM 7362, PHARM 7405.

Co-requisites: PHARM 7420.

PHARM 7398 Comprehensive Diabetes Management Credits: 4
The purpose of the course is to provide the student with a multidisciplinary foundation in the principles of diabetes management. The student will develop his-her knowledge and ability to assess, manage, educate and monitor patients with diabetes. The faculty are comprised of a multidisciplinary team of experts for the online lectures. The in-class discussion will be led by a faculty member who specializes in diabetes management.
Prerequisites: PHARM 7303.

PHARM 7399 Required Enrollment Credit: 1
Required enrollment for international students in pharmacy training sites.

PHARM 7405 Self-Care and Nonprescription Pharmacotherapy I Credits: 3
The Self-Care and Nonprescription Pharmacotherapy course integrates the fundamentals of pathophysiology and pharmacology to help develop the student’s ability to provide patient-centered care. Upon course completion, students will be able to assess and provide pharmaceutical care for patients with illnesses commonly encountered in community pharmacy practice. Students are expected to identify medical and medication-related problems, recommend nonprescription drug therapy and monitor for safe and effective drug use. Students are also expected to provide accurate medication counseling. In general, two hours per week are devoted for traditional didactic teaching and learning and two hours for laboratory experiences.
Prerequisites: PHARM 7279, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7414.

Co-requisites: PHARM 7405L.

PHARM 7405L Applied Skills Lab: Self-Care and Nonprescription Pharmacotherapy I Credit: 1
Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in community practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to provide patient-centered care utilizing the QuEST/SCHOLAR MAC process. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination.
Prerequisites: PHARM 7279, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7414.

Co-requisites: PHARM 7405.

PHARM 7406P IPPE: General Medicine I Credits: 3
This course is a required Introductory Pharmacy Practice Experience (IPPE) which provides a continuum of patient care activities throughout the third professional year. The students will spend one academic year (Fall and Spring Semesters) in a patient care setting. Emphasis of study will be on the care of patients with commonly seen illnesses. Students are expected to become involved in the provision of direct patient care and improving rational drug therapy in a practice environment.
Prerequisites: PHARM 7420, PHARM 7485P.

PHARM 7407P General Medicine II Credits: 8
The candidate will spend eight weeks in a patient-care service which is dedicated to the care of the ambulatory patient. Emphasis of study will be on pharmacotherapy in adult patients. Candidates are expected to become involved in the provision of primary care, medication maintenance activities and improvement of rationale drug therapy in the practice environment. Strong emphasis is placed on patient counseling and interviewing skills. Required rotation.

PHARM 7409P Health Systems Pharmacy Practice Credits: 4
The candidate will spend one month assigned to a health system site. Emphasis of study will be on the organizational, technical and administrative aspects of providing comprehensive pharmaceutical services in a health system. Clinical responsibilities will be maintained throughout the rotation. Candidates will take part in department activities to enhance understanding of the integration of all aspects of pharmaceutical care within the department and other services in the facility (i.e. departmental planning, committee activities, drug distribution, staff supervision and quality assurance programs, formulary management).

PHARM 7410P General Medicine III Credits: 4
Continuation of Required General Medicine series. Required rotation.

PHARM 7412P Advanced Community Pharmacy Practice Clerkship Credits: 4
The candidate will spend one month assigned to a faculty member whose practice is based in a an advanced community setting. Emphasis of study will be on the organizational, technical, administrative and practice aspects of providing comprehensive pharmaceutical services to patients in a community practice. Clinical responsibilities will be maintained throughout the rotation. Candidates will take part in all aspects of pharmaceutical care within the practice (i.e., distribution, counseling, provision of drug information, operations management and practice development). Required rotation.

PHARM 7414 Patient-Centered Care and Ethical Practice Credits: 2
Students will understand the concept as well as the pharmacist's role in providing patient-centered care. Students will learn how to build relationships through consideration of the patient's personal values, preferences and beliefs. Students will learn how to effectively communicate with patients to obtain health and medication histories and to counsel for medication adherence. One 2-hour class session is held per week.
Prerequisites: PHARM 7101.

Co-requisites: PHARM 7414L.

PHARM 7414L Applied Skills Lab: Patient-Centered Care and Ethical Practice Credits: 0.5
This applied skills lab is associated with the Patient-Centered Care and Ethical Practice course. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge to patient care in a simulated environment. Students will be afforded opportunities to obtain accurate and comprehensive health and medication histories and provide basic medication counseling. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination. One 2-hour lab session is held every other week.
Prerequisites: PHARM 7101.

Co-requisites: PHARM 7414.

PHARM 7418P Elective Clerkship I Credits: 4
Elective experiences are an essential element to the candidates' training designed to develop areas of personal interest and to expand their understanding of professional opportunities. These rotations revolve around areas of basic science, clinical practice, research and administration. Candidates may repeat required rotations as electives or may approach faculty to tailor an elective experience to develop an area of interest. Required rotation.
Restrictions: Successful completion of Pharm.D. credit and non-credit requirements through semester six and submission of required Experientials Programs documentation.

PHARM 7419P General Medicine IV Credits: 4
Continuation of General Medicine series. Required rotation.

PHARM 7420 Pharmacotherapy II Credits: 7
Pharmacotherapy II is designed to develop the student's ability to assess patients and provide pharmaceutical care. The course focuses on developing and applying problem-solving strategies for complex illnesses commonly encountered in pharmacy practice. Students are expected to identify medical and medication-related problems, recommend drug therapy and monitor for safe and effective drug use. Students are also expected to provide medication counseling. Throughout the semester, students are expected to retrieve and utilize relevant patient data from an electronic medical record system to make patient care decisions. Six hours of large group and two hours of small group discussions occur weekly.
Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414.

Co-requisites: PHARM 7420L, PHARM 7406P.

PHARM 7420L Applied Skills Lab: Pharmacotherapy II Credits: 0.5
Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in pharmacy practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to utilize home diagnostic and monitoring tests, conduct brown bag reviews, provide medication reconciliation and therapeutically manage patients at a distance (telepharmacy). Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination.
Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414.

Co-requisites: PHARM 7420, PHARM 7406P.

PHARM 7420P Advanced Pharmacy Practice Elective Credits: 4
Elective experiences are an essential element to the candidates training designed to develop areas of personal interest and to expand their understanding of professional opportunities. These rotations revolve around areas of basic science, clinical practice, research and administration. Candidates may repeat required rotations as electives or may approach faculty to tailor an elective experience to develop an area of interest.

PHARM 7421P Advanced Pharmacy Practice Elective III Credits: 4
Elective experiences are an essential element to the candidates training designed to develop areas of personal interest and to expand their understanding of professional opportunities. These rotations revolve around areas of basic science, clinical practice, research and administration. Candidates may repeat required rotations as electives or may approach faculty to tailor an elective experience to develop an area of interest.

PHARM 7424 Introduction To Dietary Supplement Therapeutics Credits: 2
This course is intended to provide students with an awareness of important issues about dietary supplements to consider when providing pharmaceutical care to patients. Students will become familiar with regulations for dietary supplements, learn communication skills specific to discussing supplement use with patients, and the skills to retrieve and interpret reliable information to be able to make decisions about new or unfamiliar supplements.
Prerequisites: PHARM 7361.

PHARM 7427 Hospital Pharmacy Credits: 2
This course in Hospital Pharmacy is designed to expose students to the daily operation of a typical hospital pharmacy, integration of informatics and automation, and understanding of historical concepts in hospital pharmacy management. The course consists of one, two-hour lecture per week. The course will be delivered via traditional didactic lecture format and interactive group discussions.

PHARM 7434 Pharmacy Preparations: Compounding Credit: 1
In the Pharmacy Preparations: Compounding Course, students will gain knowledge and skills necessary to compound extemporaneous non-sterile preparations. The course will cover regulations governing pharmaceutical compounding in Missouri, ethical considerations applicable to compounds, various dosage forms including advantages and disadvantages of each, techniques used in preparing compounds, and the counseling information to be included for each type of dosage form covered in the course. Students will utilize their knowledge of pharmaceutical calculations in the preparation of the formulations such as calculating doses and ingredient quantities.
Prerequisites: PHARM 7110.

Co-requisites: PHARM 7434L.

PHARM 7434L Applied Skills Lab: Pharmacy Preparations: Compounding Credits: 0.5
Students enrolled in this compounding lab will apply knowledge gained in the associated course necessary to compound extemporaneous non-sterile preparations. Students are expected to accurately prepare, dispense, and label a variety of the most commonly prescribed extemporaneous formulations, including liquid, solid, semi-solid, and topical preparations.
Prerequisites: PHARM 7110.

Co-requisites: PHARM 7434.

PHARM 7439 Pediatric Pharmacotherapy Credits: 3
Pediatric Pharmacotherapy provides disease-oriented and pharmacy-oriented insight into the pathophysiology, diagnosis, and rational drug treatment of diseases primarily encountered in the pediatric population. The pharmacist's role in selecting drug products, individualizing dosages, and monitoring patients is emphasized.
Prerequisites: PHARM 7361, PHARM 7362, PHARM 7420.

PHARM 7451 Pharmacy Law Credits: 2
Federal and state laws impacting pharmacy practice.
Prerequisites: PHARM 7151.

PHARM 7463 Clinical Toxicology Credits: 2
Fundamentals of toxicology, including discussion of the general classes of poisonous substances, their physiological effects, and methods of treatment.
Prerequisites: Successful completion of prior professional program coursework or course coordinator's permission.

Cross Listings: PHARM 5509.

PHARM 7465 Health Economics and Medicine Credits: 3
This course introduces major economic dimensions of healthcare system and public health practices. Covers concepts necessary to understand provider and consumer behavior, health care market structure, government involvement in health care, reimbursement strategy, determinants of health, distribution channels for biopharmaceuticals, pharmacovigilance, economic evaluation of healthcare services, and comparative-effectiveness research.
Prerequisites: PHARM 7233.

PHARM 7466 Pharmacy Practice Management Credits: 3
Pharmacy Practice Management is a required course for the Doctor of Pharmacy degree program. The goal of the course is to build the necessary foundation for basic management skills needed as a professional in pharmacy regardless of practice setting. Management activities include management of self, operations, people, finances, goods, and services. This course does not aim to produce management experts in any one particular facet of pharmacy, but rather to equip students with the fundamental concepts to apply management and economic principals in a variety of situations or settings.
Prerequisites: PHARM 7465.

PHARM 7467 Religion, Culture and Health Credits: 3
This course addresses the impact of religious beliefs, education, and cultural practices on health and healthcare issues pertinent to various segments of our society.

PHARM 7484P Pharmacy Seminar Credit: 1
Pharm. D. Student Seminar course is designed to provide students with examples and reasoning behind the fundamentals of seminar preparation and delivery and opportunity to utilize their knowledge by presenting a seminar. This experience will be achieved through identification of a topic, development and presentation of a seminar. The student is expected to complete two 40-minute seminars over two semesters.
Prerequisites: PHARM 7485P.

PHARM 7485L Applied Skills Lab: Pharmacotherapy III Credits: 0.5
Students enrolled in this applied pharmacotherapy lab will gain skills necessary to provide care for patients with illnesses commonly encountered in pharmacy practice. Learning activities are designed to complement didactic instruction while allowing students to apply knowledge in a simulated environment. Students will be afforded opportunities to provide pharmacy services, including but not limited to, Medication Therapy Management, therapeutic Drug Utilization Review, Patient Centered Medical Home and telepharmacy. Multiple activities will incorporate concepts of interprofessional team-based care. Student achievement of core abilities will be assessed through an Objective Structured Clinical Examination.
Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414, PHARM 7420.

Co-requisites: PHARM 7485P, PHARM 7406P.

PHARM 7485P Pharmacotherapy III Credits: 7
Students enrolled in the Pharmacotherapy III course will continue developing and applying problem-solving strategies to complex illnesses commonly encountered in pharmacy practice. Students are expected to identify medical and medication-related problems, recommend drug therapy and monitor for safe and effective drug use. Students are also expected to provide medication counseling. Throughout the semester, students are expected to retrieve and utilize relevant patient data from an electronic medical record system to make patient care decisions. Six hours of large group and two hours of small group discussions occur weekly.
Prerequisites: PHARM 7279, PHARM 7280, PHARM 7307, PHARM 7325, PHARM 7361, PHARM 7362, PHARM 7405, PHARM 7414, PHARM 7420.

Co-requisites: PHARM 7485L, PHARM 7406P.

PHARM 7489AB Introduction to Nuclear Pharmacy & Nuclear Medicine Credits: 2
Nuclear pharmacy employs the safe and effective use of radiopharmaceuticals and other drugs with the purpose of improving patient health. The purpose of this course is to educate students regarding the diagnostic and therapeutic roles of radiopharmaceuticals in healthcare and teach the proper procedures and techniques that go into safely compounding and handling these products. Students will visit Cardinal Health Nuclear Pharmacy where they will be able to demonstrate the techniques they have learned. Students will attend four two-hour lectures and have the opportunity to witness the utilization of a radiopharmaceutical during a diagnostic scan at Truman Medical Center.

PHARM 7489CE Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489E Special Topics In Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topic, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489EB Special Topics Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489EP Special Topics Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489EPA Secial Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489FD Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489HN Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective

PHARM 7489M Special Topics In Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489ME Special Topics Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489MG Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489MN Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective

PHARM 7489MU Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489N Special Topics In Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489NS Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489O Special Topics In Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489PH Special Topics Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489PT Special Topics In Pharmacy Credits: 1-5

PHARM 7489R Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7489RB Special Topics Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective

PHARM 7489SI Special Topics in Pharmacy Credits: 1-5
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors and prerequisites to be listed in the term bulletin. Elective.

PHARM 7497E Directed Individual Study-Clinical Pharmacy Credits: 1-4
Study in areas of special interest under individual faculty direction. Elective. Not to exceed five semester credits.

Philosophy (PHILOS)

Courses

PHILOS 5521 Managerial And Administrative Decision Making And Ethical Values Credits: 3
Methods of problem definition and decision making in ethics are presented with the goal of providing the student with a matrix for case review. A series of cases is offered that serve to integrate approaches to ethical reflection with management and administrative decision making. Cases are chosen on the basis of topical, curricular and conceptual relevance.

PHILOS 5540 Seminar On Philosophy And Law Credits: 2
An examination from a philosophical perspective of the historical and conceptual relationships present in the evolution, development and analysis of law. Among the systems of analysis examined will be natural law theory, legal positivism and legal realism. Ordinarily the seminar will focus on a specific area of controversy in the law.

PHILOS 5546 Ethics And Government Credits: 3
An examination of ethical issues related to government, with the primary focus on national and local governmental bodies in the United States. Ethics in the executive, legislative and judicial branches are examined. Ethical standards for elected officials and appointed public servants are reviewed. Attempts to "legislate morality" are considered. The course includes a historical review of ethics and government and an analysis of the legal implications of legislation regarding ethics in the executive branch.

PHILOS 5550 History and Philosophy of Bioethics Credits: 3
This course will provide an overview of the history of medicine and bioethics from antiquity to the present. In addition to key historical events, the course will provide an overview of foundational ethical theories. The course will explore key events in bioethics and the responses to them in the bioethics literature.

PHILOS 5551 Healthcare Law and Policy Credits: 3
This course will focus on basic issues in healthcare law and public policy. Issues such as confidentiality, informed consent, healthcare financing, and end-of-life decision making will be covered. In addition to key historical events, the course will provide an overview of foundational ethical theories. The course will explore key events in bioethics and the responses to them in the bioethics literature.

PHILOS 5552 Clinical Ethics and Case Consultation Credits: 3
This course will focus on classic cases in bioethics and will expose students to contemporary trends in healthcare ethics consultation.

PHILOS 5620 Descartes To Hume Credits: 3

PHILOS 5625 Aesthetics Credits: 3

PHILOS 5638 Philosophy Of Biology Credits: 3

PHILOS 5640 Philosophy Of Law Credits: 3

PHILOS 5690 Research In Selected Fields: Graduate Studies Credits: 3
Intensive research in an area selected by the student in consultation with the instructor. By permission only. May be repeated for credit when the topic varies.

Physical Education (PHYS-ED)

Courses

PHYS-ED 5530 Organization And Administration Of Athletics Credits: 3
Organization and management of a program of competitive athletics for schools and colleges.

PHYS-ED 5561 Social-Cultural Aspects of Sport and Physical Activity Credits: 3
The social significance of sport in modern societies. Research on the social structure, social relations and social problems of sport from several subcultural perspectives will be reviewed.

PHYS-ED 5570 Sport Psychology Credits: 3
Analysis of research and theory focused on the psychological aspects associated with participation in sport and physical activity.
Prerequisites: PHYS-ED 370.

Physician Assistant Program (MEDPA)

Courses

MEDPA 5501 Anatomy for the Physician Assistant Credits: 3
This course studies the anatomy of the human body and its correlation and relationship of anatomic configuration to diagnosis of clinical problems. Limited to MMSPA students.

MEDPA 5502 Foundations in Basic Medical Science Credits: 3
This course introduces the basic principles of biochemistry, microbiology, immunology, and pharmacology which prepares the student for Science and Practice of Medicine I - IV. Limited to MMSPA students.

MEDPA 5503 Research Applications in Medicine Credit: 1
This course introduces the student to clinical research in medicine and its application to clinical decision making through the concepts and principles of evidence-based medicine.

MEDPA 5504 Ethics, Law and Policy Credit: 1
This course examines ethical rules, principles, and theories as they relate to health care.

MEDPA 5505 Clinical Assessment for the PA Credits: 2
This course will focus on developing foundational physical exam and history taking skills for the physician assistant.

MEDPA 5511 Clinical Practicum I Credit: 1
This course will consist of a weekly clinical experience under preceptor supervision emphasizing patient interviewing, physical exam and presentation skills.

MEDPA 5512 Clinical Practicum II Credit: 1
This course will consist of a weekly clinical experience under preceptor supervision emphasizing patient interviewing, physical exam and presentation skills.
Prerequisites: MEDPA 5511.

MEDPA 5513 Clinical Practicum III Credit: 1
This course will consist of a weekly clinical experience under preceptor supervision emphasizing patient interviewing, physical exam and presentation skills.
Prerequisites: MEDPA 5512.

MEDPA 5514 Clinical Practicum IV Credit: 1
This course will consist of a weekly clinical experience under preceptor supervision emphasizing patient interviewing, physical exam and presentation skills.
Prerequisites: MEDPA 5513.

MEDPA 5521 PA Professions I Credit: 1
This course focuses on the history and evolution of the PA profession, intellectual honesty and professional conduct expected of a PA. Effective communication skills and the roles of various health care providers and their role in health care will be introduced.

MEDPA 5522 PA Professions II Credit: 1
This course focuses on the concept of licensing, credentialing and legal regulation of the physician assistant. Instruction will also be given in medical coding, billing and legal principles of documentation.

MEDPA 5523 PA Professions III Credit: 1
This course focuses on the impact of racial, ethnic and socioeconomic health disparities on health care delivery. The student will be come aware of differing health beliefs, values and expectations of patients and other health care professionals that can affect communication, decision-making, compliance and health outcomes.

MEDPA 5524 PA Professions IV Credit: 1
This course focuses on health care delivery systems and health policy. Students will also discuss the concepts of public health and how they relate to the role of the practicing PA.

MEDPA 5531 Science and Practice of Medicine I Credits: 9
This is a first of four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.

MEDPA 5532 Science and Practice of Medicine II Credits: 12
This is the second of a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.
Prerequisites: MEDPA 5531.

MEDPA 5533 Science and Practice of Medicine III Credits: 20
This is the third of a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.
Prerequisites: MEDPA 5532.

MEDPA 5534 Science and Practice of Medicine IV Credits: 19
This is the fourth in a four series course that will address the physiology, pathophysiology, basic medical science, clinical presentation, pharmacotherapeutics, physical exam and clinical skills of disease processes presented in a systems format.
Prerequisites: MEDPA 5533.

MEDPA 5580 Senior Seminar Credit: 1
This course will focus on discussion, study, and review of previously covered health topics in preparation for the Physician Assistant National Certification Exam (PANCE).

MEDPA 5581 Professional Development for the PA Credit: 1
This course will focus on professional development topics for the graduating PA student culminating in a professional portfolio.

MEDPA 5589 Special Topics Credits: 1-3
An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

MEDPA 5595 Capstone Credit: 1
This course will ascertain the preparation of the PA student for clinical practice by completion of a summative exam and completion and presentation of a final research paper.

MEDPA 5610 Family Medicine I Rotation Credits: 4
This is a required 4-week rotation in an ambulatory family medicine setting.

MEDPA 5611 Family Medicine II Rotation Credits: 4
This is a required 4-week rotation in an ambulatory family medicine setting.

MEDPA 5612 Elective Family Medicine Rotation - 4 week Credits: 4
This is an elective 4-week rotation in an ambulatory family medicine setting.

MEDPA 5613 Elective Family Medicine Rotation - 2 week Credits: 2
This is an elective 2-week rotation in an ambulatory family medicine setting.

MEDPA 5614 Rural Family Medicine Rotation - 4 week Credits: 4
This is an elective 4-week rotation in an ambulatory family medicine setting.

MEDPA 5615 Rural Family Medicine Rotation - 2 week Credits: 2
This is an elective 2-week rotation in an ambulatory family medicine setting.

MEDPA 5620 Internal Medicine Rotation I Credits: 4
This is a required 4-week rotation in impatient and/or outpatient adult medicine setting.

MEDPA 5621 Internal Medicine Rotation II Credits: 4
This is a required 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5622 Elective Internal Medicine Rotation I Credits: 4
This is an elective 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5623 Elective Internal Medicine Rotation II Credits: 4
This is an elective 4-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5624 Elective Internal Medicine Rotation I - 2 week Credits: 2
This is an elective 2-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5625 Elective Internal Medicine Rotation II - 2 week Credits: 2
This is an elective 2-week rotation in inpatient and/or outpatient adult medicine setting.

MEDPA 5630 Emergency Medicine Rotation Credits: 4
This is a required 4-week rotation in an emergency medicine setting.

MEDPA 5640 Women’s Health Rotation Credits: 4
This is a required 4-week rotation in a women’s health setting.

MEDPA 5642 Elective Women’s Health Rotation Credits: 4
This is an elective 4-week rotation in a women’s health setting.

MEDPA 5643 Elective Women’s Health Rotation - 2 week Credits: 2
This is an elective 2-week rotation in a women’s health setting.

MEDPA 5650 Pediatrics Rotation Credits: 4
This is a required 4-week rotation in a pediatric medicine setting.

MEDPA 5652 Elective Pediatrics Rotation Credits: 4
This is an elective 4-week rotation in a pediatric medicine setting.

MEDPA 5653 Elective Pediatrics Rotation Credits: 2
This is an elective 2-week rotation in a pediatric medicine setting.

MEDPA 5660 General Surgery Rotation Credits: 4
This is a required 4-week rotation in a general surgery setting.

MEDPA 5662 Elective Surgery Rotation I Credits: 4
This is an elective 4-week rotation in a surgery setting.

MEDPA 5663 Elective Surgery Rotation II Credits: 4
This is an elective 4-week rotation in a surgery setting.

MEDPA 5664 Elective Surgery Rotation I - 2 week Credits: 2
This is an elective 2-week rotation in a surgery setting.

MEDPA 5665 Elective Surgery Rotation II - 2 week Credits: 2
This is an elective 2-week rotation in a surgery setting.

MEDPA 5670 Behavioral Medicine Rotation Credits: 4
This is a required 4-week rotation in a behavioral health setting.

MEDPA 5671 Behavioral Medicine Rotation - 2 week Credits: 2
This is a required 2-week rotation in a behavioral health setting.

MEDPA 5680 Geriatrics Rotation Credits: 4
This is a required 4-week rotation in a geriatric specialty care setting.

MEDPA 5681 Geriatrics Rotation - 2 week Credits: 2
This is a required 2-week rotation in a geriatric specialty care setting.

MEDPA 5690 Elective Clinical Rotation Credits: 4
This is a 4-week rotation in a new or recently established clinical setting.

MEDPA 5691 Elective Clinical Rotation - 2 week Credits: 2
This is a 2-week rotation in a newly or recently established clinical setting.

MEDPA 5899 Required Graduate Enrollment Credit: 1
Required Graduate Enrollment.

Physics (PHYSICS)

Courses

PHYSICS 5500 Methods Of Mathematical Physics I Credits: 3
Intended to provide the student with the advanced mathematical techniques needed for beginning graduate studies in the physical sciences. Content includes real variables, infinite series, complex analysis, linear algebra and partial differential equations.

PHYSICS 5501 Methods Of Mathematical Physics II Credits: 3
A continuation of Physics 500 which includes Sturm-Liouville operators, special functions, Fourier transforms, distributions and Green functions, Laplace transforms, linear groups and tensor analysis.

PHYSICS 5505 Survey Of Recent Development In Physics Credits: 3
Specifically designed to help high school and junior college science teachers keep pace with current developments in various subdivisions of physics and their impact on society and technology. (Not applicable for graduate degree in Physics).
Prerequisite: Baccalaureate degree and one year science teaching experience.

PHYSICS 5510 Theoretical Mechanics I Credits: 3
A review of undergraduate mechanics precedes the study of generalized classical mechanics in this course. Topics include variational principles, Lagrangian and Hamilton methods, conservation laws and Hamilton-Jacobi theory.

PHYSICS 5511 Theoretical Mechanics II Credits: 3
A continuation of PHYSICS 5510, this course covers topics such as normal coordinates, small oscillations, continuum mechanics and special/general relativity.

PHYSICS 5520 Electromagnetic Theory And Applications I Credits: 3
Electrostatics, magnetostatics and various approaches in solving boundary value problems of electromagnetism, Green's functions, conformal transformations and polynomial expansions, Maxwell's equations and waves.

PHYSICS 5521 Electromagnetic Theory And Applications II Credits: 3
Waveguides, fiberoptics, radiation systems and antenna for wireless communications, scattering and diffraction of electromagnetic waves, multipole fields, special relativity and relativistic particle dynamics and radiation.

PHYSICS 5530 Quantum Mechanics I Credits: 3
Review of elementary methods, formal preliminaries, axioms, commuting operators, angular momentum, static perturbation theory, Wigner-Eckart theorem.

PHYSICS 5531 Quantum Mechanics II Credits: 3
Time dependent perturbation theory, scattering, applications to atoms, molecules and nuclei, reactions, relativistic methods.

PHYSICS 5535 Optical Properties Of Matter Credits: 3
Maxwell's equations and the dielectric function, absorption and dispersion, free-electron metals, interband transitions, dispersion relations and sum rules, self-consistent field approximation, current-current correlations and the fluctuation-dissipation theorem, plasmons and characteristic energy loss.
Prerequisites: PHYSICS 450, PHYSICS 460, PHYSICS 461, PHYSICS 472, PHYSICS 5500.

PHYSICS 5537 Particle Physics Credits: 3
Essential aspects of modern particle physics are examined in a historical context, and also in terms of the standard model describing concisely the fundamental interactions among particles. Conservation laws are discuses, and recent developments such as String Theory are considered.
Prerequisites: (for undergraduates) PHYSICS 240, PHYSICS 250, and PHYSICS 350 or PHYSICS 472.

Cross Listings: PHYSICS 437.

PHYSICS 5540 Statistical Physics I Credits: 3
Statistical mechanics as a basis for thermodynamics; classical distribution functions; quantum statistical mechanics, kinetic theory, transport phenomena; application to systems of interacting particles.
Prerequisites: PHYSICS 410, PHYSICS 472.

PHYSICS 5541 Statistical Physics II Credits: 3
Special topics in advanced statistical physics including: second quantization, modern many body theory, interacting Fermi and Bose systems, superfluidity and superconductivity, renormalization group and computer simulation techniques.
Prerequisites: PHYSICS 5540.

PHYSICS 5550 Atomic And Molecular Structure Credits: 3
Experimental results and theoretical models by quantum mechanics. Special emphasis on the interaction between radiation and matter.

PHYSICS 5553 Practical Astronomy Credits: 3
A practical overview of the basic methods of observational astronomy research, including the principles of telescopes, detectors and measurement theory, as well as hands-on experience with data reduction and analysis. This course is open to graduate students from all majors.

PHYSICS 5555 Stellar Astrophysics Credits: 3
A mathematical and conceptual overview of the observed properties of stars and the fundamental astrophysics of radiative transfer, hydrostatic equilibrium, atomic processes and thermonuclear energy production that govern their structure, atmospheres and remnants.

PHYSICS 5556 Galaxies Credits: 3
A mathematical and conceptual overview of the observed properties and astrophysics of galaxies highlighting star formation and evolution, the interstellar medium, the Milky Way, galaxy populations and demographics, active galactic nuclei, and galaxy formation and evolution.

PHYSICS 5560 Nuclear Physics Credits: 3
Fundamental properties of the atomic nucleus discussed in terms of experimental results and theoretical models. Quantum and statistical mechanics are used where appropriate.

PHYSICS 5565 Cosmology Credits: 3
This course provides a foundation in both physical and observational cosmology. Students will acquire both a mathematical and conceptual understanding of the formation and dynamics of the Universe.

PHYSICS 5570 Quantum Theory Of Solids I Credits: 3
Lattice dynamics and thermal conductivity. Neutron scattering. Symmetry principles in crystals and consequences. Point group, space group and irreducible representations. Energy band theory and methods of band calculation. Elementary Theory of Magnetism. Spin wave theory.

PHYSICS 5571 Quantum Theory Of Solids II Credits: 3
Topics will include crystal imperfections, impurities and defects, optical properties of metals and semiconductors, electron-lattice interaction and transport theory, superconductivity and theory of disordered systems.

PHYSICS 5580 Physics Seminar Credit: 1
Contemporary publications and research.

PHYSICS 5585 Physics of Electronics Credits: 3
An introduction to the solid state physics of basic electronic components and their operation through both theory and practical lab work.

PHYSICS 5590 Topics In Physics Credits: 1-3
Contemporary publications and research.

PHYSICS 5590A Topics In Physics Credits: 1-3
Contemporary publications and research.

PHYSICS 5590B Special Topics Credits: 1-3

PHYSICS 5590R Topics in Physics Credits: 1-3
Contemporary publications and research.

PHYSICS 5595L Computer Interfacing Laboratory Credits: 3
An introduction to computer interfacing through the use of serial and parallel ports and digital-to-analog and analog-to-digital converters. The course also introduces digital filtering techniques, data analysis techniques, and graphical presentation of data. The programming techniques are taught using high level programming languages currently used in research and development labs.

PHYSICS 5599 Research And Thesis Credits: 1-9
Research for thesis in partial fulfillment of the master’s degree in physics.

PHYSICS 5680 Research Seminar Credits: 1-2
Seminars on current research topics of research programs in the department and those of external distinguished scientists. (Must be taken by Physics Ph.D. students).

PHYSICS 5690 Special Research Topics Credits: 1-3
A lecture course presenting advanced research-level topics.
Prerequisites: Ph.D. candidacy. This course is intended to allow faculty and visiting scholars to offer special courses in selected research areas.

PHYSICS 5699 Research And Dissertation Credits: 1-9
Research for dissertation in partial fulfillment of the Ph.D. degree requirements in physics.

PHYSICS 5899 Required Graduate Enrollment Credit: 1

Piano (PIANO)

Courses

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

PIANO 5500A Graduate Piano-Secondary Credits: 2

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

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

PIANO 5500JA Graduate Applied Jazz Studies Credits: 2
One-hour lesson weekly. Jury examination is required.
Prerequisites: Graduate standing.

PIANO 5500JB Special Applied Jazz Studies Credits: 2
One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.
Prerequisites: Graduate standing.

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

PIANO 5501 Graduate Piano - Masters Performance Credits: 4

PIANO 5601 Graduate Piano - Doctoral Performance Credits: 4

Political Science (POL-SCI)

Courses

POL-SCI 5501 Seminar in American Government Credits: 3
A seminar involving intense examination of the foundations, development, and structure of American national government through study of a broad range of classic materials and current research findings; course will prepare a political science graduate student to teach an introductory college course in American government.
Prerequisites: Graduate Standing.

POL-SCI 5505 Scope And Methods Of Political Science Credits: 3
This seminar surveys the various descriptive and quantitative approaches to the study of politics, government and public policy. It covers the methods used in various sub-disciplines and the models employed in political analysis.

POL-SCI 5506 Research Design and Analysis Credits: 3
This course focuses on methods of data gathering, management, and analysis used in political science research. Students gain an understanding of different types of data including surveys, experiments, and archival records. The curriculum will also include ways that these data are managed and analyzed, and how the results are presented in a useful manner.

POL-SCI 5513 Seminar in Comparative Politics Credits: 3
A survey of the major research in comparative politics including state building, democracy, economic development, and political violence.
Cross Listings: POL-SCI 425.

POL-SCI 5521 Judicial Politics Credits: 3
This course addresses broad trends of current research in the area of the judicial process based on empirical studies and the various methodological tools currently used by researchers. Case studies may be used to illustrate in depth the institutional aspects of the judicial process. Biographies may also be used to emphasize the personal and environmental factors which affect judicial decision making.

POL-SCI 5522 Seminar In The Presidency Credits: 3
Critical examination of the American presidency, with in-depth research into selected themes and presidents.
Prerequisites: POL-SCI 406.

POL-SCI 5524 Urban Politics Credits: 3
A seminar on politics and government in urban areas with special attention to community leadership, power structures, interest group and party activity, political behavior, and movements toward local government reform.

POL-SCI 5530 Seminar in International Relations Credits: 3
This course examines major schools of thought and contemporary research in international relations. Topics discussed include international systems, the causes of war and peace, collective security, and international political economy.

POL-SCI 5541 American Political Thought Credits: 3
This course will focus on intellectual reactions to the major periods in American history (the movement for independence, the writing of the constitution, the Jacksonian period, the civil war debate, the growth of big business, the rise of the positive state and contemporary America). Contemporary theorists will be included along with Jefferson, Madison, Hamilton and Marshall.

POL-SCI 5542 Constitutional Interpretation Credits: 3
This course will provide an in-depth treatment of selected areas of constitutional development, related to various aspects of public policy developed under the Constitution through judicial interpretation, including federalism, equality, fundamental rights and freedom of expression.

POL-SCI 5570 The Politics Of Social Security Credits: 3
This course will concentrate upon the principles of social insurance in general, and of the American Social Security system in particular. It will consider the system in relation to the history and traditions of American society. It will analyze popular misconceptions and will pay special attention to the political, economic, and demographic issues relevant to Social Security's current operation and to the program's future.

POL-SCI 5575 Political Ideologies Credits: 3
Consideration of political ideologies and their effects, with in-depth research into selected topics.

POL-SCI 5580 Government And Politics Seminar Credits: 3
Offered as a special seminar in the individual faculty member's area of research specialization. The seminar may be repeated for credit when the topic varies. The topic and instructor will be announced in advance.

POL-SCI 5590 Directed Studies And Research Credits: 1-6
Under the direction of the instructor, students in this course will produce a major research paper: a self-contained thesis chapter, an article for publication or the equivalent. May be repeated for credit.

POL-SCI 5599 Thesis Credits: 1-6
Directed specialized research.

POL-SCI 5688 Doctoral Research Seminar Credits: 3
Students will produce a major research paper under the direction of the instructor. The research project will consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

POL-SCI 5697 Doctoral-Level Independent Readings Credits: 3
Individual readings under the supervision of members of the Political Science Graduate or Doctoral Faculty in the specified topic or topics. May be repeated. May not be taken during an academic year in which a graduate course or seminar is offered on the topic.

POL-SCI 5697A Doctoral-Level Ir: American National Politics And Institutions Credits: 3

POL-SCI 5697I Doctoral-Level Ir: International Politics And Processes Credits: 3

POL-SCI 5697L Doctoral-Level Ir: Public Law Credits: 3

POL-SCI 5697O Doctoral-Level Ir: Public Opinion And Voter Behavior Credits: 3

POL-SCI 5697R Doctoral-Level Ir: Research Methods Credits: 3

POL-SCI 5697T Doctoral-Level Ir: Political Theory Credits: 3

POL-SCI 5697U Doctoral-Level Ir: Urban And State Politics Credits: 3

POL-SCI 5699 Research And Dissertation Credits: 1-12
Directed specialized research.

POL-SCI 5899 Required Graduate Enrollment Credit: 1

Psychology (PSYCH)

Courses

PSYCH 5504 Contemporary Issues In Learning Credits: 3
A discussion and analysis of recent research and theoretical papers in learning. The student will have to demonstrate undergraduate competence in learning in the first few weeks of this course in order to remain enrolled.
Prerequisites: PSYCH 304 (or equivalent).

PSYCH 5505 Motivation Credits: 3
The definition of the concept of motivation is explored. Emphasis is placed upon integration of the concept of motivation into comprehensive theoretical explanations of phenomena. Students should have in their background a foundation in Learning Theory (or at least Theory Construction) and Experimental (Scientific Method). Previous laboratory experiences are desired.

PSYCH 5507 Cognitive Psychology Credits: 3
An overview of the cognitive approach to the study of human behavior. Recent research and theoretical issues in the areas of perception, memory, and concept formation are emphasized.

PSYCH 5509 Assessment 1: Intellectual And Cognitive Assessment Credits: 3
This course is designed to provide students with a foundation in the use of intellectual and cognitive assessment instruments in clinical evaluation. The course covers theoretical issues pertinent to intellectual and cognitive assessment, as well as basic assessment skills including administration, scoring, interpretation, and communication of results for commonly used measures.

PSYCH 5510 Assessment Methods In Professional Counseling Credits: 3
This course provides an understanding of assessment process and assessment techniques. Skills and practice in selection, administration, and interpretation of representative assessment instruments. Two semester hours lecture, two semester hours lab experience per week.
Prerequisites: Course on assessment of intellectual functioning.

Cross Listings: CPCE 5515.

PSYCH 5511 Principles Of Assessment In Psychology Credits: 3
This will be a field practicum course in which test batteries will be used to assess and evaluate the intelligence, personality, and aptitude of the individual.
Prerequisites: PSYCH 5510.

PSYCH 5512 Contemporary Issues In Social Psychology Credits: 3
A critical survey of the recent literature in social psychology with emphasis on experimental investigations.
Prerequisites: PSYCH 312.

PSYCH 5515 Advanced Systems And History Of Psychology Credits: 3
In depth review of the major theoretical systems of psychology in terms of historical assumptions, methodologies and developments with the goal of enabling the student to better evaluate current theories and assumptions in psychology.
Prerequisites: PSYCH 415 (or equivalent).

PSYCH 5516 Quant Analysis 1: Regression And Analysis Of Variance Credits: 3
This graduate level statistics course for students in education and the behavioral sciences provides a strong conceptual understanding of two major statistical procedures with the context of the general linear model: multiple regression and numerous analysis of variance (ANOVA) models. Students will learn to select appropriate statistical techniques, tests the assumptions of the techniques, analyze data using statistical software, and report the results of their analyses in the format of the American Psychological Association (APA, 2002).
Prerequisites: EDUC-R&P 5505, PSYCH 316.

Cross Listings: EDUC-R&P 5605.

PSYCH 5517 Quantitative Analysis II: Advanced Topics In Regression And Mda Credits: 3
This graduate level statistics course for students in the behavioral sciences and education provides a strong conceptual understanding of advanced topics in regression (interaction effects, logistic regression, path analysis) and various multivariate techniques (MANOVA, canonical correlation, factor analysis). Students will complete a series of data based projects that allow them to demonstrate their skills in analysis, reporting and interpretation of findings.
Prerequisites: EDUC-R&P 5605 / PSYCH 5516 and EDUC-R&P 5505.

Cross Listings: EDUC-R&P 5606.

PSYCH 5518 Advanced Biopsychology Credits: 3
This course assumes that the student has mastered the basics of biopsychology, and deals with this topic in greater depth and scope than PSYCH 418. It will begin with a brief review and update of basic materials of neuroanatomy, neuronal conduction, and synaptic transmission but will quickly turn to an emphasis on biological influences on human psychology, in particular those biological factors that are of practical significance in the lives of patient and non-patient populations.
Prerequisites: PSYCH 418 (or equivalent).

PSYCH 5521 Advanced Social Psychology Credits: 3
The study of the individual in a social context. How social structure and interaction influence the behavior of an individual. Several contemporary systematic positions will be compared.
Prerequisites: PSYCH 312.

PSYCH 5522 Contemporary Issues In Developmental Psychology Credits: 3
A discussion of recent research literature in developmental psychology leading to an individual research project in this area.
Prerequisites: PSYCH 322.

PSYCH 5523 Seminar Personality Theory And Methodology Credits: 3
A study of the social-cultural, trait, learning, perceptual, motivational, and field theories of personality with special emphasis on research studies and the methodology of personality research.
Prerequisites: PSYCH 323.

PSYCH 5530 Addressing Health Disparities through Community-based Participatory Research Credits: 3
The purpose of this course is to familiarize students with the principles of community-based participatory research as a strategy to reduce health disparities. Students will learn how CBPR principles are applied across the research continuum for developing new community partnerships, conducting needs assessments, developing culturally-appropriate health promotion interventions in collaboration with community-based organizations, and packaging health interventions for dissemination in minority communities. This class is organized with a service learning component which will require students to work with a local community-based organization on a health issue for which there is joint interest.

PSYCH 5533 Psychopathology Credits: 3
A review of the experimental-clinical literature concerning the behavior disorders with special reference to their classification and etiology. Course generally will be restricted to students enrolled in license-eligible specialties who have had an undergraduate course in abnormal psychology.

PSYCH 5538 Development And Evaluation Of Assessment Tools Credits: 3
This survey course examines test theories, construction, and measurement theories. Within the context of a variety of conceptual frameworks and examples, students become knowledgeable about the various purposes, approaches, and computer software tools for measurement.
Prerequisites: PSYCH 5516 and PSYCH 5517.

PSYCH 5540 The Psychology Of Aging Credits: 3
This course will identify major issues concerning psychology related to aging. The major influences on the behavior, cognitive functioning and emotions of older adults will be examined. Consideration will be given to individual, group and environmental influences. Possible interventions will be identified. Cross-sectional and longitudinal research will be reviewed in order to examine the changes in individuals due to aging and the differences between cohort groups. Three major areas of information will be the focus: concepts, theory and methods in psychology of aging; biological and social influences on behavior; and behavioral processes. There will be a review of current literature.

PSYCH 5543 Adult Development And Aging Credits: 3
This course will identify major themes and issues of mid-life and older adults. It will examine major developmental theories of adult development and aging. A contextual approach is stressed, including research and theory on the impact of cohort, gender, race/ethnicity, socioeconomic status, and culture on development. Application to real life is integrated throughout the course. There will be a review of current literature.

PSYCH 5550 Field Practicum Credits: 4
Provides supervised experience working in community agencies/ organizations which address various human and social problems. Students receive training in community service oriented skills and approaches, e.g., advocacy, community organizing, program assessment, development and evaluation, outreach, and applied research. Ten hours per week at practicum site and class attendance are required.

PSYCH 5575 Professional Issues And Ethics In Psychology Credits: 3
Ethical and legal problems of research and practice will be discussed. Professional organizations in psychology and their publications will be reviewed.

PSYCH 5575A Professional Issues & Ethics Credits: 3

PSYCH 5580 Special Topics Credits: 1-3

PSYCH 5580AD Special Topics Credits: 1-3

PSYCH 5580SM Special Topics Credits: 1-3

PSYCH 5582 Community Mental Health Credits: 3
A review of current theory and research. The emphasis is on prevention rather than treatment of mental health problems. The assets and liabilities of neighborhood communities for mental health problems will be discussed. Recent methods in crisis intervention are reviewed. Each student will be required to become familiar with a neighborhood with a high incidence of application for mental health care.

PSYCH 5586 Theory, Research And Practice Of Consultation Credits: 3
Theory and research on community, mental health, organizational and agency consultation. Entry, process, outcome and ethical issues surrounding each model of intervention will be explored. Each student will be expected to conduct and report on a consultation project.

PSYCH 5590 Directed Research Credits: 1-6

PSYCH 5597 Directed Readings In Psychology Credits: 3
Intensive readings in areas of joint interest to the enrolled student and the cooperating faculty.

PSYCH 5599 Research And Thesis Credits: 1-9

PSYCH 5601 Experimental Methods In Design And Analysis I Credits: 3
An examination of multifactor and multilevel designs and interactions. Topics covered will include randomized block designs. Latin square designs, complex trend analysis designs, covariance designs and multiple comparison of treatment means.

PSYCH 5604 Field Practicum In Community Psychology Credits: 3
Supervised experience in health care, social welfare, correctional, political, ethnic, and neighborhood agencies. May be repeated six times for up to 18 credit hours.

PSYCH 5611 Theories & Methods Of Assessment & Intervention/Community Psych Credits: 3
Review of the assessment and intervention literature in social situations will be conducted. Students will design and carry out an assessment and an intervention project.

PSYCH 5612 Program Evaluation And Research Dissemination Credits: 3
A study of the area of applied research in which process and outcome characteristics of programs are related explicitly to a set of values, such as program goals, objectives and costs.

PSYCH 5614 Prevention Science I: Theories, Principles And Methods Credits: 3
Course provides a comprehensive overview of the field of prevention emphasizing basic concepts, conceptual models, and approaches associated with prevention in the field of psychology. The goal is to provide knowledge that will allow students to critically evaluate prevention programs in their communities. Students apply their learning by conducting a critical analysis of an existing community prevention and/or health promotion initiative.

PSYCH 5615 Prevention Science II: Applications Credits: 3
This advanced seminar is the follow-up course to Prevention Science I. Emphasis is placed on the application of prevention science to specific content areas (e. g., substance abuse, violence in schools physical or sexual abuse, AIDS/HIV infection, infant mortality, cardiovascular disease, promoting social competence.) A semester project involves an in-depth review of prevention efforts in the chosen area of interest, resulting in a comprehensive research proposal and/or public policy analysis.
Prerequisites: PSYCH 5614.

PSYCH 5622 Theoretical And Ethical Issues In Professional Psychology Credits: 3
This course is designed to introduce first year doctoral students to the fundamental concepts and methods of psychology conceived as the application of scientific and ethical reasoning to human problems. It will provide an in-depth examination of the American Psychological Association code of ethics and its application to the conduct of psychologists. Critical and analytical thinking will be emphasized in all aspects of the course. The course will cover broad models of clinical and counseling psychology and their historical and scientific foundations, issues in diagnosis, cross-cultural applications and professional problems in light of ethical principles, professional standards, scientific data multicultural contexts.

PSYCH 5623 Methods Of Counseling In Professional Psychology Credits: 3
This course is designed to introduce students to the fundamental concepts and methods of counseling in professional psychology. Students will apply ethical and multicultural principles to the helping relationship while learning the basic methods of humanistic, psychodynamic, and cognitive behavioral approaches as they related to the helping process. A main focus of this course is the acquisition of basic helping skills. Students will also become familiar with counseling outcome research and will increase their level of counselor self-awareness.
Prerequisites: PSYCH 5622.

Cross Listings: CPCE 5530.

PSYCH 5625 Health Research Methods: Intro To Epidemiology & Clinical Trials Credits: 3
This course will introduce graduate students in health-related disciplines to research methods utilized in understanding disease and health risk in humans and conducting intervention trials. Students will learn about how edidemiology contributes to: 1) identifying factors that cause diseases; 2) assessing the public health importance of diseases; 3) describing the natural history of diseases; and 4) evaluating procedures for preventing or treating diseases. After completing this course, students should be able to read and summarize epidemiological research papers and answer questions about a study's purpose, design, methods of procedure, results, and major strengths and weaknesses.
Prerequisites: graduate standing; PSYCH 5601, (or equivalent).

PSYCH 5631 Theoretical Foundations Of Health Psychology Credits: 3
This course will introduce students to the theoretical foundations of health psychology, including the Biopsychosocial model, individual and systems level theories of behavior change, stress and coping, disease prevention and health promotion, as well as adherence and relapse models. Upon completion of this course students will possess a broad understanding of how cognitive, behavioral, and social factors interact with biological parameters in influencing morbidity and mortality. In addition, students will become familiar with several substantive areas (e.g., chronic pain, HIV/AIDS, cancer, sleep disorders, cardiovascular risk reduction), research methods, and multicultural and ethical issues in health psychology.

PSYCH 5632 Health Psychology Interventions Credits: 3
This course will introduce students to a wide range of psychological assessment and intervention strategies that can be used in health care settings. Individual, group, community and policy interventions will be discussed. This course may be used for credit in the Health Psychology Discipline of the Interdisciplinary Ph.D. Program.
Prerequisites: PSYCH 5631.

PSYCH 5638 Seminar In Health Care Leadership Credits: 3
This course is designed to offer an educational experience that fosters both the knowledge and skills needed for leaders of healthcare in the future. The instructors will guide students through the process of generating new thinking, creating new knowledge, and enhancing interpersonal and professional effectiveness. Course topics will include what creates health and quality of life, social capital and health, healthcare policy, collaborative problem-solving, and transformational leadership and systems thinking.

PSYCH 5650 Clinical Practicum Credits: 1-6
Advanced supervised assessment and psychotherapy with individuals and groups in applied settings. Preregistration by application to instructor at least 60 days prior to the beginning of the semester. Approval by Psychology Director of Clinical training required.
Prerequisites: PSYCH 5623.

PSYCH 5660 Clinical Health Psychology Internship Credits: 1-6
Planned sequence of training experiences in an organized program designed to prepare students for the practice of professional psychology.

PSYCH 5696 Pre-Dissertation Credits: 1-12
Individualized research experiences to prepare students for the conduct of the dissertation.

PSYCH 5699 Research And Dissertation Credits: 1-16

PSYCH 5899 Required Graduate Enrollment Credit: 1

Public Administration (PUB-ADM)

Courses

PUB-ADM 5506 Management in Context Credit: 1.5
This course introduces students to the context of management in business, public, and nonprofit organizations with a specific emphasis on the political, regulatory, social, natural and global environment of management. Students who successfully complete this course gain an understanding of organizations and management that can be utilized in day-to-day work environments, apply theories and concepts to identify organizational issues, problems, and/or ethical considerations, and strengthen their ability to integrate and understand course content in a graduate program within the Bloch School of Management. Working individually and in groups, students will be asked to ex[lain in written and oral formats, and in general and specific terms, what an organization is, how it works, and how it relates to them, to other organizations, and the environment.

PUB-ADM 5510 Research Methods In Public Administration Credits: 3
This introductory course focuses on quantitative empirical research design and statistical analyses in relation to public administration issues and concerns.

PUB-ADM 5523 Public Policy Context for Business Decisions Credits: 3
This course is designed to provide intensive exposure to the forces and personailities in Washington, D.C. that shape America's business policy. EMBA participants learn how to understand and anticipate the impact of public policy on theirbusinesses and how to become more effective participants in the national decision-making process.
Prerequisites: Admission to the Executive MBA program.

PUB-ADM 5525 Financial Accountability And Policy Development Credits: 3
Modern fiscal policy and its administrative implications to planning, budgeting, revenue administration, accounting and appraisal, and the process for assuring accountability in the development, timing, and execution of public programs.
Prerequisites: PUB-ADM 5510 (or equivalent).

PUB-ADM 5526 The Politics Of Administration Credits: 3
This course will introduce the subject of public administration from a political perspective. Special attention will be given to an examination of the administrative branch of government. More specifically, the course will focus on the demands directed to administrators from various sectors of the political system, ways in which administrators respond to those demands, and methods available for the analysis of public policies that help us assess the impacts that flow from administrators' actions.

PUB-ADM 5530 Capstone Seminar In Public Administration Credits: 3
This course examines theories of public organizational design, structure and change, including various issues in the administration of public organizations. Questions of professional ethics and management in the public interest are also considered. This is the final course in the MPA core curriculum.
Prerequisites: PUB-ADM 5525, PUB-ADM 5526, PUB-ADM 5544, PUB-ADM 5548 (or equivalents), or concurrent enrollment. Health-services students can substitute HLTH-ADM 5571 for PUB-ADM 5525, and HLTH-ADM 5578 for PUB-ADM 5544.

PUB-ADM 5535 Urban Policy And Administration Credits: 3
An examination of the formulation and administration of policies by urban governments. The course examines (a) the historical and intergovernmental contexts for decision making by urban governments, (b) the governmental forms and political processes employed in making these decisions, and (c) the various urban problems and service delivery issues which require decisions in the contemporary city.

PUB-ADM 5536 Managing Urban Economic Development Credits: 3
This course explores what managers in the public, nonprofit and private sectors need to know about urban economic development. Topics include (a) theories of urban economic development, (b) varying forms of development (e.g., attraction of new industries, central business district development, neighborhood economic development), (c) policy managerial tools for stimulating development, and (d) issues of equity in economic development.

PUB-ADM 5538 Comparative Urban Administration Credits: 3
An analysis of urban administration and planning in different comparative political, economic, and cultural settings. Analytical techniques will be applied to case studies of selected urban administrative processes involving American and other cities.

PUB-ADM 5539 Urban And Regional Planning For Urban Administrators Credits: 3
This course is designed to provide students in urban administration with a comprehensive overview of the planning process. Course topics include a review of planning and the problems of effective planning implementation.

PUB-ADM 5540 Regional and Local Government Systems Credits: 3
Relatively few of the problems confronting urban areas are confined to a single city and the most challenging problems usually require regional solutions. This graduate-level course examines the challenges encountered in governing metropolitan regions, the key actors in this process, and the means by which regional problems are identified and addressed. The topics covered in this course include: regional politics and the obstacles to intergovernmental cooperation; the role of councils of government and other regional bodies in metropolitan governance; and the powers, obligations, and roles of municipal and county government in regional systems of governments.

PUB-ADM 5541 Public Policy Development and Analysis Credits: 3
Public, nonprofit, and health organizations must navigate dense systems of complementary and contradictory public policies. These policies assign value to the actions of citizens, and are designed through a process of negotiation and analysis. In this course students will develop the frameworks and analytical methods necessary to understand the process of policy creation as well as the costs and benefits associated with any given policy, including the economic foundations for policy and the impact of policy on management decisions.

PUB-ADM 5544 Public Policy Evaluation and Analysis Credits: 3
Survey of the tools and procedures for evaluating and analyzing policies and programs in the public sector, including nonprofit and human services organizations. Consideration of such topics as definition of goals, developing measures of effectiveness, evaluation research designs, benefit-cost analysis, and the special problems of rational analysis in a political environment.
Prerequisites: PUB-ADM 5510 (or equivalent).

PUB-ADM 5548 Leadership For Public Service Credits: 3
The two core purposes of this course are for students to learn about effective and ethical leadership, and for students to understand and develop their own capacity for leadership. The course is organized around three general themes: 1) leadership as relations with subordinates, including issues of work motivation; 2) leadership as lateral relations, including organizational politics and conflict management and resolution; and 3) leadership as influence in the organization’s environment.

PUB-ADM 5551 Strategic Management In Nonprofit Organizations Credits: 3
This is an advanced course in the nonprofit management emphasis. Following review of the legal and economic uniqueness of private, nonprofit organizations, the course helps students develop a strategic framework and apply the key concepts to the management of nonprofit enities. Recommended
Prerequisites: PUB-ADM 495, PUB-ADM 5548 (or equivalent).

PUB-ADM 5552 Community Organizations And Public Policy Credits: 3
This course includes examination of both neighborhood organizations and organizations intended to promote other communities of interest. In relation to neighborhood organizations, topics considered include the varieties of neighborhoods, the role of neighborhood organizations in local politics, the use of neighborhoods in administrative and political decentralization, and federal policy toward neighborhood issues. In relation to other community organizations, topics considered include the basis of such organizations, their roles in public affairs and their effects on policy processes.

PUB-ADM 5553 Legal Framework & Financial Management Of Nonprofit Organizations Credits: 3
Utilizing a comparative approach the course examines the legal basis and tax treatment of private, nonprofit organizations in the U.S. Related topics also considered include concepts of fund and cost accounting, budgeting processes, earned income strategies, employee compensation and benefits practices, laws and regulations affecting lobbying, competition with business and unrelated business income tax.

PUB-ADM 5554 Seminar on Social Entrepreneurship Credits: 3
Seminar on Social Entrepreneurship is a graduate-level special-topics seminar that offers students from across the university the opportunity to engage in an In-depth examination of social entrepreneurship and how it is being understood, developed and practiced in the nonprofit sector. Students will gain a broad understanding of the various conceptions, types and aspects of social entrepreneurship, learn about processes for engaging in entrepreneurial nonprofit organization development, and discuss design and implementation issues with nonprofit leaders who have implemented various forms of social entrepreneurship.

PUB-ADM 5555 Topics In Nonprofit Fundraising Credits: 1-3
In order to flexibly treat the variety of strategies and techniques of charitable fundraising, these courses will usually be offered in variable credit hour segments, covering traditional and emerging fundraising topics. Each semester, two two-credit-hour segments and two one credit-hour segments will be offered. The two credit hour courses - Organizing for Successful Fund Raising" and "Creating and Implementing the Annual Development Plan" - cover the basics of fund raising. The one-credit hour courses allow students to explore several different issues related to fund raising such as direct marketing and planned giving. These courses are recommended for nonprofit management students.

PUB-ADM 5555A Topics In Nonprofit Fund Raising: Organizing For Successful Fund Raising Credits: 1-3

PUB-ADM 5555B Topics In Nonprofit Fund Raising: Creating & Implementing Annual Development Plans Credits: 1-3

PUB-ADM 5555C Topics In Nonprofit Fund Raising: Direct Marketing & Direct Mail In Fundraising Credits: 1-3

PUB-ADM 5555D Topics In Nonprofit Fund Raising: Planned Giving and Major Gift Solicitation Credits: 1-3

PUB-ADM 5555E Topics In Nonprofit Fund Raising: Contemporary Trends/Ethical Issues In Fund Raising Credits: 1-3

PUB-ADM 5555F Topics In Nonprofit Fund Raising: Prospect Research And Proposal Writing Credits: 1-3

PUB-ADM 5555G Topics In Nonprofit Fundraising Credits: 1-3

PUB-ADM 5556 Innovation In Nonprofit Management And Leadership Credits: 3
This course provides an opportunity for students in the nonprofit management specialization to examine "breaking" innovations in nonprofit management and leadership. Intra- and inter-sectoral collaborative strategies and total quality management are illustrative examples. Other topics will be considered as warranted. Recommended preparation: PUB-ADM 5525, PUB-ADM 5548 (or equivalents), and at least six hours of nonprofit management coursework.

PUB-ADM 5565 Topics In Urban Administration Credits: 1-3
To flexibly treat the variety of strategies, information, and techniques in urban administration and leadership, these courses will be offered in variable credit hour segments. Each semester, courses will be offered around traditional and emerging topics. An initial "basics" series will be offered on community development organizations, urban economic development and community development strategies.

PUB-ADM 5565A Community Economic Development:The Planning Context Credit: 1

PUB-ADM 5565B Community Economic Development Tools & Techniques Credit: 1

PUB-ADM 5565C Implementing Effective Community Economic Development Credit: 1

PUB-ADM 5565D Topics in Urban Administration Credits: 1-3
To flexibly treat the variety of strategies, information, and techniques in urban administration and leadership, these courses will be offered in variable credit hour segments. Each semester, courses will be offered around traditional and emerging topics. An initial "basics" series will be offered on community development organizations, urban economic development and community development strategies.

PUB-ADM 5570 Diversity In The Workplace Credits: 3
This course explores the many issues raised by the growing diversity of backgrounds (e.g., race, gender, culture) employees bring to the workplace. The course will examine diversity issues including demographics, relevant legislation, values questions, demands on management, and effects on service delivery to clients. To better illustrate the issues, some class sessions will feature guest lecturers representing a diversity of backgrounds and work settings.

PUB-ADM 5581 Seminar In Urban Administration Credits: 3
Advanced work on special topics in urban administration. Topics will vary.
Prerequisites: PUB-ADM 5535.

PUB-ADM 5582 Developing and Managing the Nonprofit Social Enterprise Credits: 3
This graduate-level course offers students from across the university the opportunity to learn about and better understand the processes and practices associated with developing and operating a nonprofit social enterprise. Students learn through team-based simulation experience what Is required to create and operate successful social enterprises, and engage in extensive discussions with nonprofit leaders who have implemented some form of social enterprise or other Innovative earned-Income initiative.

PUB-ADM 5585 Seminar In Public Affairs Credits: 3
Advanced work on special topics in public affairs.

PUB-ADM 5585A Seminar In Public Affairs Credits: 3
Advanced work on special topics in public affairs.

PUB-ADM 5585B Seminar In Public Affairs Credits: 3
Advanced work on special topics in public affairs.

PUB-ADM 5585C Seminar In Public Affairs Credits: 3
Advanced work on special topics in public affairs.

PUB-ADM 5587 Special Topics Credits: 3
This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

PUB-ADM 5595 Internship Seminar Credits: 1-3
Combined classroom study and field internship. To be offered only when government agency internships approved by the Public Administration Committee are available.
Prerequisites: 18 credit hours of completed courses.

PUB-ADM 5598A Supervised Research: Nonprofit Management Credits: 1-6

PUB-ADM 5598C Supervised Research: Urban Administration Credits: 1-6

PUB-ADM 5598G Supervised Research: Unspecified Credits: 1-6

PUB-ADM 5599 Thesis Credits: 1-9

PUB-ADM 5610 Inquiry In Public Administration And Affairs Credits: 3
This course is designed to provide Ph.D. students a thorough grounding in strategies of inquiry. Issues considered include competing metatheoretical paradigms and alternative conceptions of explanation in the social and policy sciences, the implications of such alternatives for empirical research, the variety and standards of qualitative and quantitative approaches to theory and research, theory construction, and research ethics. Contemporary problems in public administration and affairs research and theory are emphasized.

PUB-ADM 5620 Literature Of Public Affairs And Administration Credits: 3-6
This course grounds the student in the central ideas of the public affairs and administration literature and in the prominent themes of the discipline. The course is offered in two versions: A, in which the political science approach to public affairs and administration is emphasized; and B, in which the organizational theory and behavior approaches to public affairs and administration are emphasized. Ph.D. students whose coordinating discipline is public affairs and administration are ordinarily expected to complete both versions.
Prerequisites: PUB-ADM 5525, PUB-ADM 5526, and PUB-ADM 5544 (for PUB-ADM 5620A); PUB-ADM 5530, PUB-ADM 5548 (for PUB-ADM 5620B).

PUB-ADM 5620A Literature Of Public Affairs And Administration: Political Science Credits: 3-6

PUB-ADM 5620B Literature Of Public Affairs And Administration:Organizational Theory & Behavior Credits: 3-6

PUB-ADM 5699 Dissertation And Research In Public Affairs And Administration Credits: 1-12
Dissertation research and writing in the Public Affairs and Administration discipline.

PUB-ADM 5899 Required Graduate Enrollment Credit: 1

Reading (EDRD)

Courses

EDRD 5501 Teaching Of Reading Credits: 3
Basic theory and practice in reading instruction, with attention to individual needs.
Prerequisites: TCH-ED 415 (or equivalent).

EDRD 5502 Early Literacy and Language Development Credits: 3
This course focuses on the early foundations of literacy. Students will learn the developmental sequence of literacy acquisition, become familiar with early literacy assessments, and develop understanding of the linguistic foundations of literacy processes and instruction. (IRA standards 1.1, 1.3, 1.4, 3.1, 3.2)

EDRD 5510 Classroom-Based Literacy Assessment and Intervention Credits: 3
Diagnostic assessment of reading and writing for diverse learners in classroom contexts. This course includes a practicum with a secondary level student. Graduate students will administer individual assessments to a struggling reader, interpret patterns in data indicating strengths and challenges, plan appropriate instruction, monitor the student’s progress and write a case study describing the cycle of assessment, teaching and learning.
Prerequisites: EDRD 5502.

EDRD 5511 Reading Assessment And Evaluation Credits: 3
Study of procedures and instruments for characterizing and evaluating reading and related educational factors and skills. Students will administer and interpret ability tests customarily used in diagnosing reading problems.
Prerequisites: EDRD 5501.

EDRD 5515 Seminar In Reading Credits: 3
Understanding and designing research related to reading and literacy. Topics include research methodologies, understanding research articles, writing literature reviews and designing a research proposal.
Prerequisites: EDRD 5510.

EDRD 5520 Practicum in Reading Credits: 3
This course is a supervised field experience for master’s students to work with struggling readers in a modified classroom context. Graduate students will be expected to demonstrate their abilities to assess struggling readers, plan appropriate instruction, communicate with peers, and create a literate community for diverse learners.
Prerequisites: EDRD 5510.

EDRD 5530 Reading Instruction for English Language Learners, K-12 Credits: 3
This course investigates ways to differentiate reading instruction to meet needs of English language learners with different levels of language proficiency and at different developmental and academic levels. The course focuses on research findings related to literacy development of diverse learners and ways to strengthen diverse classroom communities.

EDRD 5541 Teaching Reading Improvement: Secondary, College, and Adult Levels Credits: 3
Classroom and laboratory techniques for upper level reading instruction; including study skills; reading speed and flexibility, and vocabulary improvement.

EDRD 5601 Organizing And Guiding The Reading Program Credits: 3
An investigation of several procedures for organizing developmental and special reading programs with emphasis on effects of such plans on the role of the reading specialist and the impact on the school environs.
Prerequisites: EDRD 5510.

EDRD 5650 Seminar In Dyslexia And Related Learning Disabilities Credits: 3
A systematic study of the likely etiology and treatment of dyslexia and related learning disabilities. Topics include: hereditary, sensory-motor, perceptual-motor, and psychological and neurophysiological problems.
Prerequisites: EDRD 5510.

Real Estate (RL-EST)

Courses

RL-EST 5555 Real Estate Forum Credit: 1
Real estate is an interdisciplinary field of study which involves a number of related professions. In this course students will be exposed to the full array of disciplines by listening to, and interacting with, a series of industry leaders. These leaders will be drawn from such fields as architecture, brokerage, construction, development, consulting/appraisal, finance, investment, law and global fields. The course will be open to students from across campus to help sensitize others to the breadth of the discipline and the nature of inquiry and career paths it entails. Students will learn the entrepreneurial spirit that it takes to succeed.

RL-EST 5556 Entrepreneurial Real Estate Process Credits: 3
This interdisciplinary course adopts an entrepreneurial approach to the real estate process spanning concept generation, planning, research, acquisition, design, construction, finance, and investment. The course is open to students from various units across campus. Students will engage in experiential learning to sensitize them to the breadth of inquiry, critical thinking and analysis involved in contemporary real estate. Instruction focuses on creation of optimal spatial solutions for targeted users on targeted sites that are economically viable, sustainable and environmentally responsible. The course emphasizes the importance of focusing on value creation, control and capture across the full life cycle of real estate.

RL-EST 5557 Urban Planning Contexts for Real Estate Decisions Credits: 3
Overview of forces and trends affecting community growth and change history, ecology, economics, demography, design and development pertaining to human settlement patterns and their interrelationship in the urbanization process, especially at the national, regional, townscape and neighborhood level.

RL-EST 5558 Capital Markets Credits: 3
The course examines the influence of capital markets on real estate by covering the structure and operation of the private and public, debt and equity real estate capital markets, as well as derivative markets that involve real estate. A thorough range of topics in equity real estate investment are examined including: private equity markets, private equity deal structuring, public and private real estate investment trusts (REITs), measuring risk and return; structuring optimal portfolios, portfolio valuation issues, valuing publicity traded real estate securities, performance evaluation and attribution, and real estate risk management techniques. This course also covers a variety of topics in commercial real estate debt markets including: the structure of the US mortgage finance system, and the valuation of mortgages and commercial mortgage backed securities.

RL-EST 5559 Corporate Real Estate Credits: 3
This course concentrates on the decisions any business faces when it comes to finding a location/s in which to operate their business/s. It deals with financial and subjective decision making models to chose a location that will create the lease occupancy cost to the business owner as well as maximizing the operation of their business. Various modeling techniques will include Lease vs Lease Analysis; Lease vs Own Analysis, Location Factor Analysis standard lease provisions, construction management topics and public-private incentives and the impact on a corporate financial statement under the current regulations of FASB 13.

RL-EST 5571 Real Estate Finance Credits: 3
This course introduces students to the full spectrum of real estate finance and investment analysis. It helps students quantify the financial implications of various real estate decisions for individual properties as well as more strategic decision-making applied to real estate portfolios. Using a combination of experiential and incremental learning students develop the foundation skills necessary to support more advanced concepts and financial theory. The course explores time value of money, law, leverage, underwriting, discounted cash flow, investment analysis, and capital markets. Students also develop advanced modeling skills and learn how to apply state-of-the art financial packages to support decisions.
Prerequisites: RL-EST 5556.

RL-EST 5572 Global Real Estate Credits: 3
Globalization is one of the key forces that have forced the real estate industry to recognize that while real estate may be located in a specific market, it is subject to a number of national and global forces. In this course, students will learn how globalization of the business, economic and capital markets affects real estate and how global capital flows affect the value of individual investments. Students will also learn how globalization has affected the key players –developers, investors, space users and lenders— and the impact on how they approach real estate on a country-specific and global basis.
Prerequisites: RL-EST 5571.

RL-EST 5573 Real Estate Feasibility and Market Analysis Credits: 3
This course helps students develop entrepreneurial, fact-based approaches to problem-solving and decision support. It incorporates experiential learning to help students deploy quantitative and qualitative approaches that incorporate the perspectives of space users, space producers, and market facilitators. Students learn how to address the goals and objectives of a particular client, while also considering the externalities and impacts such decisions have on the built environment. Students will integrate critical thinking with spatial and financial analytical methods and state-of-the-art tools to quantify market demand and to translate that demand to a spatial solution that is marketable and financially feasible.
Prerequisites: RL-EST 5556.

Co-requisites: ENT 5576.

RL-EST 5574 Real Estate Construction and Development Credits: 3
This course explores principles and techniques of construction project management and real estate development. Adopting a holistic perspective it places the production of real estate in a broader context of product life cycles drawing on systems analysis, planning, programming, budgeting and staffing, controlling major projects. Students apply experiential learning and assume the role of a developer who marshals the resources needed to produce real estate. It explores new projects and renovation of existing space with emphasis on customizing products to fit user needs. The course sensitizes students with emphasis on creating sustainable products that are socially responsible and economically viable.
Prerequisites: RL-EST 5556.

RL-EST 5575 Real Estate Taxation Credits: 3
This course concentrates on factors affecting real estate investments; legal forms of ownership, depreciation, tax basis, tax impacts on exchanges, syndications, real estate securities, and other federal laws affecting real estate.

RL-EST 5576 Real Estate Property and Portfolio Management Credits: 3
This course explores the complexities and integration of property and portfolio management which are critical to the creation, control and capture of real estate value. Students learn how to approach real estate in a more holistic manner by integrating management functions that range from individual property types to portfolios of properties. Students learn how to incorporate marketplace factors in their decisions and apply modern portfolio theory and other tools to construct and manage properties and portfolios in a socially responsible manner. Using experiential methods students learn to apply critical thinking to solve complex property and portfolio management problems.
Prerequisites: RL-EST 5571.

RL-EST 5577 Real Estate Valuation Credits: 3
This course provides students with an understanding of real estate appraisal garnered through a combination of lectures, projects and discussions. Students explore valuation theory, behavioral processes, and the unique nature of the inefficient real estate market. Through hands on exercises that constitute the experiential learning students apply best practices embedded in the three approaches to value that underpin real estate appraisal: cost, income and sales comparisons. Students also analyze the impact of macroeconomic conditions, supply/demand conditions, capital flows, and investor behavior. Students develop proprietary valuation models and apply appropriate quantitative tools and software for predicting most probable prices.
Prerequisites: RL-EST 5556.

RL-EST 5578 Legal Context of Real Estate Credits: 3
This interdisciplinary course acquaints business and law school students with legal issues in development, ownership and operation of commercial real estate. It also explores the roles of various professionals in real estate transactions. Students will learn legal concepts and terminology, and acquire familiarity with key issues and documents relating to real estate decisions and entrepreneurship, including leasing, insurance, negotiations, construction and architect’s contracts, transactions, regulation, financing and bankruptcy. Students learn how to apply risk management to design and construction contracts, insurance, bonding and indemnification, as well choice of business entity, income tax planning and negotiation of joint ventures.

RL-EST 5579 Real Estate Capstone Credits: 3
This course is a group simulation of an actual case in real estate that enables students to utilize all of their previous course experience on a real-world case in real estate. It is intended that this case study will enable students to appreciate the multiple facets of real estate, and the need to call upon the tools, concepts and skills taught in the analysis of the highest and best use of the subject property.

RL-EST 5587 Special Topics Credits: 3
This course is designed to facilitate one of two purposes: an initial offering of a new course (prior to formal approval) or an initial and possible only offering of new topics.

RL-EST 5595 Internship Credits: 1-3
An opportunity for students to integrate their academic studies via employment with a business/organization in the community.

RL-EST 5597 Real Estate: Independent Study Credits: 1-6
Independent study and research in areas of special interest under individual faculty direction.

RL-EST 5899 Required Graduate Enrollment Credit: 1

Religious Studies (RELIG-ST)

Courses

RELIG-ST 5500 Special Topics In Religious Studies Credits: 1-3
Special topics in religious studies. The focus of the course will vary by semester and instructor.

RELIG-ST 5500A Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5500B Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5500C Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5500D Special Topics in Religious Studies Credits: 1-3

RELIG-ST 5500E Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5500F Special Topics In Religious Studies Credits: 1-3

RELIG-ST 5501A Religion In America Credits: 3
An in-depth examination of selected aspects of the history of religions in America from the colonial period to the present. Special emphasis will be given to methodological issues in the study of American religious history.

RELIG-ST 5502 Religion & Colonialism in Latin America Credits: 3
The study of selected aspects of the history of religions in the Americas. Primary focus is on the complex ways that European, Native American Africans religions helped to structure and negotiate the experiences and the significance of cultural contact and colonialism through lived worlds of meaning.

RELIG-ST 5503 Visions, Dreams, and Prophesies as Religious Phenomena Credits: 3
This course explores the way visions, dreams, and prophesies have acquired religious significance in Western and non-western contexts from the ancient to the present.

RELIG-ST 5504 Gender and Religion Credits: 3
Cross-cultural and comparative study of how religious groups create and transmit gender roles and expectations.

RELIG-ST 5506 The History of Christianity to the Middle Ages Credits: 3
This course examines the historical and theological development of Christianity from its origins to the the High Middle Ages The main themes follow the mechanisms and conditions shaping Christianity’s expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.
Cross Listings: HISTORY 5506A.

RELIG-ST 5507 The History of Christianity from the Middle Ages to the Present Credits: 3
This course examines the historical and theological development of Christianity from the High Middle Ages to the present. The main themes follow the mechanisms and conditions shaping Christianity’s expansion into a major social, institutional and intellectual force with a focus on patterns of crisis and reform. This course is based on the study of primary sources (both texts and objects) and modern scholarship.
Cross Listings: HISTORY 5507A.

RELIG-ST 5508 Anthropology of Religion Credits: 3
This course explores the ways anthropologists have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

RELIG-ST 5510 Religions Of The World Credits: 3
This course is designed to introduce graduate students to the major religions of the world, as well as to selected small-group religions. Our goal will be to learn to appreciate the similarities and differences in the structure and history of these religions. A primary focus will be on using the categories of the history of religions to examine and analyze the various dimensions of religion (e.g., historical, sociological, ritual, mythological, aesthetic). In addition, methodological issues of comparison will be addressed.

RELIG-ST 5567 Myth and Ritual Credits: 3
Myth and "ritual" have long been fundamental categories in the study of religion. This course will briefly survey some of the major theories and approaches to the study of myth and ritual from the Enlightenment to the present. Will not only trace the shifting meanings of "myth" and "ritual," but will critically evaluate the utility of diverse approaches to the study of religious phenomena designated by these terms. Reading will include theoretical works, as well as selected case studies.

RELIG-ST 5584RS Sacred Narratives And Texts Credits: 3
This course will study the "social lives" of sacred narratives and texts as they circulate within religious communities. Among the topics to be studied are methods of exegesis in different religious traditions, orality and literacy (including the reoralization of written texts), the canonization process, the emergence of interpretive specialists, text as amulets, reading and meditative practices and techniques, and narratives and the arts. The course is comparative, cross-cultural, and interdisciplinary in nature.

RELIG-ST 5586RS Methodological Approaches To The Study Of Religion Credits: 3
This course examines the various disciplines that undertook the critical, objective study of religion beginning in the second half of the nineteenth century and continuing into the present. The course examines how the disciplines of the social sciences and humanities emerged in the last century and how the study of religion emerged from its roots in Jewish scholarship and Christian theology to be included under the umbrella of the humanities and social sciences. The historical development of religious studies as a historical and intellectual contexts.

RELIG-ST 5587 Contemporary Approaches to the Study of Religion Credits: 3
A survey of major scholars and theorists of religion from 1950 to the present, with an emphasis on significant shifts in the field.

RELIG-ST 5587RS Research Seminar Credits: 3
Students in this course will produce a major research paper under the direction of the instructor: a self-contained thesis chapter, an article for publication or the equivalent.

RELIG-ST 5592 Cults Sects, And New Religious Movements Credits: 3
In this course, students will experience: (a) a variety of methods for analyzing and understanding new religious movements in society: sociological, historical, and textual; (b) an introduction to the broad spectrum of religious beliefs which exist (and flourish) outside the cultural mainstream; and (c) an introduction to some of the means by which dominant religious and secular culture has confronted the presence of NRMs-e.g., deprogramming exit counseling, and theologically oriented countermovement.

RELIG-ST 5593 Sex And Religion Credits: 3
The course is designed to highlight issues related to the various ways in which religions of the world have integrated, embraced, or repressed one of the basic human experiences sexual expression. This is an elective course designed for graduate students with Religious Studies either as their coordinating or co-discipline. This is an advanced seminar, and as such does assume a certain measure of theoretical familiarity and background of study.

RELIG-ST 5594RS Death In The History Of Religions Credits: 3
As a biological "fact," death would appear to be a human universal. Yet, human beings have imagined--and, thus experienced--the meaning of death in many diverse ways in different cultures and over time. This course explores the conceptualization and representation of death and dying, as well as the ritual activities surrounding death, found in selected religious communities. The goals are to gain insight into how people have sought to (re) create a world of meaning in the face of death and to gain a critical perspective on our own contemporary situation.

RELIG-ST 5595RS Time And Space In The History Of Religions Credits: 3
Time and space are essential components of the lived worlds of human beings, yet the cultural and historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space found in selected religious communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period. Time and space are essential components of the lived worlds of human beings, yet the cultural and historical constructions of these are remarkably diverse and, moreover, are subject to change. This course is a cross-cultural, interdisciplinary, and comparative exploration of the constructions and experiences of time and space found in selected religious communities and historical periods. In addition, it investigates the pivotal role the categories of "sacred and profane time and space" have played in theorizing religion and in the study of religious myths and rituals in the modern period.

RELIG-ST 5596RS Body In The History Of Religions Credits: 3
The human body is the site of extensive imaginal and ritual activities in all religious traditions. This course explores some of the diverse ways religious communities have imagined and experienced the human body, as well as how the body had been manipulated and worked on in an effort to transform the human situation in the world.

RELIG-ST 5597RS Non-Thesis Research/Reading Credits: 1-6
Individual direction of student reading or research by selected, consenting faculty. This course can be taken only when faculty supervision is unavailable in colloquia or seminars.

RELIG-ST 5598RS Seminar In The History Of Religions Credits: 3
Advanced graduate seminar on a selected topic or problem in the History of Religion. Topic varies, but the seminar will have a methodical or theoretical focus. May be repeated for credit when topic is different.

RELIG-ST 5680RS Doctoral Colloquium Credits: 3
This course will examine the writings and theories of major scholars in a particular area of Religious Studies. The authors, works and intellectual currents which form the basis of the colloquium will vary from semester to semester depending upon the professor’s expertise and design for the course.

RELIG-ST 5687RS Doctoral Research Seminar Credits: 3
Students in this course will produce a major research paper under the direction of the instructor. This shall consist of a self-contained chapter of the dissertation or a work of publishable quality. May be repeated for credit.

RELIG-ST 5697RS Doctoral-Level Independent Readings Credits: 1-6
Individual reading under the supervision of members of the Religious Studies Doctoral faculty and adjuncts in preparation for the Comprehensive Examination for the Ph.D.

RELIG-ST 5699RS Dissertation Credits: 1-15
Course credits in dissertation.

RELIG-ST 5899 Required Graduate Enrollment Credit: 1

Research Methodology - Dentistry (RES-ME)

Courses

RES-ME 5700 Introduction To Research Methodology Credits: 2-3
This lecture/discussion course will facilitate student's understanding of terminology and key concepts of research methodology and design. Assigned exercises are designed to demonstrate application of research design principles, and to increase advanced education students' competency in evaluating and planning scientific studies. This knowledge is indispensable for conducting meaningful research in advanced education certificate, masters of doctoral level programs.

RES-ME 5701 Topics in Advanced Research Methodology Credits: 2-4
A lecture/seminar course on selected advanced research methodology topics which are to be determined in conjunction with participants. Such topics may include advanced experimental designs in the literature, etc.

RES-ME 5702 Special Problems in Research Methodology Credits: 2-4
A student will work with a faculty member on methodological aspects of a research proposal or project.

RES-ME 5703 Thesis Writing Credit: 1
The methods of preparing, organizing, and presenting research findings using scientific writing format will be reviewed for completing a thesis. This course is required for the Master of Science degrees in Oral Biology and Dental Hygiene Education.

RES-ME 5704 Introduction to Biostatistics Credits: 2-3
A lecture/seminar course required for students pursuing a master's degree. This course focuses on an in-depth coverage of statistical designs commonly found in dental research, statistical techniques associated with these designs, application to them via the use of a computer based statistical software analysis package, and the interpretation of statistical tests.
Prerequisites: RES-ME 5700.

RES-ME 5705A Design Of Clinical Research Studies Credits: 2
Students enrolled in this course will learn the elements of a good clinical research study. Additionally, students will develop a draft protocol for a clinical research project, estimate time and budget needs for the project, and be sensitive to ethical issues in the conduct of clinical research.

RES-ME 5705B Statistical Analysis For Clinical Research Credits: 2
Techniques for analyzing complex clinical research designs are a major focus of this course. Students will also learn analytic techniques for estimating failure in biomaterials as well as epidemiologic techniques.

RES-ME 5705C Introduction To Statistical Software Credits: 2
Students enrolled in this course obtain hands-on experience with comprehensive statistical analysis programs, including SPSS and SAS. Students will learn to establish and verify data files, generate program files, and develop strategies for documenting files for improved accountability and reproducibility.

RES-ME 5706 Dissertation Writing Credit: 1
Scientific writing format appropriate for preparing a dissertation will be reviewed. This course is required for the Interdisciplinary Ph.D. degree in Oral Biology.

Research and Psychology (EDUC-R&P)

Courses

EDUC-R&P 5502 Advanced Educational Psychology Credits: 3
Critical examination of the contributions of psychological principles and findings to the field of education.

EDUC-R&P 5505 Statistical Methods I Credits: 3
Non-theoretical approach to statistical procedure, including introduction to simple analysis of variance.

EDUC-R&P 5508 Principles And Methods Of Research Credits: 3
Introduction to the analysis of research literature including types of research, methodology, design and data analysis.

EDUC-R&P 5510 Child Behavior And Development Credits: 3
Growth, maturation, and learning processes in children.

EDUC-R&P 5512 Adolescent Development And The School Credits: 3
An overview of adolescent development from preadolescence to adulthood, focusing on major theories and aspects of adolescent development, critical issues of adolescence today, and the role of professional educators in facilitating positive development.

EDUC-R&P 5513 Life Span Human Development Credits: 3
This course introduces students to the theories and research of biological, cognitive, social and personality development across the lifespan, within the layers of context of people's lives. Special attention is given to the role in development of social class, gender, ethnicity and culture.

EDUC-R&P 5522 Principles Of Testing Credits: 3
Measurement theory, uses and limitation of assessment procedure.

EDUC-R&P 5525 Data Driven Decision Making to Guide Instruction Credits: 3
This course provides and introduction and overview to classroom instructors on how to assess student progress on educational standards and use the results to make instructional decisions.

EDUC-R&P 5555 Statistical Methods II Credits: 3
Non-theoretical approach to statistical procedure, including introduction to factorial ANOVA and multiple regression.
Prerequisites: EDUC-R&P 5505 or an equivalent introductory statistics course.

EDUC-R&P 5564 Instructional Design Credits: 3
Overview of learning theories and pedagogical models as related to the principles and methods of instructional design. Emphasis on the planning, design, implementation and evaluation of instructional systems including focus on technology integration.

EDUC-R&P 5575 Internship Credits: 3-16
Applied experiences in a planned, supervised program in research or educational psychology.

EDUC-R&P 5576 Educational Technology Credits: 3
History of responsive technology in education, principles of learning and strategies in programming instructional materials, methods of evaluation, and current research methodologies in educational technology.

EDUC-R&P 5589 Special Topics In Education Credits: 1-6
A course designed to deal with a topic in educational research or educational psychology which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-R&P 5589AD Special Topics in Education Credits: 1-6

EDUC-R&P 5589AT Special Topics in Education Credits: 1-6

EDUC-R&P 5589CH Special Topics in Education Credits: 1-6
Special Topics in Education

EDUC-R&P 5589CP Special Topics In Education Credits: 1-6

EDUC-R&P 5589DB Special Topics In Education Credits: 1-6
A course designed to deal with a topic in educational research or educational psychology which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-R&P 5589HL Special Topics in Education Credits: 1-6

EDUC-R&P 5589IS Special Topics in Education Credits: 1-6

EDUC-R&P 5589PE Special Topics In Education Credits: 1-6

EDUC-R&P 5589PR Special Topics In Education Credits: 1-6

EDUC-R&P 5589SE Special Topics In Education Credits: 1-6

EDUC-R&P 5590 Individual Studies Credits: 1-6
Review of the research and trends relative to selected problems in educational research or psychology.

EDUC-R&P 5604 Cognitive Processes In Learning And Instruction Credits: 3
Examination of current research and theory in cognitive aspects of learning, thinking, comprehension and classroom processes, especially as they relate to classroom settings. Designed to present background essential for an understanding of much contemporary inquiry in many fields of educational thought and practice.
Prerequisites: EDUC-R&P 5502, EDUC-R&P 5510 and EDUC-R&P 5512.

EDUC-R&P 5605 Quantitative Analysis I: Regression And Analysis Of Variance Credits: 3
This graduate level statstics course for students in education and the behavioral sciences provides a strong conceptual understanding of two major statistical procedures within the context of the general linear model: Multiple regression and numerous analysis of variance (ANOVA) models. Students will learn to select appropriate statistical software, and report the results of their analyses in the format of the American Psychological Association.
Prerequisites: EDUC-R&P 5505 and EDUC-R&P 5508 (or PSYCH 302WI).

Cross Listings: PSYCH 5516.

EDUC-R&P 5606 Quantitative Analysis II : Multivariate Data Analysis Credits: 3
This graduate level statistics course for students in the behavioral sciences and education provides a strong conceptual understanding of advanced topics in regression (interaction effects, logistic regression, path analysis) and various multivariate techniques (MANOVA, canonical correlation, factor analysis). Students will complete a series of data based projects that allow them to demonstrate their skills in analysis, reporting, and interpretation of findings.
Prerequisites: EDUC-R&P 5605 (or PSYCH 5516) and EDUC-R&P 5508 (or PSYCH 302WI).

Cross Listings: PSYCH 5517.

EDUC-R&P 5608 Introduction To Graduate Research Credits: 3
This course provides an introduction to qualitative and quantitative research methods. It is designed for students beginning their study in a doctoral program.
Prerequisites: doctoral student status.

EDUC-R&P 5609 Development and Evaluation of Assessment Tools Credits: 3
This survey course examines test theories, construction, and measurement theories. Within the context of a variety of conceptual frameworks and examples, students become knowledgeable about the various purposes, approaches, and computer software tools for measurement.
Prerequisites: EDUC-R&P 5606 or PSYCH 5517.

Cross Listings: PSYCH 5538.

EDUC-R&P 5610 Research Design & Methodology Credits: 3
An introduction of methodology and design in the behavioral and health sciences. The course will cover: (a) the key terms and concepts of design and methodology, (b) how to apply those concepts to the construction and criticism of designs, and (c) ethical issues for conducting human and animal research.
Prerequisites: EDUC-R&P 5555 or EDUC-R&P 5605.

EDUC-R&P 5611 Structural Equation Modeling Credits: 3
Students will learn core techniques in structural equation modeling, including: path analysis, confirmatory factor analysis, structural regression models; and be introduced to advanced topics such as multi-group SEM and latent growth models. There will be multiple lab sessions using appropriate computer applications.
Prerequisites: EDUC-R&P 5606 (or PSYCH 5517) and EDUC-R&P 5609 (or PSYCH 5538).

EDUC-R&P 5612 Applied Quantitative Research in Education Credits: 3
This class provides an in-depth examination of experimental and non-experimental quantitative research techniques, with a focus on their application in educational research. Students develop a proposal for a quantitative research study, including review of literature, development of research questions and hypotheses; and selection of appropriate research design, data collection techniques, and statistical analyses.
Prerequisites: One semester of statistics at the doctoral level.

EDUC-R&P 5613 Hierarchical Linear Models Credits: 3
Students will be introduced to hierarchical linear modeling techniques. Foundational topics include the rationale for using hierarchical linear models, issues related to assumptions and data screening, and a dissection of the components of a two-level organizational effects hierarchical linear model. Special topics to be discussed include growth modeling, three-level models, dyadic models, and models with categorical outcome variables (i.e., hierarchical generalized linear models). Multiple class sessions will be devoted toward use of software to build and analyze these models.
Prerequisites: EDUC-R&P 5606 and EDUC-R&P 5609.

EDUC-R&P 5615 Qualitative Research Theory & Design Educational Setting. Part 1 Credits: 3
Students will be introduced to qualitative research theory and design.
Prerequisites: EDUC-R&P 5505 and EDUC-R&P 5508.

EDUC-R&P 5616 Qual Data Collection And Analysis In Educational Settings. Part 2 Credits: 3
Students will gain experience in qualitative data collection and analysis.
Prerequisites: EDUC-R&P 5615.

EDUC-R&P 5625 Program Evaluation For Education & Social Credits: 3
Program evaluation is an applied research area that focuses on providing summative and formative data about the progress of an organization or program. This doctoral seminar will focus on learning to identify the goals, objectives and assumptions inherent in a program, and on designing a methodology to assess progress towards the goals. All students will develop a comprehensive evaluation plan for a program of their choice.
Prerequisites: EDUC-R&P 5505, EDUC-R&P 5522, and EDUC-R&P 5508 or EDUC-R&P 5608.

EDUC-R&P 5639 Educational Psychology: Focus on Teaching in Higher Education Credits: 2-3
An introduction to theories and principles from educational psychology as they relate to learning, motivation, assessment, and instruction.
Prerequisites: Doctoral Student Status.

EDUC-R&P 5640 Apprenticeship And Conference In College Training Credits: 1-3
Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors.
Prerequisites: EDUC-R&P 5639.

EDUC-R&P 5690 Special Problems Credits: 1-6
Individual studies; thesis exploration, special reading.

EDUC-R&P 5698 Dissertation In Educational Research & Psychology Credits: 1-16
Dissertation In Educational Research Psychology

Saxophone (SAXOPH)

Courses

SAXOPH 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: SAXOPH 300.

SAXOPH 5500A Graduate Saxophone-Secondary Credits: 2

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

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

SAXOPH 5500JA Graduate Applied Jazz Studies Credits: 2
One-hour lesson weekly. Jury examination is required.
Prerequisites: Graduate standing.

SAXOPH 5500JB Special Applied Jazz Studies Credits: 2
One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.
Prerequisites: Graduate standing.

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

SAXOPH 5501 Graduate Saxophone - Masters Performance Credits: 4

SAXOPH 5601 Graduate Saxophone - Doctoral Performance Credits: 4

School of Graduate Studies (SGS)

Courses

SGS 5501 Disability and Community Support Credits: 3
This is an academic service-learning course that will integrate 15 classroom contact hours with 60 service hours within a framework of Disability Studies.
Prerequisites: LAW 8815S.

SGS 5590A Special Topics Credit: 1

SGS 5590B Special Topics Credit: 1

SGS 5590C Special Topics Credit: 1

SGS 5590D Special Topics Credit: 1

SGS 5590E Special Topics Credit: 1

SGS 5590F Special Topics Credit: 1

SGS 5651A Preparing Future Faculty I Credit: 1
Course is the first in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. Course development and exploring the various roles and responsibilities of university faculty members are the emphases of the first two courses.
Prerequisites: Year I Preparing Future Faculty Fellow or doctoral student recommended by two faculty members in student’s doctoral program.

SGS 5651B Preparing Future Faculty II Credit: 1
Course is the second in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. Course development and exploring the various roles and responsibilities of university faculty members are the emphases of the first two courses.
Prerequisites: SGS 5651A.

SGS 5652A Preparing Future Faculty III Credit: 1
Course is the third in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5652A and SGS 5652B is on the teaching/classroom experience including using technology effectively. Students may enroll simultaneously in SGS 5651A and SGS 5652A.
Prerequisites: Year 2 Preparing Future Faculty Fellow, or recommendation by two faculty members in student's doctoral program.

SGS 5652B Preparing Future Faculty IV Credit: 1
Course is the fourth in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5652A and SGS 5652B is on the teaching/classroom experience with a focus on using technology effectively. Students who have completed SGS 5651A and SGS 5652A may enroll simultaneously in SGS 5651B and SGS 5652B.
Prerequisites: SGS 5652A.

SGS 5653A Preparing Future Faculty V Credit: 1
Course is the fifth in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5653A and SGS 5653B is on academic collaboration and preparing for the academic job market. Students may enroll simultaneously in SGS 5652A and SGS 5653A.
Prerequisites: EDUC-R&P 5639 (or equivalent) and either Preparing Future Faculty Fellow or recommendation by two faculty members in student's doctoral program.

SGS 5653B Preparing Future Faculty VI Credit: 1
Course is the last in a 6-course series focusing on teaching at a college or university and exploring the opportunities at, and differences among, various types of institutions of higher education. The emphasis in SGS 5653A and SGS 5653B is on academic collaboration and preparing for the academic job market. Students who have completed SGS 5652A and SGS 5653A may enroll simultaneously in SGS 5652B and SGS 5653B.
Prerequisites: SGS 5653A.

Social Sciences (SOC-SCI)

Courses

SOC-SCI 5610 Philosophy Of Social Science Credits: 3
This course examines the development of the philosophy of science since the end of the 19th century. In this regard, Positivism, Conventionalism, and Realism as the three major conceptions of science will be studied and their significance as philosophical foundations of the social sciences will be assessed. Particular attention will be given to the emerging philosophy of science (i.e., Scientific Realism) which has profoundly challenged the more established Positivism.

SOC-SCI 5621 Consensus Social Theory Credits: 3
This course explicates the connections between mainstream (or orthodox) approaches in the various social sciences, which can be collectively viewed as Capitalist interdisciplinary social theory, Explication entails positivist philosophy of science, classic liberal political philosophy, neo-classical economics, pluralist political science, human ecology and functionalist sociology.
Prerequisites: SOC-SCI 5610.

SOC-SCI 5622 Pragmatism & Evolutionary Social Theory Credits: 3
Drawing on the classical pragmatism of Peirce and Dewey as the philosophical framework for inquiry, and the institutional economics of Veblen, Commons, Mitchell, and Ayres, this course develops Evolutionary Social Theory as a paradigm for interdisciplinary social science.

SOC-SCI 5630 Seminar in Research Methodology Credits: 3
This course assists students with the establishment of a framework for their dissertation research that represents a substantive integration of their coordination discipline with the SSC program. The ultimate goal of the seminar is a defensible dissertation proposal for each student. Includes opportunity for participation by supervisory committee members.
Prerequisites: SOC-SCI 5610, SOC-SCI 5621, and 1 Critical Theory course.

SOC-SCI 5641 History of a Social Science Discipline Econ Credits: 3
The course examines the social and political development of economics that underpins the development of economic theory in the 20th century.
Prerequisites: SOC-SCI 5610.

SOC-SCI 5690 Special Doctoral Reading in Social Science Credits: 1-3
Special Research Topic in Interdisciplinary Social Science at The Doctoral Level

SOC-SCI 5690A Special Topics Credits: 1-3

SOC-SCI 5690B Special Topics Credits: 1-3

SOC-SCI 5690C Special Topics Credits: 1-3

SOC-SCI 5899 Required Graduate Enrollment Credit: 1

Social Work (SOC-WK)

Courses

SOC-WK 5510 Foundation Field Practicum I Credits: 3
Students spend 16-hours weekly in a generalist field practicum setting under MSW supervision Participation in a 12-hour integrated field seminar on campus led by faculty is required.
Prerequisites: SOC-WK 5530 or SOC-WK 5531.

Co-requisites: SOC-WK 5532.

SOC-WK 5511 Foundation Field Practicum II Credits: 3
Students continue the field practicum experience from SOC-WK 5510 and participation in the integrated seminar on campus. Focus on generalist knowledge, values, and skills.
Prerequisites: SOC-WK 5510 and SOC-WK 5532.

Co-requisites: SOC-WK 5533.

SOC-WK 5512 Advanced Field Practicum I Credits: 3
Students are placed in a field setting in their chosen field-of-practice concentration approximately 16 hours per week under the supervision of an MSW field instructor. One concentration seminar must be taken prior to or concurrently with entering this field placement.
Co-requisites: SOC-WK 5540.

SOC-WK 5513 Advanced Field Practicum II Credits: 3
Students complete a final semester in their field-of-practice concentration agency setting approximately 16 hours weekly under MSW supervision.
Co-requisites: SOC-WK 5541.

SOC-WK 5530 Human Behavior: Individuals In The Social Environment Credits: 3
This theory course focuses on the interactional context of human behavior essential to all social work practice. A variety of perspectives are considered in the understanding of the individual; developmental, ecosystemic, biopsychosocial, traditional, and alternative. Diversity and resiliency are the are key course concepts.

SOC-WK 5531 Human Behavior: Families, Groups, Organizations, And Communities Credits: 3
This theory course applies social work's ecosystemic framework to the understanding of human behavior in families, groups, organizations, and communities. Knowledge and applied theories and paradigms are examined that honor social justice, human diversity, strenghts/assets, and community-building to enhance effective social work practice.
Prerequisites: SOC-WK 5530.

SOC-WK 5532 Foundations Of Social Work Practice I Credits: 3
This course examines the fundamental knowledge, values, and skills of generalist social work practice with a focus on person-in-environment. Course topics include values and ethics, collaborative approaches to helping,stages of the helping process, and beginning practice skills with at-risk populations.
Co-requisites: SOC-WK 5510.

SOC-WK 5533 Foundations Of Social Work Practice II Credits: 3
This second generalist social work practice course examines effective helping approaches with diverse families, small groups, and communities of identify and/or place. The course also introduces values and working styles for professional practice in organizations.
Prerequisites: SOC-WK 5532 and SOC-WK 5510.

Co-requisites: SOC-WK 5511.

SOC-WK 5534 Social Welfare Programs And Policies Credits: 3
This course examines social policies that direct current social service trends at local, state, and federal levels. Students learn a model of analysis that examines the context in which policy decisions are made and the effects that social service programs and policies have on people's lives.

SOC-WK 5535 Social Welfare Policy Practice Credits: 3
This course prepares students with a social justice/empowerment orientation and the knowledge, skills and values needed to become an effective policy advocate, particularly with people who experience the effects of poverty, discrimination, exclusion, and oppression.
Prerequisites: SOC-WK 5534.

SOC-WK 5536 Social Work Research Methods Credits: 3
This course introduces students to the fundamental knowledge and skills of social work research such as practice evaluation, program planning, and other facets of professional social work practice. Emphasis on application of social research methods in actual practice situations will be used to assist students in skill development.

SOC-WK 5537 Quantitative Social Work Research Methods Credits: 3
This course is designed to prepare graduate level students to develop a comprehensive understanding of statistical method application to social work research. Students will gain a basic understanding of the research and statistical procedure that are needed for clinicians/researcher to operate within the field today. Students will become proficient in reading analyzing and assessing the results of social work publications.
Prerequisites: SOC-WK 5536.

SOC-WK 5538 Advanced Standing Seminar: Contemp Trends In Social Work Practice Credits: 3
This required seminar is designed for BSW's entering the Advanced Standing Program and serves to update and integrate social work practice approaches with contemporary perspectives of human behavior in the social environment.
Prerequisites: Advanced Standing Student.

SOC-WK 5539 Adv Standing Sem: Emerging Iss In Soc Welfare Policy And Research Credits: 3
This required seminar in the Advanced Standing Program examines emerging policy issues and research developments in the field. Students prepare to choose a field-of-practice concentration and to enter the Advanced-level year of study.
Prerequisites: Advanced Standing Student.

SOC-WK 5540 Advanced Social Work Practice I Credits: 3
This course prepares students with an advanced generalist social work perspective and to evaluate and integrate theory, values, and skills for assessment and direct practice with complex case situations in a rapidly changing service environment.
Prerequisites: Completion of foundation year.

Co-requisites: SOC-WK 5512.

SOC-WK 5541 Advanced Social Work Practice II Credits: 3
This course extends the advanced generalist model of social work practice to working with challenging families and small groups. The course introduces leadership, organizational, and management competencies for professional practice in social service agencies and skills for coalition-building and collaboration in communities.
Prerequisites: Completion of foundation year.

Co-requisites: SOC-WK 5513.

SOC-WK 5542 Social Services With Older Adults Credits: 3
This course provides an overview of social service practice with older adults. Students examine population demographics, identify normal and abnormal aspects of aging, and examine methods, paradigms, and approaches to effective advanced generalist practice in treatment and community settings.
Prerequisites: Completion of foundation year.

SOC-WK 5544 Families, Communities and Child Welfare Credits: 3
This course examines child centered, family centered and neighborhood based approaches to child welfare.
Prerequisites: Completion of Social Work Foundation Sequence.

SOC-WK 5546 Mental Health and Substance Abuse in Social Work Practice Credits: 3
This course examines current practice approaches and policy/research issues in mental health and in the dually diagnosed. Students focus on service delivery systems of care with a variety of adult populations from an empowerment perspective.
Prerequisites: Completion of foundation year.

SOC-WK 5547 Grief and Loss in Social Work Practice Credits: 3
This course provides a comprehensive study of grief and loss from a professional social work perspective that includes current theories, evidence-based frameworks, and intervention strategies from a strengths-based perspective. The course will address many forms of special losses, such as suicide, homicide, HIV/AIDS, war-related grief, bankruptcy, divorce and other life transitional events that may or may not involve death and dying.
Prerequisites: Completion of all Foundation-level courses.

SOC-WK 5550 Program Evaluation and Management Credits: 3
this course is designed to train students in evaluation of direct practice, community needs and underserved populations. Students develop a new or enhanced model of service delivery to address needs. Strategic planning, management in theories and grant writing and major components of this course.
Prerequisites: Completion of foundation year.

SOC-WK 5560 Psychopathology: A Competency Based Assessment Model in Social Work Practice Credits: 3
The DSM will be used in conjunction with a competency-based assessment model that includes an ecological approach and systems theory to determine what biopsychosocial factors have contributed to the client's problem. The multi-axial system become a tool to gather information, that supports the competency-based assessment.
Prerequisites: Foundation Coursework.

SOC-WK 5562 Family Organization and Development Credits: 3
This course examines developmental and structural theory that supports family-centered social work practice. Within this theory, the course explores how culture and social class shape family values, beliefs and behavior and how these are manifest in family structure as the family responds to developmental tasks in the context of its community.
Prerequisites: Completion of Social Work Foundation Sequence.

SOC-WK 5563 Life Span Issues in Developmental Disabilities Credits: 3
The need for interdisciplinary process in the human services sector, which supports inclusiveness and quality of life of individuals, is covered. The course covers cultural competence, person-centered and community-based application of services for their implications in planning and delivery of services.
Prerequisites: Completion of Social Work Foundation Sequence.

SOC-WK 5564 Advanced Group Interventions in Social Work Credits: 3
This course provides both a didactic and experiential introduction to advanced group therapy for social work practice, explores the therapeutic factors, norms and their creation, the role of leader and termination as a group experience.

SOC-WK 5565 Systemic Oppression and Social Justice Advocacy Credits: 3
This course presents theoretical concepts of oppression, privilege, and social justice advocacy. Students will examine their social principles and their personal experiences. Social work's core values of social practice will be critically analyzed.
Prerequisites: Completion of Social Work Foundation Sequence.

SOC-WK 5566 Family and Community Violence Credits: 3
Students will consider the sources of interpersonal violence. The causes and forms of community and family violence will be examined in relationship to the impact of individuals, families and communities. Prevention and intervention models will be studied and developed.
Prerequisites: Completion of Social Work Foundation Sequence.

SOC-WK 5567 Collaborative Strengths-Based Practice: Multi-System Interventions Credits: 3
This course examines collaborative models of strengths-based, family-centered social work practice that receive significant funding from SAMHSA NIH. Two models are explored in depth to compare and contrast program implementation when a model is based in values and philosophy vs. a theory-based model. The theory of change for each model is closely examined, as well as research supporting it and related ethical questions regarding assessment and intervention.

SOC-WK 5568 School Social Work Practice Credits: 3
Students will learn the knowledge and skills required for performing roles and functions of school social work in K-12 settings. They will apply social systems and the strengths perspectives within the context of school as organizations interconnected to community environments.

SOC-WK 5569 Core Concepts of Child and Adolescent Trauma Credits: 3
This course prepares students for trauma-informed, evidence-based practice. Based on core concepts, the course uses a problem-based learning approach through the use of in-depth case studies.
Prerequisites: All MSW Foundation Courses.

SOC-WK 5575 Advanced Generalist Community Practice Credits: 3
This seminar covers community social work practice at the advanced level addressing values, knowledge and skills essential for community social change. Models of community practice are addressed to facilitate student skill applicant in social planning, community development, and community collaboration strategies. Each model requires knowledge of large systems practice.
Prerequisites: Completion of 30 hrs or Required Foundation.

SOC-WK 5579 Integration Seminar In Advanced Generalist Practice Credits: 3
This course, taken in the last semester, serves as a final integration of advanced generalist competencies in direct practice, organization/mangagement, social action/community building and advocacy, research/evaluation and leadership skills. Students prepare a major project for presentation.

SOC-WK 5580 Special Topics In Social Work Credits: 1-3
These seminars are designed to examine relevant and innovative areas emerging in social work practice which are not available in the regular course offerings. Topics, instructors, and prerequisites are listed in the semester bulletin.
Prerequisites: Completion of foundation year.

SOC-WK 5580D Special Topics In Social Work Credits: 1-3

SOC-WK 5590 Readings And Investigations In Social Work Credits: 1-3
Under the direction of a faculty member, individual students may pursue an in-depth area of study in generalist social work practice, including a research project of the student's choice.

Sociology (SOCIOL)

Courses

SOCIOL 5501 Social Theory I Credits: 3
Examines the development of social theory in Europe up to the beginning of the twentieth century, with a focus on its intellectual precursors of social theory, debates over the nature of society, and controversies over the distinct features of sociology as an emerging academic discipline. The major perspectives covered include the intellectual origins of sociological thought in Great Britain, France, and Germany, and the debates as reflected in the writings of Karl Marx, Emile Durkheim, Max Weber, and Georg Simmel.
Prerequisites: undergraduate course in Sociological Theory.

SOCIOL 5502 Social Theory II Credits: 3
Examines the major sociological theories developed during the twentieth century and contemporary debates over the nature of society and the nature of our knowledge about society. Theories to be examined include behaviorism, symbolic interactionism, structural functionalism, phenomenology, conflict theory, postmodernism, those that attempt to integrate social agency and structure, and feminist theory.
Prerequisites: SOCIOL 5501.

SOCIOL 5503 Controversies In Contemporary Social Theory And Practice Credits: 3
This course critically examines central issues in contemporary debates among social theorists over the nature of society and how it should be studied.

SOCIOL 5510 Sociological Methods I Credits: 3
A survey of methods used by sociologists: selection and formulation of problem, research design, survey research, participant observation, sampling, reliability and validity, use of scales, and data analysis.
Prerequisites: SOCIOL 362 (or equivalent).

SOCIOL 5511 Sociological Methods II Credits: 3
Quantitative research is the primary focus of the course; emphasis is placed on problem formulation; research design; sampling procedures; questionnaire construction and interviewing techniques; data collection; problems of scaling, validity and reliability; uses of secondary data sets; data analyses and report writing.
Prerequisites: SOCIOL 362 (or equivalent).

Cross Listings: CJC 5511.

SOCIOL 5516 Intermediate Statistics Credits: 3
A systematic development of the logic and practice of selected statistical methods used in sociological research. Included are analysis of variance and covariance, regression analysis, multiple contingency, and non-parametric tests.
Prerequisites: SOCIOL 263.

Cross Listings: CJC 5516.

SOCIOL 5530 Anthropology Of Gender Credits: 3
This class explores theories of the social construction of gender in cross-cultural contexts. It will also explore global issues of diversity, local and international politics, the economy and work, education, etc.

SOCIOL 5531 Feminist Theories Credits: 3
This class introduces the major feminist theories and their primary authors over the last 200 years. The class takes both an historical (we begin with two millennia of male-centered theories about women) and a conceptual approach (theories are grouped by common ground) and familiarizes the student with both the historical processes that necessitate feminist theories as well as with the breadth of the historically and currently available scholarship. Graduate students are expected to fulfill all undergraduate requirements at graduate-level quality, including independent research components; in addition, graduate students are required to be prepared to lead class discussions.
Prerequisites: WGS 201.

SOCIOL 5534 Spatial Thinking in Social Science Credits: 3
This course will review ways in which social scientists have incorporated the concepts of space, place, and distance into their theories and research. Readings will be drawn from interdisciplinary work in the areas of urban sociology, criminology, health and demography that deal with spatial organization of communities and cities, spatial disparity of health and crimes, and mobility.Generic computer file management skills are required and knowledge of research methods is desirable.

SOCIOL 5537 Anthropology of Religion Credits: 3
This course explores the ways anthropologists have gone about studying religion from the opening decades of the 20th century to present. The course introduces students to the diversity of human religious expression and experience through anthropological literature and to the diversity of anthropological expression especially as it has been revealed in social scientific studies of religious life. The course is designed to generate a critical dialogue about the special role that religion has played in the ongoing anthropological engagement with "other" societies and cultures over time.

SOCIOL 5538 Gender, Work And Social Change Credits: 3
This course examines the role of gendered work and consumption in global social change. Drawing from sociological perspectives on gender and work, this course foregrounds a global comparative analysis of societal development and working contexts, including tourism employment, sex work, domestic work, and agricultural, garment, and informatics production. Graduate students are required to carry out independent research or complete work in the area of public sociology and academic-service learning. Students will write a conference paper or journal quality article from this research.

SOCIOL 5540 Urban Social Structure Credits: 3
An examination of the social structure of the American city with special reference to the historical development of American cities. Attention will be focused on the role of social institutions as they have changed in relation to urban problems.

SOCIOL 5550 Sociology Of Aging Credits: 3
A seminar in which theoretical orientations, methodologies, and findings from crosscultural and community research in gerontology are systematically reviewed, within a social change framework.

SOCIOL 5554 Sociology Of The Aging Woman Credits: 3
An exploration of the intersection of gender and aging issues with special attention to cultural images of women, the development of self-concept and identity in mid-life and beyond, caring roles in the family, work and retirement, and health and mental health issues. These issues are examined within the context of social class, race, and ethnicity. Implications for community programs and social policy are considered. Graduate students will be expected to carry out a research project and to lead a class session.

SOCIOL 5556 Aging And Developmental Disabilities Credits: 2
This course explores the experience of aging with a developmental disability or mental retardation within the context or normative aging. Among the comparisons made between older persons with and without developmental disabilities are their demographic characteristics, physical and cognitive functioning, role transitions and losses, identities and self-concepts, and family and caregiving issues. Policies, programs, and emerging concepts of best practices are considered within the context of quality of life, ethical, and community inclusion bases.

SOCIOL 5557 Practicum In Aging And Developmental Disabilities Credit: 1
Students gain experience in working with and defining issues of older persons with developmental disabilities through placements in sheltered workshops, senior centers, residential group homes, and other community-based programs.
Co-requisites: SOCIOL 5556.

SOCIOL 5560 Sociology Of Death And Dying Credits: 3
This course examines attitudes, behaviors, and institutions related to death and dying in contemporary American society. Topics include the meanings of death in American society, social settings for dying, interaction with the dying, customs and practices surrounding death, role transitions of survivors, and suicide. Special attention is given to issues of aging and dying.

SOCIOL 5573 Latin American Immigrants and Refugees in the U.S. Credits: 3
This course is the study of history, culture and societies of immigrants and US citizens of Latin American heritage living in the U.S.

SOCIOL 5580 Special Studies In Sociology Credits: 1-3
An opportunity to explore in depth topics not included in usual course offerings. One or more topics will be announced in advance of registration.

SOCIOL 5595 Directed Research Experience Credits: 3
Research project supervised by faculty.

SOCIOL 5597 Independent Readings Credits: 1-3
Intensive readings in an area selected by the student with prior consultation with the instructor.

SOCIOL 5599 Thesis And Research Credits: 1-6
Directed specialized research. Before writing a thesis, the student must clear the topic and research design with the Supervisory Committee. The course also involves the writing of the thesis.

SOCIOL 5699 Dissertation Research Credits: 1-12
Individual directed research leading to preparation and completion of doctoral dissertation.

SOCIOL 5899 Required Graduate Enrollment Credit: 1

Spanish (SPANISH)

Courses

SPANISH 5503 History of the Spanish Language Credits: 3
An introduction to the history of the Spanish language from Latin to the present, with an overview of dialects in the Peninsula and in the Americas.
Prerequisites: SPANISH 325 or higher grammar class.

SPANISH 5514 Spanish Literature Credits: 3
Selected readings in Spanish narrative, poetry, drama and philosophical essay from the beginning of the 20th Century to the Avant-Garde movements in the 1930’s.

SPANISH 5516 Medieval Spanish Literature Credits: 3
A study of selected medieval masterpieces in their Old Spanish form, with special emphasis on Romances, the Cantar de Mio Cid La Celestina, El Corbacho, Libro del buen amor, etc. Includes a short history of the Spanish language.

SPANISH 5519 Federico Garcia Lorca Credits: 3
A study in depth of the poetry and drama of Federico Garcia Lorca.

SPANISH 5520 Cervantes' Don Quixote, Part 1 Credits: 3
An intensive reading of the first part of Cervantes' novel, Don Quixote.

SPANISH 5521 Cervantes' Don Quixote, Part II Credits: 3
An intensive reading of the second part of Cervantes' novel, Don Quixote. Part One is not a prerequisite.

SPANISH 5526 Golden Age Drama Credits: 3
A study in depth of the creation of national theater by Lope de Vega and his followers.

SPANISH 5527 Pre-Columbian and Spanish Colonial Literature Credits: 3
A study of pre-Columbian works in drama, narrative, and poetry (Popol Vuh, Apu-Ollantay, Incan and Aztec poetry) along with a survey of Spanish-American colonial literature.

SPANISH 5528 Contemporary Spanish Poetry Credits: 3
A comprehensive and intensive study of 20th-century Spanish poetry. The poets and their poetry will be studied in the light of literary movements, foreign influences, political tendencies and philosophical ideas.

SPANISH 5529 Novel of the Mexican Revolution Credits: 3
The revolution as the principal focus of 20th-century Mexican fiction. The course will examine both the evolving understanding of the event/process and the sophistication of narrative technique employed in its presentation. Among the writers to be studied are Azuela, Guzman, Lopez y Fuentes, Yanez, Revueltas, Rulfo and Fuentes.

SPANISH 5530 Spanish Mysticism Credits: 3
An examination of the development of mysticism in Oriental and Occidental civilizations, with emphasis on the great periods of mystic experience as reflected in the literary production of the Spanish Golden Age. Readings could include the works of Fray Luis de Granada, Fray Luis de Leon, Saint John of the Cross and Saint Teresa of Avila.

SPANISH 5531 The Golden Age Novel Credits: 3
A study of major prose works of the Golden Age. Possible topics include authorship, innovative narrative techniques, textual strategies and metafiction issues. Readings could include works by Alfonso Martinez de Toledo, Diego de San Pedro, Fernando de Rojas, Francisco Delicado, Cervantes, and Lope de Vega.

SPANISH 5532 Pastoral Literature Credits: 3
A study of the development of pastoral literature during the Spanish Golden Age. Possible texts: Juan del Encina's Eclogues, Montemayor's Los siete libros de la Diana and Cervantes' Galatea. These works will be examined within their historical and cultural context.

SPANISH 5533 Cervantes' Exemplary Novels Credits: 3
A study of Cervantes' Exemplary Novels within the context of 17th Century Spain. Attention will be paid to interpretive possibilities and how knowledge of historical contexts might influence readings of this rich and varied cultural output.

SPANISH 5534 The Picaresque Novel Credits: 3
A study of the development of picaresque fiction during the Spanish Golden Age. The course deals with novelists principally active during the Baroque period such as Mateo Aleman, Francisco Lopez de Ubeda, Miguel de Cervantes, and Francisco de Quevedo.

SPANISH 5535 Peninsular Poetry Credits: 3
This course is a survey of poetics and poetry in Spain from the Reconquest to the present, with emphasis on sociohistorical contexts and movements. It examines theoretical and methodological approaches to literary analysis and also provides practical experience in exploring poetic texts. Students will analyze a wide spectrum of poems, while discussing the cultural philosophical, linguistic, political and ethical considerations that surround the reception of a text.

SPANISH 5536 Spain's Transition to Democracy: Literature and Film Credits: 3
This course reviews the cultural production between the death of Francisco Franco in 1975 and the entrance in the European Union, in film, literature and music, within its historical and political context.

SPANISH 5550 Modern Classics of Latin American Literature Credits: 3
The goal of the course is to familiarize the student with the principal Latin American writers of the modern period. The focus will be dual: the progressive sophistication of literary technique, and the refinement of social conscience. Among the authors to be studied are: Asturias, Borges, Carpentier, Cortazar, Donoso, Fuentes, Garcia Marques, Paz, Rulfo, and Vargas Llosa.
Cross Listings: SPANISH 450.

SPANISH 5553 Spanish-American Short Story Credits: 3
A study of Spanish-American short stories from Romanticism to the present.

SPANISH 5580 Special Topics Credits: 1-3
Treatment of a particular genre or area of literature or language normally not offered through regular courses. May be repeated for credit when the topic changes.

SPANISH 5580D Special Topics Credits: 1-3

SPANISH 5590 Directed Studies in Spanish & Latin American Literature Credits: 1-3
Intensive readings in a field or literary figure to be selected by the student in consultation with the instructor. Available by permission of graduate advisor or instructor, as appropriate, only when student cannot take regularly scheduled courses.

Special Education (EDUC-SP)

Courses

EDUC-SP 5506 Special Education Law, Individualized Education Programs (IEP's), and Transition Credits: 3
This course provides students with knowledge of special education law, the individualized education program (IEP), and transition-related instruction i.e., preparation for post-high school education employment, independent living, and community integration) for students with disabilities. Prior to taking the course, a background check must be completed in order to do the required 10-hour field experience for this course. The field experience will include observation of meetings with families and other professionals.
Prerequisites: Master's student status.

EDUC-SP 5507 Introduction To Mild/Moderate Cross-Categorical Disabilities Credits: 3
This is the initial foundations course in the master's degree sequence in special education of children and youth with mild/moderate disabilities including learning disabilities (LD), emotional/behavioral disorders (EBD), mental retardation (MR), and physical and other health impairments (POHI). It is designed to provide candidates who are new to the field of special education with a foundation for working with students who have exceptional learning needs. Prior to taking the course, a background check must be completed in order to do the required 10-hour field experience for this course. The field experience will include observations and working with children and youth with disabilities.
Prerequisites: TCH-ED 404.

EDUC-SP 5508 Assessment for Special Educators Credits: 3
This is a foundations course in the master's degree sequence in special education of children and youth with mild/moderate disabilities. The purpose of this course is to provide understanding and practice in formal and informal evaluation. This course is applicable to candidates who plan to work either directly (special educators) or indirectly (special education administrators) with students with exceptional learning needs and to engage in critical analysis of assessment issues confronting the field of special education. Prior to taking the course, background check must be completed in order to do the required 10-hour field experience for this course. The field experience will include observations and working with children and youth with disabilities.
Prerequisites: EDUC-SP 5507, EDUC-SP 5513.

EDUC-SP 5509 Cognition & Lang Dev In Mild/Mod Cross-Categorical Disabilities Credits: 3
This is a specialized methods course in the master's degree sequence in special education of children and youth with mild/moderate disabilities. This course examines normal and atypical development and cultural and linguistic diversity of students with exceptional learning needs. Candidates will practice collaborative and reflective decision-making and problem solving in areas such as: (a) developmentally sequenced activities, (b) receptive and expressive language, and (c) communication and augmentative communication skills. The field experience will include working observations and working with children and youth with disabilities.
Prerequisites: Background check, EDUC-SP 5507, EDUC-SP 5513.

EDUC-SP 5510 Practicum in Special Education Credits: 2
The purpose of this course is to provide a field-based experience in a setting with students with mild/moderate cross-categorical disabilities. This field experience affords candidates classroom experience either in their own instructional settings or under the tutelage of a master teacher. Placement sites reflect the multicultural diversity found in special education classrooms (K-12). The practicum will include observations, working with children and youth with disabilities individually and in small groups, as well lesson preparation and presentation.
Prerequisites: TCH-ED 404 and EDUC-SP 5507.

EDUC-SP 5513 Methods Of Teaching Students M/M Cross-Categorical Disabilities Credits: 3
This is the initial methods course in the master's degree sequence in special education of children and youth with mild/moderate disabilities. The central purpose of this course is to present unit-wide academic and behavioral strategies from eclectic theoretical perspectives. Candidates will examine validated practices and learn to apply such practices to plan instruction, deliver instruction, and evaluate student and teacher performance. Prior to taking the course, a background check must be completed in order to do the required 10-hour field experience for this course. The field experience will include observations and working with children and youth with disabilities.

EDUC-SP 5514 Understanding and Addressing Challenging Behavior in the Classroom Credits: 3
This is a specialized methods course in special education of children and youth with mild moderate disabilities and is designed to provide master s candidates with tools to engage children and youth behavioral assessment strategies and behavior management techniques Prior to taking the course a background check must be completed in order to do the required 10 hour field experience for this course The field experience will include observations and working with children and youth with disabilities.

EDUC-SP 5516 Collaborating with Families and Other Professionals Credits: 3
This is a methods course in the master's degree sequence in special education of children and youth with mild/moderation disabilities. The course presents principles and procedures for fostering collaborative partnerships among family members, caregivers, educators, and human service personnel that lead to outcomes of individual and mutual empowerment. Candidates will engage in reflective thinking on their personal philosophical beliefs and interweave these beliefs with the skills needed to work with the multicultural issues facing families of children and youth with mild/moderate cross-categorical disabilities and other professionals. Prior to taking the course a background check must be completed in order to do the required 10 hour field experience for this course. The field experience will include observations and working with families of children and youth with disabilities and education professionals.

EDUC-SP 5517 Characteristics, Hist & Thrys: Emotional Disturbance In Children Credits: 3
An investigation of theories, classification, etiology, incidence, and characteristics of children with emotional/ behavioral disorders.

EDUC-SP 5570 Student Teaching in Special Education Credits: 8
This is the final clinical course in the master's degree sequence in special education of children and youth with mild/moderate disabilities. The purpose of this course is to provide a field-based experience in a setting where candidates will be fully responsible for designing curriculum and teaching students with mild/moderate cross-categorical disabilities. Placement sites reflect the multicultural diversity found in special education classrooms (K-12). This course requires candidates to apply content learned throughout the master's degree program in an authentic setting. Student teaching involves a full time commitment to the field for 16 weeks.
Prerequisites: EDUC-SP 5510, Background check.

EDUC-SP 5589 Special Topics In Education Credits: 1-6
A course designed to deal with a special education topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-SP 5598 Individual Studies Credits: 1-6
Review of the research and trends relative to selected problems in special education.

Statistics (STAT)

Courses

STAT 5501 Statistical Design Of Experiments Credits: 3
This course is designed to present a variety of experimental design techniques to students with moderate mathematical and statistical background. The course includes three major components: efficient factorial designs, linear and quadratic process optimization of the location parameter, and variability reduction. Students will be trained to use the SPSS statistical software package.
Prerequisites: STAT 436.

STAT 5537 Mathematical Statistics I Credits: 3
Probability theory, distribution functions, sampling, statistical inference, topics in advanced applied statistics. Continued in STAT 5547.
Prerequisites: MATH 402.

STAT 5547 Mathematical Statistics II Credits: 3
Continuation of STAT 5537.

STAT 5551 Applied Statistical Analysis Credits: 3
Methods for analyzing data from experiments and observational studies; design-based and model-based inferences; model assessment; ANOVA; power analysis; SAS procedures.
Prerequisites: STAT 441.

STAT 5561 Time Series Analysis Credits: 3
This course is intended to present the basis knowledge (including models, methods and concepts) of time series analysis to students with a good background in intermediate mathematical statistics. Some elementary knowledge of basic linear regression analysis would be helpful but not necessary. The presentation will be balanced between theory and data analysis, with sufficient theory to understand the basis of methods and a broad variety of models and many real data examples. Case studies will be drawn from business and economics, network traffic and meteorology, and data will be analyzed by students using existing computer programs (SAS, Minitab and R). Students are also expected to understand proper use and limits of time series models.
Prerequisites: STAT 441.

STAT 5565 Regression Analysis Credits: 3
Simple linear regression; multiple linear regression; correlation analysis; model selections; checking assumptions; regression diagnostics; combating multi-collinearity; nonlinear regression.
Prerequisites: STAT 441.

STAT 5572 Multivariate Analysis Credits: 3
Random vectors; multivariate normal distributions; Hotelling's T-square distribution; Wishart distribution; inferences on one mean vector; MANOVA; inferences on covariance matrices; profile analysis.
Prerequisites: MATH 420 and STAT 441.

STAT 5575 Stochastic Calculus for Finance Credits: 3
This course presents the basic idea and theory of stochastic calculus with the focus on the applications to finance. Topics include Brownian motion, Ito integral, Ito formula, Black-Scholes equation and formula, risk-neutral pricing, connections with partial differential equations, exotic options, American derivative securities, and term structure models for interest rates.
Prerequisites: MATH 402 and STAT 436.

Cross Listings: MATH 5575.

STAT 5576 Probability Credits: 3
Existence and extension of measure, random variable, expectation and its properties, types of convergence, law of large numbers, weak convergence, central limit theorem, and martingale.
Prerequisites: STAT 436 and MATH 5513.

STAT 5578 Advanced Mathematical Statistics Credits: 3
Exponential and location families, principles of data reduction, asymptotic distributions, advanced theory of estimation and hypothesis testing.
Prerequisites: STAT 5547.

STAT 5588 Theory of Linear Model Credits: 3
This course covers vector space, full rank linear model, general inverse, estimation under linear constraints interval estimation, hypothesis testing, distributions of quadratic forms, general distribution theory, estimability, Gauss-Markov theorem, Best Linear Unbiased Estimation (BLUE), regression on dummy variables, estimation of variance components, Scheffe and Turkey intervals, and non-full rank linear model.
Prerequisites: MATH 420, STAT 5537, and STAT 5565.

STAT 5590 Special Topics Credits: 1-3
Selected topics in various fields of mathematics. May be repeated for credit when the topic varies.

String Bass (STR-BASS)

Courses

STR-BASS 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: STR-BASS 300.

STR-BASS 5500A Graduate String Bass-Secondary Credits: 2

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

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

STR-BASS 5500JA Graduate Applied Jazz Studies Credits: 2
One-hour lesson weekly. Jury examination is required.
Prerequisites: Graduate standing.

STR-BASS 5500JB Special Applied Jazz Studies Credits: 2
One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.
Prerequisites: Graduate standing.

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

STR-BASS 5501 Graduate String Bass - Masters Performance Credits: 4

STR-BASS 5601 Graduate String Bass - Doctoral Performance Credits: 4

Teacher Education (TCH-ED)

Courses

TCH-ED 5492 Language Arts Capstone Credits: 2
Designed for students in their last professional semester of the TE program, and are in a full-time student teaching placement. The course will serve as a culminating experience of the major concepts from the previous three semesters. Topics covered include school law, classroom management, working with special needs students, building critical thinking activities into the curriculum, planning and implementing authentic assessments, and examining the obligations, challenges, and realities of the teaching profession.
Prerequisites: TCH-ED 432.

Co-requisites: student teaching.

TCH-ED 5493 Mathematics Capstone Credits: 2
This seminar will develop academic excellence, inquiry and reflective problem solving, and skills to create caring and safe environments. It is designed to complement the student teaching experience through discussing and analyzing school and school-based issues. It is intended to help further development of reflective, critical, and analytical approaches to pedagogical decision making through supportive collaboration. Students are asked to use knowledge of child/adolescent development, learning, classroom dynamics, society, history, culture, and subject area to analyze classroom situations, and develop and defend alternatives to observed teaching practices and problems.
Prerequisites: TCH-ED 433.

Co-requisites: Student Teaching.

Theatre (THEATRE)

Courses

THEATRE 5500RA Theatre Collaboration Credits: 1-2
A course for M.F.A. students exploring the collaboration/ communication process in preparing a production. Must be elected by all students assigned to design, direct, technical direct or stage manage within the current or the following semester. Maximum of 8 hours applicable towards degree.

THEATRE 5501R Voice Training Credits: 2
(A,B,C,D) Training for the speaking and singing voice, development of skills in vocal dynamics, physical control, and relaxation for the actor, dialects and verse structure. Four semesters required for acting emphasis.

THEATRE 5506RR French Drama And Theatre Credits: 3
Study of significant plays and production methods in France from medieval times to the present. Particular emphasis will be given to the plays of Moliere, Racine, and Corneille, and to internationally renowned contemporary directors.

THEATRE 5507 19Th-Century Continental Theatre Credits: 3
Production of significant French, German, Russian, Spanish, and Scandinavian plays and playwriting of the 19th century. Particular emphasis will be given to plays representative of romanticism, realism, naturalism, fin-de-siecle decadence, and intensive study of production history.

THEATRE 5508 20Th-Century Continental Theatre Credits: 3
Study of the production of significant plays of Continental Europe from Strindberg to the present. Dramatic literature will be related to artistic currents such as expressionism, surrealism, the absurd, and where applicable, to political currents.

THEATRE 5509 Russian Drama And Theatre Credits: 3
Study of the production of Russian and Soviet plays with reference to the development of theatre art from the Christianization of Russia to contemporary post-Soviet drama.

THEATRE 5510 History Of The American Theatre I Credits: 3
An exploration of the trends in and the development of the American theatre from Colonial times to 1900.

THEATRE 5511 History Of The American Theatre II Credits: 3
An exploration of the trends in and the development of the American theatre for 1900 to the present.

THEATRE 5512R History Of The English Stage I Credits: 3
The English stage and its arts, crafts and literature from the medieval cycles through the Restoration.

THEATRE 5513 History Of The English Stage II Credits: 3
Development of English and Irish theatre art and dramatic literature from the 18th century to the present.

THEATRE 5514 History of Design And Technology I Credits: 3
The study of period style and scenic, costume, lighting, and technical production practices from the ancient world through the 17th century. The course will emphasize the application of research toward the presentation of period plays and contemporary production.

THEATRE 5515R History of Design And Technology II Credits: 3
The study of period style and scenic, costume, lighting, and technical production practices from the 18th century to the present. The course will emphasize the application of research toward the presentation of period plays and contemporary production.

THEATRE 5516A Technical Production for The Practitioner Credits: 3
The course is an in-depth review of technologies in scenery, lighting and stage operations, expansion of that knowledge, and application of it to the individual class member's particular theatre. Classroom material is augmented by hands-on experience in a controlled laboratory situation. Students should have a prerequisite of a basic technical theatre course or considerable practical experience. This course can be repeated for credit.

THEATRE 5516B Technical Production for The Practitioner Credits: 3
See course description for THEATRE 5516A.

THEATRE 5517A Professional Stage Management I Credits: 3
A functional analysis of the responsibilities of the professional stage manager. Requires the student to be an assistant stage manager on a University or KC Rep production.

THEATRE 5517B Professional Stage Management II Credits: 2
Practical course in stage management. Requires student to stage-manage or assistant stage-manage a production.
Prerequisites: THEATRE 5517A.

THEATRE 5517C Equity Assistant Stage Management Credits: 2
This course develops a skill set for professional assistant stage managers. Class will discuss duties and paperwork and how to supplement the work of the stage manager.

THEATRE 5517D Opera Stage Management Credits: 3
Class covers duties of the opera stage manager, including how to follow an opera score.

THEATRE 5517E Union Contracts for Actors and Stage Managers Credits: 2
Students study and discuss all the rules in the Equity Rule Book.

THEATRE 5517F Professional Production Management in Theatre Credits: 2
This course is a seminar on the duties, planning, negotiations, and problem solving techniques of the professional theatre production manager.
Prerequisites: THEATRE 5517A.

THEATRE 5520 Individual Performance Studies Credits: 1-2
(A,B,C) Private instruction for the advanced student.

THEATRE 5520L Individual Performance Studies Credits: 1-2

THEATRE 5521A Professional Sound Design Credits: 3
Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5521B Professional Sound Design Credits: 3

THEATRE 5521C Professional Sound Design Credits: 3
Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5521D Professional Sound Design Credits: 3
Professional Sound Design is a series of four courses constructed to develop the designer's skills from research and initial sound collection, into interpretation, collaboration and idea development, concluding with the production of finished designs for the MFA productions. Each section deals with problems of increasing complexity beginning with "found" design material for early production and leading to indigenous designs created and layered for complex production support. The course may be taken once or twice for non-sound designers with the full cycle being required for the sound design emphasis.

THEATRE 5530 Drafting for The Theatre Credits: 3
Practical laboratory course in drafting for the theatre encompassing floor plans, sections, designer's evaluations, front and rear elevations, working drawings, and problems in communicating design ideas.

THEATRE 5531R Rendering Techniques for the Theatre Designer II Credits: 3
Continuation of Rendering Techniques with the introduction of color, pastels, watercolor and goauche. Skills are applied in developing projects for design in the theatre.

THEATRE 5532 Professional Costume Design Credits: 3
(A, B, C, D) The courses in Professional Costume Design are intended to develop the costume designer's skills in research, rendering and drawing. Each section will deal with specific problems of design, such as period, line, silhouette, color and texture. Specific problems in design from realistic to stylized productions will be worked on by the students. The course may be taken once or twice by non-costume designers with the full cycle being required for costume emphasis.

THEATRE 5534 Costume Construction I Credits: 3
(A,B,C) Research and methodology into one or more of the following areas of costume construction for the stage: period pattern and tailoring adaptation, work with non-woven materials, and the cutting and finishing of costumes for the stage. May be repeated up to six hours with content change and permission of instructor.

THEATRE 5535 Technical Studies In Costuming And Makeup Credits: 3
(A,B,C) Concentration in one or more of the arts and crafts necessary to costume design. Areas to be chosen from include: fabric dyeing and painting, millinery, wig design and construction, latex prosthetic, and decorative accessories for the stage. May be repeated up to six hours with content change and permission of instructor.

THEATRE 5536 Professional Scene Design Credits: 3
(A,B,C,D) Professional Scene Design is a series of courses constructed to develop the designer's skills from research and initial sketches to finished renderings, models and working drawings. Each successive section deals with problems of increasing complexity beginning with one-set realistic productions through unit-settings, stylization and multiple setting problems. The course may be taken once or twice for non-set designers with the full cycle being required for the scene design emphasis.

THEATRE 5538 Scene Painting Credits: 3
A practicum course in scene painting techniques and execution. Introduction to painting equipment and supplies, priming and preparation of surfaces and materials, standard techniques for painting ornament.

THEATRE 5539 Scene Painting II Credits: 3
A practicum course in scene painting techniques with emphasis on painting interior drops, exterior landscapes and three-dimensional pieces.

THEATRE 5540 Pattern Drafting And Cutting Credits: 3
Theory and laboratory study of the techniques and methods employed in drafting patterns for the professional stage.

THEATRE 5545 Professional Acting Techniques I Credits: 3
Theatre games, exercises, mask work, and some scene study to develop the first year acting/directing class into a training ensemble, instill a clear and uniform vocabulary, heighten awareness, and begin concentrated skill work. The semester will culminate in a class project.

THEATRE 5546 Professional Acting Techniques II Credits: 3
Continuation of THEATER 5545 with emphasis on the application of the first semester's work through scene study of contemporary plays and monologues.

THEATRE 5547 Professional Acting Techniques III Credits: 3
Concentration on non-naturalistic styles. Work on scenes from Shakespeare and other classical playwrights.

THEATRE 5548 Professional Acting Techniques Iv Credits: 3
Work on audition material and further scene work dealing with specific individual acting problems.

THEATRE 5549 Master Class In Acting Credits: 2
(A,B,C,D) Class in advanced studies in acting. May be repeated for credit up to eight hours as content and guest artist change. Permission of instructor or head of area required. Required for third year graduate acting students in the fall semester and may be repeated subsequently as elective.

THEATRE 5551 Rendering Techniques for the Theatre Designer III Credits: 3
Developing techniques for rendering in realistic settings: interiors, landscapes, fabric and furnishings.

THEATRE 5552R Rendering Techniques for the Theatre Designer Iv Credits: 3
Developing techniques for rendering in non-realistic styles with the emphasis on imaginative designs, light and air, created textures, etc.

THEATRE 5557 Theatre History I Credits: 3
Development of theatre art-including dramatic literature, staging, and performance styles-from the beginning through the 17th century. This course also looks at Asian theatre forms. Students read approximately 20 plays.
Prerequisites: Graduate Status.

THEATRE 5560 Theatre History II Credits: 3
Development of western theatre art-including dramatic literature, staging, and performance styles-from the 18th century to the present. Students will read approximately 24 plays.
Prerequisites: Graduate status.

THEATRE 5562 Actor Practicum Credits: 3
A contemporary scene study class for actors. Actors test their acquired process skills with major emphasis placed on characterization.

THEATRE 5563 Text Analysis I Credits: 3
Linear analysis of selected prose dramas with concentration on character delineation, images and motivation for actors and directors.

THEATRE 5564 Text Analysis II Credits: 3
Continuation of THEATRE 5563 with emphasis on verse plays. Selected playwrights from the Greek and Elizabethan periods will be included along with modern verse dramatists.

THEATRE 5565 Introduction To Professional Directing Credits: 3
The first part of the class is devoted to an intensive study of various and diverse concepts related to the dramatic experience by dramatists, critics, and directors. The class also examines current production methods and practices for today's functioning professional director. Systems related to stage management and actors are investigated.

THEATRE 5567 Professional Directing Practicum Credits: 3
This class will move from concept to production. Work will revolve around the presentation of production concept statements in which the director will select, organize and articulate the theatrical substance in support of his or her chosen concept. Intensive analysis will lead to the development of an image/metaphor for production. Term will include presentation of a full book justifying concept choices for scenic, costume, music and dance, and, finally, full production.

THEATRE 5568 Seminar In Dramaturgy Credits: 3
Critical analysis of dramatic structure and techniques, with special reference to modern and contemporary drama.

THEATRE 5569 Master Class in Directing Credits: 2
(A,B,C,D) Class in advanced studies in directing. May be repeated for credit up to eight hours as new material and guest artist change. Graduate students elect THEATRE 5569.

THEATRE 5570 Professional Lighting Design Credits: 3
(A, B, C, D) Professional Lighting Design is a series of courses concerned with the study of light as a design element. Projects to implement design theory are primarily selected from the areas of dramatic, musical and opera theatre, and dance. Emphasis is on the design process with each successive section dealing with problems of increasing complexity. Areas of study and projects are chosen on the basis of individual levels of development. When elected by non-lighting designers the course may be elected for a maximum of two semesters.

THEATRE 5571A Professional Projections Design I Credits: 3
This course examines the techniques of theatrical projection design. Focus will be on the manipulation of projected images, and the fundamental use and control of automated projectors. This hands-on laboratory class will instruct students in the use of state of the art projection equipment and control consoles.

THEATRE 5571B Professional Projections Design II Credits: 3
This class will teach students how to design projections. Students will learn the practical applications of projection design as well as the theoretical and critical thinking necessary to successfully complete a projection design assignment. This class will culminate with the presentation of an assigned projection design or a realized projection design.
Prerequisites: THEATRE 5571A

THEATRE 5572 Stage Lighting Equipment Credits: 2
A comprehensive study of contemporary technical equipment and its usage to actualize a lighting design. Areas of emphasis include instruments, color and color theory, lighting control systems, projection, and optical special effects.

THEATRE 5573 Professional Technical Production Credits: 3
Detailed study and experimentation with recent scenic materials, scenery construction, rigging systems, use of metal and special effects.

THEATRE 5574 Theatre Regulations, Laws and Safety Credit: 1
Survey of fire, city and Equity codes, and insurance, liability, health rules and regulations related to theater operation. Union and legal contracts, philosophy and relations with theatre facilities and operations.

THEATRE 5575R Property Construction Credits: 3
Construction techniques and materials used to make and modify set and hand properties and set dressing.

THEATRE 5577 Advanced Materials Credits: 3
(A,B,C,D) The theatre technician and designer are dependent on a wide range of materials in the creation of their art. Each semester the student will pursue detailed study of a material area (i.e., wood, metal, plastics, textiles), the processes of its usage and its related process-products (i.e., adhesives, paints, dyes, etc.). Field trips and hands-on laboratory work are integral to the course.

THEATRE 5578 Professional Theatre Administration Credits: 3
Theories, problems and techniques preparing the student for effective interaction with professional theater administration, offering a foundation for potential theatre administrators as well as enrichment for students of directing, design, technical and stage management.

THEATRE 5579R Master Class In Design Credits: 2
(A,B,C,D) Class in advanced studies in design. May be repeated for credit up to eight hours as content and guest artist change.

THEATRE 5580R Graduate Technical Student Seminar Credits: 2
(A,B,C,D,E,F) Required in every semester for Design/Tech M.F.A. candidates choosing a technology emphasis. This continuing seminar course serves as a forum for all graduate technical students to analyze and discuss problems and solutions on current academic and KCRep productions. The course develops collaborative skills through the sharing of ideas and experiences. In addition, topics of general interest to the technician will be studied through guest lecturers and/or individual projects prepared by the faculty and students and presented to the class.

THEATRE 5583 Seminar on Technical Production Management Credits: 2
Seminar involving shop organization, scheduling, purchasing, lending and borrowing, rentals, personnel, job description, organizing structure, etc. Emphasis upon organization and techniques for repertory theatre operation.

THEATRE 5584 Master Class In Technology Credits: 2
(A,B,C,D) Class in advanced studies in technology. May be repeated for credit up to eight hours as content and guest artist change.

THEATRE 5585 Advanced Technical Drafting Credits: 3
An intensive drafting course required for Design/Tech M.F.A. candidates with emphasis in technology. The course aims to equip the student to prepare clear shop working drawings from designer elevations. Topics include both conceptual planning techniques and developing mechanical drawing skills. One hour lecture, four lab hours, and extensive outside preparation.

THEATRE 5586 Structural Design for the Stage Credits: 3
A course in the structural design of scenic elements. The student learns to work within the visual restrictions imposed by the designer to build structures that will bear given load requirements with a minimum of deflection. Basic engineering and load analysis principles are studied and applied in the design procedure to find the best possible solutions in terms of strength, weight, safety and cost.

THEATRE 5587 Structural Design for the Stage II Credits: 3
This course is designed to give an introduction to the physics behind structural design and to guide the student through the process of designing safe, effective structural scenery for the theatre.
Prerequisites: THEATRE 5586.

THEATRE 5590 Directed Graduate Studies Credits: 3-6
Individual projects on the graduate level. No more than three hours with any one instructor. Only one 590 each semester.

THEATRE 5590A Directed Graduate Studies Credits: 3-6

THEATRE 5590B Directed Graduate Studies: Design Credits: 3-6

THEATRE 5590C Directed Graduate Studies: Costumes Credits: 3-6

THEATRE 5590D Directed Graduate Studies: Scenic Design Credits: 3-6

THEATRE 5590E Directed Graduate Studies: Directing Credits: 3-6

THEATRE 5590F Directed Graduate Studies Credits: 3-6

THEATRE 5590G Directed Graduate Studies: Lighting Credits: 3-6

THEATRE 5590H Directed Graduate Studies: Playwriting Credits: 3-6

THEATRE 5590I Directed Graduate Studies Credits: 3-6

THEATRE 5590J Directed Graduate Studies: Stage Management Credits: 3-6

THEATRE 5590K Directed Graduate Studies: Technical Production Credits: 3-6

THEATRE 5590L Directed Graduate Studies: Theatre Management Credits: 3-6

THEATRE 5590M Directed Graduate Studies: Theory And Criticism Credits: 3-6

THEATRE 5590N Directed Graduate Studies: Dramaturgy Credits: 3-6

THEATRE 5590R Directed Graduate Studies Credits: 3-6

THEATRE 5590S Directed Graduate Studies Credits: 3-6

THEATRE 5590T Directed Graduate Studies Credits: 3-6

THEATRE 5592A Seminar on Stage Management Practice Credit: 1
MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training), to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.
Prerequisites: Graduate Stage Management Student.

THEATRE 5592B Seminar on Stage Management Practice Credit: 1
MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.
Prerequisites: Graduate Stage Management Student.

THEATRE 5592C Seminar on Stage Management Practice Credit: 1
MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.
Prerequisites: Graduate Stage Management Student.

THEATRE 5592D Seminar on Stage Management Practice Credit: 1
MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.
Prerequisites: Graduate Stage Management Student.

THEATRE 5592E Seminar on Stage Management Practice Credit: 1
MFA student stage managers meet one hour a week with the Production Manager of both Kansas City Repertory Theatre and Department of Theatre (and head of stage management training) to discuss current management problems and solutions for productions in progress. The seventeen productions mounted each year by the Department and the Rep will be examined. Students will become aware of problem solving procedures in both the professional and the academic theatre.
Prerequisites: Graduate Stage Management Student.

THEATRE 5597 Repertory Theatre: Internship Credits: 3-6
Assignments available in the following areas: directing, design, carpentry, lighting, costume, props, acting, stage management. Technical interns will be assigned by the appropriate heads of those areas. Acting interns may understudy and/or play roles with the Kansas City Repertory Theatre on the Spencer stage or in showcase productions. Also, interns will have some responsibility in technical areas such as change-over, props, costume, running crew, and stage management. Directing interns may assist director or assistant stage manager.
Prerequisites: Selection by chairman of department.

THEATRE 5598R Research And Performance Credits: 1-6
Primarily for the M.F.A. student. Permission of the graduate faculty.

THEATRE 5599 Research And Thesis Credits: 1-6

THEATRE 5697 Repertory Theatre: Residency Credits: 6
The residency consists of authorized participation with the Kansas City Repertory Theatre, the Department of Theatre, or an approved outside professional company, and is arranged under departmental advisement, with the chairman of the department, and in consultation with the artistic director of KCRep. The assignment will be determined by matching interest and degree emphasis with available production assignments.

THEATRE 5899 Required Graduate Enrollment Credit: 1

Trombone (TROMB)

Courses

TROMB 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: TROMB 300.

TROMB 5500A Graduate Trombone-Secondary Credits: 2

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

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

TROMB 5500JA Graduate Applied Jazz Studies Credits: 2
One-hour lesson weekly. Jury examination is required.
Prerequisites: Graduate standing.

TROMB 5500JB Special Applied Jazz Studies Credits: 2
One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.
Prerequisites: Graduate standing.

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

TROMB 5501 Graduate Trombone - Masters Performance Credits: 4

TROMB 5601 Graduate Trombone - Doctoral Performance Credits: 4

Trumpet (TRUMPET)

Courses

TRUMPET 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: TRUMPET 300.

TRUMPET 5500A Graduate Trumpet-Secondary Credits: 2

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

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

TRUMPET 5500JA Graduate Applied Jazz Studies Credits: 2
One-hour lesson weekly. Jury examination is required.
Prerequisites: Graduate standing.

TRUMPET 5500JB Special Applied Jazz Studies Credits: 2
One-hour lesson weekly. This course is for pedagogical or review purposes. A jury for comments only may be held at the discretion of the faculty.
Prerequisites: Graduate standing.

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

TRUMPET 5501 Graduate Trumpet - Masters Performance Credits: 4

TRUMPET 5601 Graduate Trumpet - Doctoral Performance Credits: 4

Tuba (TUBA)

Courses

TUBA 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: TUBA 300.

TUBA 5500A Graduate Tuba-Secondary Credits: 2

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

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

TUBA 5501 Graduate Tuba - Masters Performance Credits: 4

TUBA 5601 Graduate Tuba - Doctoral Performance Credits: 4

University of Missouri Traveling Scholar (UMTS)

Courses

UMTS 5999 Credit From Another University Of Missouri Campus Credits: 99
Credit From Another University Of Missouri Campus

Urban Leadership (EDUC-UL)

Courses

EDUC-UL 5501 Foundations Of School Leadership & Organization Credits: 3
Participants will study as cohort team members actively engaged in clinical/practical endeavors in schools, concepts and theories focused: 1) to understand and apply modern leadership and organization development theory in relation to school organizational cultures; 2) to understand both the development of productive school relationships and the theoretical concepts of the legal responsibilities of schools in the society; 3) to develop a plan for principal certification based upon participant needs and experiences; and 4) to build school cultures that are collaborative, participative, reflective, and self renewing.

EDUC-UL 5502 Building Administration And Management Credits: 3
Participants will study and apply theories and concepts as members of a Cohort Team doing clinical work in schools designed to study, learn, and practice the management and administrative responsibilities of building level leaders including principal roles, personnel issues, school business management, community relations, supervision of staff, and to know the legal responsibilities relating to teachers, student and public rights.
Prerequisites: EDUC-UL 5501.

EDUC-UL 5503 Student, Staff And Organization Development Credits: 3
Participants will study as a member of a cohort team doing clinical work in school and developing the ability: 1) to gain knowledge of, and practice in developing "learning organizations"; 2) to assist teachers and other staff members of a school in structuring classrooms around the learning and development of all students; 3) to lead and develop urban schools that are culturally diverse where learner outcomes and performance are not related to race, class, or gender; and 4) to provide leadership related to developing school structures that are outcome oriented.
Prerequisites: EDUC-UL 5501 and EDUC-UL 5502.

EDUC-UL 5504 Elementary School Administration Credits: 3
Contemporary knowledge, understanding, and competencies for elementary administration. Focus on leadership, communication, group processes, organization, fiscal, and political areas. In addition, basic roles and responsibilities of the school principalship are addressed.

EDUC-UL 5505 Middle School Administration Credits: 3
Middle school goals, effective middle school leadership, change models for staff development, relevant curricula, auxiliary and support systems.

EDUC-UL 5506 Secondary School Administration Credits: 3
Organization and objectives of secondary education; curriculum trends; role analysis; principal-staff relations.
Prerequisites: EDUC-UL 5501.

EDUC-UL 5507 Instructional Supervision Credits: 3
Principles of supervision, factors influencing effectiveness of instruction, including the evaluation of teachers.

EDUC-UL 5508 Special Education Administration Credits: 3
Provides special educators, special education and regular education administrators with knowledge and experience in the areas of special education process, policy development, data collection and funding, legal issues and program organization. Special emphasis is given to dealing with common problems which arise in public school special education programs.

EDUC-UL 5510 Planning Educational Facilities Credits: 3
Analysis of educational specifications; cooperative planning processes; analysis of trends in school facilities; financial considerations and construction research. Visitation of selected facilities included.

EDUC-UL 5511 Public School Business Administration Credits: 3
The business related aspects of administering a school district including budgeting and accounting, purchasing, transportation, insurance, and facilities management.

EDUC-UL 5512 School Finance Credits: 3
Sources of revenue for public education; distribution of monies for education; budget construction; accounting procedures; and theories for financing education.

EDUC-UL 5513 School Personnel Administration Credits: 3
Study of processes, policies and theory concerned with the personnel function in educational administration. Emphasizes the importance of human resources in developing effective educational systems.

EDUC-UL 5514 Public Relations In Education Credits: 3
Analysis of various public views on education; mass communications and social change; public relations programs.

EDUC-UL 5515 Governmental And Legal Aspects Of Education Credits: 3
Current and recent legislation affecting education; court cases related to education; emerging patterns of modern juris-prudence; administrators' responsibilities regarding legal decisions.

EDUC-UL 5516 Governmental And Legal Aspects Of Special Education Credits: 3
An examination of current and recent legislation affecting special education; emerging patterns of modern jurisprudence; and special education teacher and administrator legal responsibilities.

EDUC-UL 5518 Leadership for School Improvement Credits: 3
Course is designed to prepare educational leaders with the knowledge and practical skills needed to lead school-level improvement initiatives within the unique context of the school. Candidates will learn to develop, implement, and assess school improvement strategies in alignment with the district-wide initiatives, and with state and national policies and standards. It is recognized that school improvement is not a linear process and takes place in a complex dynamic environment that recognizes cultural and linguistic diversity. The course will focus on stewardship of the change process to improve the learning outcomes of diverse students, to improve the professional skills of teachers, and to improve the school organization. The course will be offered one time per year. It is required for masters' level students to achieve their initial certification in school administration at the building level.
Prerequisites: Admission into the Educational Administration Program.

EDUC-UL 5520 Data Driven Leadership for Reculturing Schools Credits: 3
The challenges facing urban education are complex and may be understood from a myriad of perspectives including historical and socio-cultural underpinnings, economic and political contexts, and pedagogical/achievement orientations. This course will bring together some of these arguments as they relate to what school leaders can do to promote a community of adult leaders who use data th make decisions for the success of all children. Such a challenge includes working as educational leaders to reculture schools to increase opportunities for all students to learn. For some schools this task involves closing the persistent achievement gap that may exist among groups of students which requires disaggregating data by race, ethnicity, socioeconomic status, gender, and special educational needs.

EDUC-UL 5522 School Organizational Culture As The Context Of Change Credits: 3
This course is designed to enable students to understand that schools as organizations develop cultures and that this culture establishes relationships and conditions in schools for students, teachers, and administrators. Students will develop an understanding of the culture of a school and its influence on efforts to achieve substantive change or reform.

EDUC-UL 5523 Administrative Roles For Instructional Leadership Credits: 3
This course meets a requirement for administrator certification in Missouri and Kansas in the area of school improvement and leadership. The course focuses upon leadership roles necessary for creating a supportive climate for change and for implementing improved instructional programs.

EDUC-UL 5524 Philosophical Inquiry And Education Credits: 3
An examination of issues, problems and controversies discussed in educational and related literature, utilizing criteria and techniques of logical and philosophical analysis. The focus is on the development of critical thinking abilities as applied to theories, positions and arguments in educational and related contexts.

EDUC-UL 5525 Cultural Foundations Of Education Credits: 3
Examines education and schooling as cultural phenomena. This course focuses on an analysis of education and schooling as both cultural transmission and cultural change and the practical implications. Also included is a philosophical/ theoretical examination of varying relationships between dominant and minority cultures.

EDUC-UL 5526 Philosophical Foundations Of Education Credits: 3
Introduction to the study of philosophical problems implicit in educational issues. Focuses on the application of a number of philosophical concepts and skills to a variety of controversies, policies, and theories in education.

EDUC-UL 5527 Historical Foundations Of Education Credits: 3
Study of the development of educational policy, practice, and theory in relation to changes in social institutions and thought. Focuses on the analysis of contemporary educational problems in the light of historical perspectives.

EDUC-UL 5528 Sociological Foundations Of Education Credits: 3
An analysis of issues involving the role of schools in society, the relationship between education and other social institutions, and contemporary social developments which have major implications.

EDUC-UL 5531 Educational Leadership and Human Resources Credits: 3
This course has been designed to develop students' proficiencies in school human resource management and its importance to positive outcomes for student learning. The course focuses on human resource components that are essential to effective schools.
Prerequisites: Admission into the Educational Administration EdD Program.

EDUC-UL 5532 Educational Leadership and Organizational Behavior Credits: 3
This course has been designed to develop the students' proficiencies in school organization and management to provide positive outcomes for student learning. The course focuses upon organizational behavior and development and its components that are essential to effective school.
Prerequisites: Admission into the Educational Administration EdD Program.

EDUC-UL 5534 English Language Learner Program Administration Credits: 3
Provides educators, administrators, and district officials with knowledge, skills, and dispositions necessary to supervise/manage programs and teachers in elementary, middle, or secondary schools that serve students with limited English proficiency. Participants will study and apply theories and practices related to language acquisition cultural pluralism, multicultural education, family and community engagement, acculturation, assessment, and legal rights and responsibilities relating to English language learners and the school.
Prerequisites: Bachelor's degree.

EDUC-UL 5535 Current Topics in Urban School Leadership Credits: 3
Current Topics in Urban School Leadership

EDUC-UL 5550 Organization And Administration Of Higher Education Credits: 3
Organizational patterns; administrative roles and procedures; establishment of policies, institutional development; and public and private financing of higher education.

EDUC-UL 5551 Student Affairs Administration In Higher Education Credits: 3
Study of the objectives, organizational structure, and current issues of student affairs administration as they relate to the academic program, the campus environment, and the needs of students; analysis of the functions of different services.

EDUC-UL 5553 Supervision and Management of People Credits: 3
The purpose of this course is to provide a broad overview of staffing practices in the field of higher education, especially student affairs. The course will assist students to be better professionals, to learn the literature as it relates to supervision, and to begin basic skill development. Other course content includes issues surrounding staff selection, staff orientation. The course is open to any graduate student.

EDUC-UL 5556 The College Student Credits: 3
An examination of today's college students. Review and study of demographics, relationships of students and colleges, nature of student communities, new student populations and the impact of college on students and their educational development.

EDUC-UL 5557 Legal Aspects Of Higher Education Credits: 3
Study of legal issues within higher education. Focus is on state and federal law and regulations as they pertain to issues ranging from academic freedom to governance and administration. Focus on strategies for preventive law is a major component of the course.

EDUC-UL 5558 Advanced Student Development Theory Credits: 3
A focused and in-depth examination of developmental theories related to the college student. This course builds on information presented in EDUC-UL 5556.
Prerequisites: EDUC-UL 5556.

EDUC-UL 5559 Current Issues In Community Colleges Credits: 3
A course responsive to the contemporary issues in community college administration, addressing interesting and important topics that fall outside the scope of other courses in the higher education curriculum. Students will have an overview of the role of community colleges within the larger organization of colleges and universities in the U.S. higher education system.
Prerequisites: Graduate student status.

EDUC-UL 5560 Leadership In Higher Education Credits: 3
Focus on leadership, connections among different approaches to leadership, different forms of power, and different leadership behaviors. A series of opportunities to think systematically about leadership and to increase a student's personal leadership capacities in higher education will be provided.

EDUC-UL 5562 Gender & Leadership In Educ: Implications For Prof. Effectiveness Credits: 3
This course is for women and men who want to understand better the unique challenges and opportunities facing leaders in today's educational organizations. Exploration of connections between gender and leadership is the focus of study. Students will probe linkages between gender and leadership for their own leadership and for organizational policy and practice.

EDUC-UL 5564 History Of Higher Education Credits: 3
Study of the evolution of the constituencies within different types of American higher education institutions. The development of professional, practical, and graduate education will be examined as will 20th century alternatives to the liberal arts colleges and research university models.

EDUC-UL 5566 Racial And Ethnic Diversity, And Cultural Understanding Credits: 3
An exploration of the ideological and historical construction of education for social equality, and subsequent issues of race, ethnicity, and class that influence colleges and universities in the U.S. today.

EDUC-UL 5567 Higher Education Capstone Credits: 3
This course will provide a culminating experience for students in the Higher Education Masters program. All aspects of higher education administration will be examined and synthesized to enhance student ability to understand and operate in a complex setting.

EDUC-UL 5570 Administrative Practicum Higher Education Credits: 3-6
Assigned administrative responsibilities under supervision of practicing higher educational administrator, seminar and written project accompany field experiences.

EDUC-UL 5571 Internship In Higher Education Credits: 3-16
Applied experiences in a planned, supervised program. Seminar accompanies internship experiences.

EDUC-UL 5572 Higher Education Administration: The Profession Credits: 3
A course to introduce the prospective or new student affairs professional to all facets of higher educational administration. The course provides a balance of presentations by student affairs professionals, participation and observation in a variety of higher education offices and individual research projects. It is anticipated that students will visit several institutions of higher education and will participate in a service-learning project.

EDUC-UL 5574 Administrative Practicum Credits: 1-6
Assigned administrative responsibilities under supervision of practicing educational administrators seminar and written project accompany field experiences.

EDUC-UL 5575 Internship In Administration Credits: 1-16
Applied experiences in a planned, supervised educational administration program. Seminar accompanies internship experiences.

EDUC-UL 5589 Special Topics In Educational Leadership Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589AD Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589BE Special Topics in Educational Leadership Credits: 1-6
Special Topics in Educational Leadership

EDUC-UL 5589CP Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589EA Special Topics In Educational Leadership Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589ED Special Topics In Educational Leadership Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589EL Special Topics In Educational Leadership Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589ET Special Topics In Educational Leadership Credits: 1-6
A course designed to deal with a topic which is not available in the regular course offerings. Topics, instructors, and prerequisites to be listed on the semester bulletin.

EDUC-UL 5589HR Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589LR Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589OB Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5589SM Special Topics In Educational Leadership Credits: 1-6

EDUC-UL 5590 Seminar Credits: 3
Discussion and evaluation of literature in Education Administration.

EDUC-UL 5598 Individual Studies Credits: 1-6
Review of the research and trends relative to selected problems in education.

EDUC-UL 5601 Research In Education Administration: Qualitative Theory & Design Credits: 3
First of two courses in advanced qualitative research in higher education and educational administration. Focus is on the theory and design of qualitative work. Students will become familiar with the various ontological, epistemological, and methodological assumptions that guide research in the social sciences and be able to make informed choices about inquiry techniques for dissertation and future research.

EDUC-UL 5602 Seminar In The History Of American Urban Education Credits: 3
A study of the historical development of American urban educational institutions and ideas and of how that development is embedded within the broader context of social, political, and economic change in the United States.

EDUC-UL 5603 Research In Education Administration: Qualitative Data & Analysis Credits: 3
Second of two courses in advanced qualitative research in higher education and educational administration. Focus is on data collection and analysis in qualitative work. Students will become familiar with various data gathering techniques and devices for interpreting qualitative data and drawing meaningful conclusions. This information will guide students in dissertation and future research.
Prerequisites: EDUC-UL 5601.

EDUC-UL 5604 Introduction to Doctoral Study Credits: 3
This course is designed as an introductory course in the doctoral sequence for the EdD in Educational Administration with an emphasis in Higher Education. The course is designed to introduce students to the tasks and processes involved in the completion of the doctoral requirements. It is required for all entering doctoral students.
Prerequisites: Admission to the doctoral program.

EDUC-UL 5616 Analysis Of Educational Theory Formation Credits: 3
Study and application of criteria for evaluating the adequacy of educational theories and evaluating the relevance to theories of research studies.

EDUC-UL 5626 Theory In Educational Administration Credits: 3
Leadership theories and research; bureaucracy and organizational processes; new directions in organizational analysis; sociological and psychological concepts in school administration.
Prerequisites: EDUC-UL 5501 (or equivalent).

EDUC-UL 5627 Advanced Educational Supervision Credits: 3
Principles and concepts of educational supervision and implementation.
Prerequisites: EDUC-UL 5507 (or equivalent).

EDUC-UL 5628 The Superintendency Credits: 3
Analysis and overview of the nature, functions and activities of the public school superintendency including: historical and philosophical foundations; board-staff and other governing body relationships and functions; professional staff relations and management; public relations and communication; inter-governmental relations and responsibilities, and the functions of planning, direction and supervision of the instructional enterprise.

EDUC-UL 5634 Faculty & Curricular Issues Higher Education Credits: 3
This course will explore different facets of college and university curricula. This course will include varying ways curriculum has been structured and the debates that have surrounded the structure and content. Faculty issues will be explored via the curriculum and will include a focus on workload policies and practices.
Prerequisites: Admission to the doctoral program.

EDUC-UL 5635 Topics In Higher Education Credits: 3
Organization of higher education, public and private financing; accreditation; academic freedom; policy development; community relations; curricular patterns, selected current issues.
Prerequisites: EDUC-UL 5550 (or equivalent).

EDUC-UL 5636 Policy Issues in Higher Education Credits: 3
This course is intended for those whose roles as educational leaders requires them to participate in the analysis and development of policies associated with educational programs and practice. Students will be able to understand the characteristics of a well developed policy agenda, obstacles to policy implementation, and interpretations related to policy implementation. Concurrently, institutional, political, economic, social, and moral consequences of various policies will be explored.
Prerequisites: Admission to the doctoral program.

EDUC-UL 5637 Community College Credits: 3
Investigation of the purposes, programs, and the problems in the American community college movement; analysis of the structure, governance, and financial support of community colleges.
Prerequisites: Doctoral status.

EDUC-UL 5640 Apprenticeship And Conference In College Training Credits: 2-5
Apprenticeship experience in preparing, conducting, and evaluating college teaching under the direction of and in conference with supervising professors. Some attention to student personnel and administration in higher education.

EDUC-UL 5652 Financial Aspects Of Higher Education Credits: 3
This course is designed for graduate students with a basic understanding of the area of Higher Education Administration. The course examines basic concepts and principles of finance in higher education in the United States. Students are expected to: Develop an understanding of 1) the issues and fiscal problems of higher education, 2) the roles and responsibilities of financial officers in higher education, and 3) possible future trends in the financing of higher education.
Prerequisites: Doctoral status.

EDUC-UL 5655 Studies In Philosophy Of Education Credits: 3
Study of special topics in the philosophy of education.
Prerequisites: EDUC-UL 5523, EDUC-UL 5526.

EDUC-UL 5660 Effective Practices II Credits: 3
This course builds on the general understanding of leadership and professional practices developed in Leadership in Education Effective Practices I. The course addresses key leadership challenges and decision making in today's complex work world. The course uses reading on selected issues, case discussions, and role plays to move beyond theory and understanding to application and effectiveness.

EDUC-UL 5665 The Urban University Credits: 3
This course examines the development and unique aspects, characteristics and role of the urban university. In addition to an exploration of the historical relationship between urbanization in American society and university development and evolution, seminars will focus attention on undergraduate and graduate education, faculty development, community relations, and regional and economic development for urban institutions.
Prerequisites: Doctoral status.

EDUC-UL 5685 Problems And Issues In Education & Urban Leadership Credits: 3
This course serves as the capstone class for all doctoral students in education. The course requires analysis of successful dissertations in urban education and prepares students to write their own dissertation relative to urban study and education.

EDUC-UL 5690 Special Problems Credits: 1-6
Individual studies; thesis exploration, special reading.

EDUC-UL 5690A Special Problems Credits: 1-6
Individual studies; thesis exploration, special reading.

EDUC-UL 5696 Dissertation Administration And Community Leadership Credits: 1-16
Culminating written research project for doctoral students in Urban Leadership and Policy Studies.

Urban Planning and Design (UPD)

Courses

UPD 5596 Directed Study In Urban Planning And Design Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596A Directed Study In Urban Planning And Design Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596B Directed Study In Urban Planning And Design Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5596C Directed Study In Urban Planning And Design Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599 Special Topics In Urban Planning And Design Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599A Special Topics In Urban Planning And Design Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599B Special Topics In Urban Planning And Design Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5599C Special Topics In Urban Planning And Design Credits: 1-3
Intensive reading and/or research in an area selected by the student in consultation with the instructor.

UPD 5630 Quantitative Planning Methods I Credits: 3
This course introduces graduate students to quantitative methods in urban planning analysis. Topics include relating built form to function, demographic forecasting, economic impact analysis, trip generation, and housing market dynamics.
Prerequisites: STAT 235.

UPD 5740 Advanced GIS for Urban Planning Credits: 3
This advanced level GIS course is designed to expose graduate students to high level GIS techniques and geospatial analysis in the urban planning context. Students will learn data management skills in GIS and advanced geoprocessing tools with hand-on experiences. Students will also have an opportunity to work on a real world GIS project as part of course requirements.
Prerequisites: UPD 203 (or equivalent).

UPD 5742 Transportation Planning Credits: 3
This course provides fundamental theories, methods, and contemporary issues in transportation planning. The topics covered in this course include the transportation planning process, transportation systems, travel demand analysis, and policy issues such as the linkage between land use and transportation and environmental impacts, and traffic congestion.

UPD 5746 Urban Environmental Planning Credits: 3
Urban environmental planning examines ecological change due to urbanization. It looks at ways to measure and demonstrate ecological change at the site, neighborhood, and regional scales. Students incorporate environmental ideas and policies into plans developed for a client.

UPD 5747 Urban Redevelopment Credits: 3
This course examines techniques of urban redevelopment within urban planning and real estate. Graduate students learn about the development process, real estate markets, techniques of development finance and local policy approaches to urban redevelopment incentives.

Viola (VIOLA)

Courses

VIOLA 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: VIOLA 300.

VIOLA 5500A Graduate Viola-Secondary Credits: 2

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

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

VIOLA 5501 Graduate Viola - Masters Performance Credits: 4

VIOLA 5601 Graduate Viola - Doctoral Performance Credits: 4

Violin (VIOLIN)

Courses

VIOLIN 5300 Studio Class Credits: 0
Experiential lab where students gain orientation and experience with pedagogy, literature, and performance.
Cross Listings: VIOLIN 300.

VIOLIN 5500A Graduate Violin-Secondary Credits: 2

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

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

VIOLIN 5501 Graduate Violin - Masters Performance Credits: 4

VIOLIN 5601 Graduate Violin - Doctoral Performance Credits: 4

Voice (VOICE)

Courses

VOICE 5500A Graduate Voice-Secondary Credits: 2

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

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

VOICE 5501 Graduate Voice - Masters Performance Credits: 4
One hour weekly participation in Vocal Performance Seminar is required

VOICE 5601 Graduate Voice - Doctoral Performance Credits: 4
One hour weekly participation in Vocal Performance is required.