

University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4

The University Budget Committee recommends that state appropriated funds be allocated to the primary academic units in FY2009 (after state funds are first directed to special legislative appropriations and clearly identified University priorities.) Funds are allocated based on weighted student credit hours of instruction by each primary academic unit on campus. The weights are based on cost of instruction, and are a combination of weights utilized by the Missouri Council on Public Higher Education (COPHE) Study and a modified version of the Texas Higher Education Coordinating Board system.

The weights used in the COPHE study were derived from the state formula funding model proposed by Coordinating Board for Higher Education for institutions of higher education in the State of Missouri. The study divides academic disciplines into five clusters using cost per credit hour as determined by the National Study of Instructional Costs and Productivity Study (the Delaware Cost Study). Cost of instruction in the Delaware study, which includes benchmark data from approximately 400 institutions, is based on salaries, benefits and operating expenses in current funds for on-campus academic instruction, community education and off-campus academic instruction. The COPHE model then goes beyond the Delaware Study and differentiates instructional cost among student levels; the student level weights were obtained from research conducted by Dr. Howard Bowen.

The Texas Higher Education Coordinating Board funding formula also recognizes that instruction cost differs by discipline and student level. Weights in this model were derived by calculating educational costs for various academic disciplines and student levels within the Texas system (approximately 35 academic institutions). Educational costs included in the Texas model include faculty costs, academic support, institutional support, student services, research and departmental operating expenses in all funds.

Although both the COPHE and Texas models weigh instruction by both discipline and student level, the two studies differ in what is included in educational costs; therefore, the weights varied greatly for some disciplines and student levels between the two models. Both models had merit, and the UBC recognized it would be difficult to make an impartial decision favoring one weighting system over the other. Therefore, the UBC recommended to the Chancellor that a weighting system which blended the two methodologies equally be used to allocate state appropriations.

Additionally, during the development of the UBC recommendations, certain adjustments were made as omissions or extreme variances in either or both models were discovered during the budget model drafting process.

- The Texas system did not specifically address professional Schools of Medicine or Dentistry; therefore, at the Chancellor's suggestion, the weights for UMKC using the Texas model for these two disciplines were adjusted to 1.25 times the Pharmacy weight.
- Weights for the Law School varied greatly between 3.55 in the Texas model for first professional students and 8.35 in the COPHE model. The Chancellor had noted this and proposed a compromise weight of 4.72 for Law School instruction (which was the weighting factor originally included in the UBC's March 26, 2007 recommendation) in the modified version of the Texas model weights he suggested the UBC consider.
- There was also a fairly significant difference between the results of the modified Texas weights and the COPHE approach for A & S. Accordingly the UBC recommended that if the 50/50 blend of the two approaches were adopted (as it ultimately was), \$682,178 of expenses previously in the A & S budget, for items with wide benefit across the campus, be moved to the Appendix 5 assessments on all of the primary academic units. That adjustment is reflected in Appendix 5.

University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4

- Adjustments were made to weights in the School of Biological Sciences in both the COPHE and Texas model to account for that unit's unique teaching mission to first professional students in the health sciences.

The following table compares the weights between each model for each academic disciplines and student level.

CRSE_DEPT	COPHE Formula		Texas Formula	
	Level	Weighting Factor	Level	Weighting Factor
ANTHROPOLOGY	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
ARCH, URBAN PLNG AND DESIGN	1. Lower Division	1.84	1. Lower Division	1.00
	2. Upper Division	2.76	2. Upper Division	1.77
	3. Masters	3.86	3. Masters	4.01
	4. Doctors	5.52	4. Doctors	9.94
	5. UGrad Med	1.84	5. UGrad Med	1.00
	6. 1st Prof	1.84	6. 1st Prof	1.00
ART AND ART HISTORY	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	2.51
	3. Masters	2.10	3. Masters	5.65
	4. Doctors	3.00	4. Doctors	9.78
	5. UGrad Med	1.00	5. UGrad Med	1.50
	6. 1st Prof	1.00	6. 1st Prof	1.50
CHEMISTRY	1. Lower Division	1.51	1. Lower Division	1.50
	2. Upper Division	2.26	2. Upper Division	2.93
	3. Masters	3.17	3. Masters	7.29
	4. Doctors	4.53	4. Doctors	20.05
	5. UGrad Med	1.51	5. UGrad Med	1.67
	6. 1st Prof	1.51	6. 1st Prof	1.67

**University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4**

	COPHE Formula		Texas Formula	
COMMUNICATION STUDIES	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
CRIMINAL JUSTICE	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
ECONOMICS	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
ENGLISH LANGUAGE AND LIT	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
FOREIGN LANGUAGES AND LIT	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00

**University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4**

	COPHE Formula		Texas Formula	
GENERAL STUDIES	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
GEOSCIENCES	1. Lower Division	1.51	1. Lower Division	1.00
	2. Upper Division	2.26	2. Upper Division	2.93
	3. Masters	3.17	3. Masters	7.29
	4. Doctors	4.53	4. Doctors	20.05
	5. UGrad Med	1.51	5. UGrad Med	1.67
	6. 1st Prof	1.51	6. 1st Prof	1.67
HISTORY	1. Lower Division	1.00	1. Lower Division	1.67
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
INTERDEPARTMENTAL - A&S	1. Lower Division	1.51	1. Lower Division	1.00
	2. Upper Division	2.26	2. Upper Division	1.77
	3. Masters	3.17	3. Masters	4.01
	4. Doctors	4.53	4. Doctors	9.94
	5. UGrad Med	1.51	5. UGrad Med	1.00
	6. 1st Prof	1.51	6. 1st Prof	1.00
MATHEMATICS AND STATISTICS	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00

University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4

	COPHE Formula		Texas Formula	
PHILOSOPHY	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
PHYSICS	1. Lower Division	1.51	1. Lower Division	1.00
	2. Upper Division	2.26	2. Upper Division	2.93
	3. Masters	3.17	3. Masters	7.29
	4. Doctors	4.53	4. Doctors	20.05
	5. UGrad Med	1.51	5. UGrad Med	1.67
	6. 1st Prof	1.51	6. 1st Prof	1.67
POLITICAL SCIENCE	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
PSYCHOLOGY	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
SOCIAL WORK	1. Lower Division	1.84	1. Lower Division	1.89
	2. Upper Division	2.76	2. Upper Division	2.09
	3. Masters	3.86	3. Masters	3.76
	4. Doctors	5.52	4. Doctors	12.21
	5. UGrad Med	1.84	5. UGrad Med	1.89
	6. 1st Prof	1.84	6. 1st Prof	1.89

University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4

	COPHE Formula		Texas Formula	
SOCIOLOGY	1. Lower Division	1.00	1. Lower Division	1.89
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
THEATRE	1. Lower Division	1.51	1. Lower Division	1.00
	2. Upper Division	2.26	2. Upper Division	2.51
	3. Masters	3.17	3. Masters	5.65
	4. Doctors	4.53	4. Doctors	9.78
	5. UGrad Med	1.51	5. UGrad Med	1.50
	6. 1st Prof	1.51	6. 1st Prof	1.50
A & S Total				
BIOLOGICAL SCIENCES	1. Lower Division	1.84	1. Lower Division	1.84
	1. Lower Div - Health Sci	2.77	1. Lower Div - Health Sci	2.77
	2. Upper Division	2.93	2. Upper Division	2.93
	2. Upper Div - Health Sci	4.15	2. Upper Div - Health Sci	4.15
	3. Masters	3.86	3. Masters	7.29
	4. Doctors	5.52	4. Doctors	20.05
	5. UGrad Med	1.84	5. UGrad Med	1.67
	6. 1st Prof	1.84	6. 1st Prof	1.67
BIOL Total				
BUSINESS AND PUBLIC ADMIN	1. Lower Division	1.51	1. Lower Division	1.18
	2. Upper Division	2.26	2. Upper Division	1.68
	3. Masters	3.17	3. Masters	3.70
	4. Doctors	4.53	4. Doctors	19.08
	5. UGrad Med	1.51	5. UGrad Med	1.18
	6. 1st Prof	1.51	6. 1st Prof	1.18
BUS A Total				

**University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4**

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CIVIL ENGINEERING	1. Lower Division	3.34	1. Lower Division	2.46
	2. Upper Division	5.01	2. Upper Division	3.51
	3. Masters	7.10	3. Masters	7.39
	4. Doctors	10.02	4. Doctors	17.05
	5. UGrad Med	3.34	5. UGrad Med	2.46
	6. 1st Prof	8.35	6. 1st Prof	2.46
COMPUTER SCIENCE PROGRAM	1. Lower Division	3.34	1. Lower Division	2.46
	2. Upper Division	5.01	2. Upper Division	3.51
	3. Masters	7.01	3. Masters	7.39
	4. Doctors	10.02	4. Doctors	17.05
	5. UGrad Med	3.34	5. UGrad Med	2.46
	6. 1st Prof	8.35	6. 1st Prof	2.46
COORD UNDERGRAD ENGINEERING	1. Lower Division	3.34	1. Lower Division	2.46
	2. Upper Division	5.01	2. Upper Division	3.51
	3. Masters	7.01	3. Masters	7.39
	4. Doctors	10.02	4. Doctors	17.05
	5. UGrad Med	3.34	5. UGrad Med	2.46
	6. 1st Prof	8.35	6. 1st Prof	2.46
ELECTRICAL AND COMP ENGIN	1. Lower Division	3.34	1. Lower Division	2.46
	2. Upper Division	5.01	2. Upper Division	3.51
	3. Masters	7.01	3. Masters	7.39
	4. Doctors	10.02	4. Doctors	17.05
	5. UGrad Med	3.34	5. UGrad Med	2.46
	6. 1st Prof	8.35	6. 1st Prof	2.46
MECHANICAL ENGINEERING	1. Lower Division	3.34	1. Lower Division	2.46
	2. Upper Division	5.01	2. Upper Division	3.51
	3. Masters	7.01	3. Masters	7.39
	4. Doctors	10.02	4. Doctors	17.05
	5. UGrad Med	3.34	5. UGrad Med	2.46
	6. 1st Prof	8.35	6. 1st Prof	2.46
SCE Total				

**University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4**

	COPHE Formula		Texas Formula	
MUSIC (CONSERVATORY)	1. Lower Division	1.51	1. Lower Division	1.50
	2. Upper Division	2.26	2. Upper Division	2.51
	3. Masters	3.17	3. Masters	5.65
	4. Doctors	4.53	4. Doctors	9.78
	5. UGrad Med	1.51	5. UGrad Med	1.50
	6. 1st Prof	1.51	6. 1st Prof	1.50
CONSR Total				
DENTISTRY (SCHOOL)	1. Lower Division	3.34	1. Lower Division	2.20
	2. Upper Division	5.01	2. Upper Division	4.81
	3. Masters	7.01	3. Masters	18.63
	4. Doctors	10.02	4. Doctors	31.59
	5. UGrad Med	3.34	5. UGrad Med	2.20
	6. 1st Prof	8.35	6. 1st Prof	6.41
DENT Total				
COUNSELING PSYCHOLOGY	1. Lower Division	1.51	1. Lower Division	1.89
	2. Upper Division	2.26	2. Upper Division	2.09
	3. Masters	3.17	3. Masters	3.76
	4. Doctors	4.53	4. Doctors	12.21
	5. UGrad Med	1.51	5. UGrad Med	1.89
	6. 1st Prof	1.51	6. 1st Prof	1.89
EDUCATION (SCHOOL)	1. Lower Division	1.51	1. Lower Division	1.33
	2. Upper Division	2.26	2. Upper Division	1.79
	3. Masters	3.17	3. Masters	2.68
	4. Doctors	4.53	4. Doctors	7.70
	5. UGrad Med	1.51	5. UGrad Med	1.33
	6. 1st Prof	1.51	6. 1st Prof	1.33
PHYSICAL EDUCATION	1. Lower Division	1.51	1. Lower Division	1.33
	2. Upper Division	2.26	2. Upper Division	1.79
	3. Masters	3.17	3. Masters	2.68
	4. Doctors	4.53	4. Doctors	7.70
	5. UGrad Med	1.51	5. UGrad Med	1.33
	6. 1st Prof	1.51	6. 1st Prof	1.33
EDUCATION TOTAL				

University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4

	COPHE Formula		Texas Formula	
INTERDIVISIONAL - GRADUATE	1. Lower Division	1.00	1. Lower Division	1.00
	2. Upper Division	1.50	2. Upper Division	1.77
	3. Masters	2.10	3. Masters	4.01
	4. Doctors	3.00	4. Doctors	9.94
	5. UGrad Med	1.00	5. UGrad Med	1.00
	6. 1st Prof	1.00	6. 1st Prof	1.00
INTERDIVISIONAL – GRADUATE TOTAL				
LAW (SCHOOL)	1. Lower Division	3.34	1. Lower Division	4.72
	2. Upper Division	5.01	2. Upper Division	4.72
	3. Masters	7.01	3. Masters	4.72
	4. Doctors	10.02	4. Doctors	4.72
	5. UGrad Med	3.34	5. UGrad Med	4.72
	6. 1st Prof	8.35	6. 1st Prof	4.72
LAW TOTAL				
MEDICINE (SCHOOL)	1. Lower Division	3.34	1. Lower Division	2.20
	2. Upper Division	5.01	2. Upper Division	4.81
	3. Masters	7.01	3. Masters	18.63
	4. Doctors	10.02	4. Doctors	31.59
	5. UGrad Med	3.34	5. UGrad Med	2.20
	6. 1st Prof	8.35	6. 1st Prof	6.41
MEDICINE TOTAL				
NURSING (SCHOOL)	1. Lower Division	2.19	1. Lower Division	2.73
	2. Upper Division	3.28	2. Upper Division	3.24
	3. Masters	4.60	3. Masters	5.36
	4. Doctors	6.57	4. Doctors	11.79
	5. UGrad Med	2.19	5. UGrad Med	2.73
	6. 1st Prof	5.48	6. 1st Prof	2.73
NURSING TOTAL				
PHARMACY (SCHOOL)	1. Lower Division	2.19	1. Lower Division	1.76
	2. Upper Division	3.28	2. Upper Division	3.85
	3. Masters	4.60	3. Masters	14.90
	4. Doctors	10.02	4. Doctors	25.27
	5. UGrad Med	2.19	5. UGrad Med	1.76
	6. 1st Prof	5.48	6. 1st Prof	5.13

**University Budget Committee
Allocation of State Appropriations Methodology
Appendix 4**