Central Connecticut State University (CCSU) > **Graduate Studies Curriculum Committee** Send To Printer

FROM: Carlotta Parr, Interim Chair

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SUBJ: Minutes of the Graduate Studies Curriculum Subcommittee

November 19, 2010, Meeting at 2:30 in Blue and White Room in the Student Center

Members in Attendance: Shelly Jones (Math), Eric Leonidas (English), William R. Nelson (Special Education); Glynis Fitzgerald (Dean's Assistant), Don Adams (Chair, Curriculum Committee), Susan Seider (Chair, Graduate Studies Committee), Paulette Lemma (Dean)

I. Old Business

A. The committee **approved** the **course addition** of CM 585: Advanced Construction Law in **Construction Management** (Anne Pautz, Representative).

Construction Management					
1	Graduate Course Addition:	CM 585: Advanced Construction Law	***Change in course number, change description, and credit***	**Approved**	[TECH] [GS]
2	Undergraduate/Graduate Course Revision:	CM 455: Construction Project Management	***Change in prerequisite, change description***	**Approved**	[TECH] [GS]
International Studies					
3	Graduate Course Addition:	IS 420: *cross-list with PS 420*	Government and Politics of Latin America 3	**Not Approved**	AS][GE][GS]
4	Graduate Course Addition	IS 421: *cross-list with PS 421*	Government and Politics of Africa 3	**Not Approved**	[AS][GE][GS]

1. The committee **approved as revised** the **course addition** of CM 585: Advanced Construction Law, CM 455: Construction Project Management, and **graduate course revision** in the **Construction Management** (Jacob Kovel, Representative). The course descriptions are as follows.

a. CM 585 Advanced Construction Law 3

Prereq.: CM 515 or permission of instructor. Advanced concepts related to legal doctrine as applied to the construction industry. Focus on contract documents, dispute resolution and case law dealing with contractors, owners and design professionals. Fall (O) [GR]

b. CM 455 Emphasis on administrative procedures, quality control, time and cost control, resource management, field office practices, construction processing, job site meetings, and correspondence. Lecture/lab meets four hours per week.

2. The committee **did not approve** the **course addition** of IS 420: Government and Politics of Latin America, and IS 421: Government and Politics of Africa in the **International Studies Department** (Robin Smith, Representative). The committee recommends that any revisions be submitted with PS program revisions in the spring.

I. New Business:

A. The committee **approved** the following **course and program revisions.**

Biology					
1	Undergraduate/Graduate Course Revision:	BIO 480: Animal Behavior	***Change credits from 3 to 4, change description***	**Approved as Amended**	[A&S] [GS]
2	Undergraduate/Graduate Course Deletion	BIO 488		**Approved**	[A&S][GS]
Counseling and Family Therapy					
3	Graduate Course Revision	MFT 593	***Change course title, change description***	**Approved as Amended**	[SEPS][GS]
4	Graduate Course Revision	MFT 594	***Change course title, change description***	**Approved as Amended**	[SEPS][GS]
Mathematical Sciences					
5	Graduate Course Addition	STAT 520		**Approved as Amended**	[AS][GS]
6	Graduate Course Revision	STAT 521	***Change in course description***	**Approved as Amended**	[AS][GS]
7	Graduate Course Revision	STAT 522	***Change in course title and description***	**Approved as Amended**	[AS][GS]
8	Graduate Course Revision	STAT 523	***Change in prerequisite, course title and description***	**Approved as Amended**	[AS][GS]
9	Graduate Course Revision	STAT 526	***Change in credit, & course description***	**Approved as Amended**	[AS][GS]
10	Graduate Course Revision	STAT 527	***Change in credit, & course description***	**Approved as Amended**	[AS][GS]

1. The committee **approved** the **course revisions** for BIO 480: Animal Behavior, and the **course deletion of** BIO 488 in the **Biology Department** (Ruth Rollin, Representative). The revised course description is as follows:

Understanding animal behavior from the perspectives of adaptive function, evolutionary history, development and physiological. Laboratories focus on techniques of observation, experimental design, and data analysis. Three hours of lecture and one three-hour field or laboratory session per week. 4 credits.

2. The committee **approved** the **course revisions** for MFT 593: School-Based Marriage and Family Therapy Practicum and Seminar I, and MFT 594: School-Based Marriage and Family Therapy Practicum and Seminar II the **Counseling and Family Therapy** (Ralph Cohen, Representative). The revised title and course descriptions are as follows.

a. MFT 593: School-Based Marriage and Family Therapy Practicum and Seminar I

Supervision of Marriage and Family practice in public schools with direct client contact. Covers school-based learning and systems theories, Federal and state education laws (e.g., IDEA and ADA); professional ethics and code of professional responsibility for educators; FERPA; statutory requirements for mandated reporting, suspensions and expulsions; and school and district accountability. Fulfills 1/2 of the required 300 hours of practicum for state certification (Fall).

b. MFT 594: School-Based Marriage and Family Therapy Practicum and Seminar II Continuation of the two-semester School-Based Marriage and Family Therapy Practicum and Seminar. Further development of content areas covered in MFT 593. Fulfills the second ½ of the required 300 hours of practicum for state certification. (Spring)

3. The committee **approved as program addition (STAT 520), course title and revisions, the graduate program revisions for** the **MASTER OF SCIENCE IN DATA MINING, and GRADUATE OFFICIAL CERTIFICATE PROGRAMS** in the **Mathematical Sciences Department** (Dan Larose, Representative). The additions and revisions are as follows.

a. STAT 520: Multivariate Analysis for Data Mining

A concept-based introduction to multivariate analysis, useful for data mining and predictive modeling, with emphasis given to interpreting output and checking model assumptions using one of the standard statistical packages. Topics may include: multivariate normal distribution, simultaneous inferences, one- and two-way MANOVA, multivariate multiple regression and ANACOVA, correlation, principle component and factor analysis, discriminant analysis, cluster analysis and multidimensional scaling, path analysis, structural equation modeling, and longitudinal data analysis.

b. STAT 521: Introduction to Data Mining

Data mining models and methodologies. Topics may include data preparation, data cleaning, exploratory data analysis, statistical estimation and prediction, regression modeling, multiple regression, model building, classification and regression trees, and report writing.

c. STAT 522**:** Clustering and Affinity Analysis

Investigation and application of methods and models used for clustering and affinity analysis. Topics may include dimension reduction methods, k-means clustering, hierarchical clustering, Kohonen networks clustering, BIRCH clustering, anomaly detection, market basket analysis, and association rules using the a priori and generalized rule induction algorithms.

d. STAT 523**:** Predictive Analytics

Investigation and application of methods and models used for predictive modeling and predictive analytics. Topics may include neural networks, logistic regression, k-nearest neighbor classification, the C4.5 algorithm, CHAID and QUEST decision trees, feature selection, boosting, naïve Bayes classification and Bayesian networks, time series, and model evaluation techniques.

e. STAT 526: Data Mining for Genomics and Proteomics

Topics include selection of data mining methods appropriate for the goals of a biomedical study (supervised versus unsupervised, univariate versus multivariate), analysis of gene expression microarray data, biomarker discovery, feature selection, building and validation of classification models for medical diagnosis, prognosis, drug discovery, random forests, and ensemble classifiers.

f. STAT 527: Text Mining

Intensive investigation of text mining methodologies, including pattern matching with regular expressions, reformatting data, contingency tables, part-of-speech tagging, top-down parsing, probability and text sampling, the bag-of-words model and the effect of sample size. Extensive use of Perl and Perl modules to analyze text documents.

g. 534: Applied Categorical Analysis

Introduction to analysis and interpretation of categorical data using analysis of variance or regression analogs. Topics may include contingency tables, generalized linear models, logistic regression, log-linear models, models for matched pairs, and

modeling correlated and clustered responses; use of computer software such as SAS and R.

h. Graduate Program Revisions for Graduate Official Certificate Program in Data Mining: Reduce program credits from 36 to 33, eliminate some program prerequisites (Calculus, Mathematical Statistics), Reduced core courses from 8-6, changes in titles, credits and course descriptions noted above, and change in sequence of 521, 22, and 523.

i. Graduate Program Revisions for Master of Science in Data Mining: Reduce required credits from 18, to 18-20, addition of new course STAT 520 to restricted electives, and changes in titles, credits and course descriptions noted above.

4. The committee **approved as revised** the **course revisions** for SCI 520: The Physical Sciences, SCI 530: The Earth/Space Sciences in the **Physics and Family Earth Sciences,** SCI 540: The Life Sciences (Marsha Bednarski, Physics Representative). The revised course descriptions are as follows:

a. SCI 520: The Physical Sciences5

Emphasis on conceptual understanding of the physical science strands in the Connecticut Science Standards: Properties of Matter, Forces and Motion, and Energy Transfer and Transformations. Development of content activities, labs, and assessments for use in the classroom.

b. SCI 530: The Earth/Space Sciences

Emphasis on conceptual understanding of the Earth/Space science strands in the Connecticut Science Standards: Energy in the Earth's Systems, The Changing Earth, and Earth in the Solar System. Development of content activities, labs, and

assessments for use in the classroom.

c. SCI 540: The Life Sciences

Emphasis on conceptual understanding of the life science strands in the Connecticut Science Standards: Heredity and Evolution, Structure and Function, and Matter and Energy in Ecosystems. Development of content activities, labs, and assessments for use in the classroom.

d. Graduate Program Revisions for Master of Science in Natural Science: Plan A Reduce Specialization from 6-9 credits to 3-6 credits, additional science courses from 6-9 credits to 6-12 credits.

A. The committee **tabled** the following **course revisions, and graduate program revision** because there was not a representative from the History Department present at the meeting.

History					
1.	Undergraduate/Graduate Course Revision:	HIST 455	***Change course title and description***	**Tabled**	AS][GE][GS]
2.	Undergraduate/Graduate Course Revision:	HIST 446	***Change course title and description***	**Tabled**	AS][GE][GS]
3.	Graduate Program Revision	**Master of Arts in History**		**Tabled**	[AS][GS]