

A regular meeting of the University Curriculum Committee was held on December 8, 2008 at 2:00 p.m.

Members present: Chair Carole Makela, Professors Bradley Goetz, David Gilliland, Patrick Fitzhorn, Walt Jones, John Ridley, Steven Strauss, Howard Ramsdell, Cathy Cranston.

Absent: Graduate representative Kyle Stone and Alan Lamborn (*ex-officio*).

Guest: Linda Selkirk

Minutes

The minutes of December 1, 2008, were approved.

CURRICULAR REQUESTS

The following curricular requests were approved.

New Courses

Effective Date

FIN 524/STAT 524 03(3-0-0). Financial Statistics. F. Prerequisite: MATH 345; STAT 420, or Admission to MSBA program with Financial Risk Management specialization.

Fall Semester 2009

Probability and statistical concepts and quantitative tools used in financial modeling and decision-making.

FIN 605 03(3-0-0). Enterprise Valuation. F. Prerequisite: FIN 300; Admission to MSBA program with Financial Risk Management specialization.

Fall Semester 2009

Corporate valuation methodologies including dividend discount model, relative valuation using market multiples, free cash flows and options analysis.

FIN 670 03(3-0-0). Risk Management Theory and Application. S. Prerequisite: FIN 605; FIN 625; FIN 655.

Spring Semester 2010

Fundamentals of financial risk management using quantitative techniques and models to identify, measure, and manage corporate risk.

STAT 524/FIN 524 03(3-0-0). Financial Statistics. F. Prerequisite: MATH 345; STAT 420, or Admission to MSBA program with Financial Risk Management specialization.

Fall Semester 2009

Probability and statistical concepts and quantitative tools used in financial modeling and decision-making.

New Curricula

**College of Natural Sciences
Master of Natural Sciences Education (Plan C)**

Effective Summer 2009

(The entire program is shown.)

<u>Course</u>	<u>Title</u>	<u>Cr</u>
Education Courses		
EDUC 628 ^{P1}	Models of Teaching	3
EDUC 629 ¹	Communication and Classrooms	3
EDUC 714 ^P	Education Policy Analysis	3
	TOTAL	<hr/> 9
Natural Science Courses		
NSCI 619 ^{P2}	Physics for Science Educators	3
NSCI 620 ^{P2}	Chemistry for Science Educators	3
NSCI 630 ^{P2}	Spectroscopy for Science Educators	3
NSCI 640 ^{P2}	Energetics for Science Educators	3

<u>Course</u>	<u>Title</u>	<u>Cr</u>
NSCI 650 ^{P2}	Pollution and Environmental Biology for Educators	3
	TOTAL	15
Research		
NSCI 698 ^{P3}	Research Experience in Natural Sciences	7
	TOTAL	7
Independent Study		
NSCI 695 ^{P4}	Independent Study for the MNSE	3
	TOTAL	3
PROGRAM TOTAL = 34 credits		

^P This course has at least one prerequisite. Check the Courses of Instruction section of the catalog or <http://catalog.colostate.edu/front/courses-of-instruction.aspx> to see the course prerequisites.

¹ Course may be offered in a video tape format.

² Offered only as an online course.

³ Requires residency on campus for the 8-week summer session at full time (8 weeks x 40 hours/week = 320 hours). Students will complete the research experience requirement in the summer after their first year they are enrolled in the Program. Instructors are graduate student advisors who hold regular faculty appointments in the Departments of Biology, Chemistry, or Physics.

⁴ Students are expected to complete a Plan C Master's degree. The independent study requires enrollment in the summer session after completing the course and research requirements. It involves weekly meetings of the student with her/his research advisor, but does not require full-time residency on campus.

Major Changes in Curricula

College of Natural Sciences
 Department of Mathematics
 Major in Mathematics
 General Mathematics Concentration

Effective Summer 2009

(The entire program is shown. Deletions are in ~~strikeout~~; additions are in underline.)

<u>Course</u>	<u>Title</u>	<u>Cr</u>	<u>AUCC</u>
FRESHMAN			
CO 150 ^P	College Composition	3	1A
MATH 160 ^P	Calculus for Physical Scientists I	4	1B
MATH 161 ^P	Calculus for Physical Scientists II	4	<u>1B</u>
MATH 192	First Year Seminar in Mathematical Sciences	1	
MATH 229^P	Matrices and Linear Equations	2	
STAT 192	First Year Seminar in Mathematical Sciences	1	
	Arts/humanities ¹	6	3B
	Global and cultural awareness ²	3	3E
	Historical perspectives ³	3	3D
	Social/behavioral sciences ⁴	3	3C
	<u>Elective⁵</u>	<u>2-3</u>	
	TOTAL	<u>30-31</u>	
SOPHOMORE			
MATH 261 ^P	Calculus for Physical Scientists III	4	
MATH 369 ^P	Linear Algebra	3	4A
PH 141 ^P	Physics for Scientists and Engineers I	5	3A
PH 142 ^P	Physics for Scientists and Engineers II	5	3A
STAT 315 ^P	Statistics for Engineers and Scientists	3	
	OR		
<u>STAT 303^P</u>	<u>Introduction to Communication Principles</u>	<u>3</u>	
	Additional communication ^{5b}	3	2A or 2B

<u>Course</u>	<u>Title</u>	<u>Cr</u>	<u>AUCC</u>
	Introductory programming ^{6,7}	4	
	Elective⁷	3	
	<u>Mathematical Sciences Electives^{8,9}</u>	<u>3</u>	
	TOTAL	30	
JUNIOR			
<u>MATH 317^P</u>	<u>Advanced Calculus of One Variable^{9,10}</u>	<u>4</u>	<u>4B</u>
	OR		
<u>MATH 417^P</u>	<u>Advanced Calculus I^{9,10}</u>	<u>3</u>	<u>4B, 4C</u>
	<u>Select one of the following courses:¹⁰</u>		
MATH 360 ^P	Mathematics of Information Security ⁹	3	
	OR		
MATH 366 ^P	Introduction to Abstract Algebra ⁹	3	
<u>MATH 466^P</u>	<u>Abstract Algebra I⁹</u>	<u>3</u>	<u>4C</u>
	Biological/physical sciences ^{8,11}	3	3A
	Mathematical s Sciences <u>Electives^{9,8,9}</u>	7 <u>3</u>	
	Electives ^{7,5}	17	
	TOTAL	<u>29-30</u>	
SENIOR			
MATH 317^P	Advanced Calculus of One Variable	4	4B
	<u>Select one of the following:¹⁰</u>		
MATH 417 ^P	Advanced Calculus I ⁹	3	
<u>MATH 418^P</u>	<u>Advanced Calculus II⁹</u>	<u>3</u>	
MATH 419^P	Introduction to Complex Variables	3	
MATH 460^P	Information and Coding Theory	3	
MATH 466 ^P	Abstract Algebra I ⁹	3	<u>4C</u>
<u>MATH 467^P</u>	<u>Abstract Algebra II⁹</u>	<u>3</u>	
MATH 417^P	Advanced Calculus I¹⁰	3	4C
	OR		
MATH 466^P	Abstract Algebra I¹⁰	3	4C
	Mathematical s Sciences <u>Electives^{9,8,9}</u>	5 <u>12</u>	
	Electives ^{7,5}	15	
	TOTAL	30	
PROGRAM TOTAL = 120 credits			

^P This course has at least one prerequisite. Check the Courses of Instruction section of the catalog or <http://catalog.colostate.edu/front/courses-of-instruction.aspx> to see the course prerequisites.

¹ Select two courses from the list in category 3B in the All-University Core Curriculum (AUCC). Only 3 of the 6 credits required for arts and humanities may come from intermediate (L* 200 and L* 201) foreign language courses.

² Select from the list of courses in category 3E in the AUCC.

³ Select from the list of course in category 3D in the AUCC.

⁴ Select from the list of courses in category 3C in the AUCC.

⁵ Enough elective credits must be selected to bring the program total to 120 credits with a minimum of 12 upper division credits. MATH 117, MATH 118, MATH 124, MATH 125, and MATH 126 cannot be used as elective credits for a mathematics degree.

⁵⁻⁶ Select from the list of courses in category 2A or 2B in the AUCC. First-time students entering a college or university on or after July 1, 2008, must take an advanced writing course (category 2B).

⁶⁻⁷ Students must take either CS 160 (4 credits), or take 4 credits including CS 155 and CS 156, **plus** two of the following one-credit courses: CS 157, MATH 151, MATH 152, and/or MATH 158/CS 158.

⁷ ~~Enough elective credits must be selected to bring the program total to 120 credits with a minimum of 42 upper division credits. MATH 117, MATH 118, MATH 124, MATH 125, and MATH 126 cannot be used as elective credits for a mathematics degree.~~

⁸ ~~Select a non-physics course from category 3A in the AUCC.~~

⁹⁻⁸ ~~Select a total of 15-18 credits from the following, with 6 or more from (a). (a) Upper division mathematics courses except MATH 315 and those ending in -80 to -99. (b) Upper division MATH, CS, or STAT courses, except those ending in -80 to -99. upper division (300-400 level) MATH, CS, or STAT courses, except those courses ending in -80 to -99. At least 9 of the 18 credits must be from upper division MATH courses.~~

⁹ At least 12 credits of ALL upper division MATH courses must be at the 400-level or above.

¹⁰ ~~Whichever course is chosen as the capstone course cannot be used to satisfy other upper-division mathematics requirements. These courses are in addition to the 18 credits of Mathematical Sciences Electives required in footnote 8, and may not be used to fulfill the Mathematical Sciences Electives requirement.~~

¹¹ Select a non-physics course from category 3A in the AUCC.

Request to add Master of Natural Sciences Education (Plan C)

A request by the College of Natural Sciences to add a master of natural sciences education Plan C (M.N.S.E. program) was approved. The recommended effective date, subject to special action by Faculty Council and approval by the Board of Governors and the Department of Higher Education, is Summer Session 2009.

Revisions to the Graduate Professional Bulletin—Plan C Master Degree and Credit Requirements

Committee members reviewed and revised the *Master's Degrees and Credit Requirements Regarding Plan C Option* submitted by the Committee on Scholarship, Research, and Graduate Education (CoSRG). The definition of Plan C Master's degree has been amended to add 'consistent with expressed goals of the program'. The amended proposal will be shared with CoSRG. Guidelines for a limited number of credits from internship, practicum or other experience in specific Plan C programs of study will be outlined in the Curricular Handbook.

CAP4Kids: Preschool to Postsecondary Education Alignment Act

UCC members provided feedback from their colleges regarding the *CAP4Kids: Preschool to Postsecondary Education Alignment Act*. The intent of the bill is to mesh the P-12 and Higher Education environments in a way that prepares all students to be successful as they enter college or the workforce. Carole Makela will take issues raised by UCC to Faculty Council Chair. The committee recommended the following be considered as part of the final document from Colorado State University:

- Make sure the final document specifically states the Higher Education Admission Requirements (HEAR) adopted by the Colorado Commission on Higher Education be included when implementing CAP4Kids.
- Include a stronger/clearer definitions of communication skills (speaking and writing skills).
- Clarify the attitudes and traits students should possess when they entering a university by adding a statement or paragraph as to why the attitude and trait is necessary to be successful.

School of Global Environmental Sustainability—SoGES Curricular Process and GES Subject Code Request

Several questions and concerns were raised by UCC members about the School of Global Environmental Sustainability's (SoGES) curriculum process proposal and their GES subject code request. The UCC chair will invite Kathy Pickering, Associate Director for Education Programs, to a future UCC meeting to address committee members' questions.

The meeting adjourned at 4:10 p.m.

(FC) 1/5/09

Carole Makela, Chair
Tom Hoehn, Secretary