

**MINUTES OF
GRADUATE COLLEGE COMMITTEE ON CURRICULA
September 23, 2015**

Present: T. Abebe, S. Moore, F. Fontana, S. Golitsynskiy, S. Onken, D. Cyphert, B. Cutter, G. Pohl, A. Peterson, P. Mackay, D. Wallace, M. Timmerman

Guests: D. Del Carlo, P. Shand, L. Strauss, S. Morgan, D. Saunders, D. Mupasiri, S. Kirmani, D. Hotek

The meeting was called to order by GCCC Chair Cutter at 10:02 a.m. in 115 Lang Hall.

I. Welcome and Introductions

Chair Cutter welcomed all present and introductions followed.

Cutter informed the group a pre-meeting took place on Monday, September 21, 2015.

II. Approval of 9/16/15 Minutes

Cutter asked members to review GCCC minutes dated September 16, 2015.

Pohl moved, Onken seconded to approve minutes.

Onken requested changes to section F paragraph one. The passage, "so few graduate students aren't taking..." was changed to "so few graduate students are taking." The third sentence was changed to, "Most graduate Social Work students are taking graduate-only electives within the major so doesn't make sense to continue offering these courses." Carr Childers requested changes to section C paragraph six. The passage, "consistent with what the thesis option is currently doing," should be changed to, "consistent with what the non-thesis option is currently doing." In a separate email from Cutter, changes were requested to section C paragraph two and three. The passage, "Cyphert asked why HISUS 4190/5190 was being dropped," changed to, "Cyphert asked why HISUS 4190/5190 was being added." The passage, "R. Martin indicated this course should have been dropped with the last cycle, and the department is taking care to drop it this cycle instead," was changed to, "R. Martin indicated this course should have been added with the last cycle, and the department is taking care to add it this cycle instead."

Question was called on the motion to approve minutes as corrected. Motion carried and September 16, 2015, minutes were approved as corrected.

III. Curriculum Review Procedures for CHAS (Sciences only) Curriculum Proposals

Abebe moved, Pohl seconded to approve Physics curriculum proposals.

**A. PHYSICS 4000/5000 Fundamentals of Physics I
PHYSICS 4310/5310 Physical Computing**

Shand indicated employers are looking for emphasis in microcontrollers and this is the reason for the changes to PHYSICS 4310/5310. The course has MWF labs right now and lecturing is done within the context of the laboratory. The course should remain setup in the catalog as Lecture/Lab.

Question was called on the motion to approve Physics curriculum proposals. Motion carried and approved unanimously.

Abebe moved, Pohl seconded to approve Computer Science curriculum proposals.

**B. CS 3120/5120 User Interface Design
CS 3730/5730 Project Management**

A brief review of changes took place.

Question was called on the motion to approve Computer Science curriculum proposals. Motion carried and approved unanimously.

Abebe moved, Pohl seconded to approve Chemistry & Biochemistry curriculum proposals.

C. CHEM 4100/5100 Inorganic Chemistry
CHEM 4310/5310 Instrumental Analysis
CHEM 4505/5505 Drugs, Poisons, and Venoms

Strauss indicated CHEM 4505/5505 was offered as an experimental course for four years. It is now delivered almost entirely online so serves the graduate Science Education cohort very well. Most students taking the courses are teachers, so there's a graduate-level project in which students are developing units to be used in the classroom.

Question was called on the motion to approve the Chemistry & Biochemistry curriculum proposals. Motion carried and approved unanimously.

Abebe moved, Pohl seconded to approve Earth Science curriculum proposals.

D. EARTHSCI 3210/5210 Meteorology
EARTHSCI 3220/5220 Weather Analysis and Forecasting
EARTHSCI 3230/5230 Air Quality
EARTHSCI 3240/5240 Air Quality Modeling
EARTHSCI 3250/5250 Measurement and Analysis of Air Quality
EARTHSCI 3305/5305 Volcanology
EARTHSCI 3335/5335 Igneous Petrology
EARTHSCI 4150/5150 Astrophysics
EARTHSCI 6400 Research Methods in Earth Science

Onken asked what resources were necessary for these changes and what the impact would be.

S. Morgan indicated faculty members are assigned to courses based on course load. Faculty will have a full load but not be overloaded. The department will still have flexibility to offer LAC courses online and in-person. Changes to EARTHSCI 3210/5210 are needed for teaching majors.

Onken asked about impact on graduate students taking EARTHSCI 3230/5230.

S. Morgan responded EARTHSCI 3230/5230 is required for undergraduate majors and graduate students rarely take it. The course was once part of the Environmental Science graduate program. Graduate students taking the course would be given additional graduate-level assignments. The Earth Science minors are discipline-specific and, in order to take them, students must take the requisite courses at the undergraduate level.

Question was called on the motion to approve the Earth Science curriculum proposals. Motion carried and approved unanimously.

Abebe moved, Pohl seconded to approve Science Education curriculum proposals.

E. SCI ED-MA Major in Science Education
SCI ED 3100/5100 Integrating Science, Technology, Engineering, and Mathematics in the Elementary Classroom
SCI ED 3500/5500 Techniques for Science Teachers
SCI ED 6400 Special Problems in Science Education

Cyphert asked if anything was replacing the comprehensive exam requirement for the SCI ED-MA.

D. Del Carlo responded no, the comprehensive exam requirement would be eliminated as an outdated form of assessment not consistent with program goals. Students will be assessed through the context of the courses. The courses are offered in-person.

Onken asked about the change to the range of credit hours for SCI ED 3500/5500.

D. Del Carlo indicated the change was made to the information displayed in the catalog to reflect how students are currently taking the course. The course may be repeated up to seven hours.

Question was called on the motion to approve the Science Education curriculum proposals. Motion carried and approved unanimously.

Abebe moved, Pohl seconded to approve Biology curriculum proposals.

- F. BIOTECH-PSM Major in Biotechnology**
- ECOMGMT-PSM Major in Ecosystem Management**
- BIOL 4116/5116 Neurobiology**
- BIOL 4127/5127 Bioinformatics Applications for Biology**
- BIOL 4143/5143 Biogeography and Origins of Diversity**
- BIOL 4153/5153 Recombinant DNA Techniques**
- BIOL 4155/5155 Ecotoxicology**
- BIOL 4157/5157 Biostatistics**
- BIOL 4176/5176 Microscopy Methods in Biology**
- BIOL 4178/5178 Fire Management in Ecosystems**
- BIOL 4184/5184 Natural History Interpretation Techniques**

Cutter indicated there were two suspended programs.

Cyphert asked why these programs were suspended and not terminated.

Mackay responded programs are suspended for a couple of cycles before termination occurs. Suspended programs remain in the catalog. Departments have the opportunity to revive before termination.

Onken asked for explanation of the prerequisite requirements for BIOL 4157/5157.

Saunders stated the changes were an attempt to broaden course requisite options to reduce the number of student request forms required.

Wallace indicated the courses listed could be enforced behind the scenes at registration time and the department would need to enforce the “or equivalent” on an individual basis.

Cyphert asked about the impact of the change of credit hours for BIOL 4176/5176.

Saunders replied there would be a shifting of course assignments across faculty within the department to allow this change to occur and shouldn't have a substantial impact.

Question was called on the motion to approve Biology curriculum proposals. Motion carried and approved unanimously.

Abebe moved, Pohl seconded to approve Mathematics curriculum proposals.

- G. INDMATH-PSM Major in Industrial Mathematics**
- MATH-MA Major in Mathematics**
- MATH 4742/5742 Geometric Modeling for CAD**
- MATH 4754/5754 Introduction to Stochastic Processes**
- MATH 6213 Selected Topics in Mathematics for the Middle Grades**
- MATH 6214 Mathematical Problem Solving in the Middle Grades**
- MATH 6391 Problems and Issues in Teaching High School Mathematics**
- MATH 6393 The Secondary School Mathematics Curriculum**
- MATH 6796 PSM Capstone Project**
- STAT 3770/5770 Statistical Methods**
- STAT 4754/5754 Introduction to Stochastic Processes**
- STAT 4772/5227 Statistical Computing I**
- STAT 4782/5782 Statistical Computing II**

Cutter indicated the MATH-MA was an automatic drop.

Onken stated no mention of graduate requirements for the added STAT 4782/5782.

Kirmanian replied this information could be provided to Wallace to be attached to proposal.

Pohl asked about the expected enrollment in INDMATH-PSM.

Kirmanian responded eight students per year are anticipated.

Question was called on the motion to approve Mathematics curriculum proposals pending the receipt of a description of the graduate requirements for STAT 4782/5782. Motion carried and approved.

Abebe moved, Pohl seconded to approve Technology curriculum proposals.

- H. ADVTECH-CERT Advanced Technology Certificate**
- TECH 3129/5129 Linear Control Systems**
- TECH 3188/5188 Nanotechnology Fabrication**
- TECH 4104/5104 Applied Digital Signal Processing**
- TECH 4110/5110 Manufacturing Process Planning**
- TECH 6265 Risk Analysis and Management in Construction**
- TECH 6273 Machining Process Planning**
- TECH 6284 Industrial Technology**
- TECH 6290 Training and Development in Industrial Technology**
- TECH 6291 Technical Program Development**

Hotek indicated the ADVTECH-CERT should be dropped. The department has never had a student take the certificate.

Wallace indicated changes would need to be made to ADVTECH-CERT to increase the electives to nine hours and the required to six hours.

Cyphert asked about the impact on TECH 4110/5110 being offered twice a year instead of once a year.

Hotek responded this was possible because a course was being dropped.

Discussion concluded. Question was called on the motion to approve Technology curriculum proposals. Motion carried and approved unanimously.

The meeting adjourned at 11:04 a.m. **The next GCCC meeting will be Wednesday, September 30.**

Respectfully submitted,

Marissa Timmerman
Office of the Registrar

mrt

Cc: GCCC
UCC
Alternates
Guests