MINUTES OF
GRADUATE COLLEGE COMMITTEE ON CURRICULA
October 8, 2018

Absent: C. Miller, R. Al-Mabuk

Guest: J. Nie, S. Riehl, S. Morgan, J. Morgan, T. Bohnenkamp

The meeting was called to order by Chair Gabriela Olivares at 12:00 p.m. in Lang 115.

I. Welcome and Introductions

GCC Chair Olivares welcomed all present.

II. Approval of Minutes

September 24 meeting minutes were shared electronically. No amendments or corrections were given.

Minutes were approved.

III. Consent Agenda

G. Olivares asked if there are any items on the consent agenda that should be moved to the regular agenda.

G. Pohl asked if TECH 6239, a new course, can be added to the consent agenda. D. Cyphert commented we should maintain current practice and leave new courses on regular agenda.

No items were removed or added to the consent agenda.

IV. Consent Agenda for College of Humanities, Arts and Sciences – Humanities

E. Sutton moved to approve the CHAS -- Humanities consent agenda. G. Pohl seconded.

G. Olivares highlighted that all CHAS-Humanities curriculum proposals were on the consent agenda.

G. Olivares asked if there was any discussion. Hearing none.

Chair Olivares called for a vote on the motion to approve the CHAS-Humanities consent agenda; motion carried and was approved unanimously.

- CSD 4100 Augmentative and Alternative Communication (substantive, title, increasing one credit hour)
- ENGLISH 4775 Applied Writing: Specialized Documents (editorial, change in title and description)
- SPAN 3002 Advanced Spanish for Special Purposes: ____________ (editorial, credits changed to 3 from 2-3)
- SPAN 3008 Introduction to Spanish Linguistics (editorial, credits changed to 3 from 2-3)
- SPAN 4043 Pronunciation and Oral Proficiency (editorial, credits changed to 3 from 2-3)
- SPAN 4045 Translation (editorial, credits changed to 3 from 2-3)
- SPAN 4047 Structure of Spanish (editorial, credits changed to 3 from 2-3)
- SPAN 4062 Spanish American Literature:______________ (editorial, credits changed to 3 from 2-3)
- SPAN 4063 Peninsular Literature:________________ (editorial, credits changed to 3 from 2-3)
- SPAN 4064 Hispanic Literature:______________ (editorial, credits changed to 3 from 2-3)
IV. Regular Agenda for College of Humanities, Arts and Sciences – Sciences

G. Pohl moved to approve the curriculum packet for sciences within the College of Humanities, Arts and Sciences. D. Cyphert seconded.

Department of Earth and Environmental Science

- EARTHSCI 3365 Hydrology Seminar (new)

Department of Mathematics

- MATH-MA Major in Mathematics (dropping and adding of course options)
- MATHMIDGRD-MA Major in Mathematics for the Elementary and Middle Grades (K-8) (title, dropping and adding of course options)
- MATH 3640 History of Mathematics (substantive, title and description)
- MATH 6209 Mathematics Curriculum and Assessment (new)
- MATH 6216 Number and Operations (new)
- MATH 6225 Teaching and Learning Mathematics (new)
- MATH 6227 Data Analysis, Probability, and Discrete Mathematical Reasoning (new)
- MATH 6236 Equity and Mathematics Education (new)
- MATH 6504 Advanced Linear Algebra (new)

Department of Technology

- TECH-MS Master of Science in Technology (Adding three emphasis: metal casting, electrical engineering, technology management, 30 hours for thesis or non-thesis option)
- TECH CM 3000 Civil Construction (substantive, change in prefix and number, title, change in prerequisite and pre or co requisite at UGRD, term offered)
- TECH CM 3150 Construction Project Planning and Scheduling (substantive, change in prefix and number, title, description, prerequisites at UGRD, frequency)
- TECH CM 4050 Construction Management (substantive, change in prefix and number, change in prerequisite at UGRD, terms offered, frequency)
- TECH CM 4200 Structural Components of Construction (substantive, change in prefix and number, title, description, prerequisite at UGRD)
- TECH CM 4300 Construction Technology and Innovation (substantive, change in prefix and number, title, description, prerequisites at UGRD, terms offered)
- TECH 6239 Foundry Management (new)

Olivares called for discussion.

TECH-MS Master of Science in Technology; J. Nie explained that in the past there were no emphasis, the focus was on technology management. The department has received requests for specialization in information and electrical engineering technology and metal casting technology. Those areas have been added to the new program proposal. J. Nie added that they are only proposing one new course TECH 6239. All other courses which make up the emphasis areas are existing courses.
There will be a program core of three required courses, three to four required courses depending on the emphasis selected and then thesis or non-thesis electives. The new program is being reduced from 33 to 30 hours. All emphasis areas will be 30 credit hours. C. Nielsen asked if the department thought they may attract more students because of the reduction in hours. J. Nie stated they may possibly attract more international students because they can complete the program in 3 semesters. In addition, the three program core classes, are offered online, so international students may be able to take those courses from their home country and then attend UNI in residence for 1 year. This could be a significant cost savings for international students.

S. Onken asked if there is a concern about needing to offer more courses due to the new emphasis and variety of courses needed. J. Nie stated they will need appropriate enrollment to offer all of the classes but feels that they will have enough demand to offer the classes as needed. If they do need to drop a course due to low enrollment they could substitute a course. J. Nie mentioned there are currently many 5000 level courses available to students.

S. Onken mentioned the resequencing appears to help faculty meet the demand. J. Nie stated Research Methods will need to be offered each year but moving forward many courses will be offered once every two years rather than once each year which will aid in staffing courses.

TECH CM 3000 G. Pohl asked about title change and number 3125 to 3000. J. Nie confirmed they will not be dropping graduate level. The department has added some details on what graduate students will need to do for the course.

TECH CM 3150 S. Onken stated the requirements for graduate students is very clear and specific which is helpful.

TECH CM 4050 Additional clarification on graduate student requirements was added.

TECH 4200 J. Nie handed documentation to Registrar’s Office on the details that need to be added for graduate student requirements.

G. Olivares asked if department can add the changes or does the Registrar’s Office need to do it. D. Wallace stated the Register’s Office will add the additional text. G. Olivares will forward the emails with the additional course details on requirements for graduate students.

TECH CM 4300 Information will be added on extra work required for graduate students.

TECH 6239 is a new course in foundry management: G. Pohl stated it was a well-developed course. Justification provide by J. Nie on behalf of S. Giese addresses the interrelated nature of foundry work. G. Pohl reviewed. G. Olivares will forward to be added to the proposal.

MATH-MA S. Riehl addressed there are three programs. One on campus and those students are primarily working to apply to a PhD program. And two cohorts for practicing teachers which is taught primarily online. The practicing teachers are mostly high school and sometimes community college teachers. Within the two cohorts; one is community college focused, they either teach at community colleges, want to teach at community colleges, or want to be able to offer community college credit for their classes. The other group are high school teachers looking for professional development to become better at content and teaching.

S. Riehl explained that the current MATH-MA has 5 one hour courses. Initially it was believed it was a good way to keep in communication with students throughout their program. They have discovered it is difficult to staff and it is harder for students to be eligible for financial aid. The proposed changes will now have two 3 hour courses, taking 1 hour of content from another course.
The high school teachers wanting to teach at the community college level, will have the option to take more rigorous courses. The high school teachers wanting to focus on professional development can take courses focused on their area to get a deeper understanding of a topic that can specifically benefit their classrooms. The combining of courses also allows students to complete the program more quickly. Rather than taking 2 years and 3 summers, the new proposal will eliminate one summer so students can complete the degree in 2 years and 2 summers.

Committee asked if any courses will be dropped or if they need to offer all courses in order for current cohort students to graduate. S. Riehl explained that all current cohorts will be done in summer 2019, which is when the new cohorts will be able to start. Riehl added that the courses are not being dropped this curriculum cycle but will no longer be offered and likely will be dropped in the next curriculum cycle.

D. Cyphert asked about enrollment and if there is an expectation it will change. S. Riehl doesn’t expect a big change in this program but there is a hope to maintain the current numbers of 30 to 35 students each cohort. There is a hope the growth will be with the elementary and middle-level program up for discussion next.

MATHMIDGRD-MA Major in Mathematics for the Elementary and Middle Grades (K-8): Originally the program focused on grades 4-8, now it is focused on K-8 professional development.

S. Riehl explained that MATH 6224 and MATH 6226 are not going to be taught and new courses have been created, MATH 6227 and MATH 6225, which will replace those 2 courses. This program will also be shorten by one summer. In the past took 3 summers and 2 years to complete. Moving forward will now take 2 summers and 2 years, a reduction of one summer.

In the past, this program also utilized the 1 credit reflective teaching courses which were offered each semester. They are also being combined and changing to two 3 credit courses. The one credit courses will not be offered.

Committee asked about the students on the current program and how not offering the courses will affect them. S. Riehl clarified that due to low enrollment, there is not a current cohort for the 4-8/Middle School group but if there was, it would have been done by summer 2019.

S. Onken asked about the number of credit hours. It appears the new program requires 30 hours and the previously program was 32 but the supporting text states there is no change in credit hour requirements. D. Wallace confirmed the credit requirements. S. Riehl stated the new program is ten 3 credit hour courses, and speculates that the additional credits may have been for some optional research credits that students may have taken to be eligible for financial aid. D. Wallace stated she will update the narrative to accurately reflect that the program changes do result in a reduction of 2 credit hours.

D. Cyphert had questions on MATH 3640 because it referred to a previous history course but didn’t state what the course was. S. Riehl clarified that they use to offer two history classes, one history to the calculus and then a history after the calculus. History after the calculus was dropped in 2006. History to the calculus is now being edited to adjust some content. S. Riehl added that typically the course is being taken by undergraduate teaching majors. It is not often taken by graduate students.

S. Riehl explained that MATH 6209 is a new course for teaching majors. It is a repackaging of two previous courses. MATH 6203 which is 2 credits and MATH 6208 which is 1 credit.

MATH 6216 is a new course that is a repackaging of a previous course that was geared toward middle grades (4-8) cohort.
MATH 6225 Teaching and Learning Mathematics is a repackaging of 3 of the 1 hour classes from the previous program.

MATH 6227 Data Analysis, Probability, and Discrete Mathematical Reasoning is a rework of MATH 6224. It involves a renaming to make it more relevant for elementary and middle school grades.

MATH 6236 is one of the other new courses that is a repackaging of previous 1 hour courses.

MATH 6504 Advanced Linear Algebra is a new course which covers abstract algebra. This new course is less dependent on the sequencing of learning the algebraic content of groups and rings. Advanced Linear Algebra is a very popular topic for teachers to deepen their understanding.

S. Riehl added that all cohorts spends 2 weeks on campus. The department has found the on campus component most beneficial for building community. With the new programs there could be 4 groups/cohorts that can share classes to maintain enrollment.

EARTHSCI 3365 Hydrology Seminar (new) S. Morgan stated the class has been taught experimentally twice. It will be added to a rotation in the fall with another course. This class is more popular with undergraduates than graduate students but is an option for graduate students.

Chair Olivares called for a vote on the motion to approve curriculum packet for College of Humanities, Arts and Sciences -- Science proposals. Motion carried and changes were approved unanimously.

G. Pohl moved to approve the CHAS -- Sciences consent agenda. D. Cyphert seconded.

Chair Olivares called for a vote on the motion to approve all remaining items on the consent agenda; motion carried and was approved unanimously.

Consent Agenda – CHAS -- Sciences

A. Department of Biology

- BIOL 4129 Genomics (editorial, change in title, description, frequency)

B. Department of Earth Science

- EARTHSCI 3220 Weather Analysis and Forecasting (substantive, change in prerequisite at the undergraduate level)
- EARTHSCI 3330 Geomorphology (substantive, frequency)
- EARTHSCI 3400 Topics in Earth and Environmental Science (editorial, change in title and description)
- EARTHSCI 3410 Field Studies In___________(editorial, description)
- EARTHSCI 3420 Readings in Earth and Environmental Science (editorial, title, description)

C. Department of Mathematics

- MATH 6201 Foundations of Mathematics Education (editorial, title, drop of prerequisite)
- MATH 6212 Foundations of Algebraic Reasoning (editorial, title, drop of prerequisite)
- MATH 6215 Foundations of Geometric Reasoning (editorial, title, drop of prerequisite)

D. Department of Technology
- TECH CM 2000 Land, Route, and Construction Surveying (substantive, prefix, number, dropping graduate level, description, prerequisites, terms offered)
- TECH CM 2100 Mechanical Systems in Construction (substantive, prefix, number, description, prerequisites/corequisites, dropping graduate level)
- TECH 3135 Product Design (substantive, drop of prerequisites)
- TECH 3163 Advanced Digital Pre-Media (substantive, drop of prerequisite at UGRD, term offered)
- TECH 4110 Manufacturing Process Planning (substantive, change in pre-and-co-requisites at UGRD)
- TECH 4154 Computerized Construction Estimating (dropped)
- TECH 4158 Graphic Communications Technical Visualization (substantive, terms offered)
- TECH 6288 Master Internship/Project (editorial, terms offered)
- TECH 6289 Seminar in Engineering and Technology (dropped)
- TECH 6294 Technological Evolution and Innovation (dropped)
- TECH 6296 Research Design in Technology (dropped)
- TECH 6225 Integrated Logistics and Production Operations (editorial, terms offered)
- TECH 6235 Material Transformations and Modeling (editorial, terms offered)
- TECH 6250 Technology of Productivity Improvement (editorial, terms offered)
- TECH 6258 Total Quality Management (editorial, terms offered)
- TECH 6275 Advanced Lean and Sustainable Operations (editorial, title change)
- TECH 6295 Advanced Management and Supervision Technology (editorial, terms offered, frequency)
- TECH 3168 Technology Training Strategies (substantive, term offered)
- TECH 4000 Wind Energy Engineering (substantive, term offered)
- TECH 6100 Engineering Cost Analysis (substantive, term offered)
- TECH 6242 Complex Digital System Design (substantive, term offered)
- TECH 6244 Applied Embedded Systems (substantive, term offered)
- TECH 6300 Advanced Technical Project Management for Engineering and Technology (substantive, term offered)

E. Department of Science Education

- SCIED-MA Major in Science Education (dropped MEASRES 6505, taught internally)
- SCI ED 6500 Research Methods in Science Education (substantive, increased 1 hour, 3 to 4)
- SCI ED 6700 The History, Philosophy, and Nature of Science (substantive, increased 1 hour, 3 to 4)
- SCI ED 6900 Trends and Issues in Science Education (substantive, increased 1 hour, 2 to 3)

V. Get-Together, October 13

All are invited to a gathering at G. Olivares house on Saturday, October 13 at 6pm.

VI. Next meeting Monday, October 15, 2018, 12pm/Noon, Lang 115

Chair Olivares stated the next meeting is scheduled for October 22, 2018 in room 115 Lang Hall. It is a make-up session for HRCS/Leisure, Youth and Human Services curriculum packet.

Olivares asked if we needed a pre-meeting or could we meet on Monday, October 15 to discuss and vote. The committee is supportive of having RTCS meeting next week.

Olivares added that she would like to have a discussion and feedback from the committee on ways to streamline GCCC meetings. For example, if a department is doing a prefix change, does the GCCC need to review and discuss that type of editorial change.
D. Cyphert asked if it is editorial will the items not show up for GCCC to review at all. G. Olivares stated that yes, some items might not show up to the committee, things such as a department name change or prefix.

Olivares asked D. Wallace for her feedback. D. Wallace stated that the Registrar’s Office has no preference but many changes may seem editorial at first but upon further review there are bigger changes to consider. D. Cyphert stated that she would like to be able to see the courses and have them reviewed by committee readers. They may all go to the consent agenda but need someone to review. Cyphert added that if it is a program restatement that only involves a department name change, that maybe okay to approve without review.

C. Nielsen asked about the timeline of when courses are dropped. D. Wallace stated that if a course is not taught in 4 years then is removed.

The meeting adjourned at 1:15 p.m.

Respectfully submitted,

Joan Smothers
Office of the Registrar

jps
cc: UCC
GCCC
Guests