Colorado School of Mines – GRADUATE COUNCIL MEETING MINUTES
October 18, 2023, 4:00 – 5:00 pm, via Zoom

Attendees:
Voting Members: 18 total (12 - majority needed for quorum). Quorum was present
P Soutir Bandyopadhyay (Chair)
P Danielle Ostendorf (LB)
P Andy Osborne (NSE)
P Owen Hildreth (ME)
P Adrienne Marshall (HSE)
P Bettina Voelker (CH)
P Jaeheon Lee (MN)
P Jared Carbone (EB)
P Yaqiu Li (GP)
P Juan Lucena (EDS)
P Jim Ramelle (GE)
P Payman Tahmasebi (PE)
P Suveen Mathaudhu (MME)
P Zhexuan Gong (PH)
P Ryan Venturelli (GE)
P Dong Chen (CS)
P Adrijenne Marshall (HSE)
P Nikki Farnsworth (CBE)
P Jiaheon Lee (MN)
P Jared Carbone (EB)
P Yaoguo Li (GP)
P Juan Lucena (EDS)
P Jim Ramelle (GE)
P Payman Tahmasebi (PE)
P Suveen Mathaudhu (MME)
P Zhexuan Gong (PH)
P Ryan Venturelli (GE)
P Dong Chen (CS)
P Adrienne Marsholl (HSE)
P Nikki Farnsworth (CBE)
P Rena Zhu (GSIE)
P Reza Hedayatt (CEIE)
P Yamuna Phal (EE)
P Gabriel Walton (UCTE)

Other Regular Attendees and Guests
P Tim Barbari (OGS)
P Carolyn Freedman (OGS)
P Jenny Briggs (OGS)
P Vihbudi Dave (UG)

Wendy Adams (HNRS) P D. Scott Heath (RO)
P Paul Myskiw (RO)
P Roxane Aungst (OGS)
P Sam Spiegel (Mines Online)
P Suzanne Beach (Payne)
P Jen Gagne (Grad Admissions)
P Kendra Stansbury (RO)
P Jon Johnson (Mines Online)
P Atef Elsherbeni (EE)
P Richard Krahenbuhl (GP)
P Valerie Holt (AES)

Special Guest(s): Honygan Liu, Rachel McDonald, Cadi Gillette

Welcome
Soutir Bandyopadhyay

Briefings and Information Items

Office of Graduate Studies
Tim Barbari
Any students who are in the process of forming a committee for the first time for a thesis (master’s or Ph.D.) need to contact us to be beta testers for the new on-base submission process for creating the committee in lieu of paper forms to address any issues. Please get the message out to your departments and programs.

Registrar’s Office
Paul Myskiw
Paul is out so Scott Heath provided an update. Please take consideration for the proposal for automating programs. Please talk to your department and let us know if there are any objections. Need formal proposal. New program assistant will start on October 30th.

Graduate Student Government
Rena Zhu
Currently scheduling a meeting to discuss what it would look like to expand the Ombuds office and grad student leave. Tentative meeting date is October 30, 2023.

New Business
2.1 Civil & Environmental Engineering New Course & Course Change
Hongyan Liu
New Course CEEN478/578: Course has been taught by the post-doc twice before. The post-doc suggests the course be offered in the summer as there is a trend that more grad students like to take this course in the summertime. This course would help students to fulfill their technical elective. There has been more interest in this course as enrollment has increased from 2 to 8.

- **Question:** If the course is taught by a post-doc, how will the course be taught if they are on leave? Will the course be moved to online?
- **Answer:** The post-doc is willing to teach the course even when he is not here. Currently, we are just proposing a course number for the course. But eventually, we would work for the course to be taught online. Additionally, if the post-doc is on leave, we will have instructors that can cover the course.

**Course Change CEEN442/542:** Before, this course was taught in one semester covering both topics. However, there has been an expansion with mass timber structures, and it has become a hot topic. We want to split the two topics into two individual courses. We have an instructor that is willing to teach Design of Wood Structures and we just hired a new instructor who is an expert in masonry design. Our plan is to change to the Timber and Masonry Design course to Design of Wood Structure and then pilot Masonry Design in the Spring semester. We will propose a new course number in the future and upload supporting documents explaining why splitting the course is needed.

- **Comment:** Reminder on cross-listed courses that the syllabi need to have differentiators between graduate and undergraduate levels.

For the graduate level of the course, the instructor would have students study the seismic design for mass timber. He will not directly cover this, so graduate students will be expected to do self-studying as well as the final project. We will be sure to update this in the graduate course description.

### 2.2 New Chemistry Course Change

**Tina Voelker**

**New Course CHGN535:** This new course will be offered both in a 400 and a 500-level version. The 400-level version has already been approved by undergraduate council. The purpose of this course is to teach the intersection of physics and biochemistry with emphasis on biological topics from the perspective of a physical chemist such as chemical thermodynamics, statistical mechanics, and quantum mechanics. The course is hoping to attract biochemistry and QBE students due to its minimal overlap with other courses.

- **Question:** Last year there was a lot of discussion regarding cross-listed courses and making sure they will meet accreditation requirements. Do you feel there is enough differentiation between the 400 and 500 level courses to meet accreditation requirements?
- **Answer:** The assignments in this course will be more open-ended for grad students such as a grant proposal assignment and presentation which will encourage students to give a more thorough and detailed proposal. An important aspect of cross-listing this course with others is that it offers deeper work instead of more work. Having more open-ended assignments will require students to not only look at a problem but also do a literature review or identify current research in that problem for more graduate-level critical thinking.

### 2.3 Computer Science New Courses

**Dong Chen**

We are proposing two new courses which have been offered twice before but only as advanced topics. Due to increased interest, we would like to add these two courses permanently.

1. **CSCI577:** The major difference between undergraduate and graduate level is advanced topics such as AI planning algorithms, 2-D game feeding, 2D game lighting, 3D character movement, etc.
2. **CSCI582:** Currently, we do not offer any courses with topics beyond regular CPU but would like to. This course has been offered the last two years and will have guest lecturers from the industry.

### 2.4 Economics & Business New Course

**Jared Carbone**

Jared had to leave. Soutir provided new course EBGN529 documentation showing course proposal and
Question: Was this course already taught as a 598? Do we require a new course to go through the 598 process?

Answer: The process may have changed that a new course can be proposed with a course number without piloting them.

2.5 Geology & Geologic Engineering New Course/Course Change/Program Change

Ryan Venturelli

New Course GEOLS27: The new course offering is not one we have had previously although it does have wide application in Australia, Canada, and Latin America. It would be a 1 credit hour course for graduate students in the exploration methods certificate program, economic geology program, and mineral exploration program.

Course Change GEGN588: We are changing point of contact and admin specificity to the course description reflect what is done in class, which is evaluating planetary landscapes and mapping techniques.

Program Change CRTG-GISG and XMS-GSG-NT: Update description and title to GEGN588 and inclusion of a permanent course number from MNGN598 to MNGN 502 because it’s been given a permanent course number.

2.6 Geophysics New Courses

Yaoguo Li

Yaoguo is currently out of the country. Richard Krahenbuhl provided information on his behalf regarding the new courses.

1. CCUS525: Ties in with CCUS Carbon Capture IGP program. For online certificate only and already in place.
2. CCUS530: Ties in with CCUS Carbon Capture IGP program. For online certificate only and already in place.
   - Question: Does CCUS online certificate programs require prerequisites in order to obtain a degree?
   - Answer: Because this is an interdisciplinary certificate program, we will need to be clear on the prerequisites to ensure student success in the course. Currently, there is no prerequisite listed for these two elective courses so it may send a message that any student is welcome to take the course.
   - Comment: Even if these are elective courses, we need to have a standard of expectations for prior learning for those taking these courses.
   - Comment: This certificate program is not just for graduate students but for working professionals as well. They may not have the time to take many of the prerequisites.
   - Comment: We may need additional representation from interdisciplinary programs to address concerns.
   - Question: Are these courses cross-listed with chemistry at the chemistry level?
3. GP贡543: This course has been taught before and was well received. It is being requested to be a required course for the master’s degree in mineral engineering.

2.7 Petroleum Engineering Course Changes & Deactivation

Pejman Tahmasebi

We are looking to clean up our course catalog and deactivate courses that have been offered for awhile, are no longer needed, or are outdated. The course changes were name changes to differentiate between undergraduate and graduate level by adding “advanced” to the titles.
Adjourn

Soutir Bandyopadhyay

Next meeting: November 1, 2023, 4:00-5:00 pm via Zoom. Please send all agenda items to Soutir Bandyopadhyay (sbandyopadhyay@mines.edu) 1 week in advance.

Consent Agenda The following proposals will not be discussed unless specifically requested by the Council. Please review the following items. With no objections, approval is implied, and items will be processed accordingly.

2.1 Approval of Previous Minutes – October 11, 2023

Soutir Bandyopadhyay