Colorado School of Mines – GRADUATE COUNCIL MEETING MINUTES
March 16, 4:00 – 5:00 pm, via Zoom

Attendees:

Voting Members: 22 total (12 - majority needed for quorum). Quorum was present

| P | Bettina Voelker (Chair) | P | Christine Baker (LB) | P | Andy Osborne (NSE) | A | Owen Hildreth (ME) |
| P | Eric Anderson (HSE)     | A | Karin Leiderman (AMS) | A | Jamal Rostami (MN) | P | Michael Heeley (EB) |
| P | Ebru Bozdag (GP)        | A | Juan Lucena (EDS)    | P | Jim Ranville (GC) | P | Luis Zerpa (PE)   |
| P | Geoff Brennecka (ML)    | P | Zhexuan Gong (PH)   | A | Danica Roth (GE) | P | Qi Han (CS)       |
| P | Elizabeth Davis (HASS) | P | Dave Marr (CBE)     | P | Maxwell Silver (GSG) | P | Lori Tunstall (UCTE / CEE) |
| P | Christine Morrison (CH) | A | Salman Mohagheghi (EE) |

Other Regular Attendees and Guests

| P | Tim Barbari (OGS) | P | Carolyn Freedman (OGS) | A | Deb Jordan (Trefny) | A | Mara Green (AA) |
| A | Jennie Kenney (AA) | A | Denise Winn-Bower (PE) | P | Paul Myskiw (RO) | A | Kendra Stansbury (RO) |

Special Guest(s): Tony Petrella (ME)

Welcome

Tina Voelker

Briefings and Information Items

Office of Graduate Studies

Tim Barbari

No updates from the Office of Graduate Studies.

Registrar’s Office

Paul Myskiw

RO to pilot a new incomplete grade form to encourage students to have a conversation with faculty about the incomplete; form done in response to students not knowing why an incomplete was given, student confusion on what was to be done to make up for an incomplete, and students re-registering for the course unnecessarily.

Form would be made available on Registrar’s Office website to establish an agreement between students and faculty to communicate on the incomplete and what work needs to be done.

Graduate Student Government

Maxwell Silver

No updates from Graduate Student Government.

Graduate Council Operations

Tina Voelker

Council was open to having additional voices and representatives; Council noted the disadvantage was lack of engagement and space. Discussion continued on a space to accommodate a larger group of Councilors; Councilor noted the meeting time of 4:00-5:00pm in-person may not work for those with younger children. Councilors agreed on the flexibility of virtual meetings and highlighted the importance of social gatherings once or twice a year.

Suggestion made for a separate curriculum committee, the larger group would discuss graduate issues and policies and spend less discussion on curriculum items. Councilor noted the Faculty Senate Bylaws have tasked the Councils with curriculum review, and a separate committee would need to be delegated by the Bylaws. Suggestion made to review other universities and how the curriculum committee functions.
Councilor noted the importance of having conversations with departments affected by a curriculum item in advance of Graduate Council or submission in CIM, Councilor suggested a list of department representatives to discuss these items.

New Curriculum Item(s)

1.1 **MECHANICAL ENGINEERING**
   
   **Dinesh Mehta**
   
   [CIM 3/1]
   
   **1 program change:** MSPHD-ORWE: Operations Research with Engineering
   
   *Routine changes based on Catalog updates from MATH and EBGN (from core courses: removal of MATH531, addition of MATH424).*

1.2 **MINING ENGINEERING**
   
   **Jürgen Brune**
   
   [CIM 3/14; Provost 3/14]
   
   **1 new course:** MNGN582: FUNDAMENTALS OF TAILINGS ENGINEERING
   
   *This is the second course in Tailings Management. The first course is MNGN581.*

   Due to recent, catastrophic tailings dam failures, mining constituents have a significant interest in tailings facilities design and engineering. Both courses have been offered in short course format with very good registrations (25 to >50 students per class) twice during 2021. Registrants were from around the world, including Australia, Brazil, Canada, Chile, Cote d’Ivoire, DRC, Mexico, New Caledonia, Peru, South Africa, Suriname, Tanzania, and the U.S. The course delivery has been virtual using Zoom and Canvas, and student satisfaction has been assessed as high. The MN department requests approval to offer the second in the series of courses for academic graduate credit. The interest from the industry is high, and MN expects to recruit from the student registrants into the graduate degree programs in MN at Mines. This course is aligned with the following Mines@150 aspirations: 1) A go-to place for use-inspired research and innovation needed to solve challenges facing industry, society and the environment, 2) A Leader in educating STEM students and professionals, and 3) A preferred partner for talent, solutions and life-long learning.

Continuing Curriculum Item(s) – from 3/2/22

2.1 **ECONOMICS & BUSINESS**
   
   **Michael Heeley**
   
   [CIM 2/17]
   
   **1 program change:** MSPHD-ECO: MS & PhD – Mineral & Energy Economics
   
   *Adding language to the program to encourage applicants to the Mineral and Energy Economics (MEE) program by facilitating applications from Western Colorado University’s Bachelors of Energy Management program. The program will allow these students to complete the non-thesis Masters in MEE in one year by setting specific course requirements at Western Colorado University.*

Barbari noted work done with Lange to assure language in the program was consistent with the current transfer policies at Mines; existing language for Mesa was cleaned up, as well.
Comment made that online can come down to faculty resource issue, some faculty have heard varying opinions on the difficulty of teaching online and residential courses.

Concern raised on some students withdrawing from a residential course and taking the second, eight-week version online; Petrella noted there being no plan to offer the online version in the same semester as the residential version. Barbari noted this occurrence in the residential student population with around 75-80% of students in an online class being residential students. ME has been made aware of residential students taking online sections.

- **Question** on who is developing the online courses and if it is not the residential course instructor; six of the ten classes are being developed for online by those teaching the residential section.

Petrella noted one instance of a postdoc that will act as an adjunct for the development of one of the online courses; this individual had TA’d under three instructors for the course and would assist in conjunction with faculty teaching residential sections.

- **Question** on how equivalency may be determined; Petrella working with Mines Online and faculty to support online pedagogy, specific development tasks, learning outcomes, and the course map.

Comment on the level of increased confidence knowing the faculty member teaching the residential version is a key developer of the online version.

- **Question** on interchangeability of requirements and students’ ability to take a semester online and take the next semester on campus; the intention was to provide a seamless program with the understanding that online tuition is different from residential.

**New Business**

**Request for Extension for GEGN598**

Roth requested extension to teach GEGN598: Point Cloud Data Analysis in Earth Science and Engineering for Fall 2022 due to missing the CIM submission deadline to submit an official course number for the course.

**Adjourn**

Meeting adjourned: 4:52 pm.
Next meeting: April 6, 4:00-5:00 pm via Zoom.

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

3.1 **Approval of Minutes** – February 16, 2022  
Tina Voelker

3.2 **GEOLOGY & GEOLOGICAL ENGINEERING**  
Cheryl Medford  
[CIM 3/4]  
1 course change: GEGN582: INTEGRATED SURFACE WATER HYDROLOGY  
Changing Groundwater Engineering (GEGN466/GEGN467) prerequisites to co-requisites. Many incoming HSE graduate students currently take both Groundwater Engineering and GEGN 582 (Surface Water Hydrology) concurrently. Later units of the Surface Water Hydrology course rely on material covered early in the semester in Groundwater, making these two courses fit well together with Groundwater as a corequisite. Allowing these courses as a corequisite also supports students who are doing a one-year non-thesis MS, and would formalize in the catalog something that is widely done in practice now.

3.3 **MINING ENGINEERING**  
Jamal Rostami  
[CIM 3/11]  
1 course change: MNGN504: UNDERGROUND CONSTRUCTION ENGINEERING IN HARD ROCK  
Update to course for online delivery for the Graduate Certificate in UCTE. Update to course description, addition of MNGN321 prerequisite and GEGN462 co-requisite.