

Colorado School of Mines – GRADUATE COUNCIL MEETING MINUTES
 October 7, 2020 | 4:00 – 5:00 pm, via Zoom

Attendees:

Voting Members: 24 total (13 - majority needed for quorum). Quorum was present

Neal Sullivan (Chair)	Amy Hitchner (LB)	Andy Osborne (NSE)	Owen Hildreth (ME)
Dave Benson (HSE)	Karin Leiderman (AMS)	Ugur Ozbay (MN)	Gabe Walton (UCT)
Ebru Bozdag (GP)	Juan Lucena (EDS)	Jim Ranville (GC)	Zhenzhen Yu (MME)
Geoff Brennecka (ML)	Tulay Flamand (EB)	Danica Roth (GE)	Dejun Yang (CS)
Elizabeth Davis (HASS)	David Marr (CBE)	Maxwell Silver (GSG)	Luis Zepa (PE)
Reza Hedayat (CEE)	Christine Morrison (CH)	Gongguo Tang (EE)	Jeremy Zimmerman (PH)

Other Regular Attendees and Guests

Justin Bush (CEE)	Carolyn Freedman (OGS)	Jane Ko (AA)	Jennifer Velloff (Tref)
Tim Barbari (OGS)	Jennie Kenney (AA)	Paul Myskiw (RO)	Denise Winn-Bower (PE)
Dorothy Cheng (CS,EE,ME)			

Welcome

Neal Sullivan

Note – ML course and program changes were submitted in time for this meeting but were mistakenly left off the agenda by Ko. These will appear on the October 21 agenda.

Consent Agenda

The items below did not require additional discussion and have been approved.

- **Approval of Minutes – Sept. 16, 2020** Neal Sullivan
- **APPLIED MATHEMATICS and STATISTICS** Karin Leiderman
 [status: CIM 9/13, processed 10/9]
5 course changes:
 - MATH514: Applied Mathematics I – *swap topics with MATH515*
 - MATH515: Applied Mathematics II – *swap topics with MATH514*
 - MATH530: Statistical Methods I – *updated description/prereqs*
 - MATH560: Intro to Key Statistical Learning Methods I – *reorder topics*
 - MATH561: Intro to Key Statistical Learning Methods II – *reorder topics*

Briefings and Information Items

- **OGS** Tim Barbari

Barbari will be submitting a policy change request for the Graduate Catalog on admissions requirements, to be discussed at an upcoming GC meeting. The current Graduate Catalog outlines general admissions requirements for the University and in the past, various programs have waived what did not apply. This proposal is meant to move towards program-specific application requirements. Graduate Admissions is already shifting in this direction, communicating to applicants what each program deems as important materials for admissions consideration.

Barbari shared that a lot of language has already been created and is available on the Graduate Admissions website, laid out program by program. He envisions this as an annual review process going forward, reviewing requirements at the end of each academic year before the next admissions cycle. The GRE is currently being debated as a relevant admissions metric.

- **Registrar**

Paul Myskiw

Myskiw updated GC on the search for administrative support to replace Cathy Timm. There are numerous applicants and it has been changed to a full-time position. 80% of the role will be dedicated to supporting GC, UGC, and Faculty Senate while 20% will be supporting the Registrar's Office, mostly with CIM functionality.

Schedules for the spring semester were due on Friday, October 9. The goal is to have 50% face-to-face instruction. Students will be surveyed on whether they want or need to take all classes remotely and it will be presented as a binary yes or no, not by individual courses. The class schedule itself will be better at describing the delivery modality, so students are better informed during registration to make their decision to be all remote or not. Faculty are being asked to be as accommodating as possible to students if unexpected situations arise.

Room selection has been challenging. There are about 150 classrooms and around 36/37 are not being used because they are too small. Until social distancing protocols are loosened, they cannot make those rooms work.

A question was raised on hybrid classes that may not be using their assigned room, leaving them potentially available. Myskiw explained there was a great deal of variability, and while many classes can currently be held outdoors, meeting patterns may change when the weather turns. While there is no standard for how hybrid classes are run, the most important aspect is making sure students have the appropriate amount of contact time with the faculty and the minimum standards should be met, regardless of format. The difficulty of managing the almost 1700 sections scheduled for spring will be determined by what everyone decides to do. So far there has been a handful of negative feedback from faculty, but none from students.

Deadline for the Spring 2021 Addendum was 10/7. Nothing was proposed for inclusion. Myskiw clarified if a course is changed for spring, it will still be on the schedule for students to see, but the Catalog will not be repopulated.

Barbari added that this was an atypical year for the Catalog, with late approvals and a much later than usual publishing date. In a typical year, there may be more items that do not make it into the Catalog publishing cycle and the addendum will be useful.

- **Graduate Student Government**

Maxwell Silver

Silver provided an overview on what GSG has been focused on over the summer and this semester. DI&A initiatives at Mines have been a major priority, both on campus and for students online.

GSG has instituted an Equity Chair focused on DI&A initiatives and support for graduate students. They have increased their DI&A budget and membership of internal GSG DI&A committees with the goal of supporting the University-wide DI&A initiatives led by Dr. Amy Landis as well as other organizations across campus.

GSG DI&A is working toward more advocacy for changing overall admissions practices and considering what is most important and relevant. GSG is also discussing the possible removal of the GRE requirement, as mentioned previously by Barbari. Mines seems to prioritize standardized test scores for undergraduates, rigor of high school education, and GPA, which tend to discriminate or focus on socioeconomic status. GSG DI&A is seeking a more holistic admissions process including job experience, volunteering, etc.

GSG has instituted an International Student Officer to spearhead advocacy for international graduate students. They are trying to improve situations and provide financial relief for international students due to Covid-19, as the CARE Act does not apply to them. GSG is working with Student Life to supplement funds and communicate the available resources.

Graduate Council can play a role in these GSG initiatives by advocating for more holistic admissions requirements, and to reach out and check in with international students who may be facing financial issues and discrimination. Councilors also discussed the possibility of developing a supplemental rubric for graduate admissions in an effort to minimize bias and encourage equity across all candidate. Similar rubrics already exists at Mines for other areas such as hiring. Barbari will find examples from other institutions to share.

Curriculum Items – Request for Council Vote (from 9/2/20)

- 1.1 CHEMISTRY** **Christine Morrison**
[status: CIM 8/28 and 9/3]
1 program change: PhD in Chemistry

MOTION: To approve the program change in CH as presented by Brennecka; seconded by Zimmerman. No abstentions. APPROVED. Processed in CIM 10/9.

- 1.2 ENGINEERING, DESIGN and SOCIETY** **Juan Lucena**
[status: CIM 9/1 and 9/3]
2 program changes: MS in Humanitarian Engineering and Science
MS-NT in Humanitarian Engineering and Science

MOTION: To approve the two program changes in EDS as presented by Brennecka; seconded by Hildreth. No abstentions. APPROVED. Processed in CIM 10/9.

Curriculum Items in Progress – Continued Discussion (from 9/16/20, for vote 10/21/20)

- 2.1 APPLIED MATHEMATICS and STATISTICS** **Karin Leiderman**
[status: CIM 9/13]
3 program changes: MS-NT in Applied Mathematics and Statistics
MS in Applied Mathematics and Statistics
PhD in Applied Mathematics and Statistics

Removing one of the required courses (Applied Analysis) and changing it to an elective, so they all have 5 required courses. PhD students are required to take an additional 1-hr seminar (new course – MATH588). Leiderman clarified the course is slightly different than a typical seminar and will only be taken once.

Administrative Changes to Curriculum

The following course changes will appear on the **next meeting's consent agenda (10/21/20)** and administratively processed in the system unless additional discussion is requested:

- 3.1 ENGINEERING, DESIGN and SOCIETY** **Juan Lucena**
[status: CIM 9/17, Provost approved 9/18]
1 new course EDNS515: Introduction to Engineering in Society

Designed to help drive interest in online graduate certificate and master's programs, provides a crucial foundation for engineers to learn about social science approaches to studying engineering and its inextricable link to society. 3 cr.

3.2 COMPUTER SCIENCE

Dejun Yang

[status: CIM 9/23]

2 course changes CSCI565: Distributed Systems

The original title does not match the course description, since distributed computing systems are for high performance computing and they are only one class of distributed systems. No changes are being made to the course content, only to the title.

***CSCI575: Advanced Machine Learning**

Currently teaching the two Machine Learning courses together as cross-listed sections. They will be separated beginning next year. To make it more clear that they are two distinct ML courses, adding the term "Advanced" to the current CSCI575.

**This item will be moved to the standard agenda as a Curriculum Item in Progress for 10/21 based on concerns raised by the Registrar. Need feedback from CS Department. Recommendation is to follow best practices and create a new course number if content is substantially different. Councilors discussed the implications of potential discrepancies between academic transcripts and course catalog descriptions when titles are changed.*

3.3 GEOLOGY and GEOLOGICAL ENGINEERING

Danica Roth

[status: CIM 9/2, Provost approved 9/23]

2 new courses GEOL508: Skarns and Related Deposits

Skarns and Related Deposits has successfully been taught for two semesters as a seminar course GEOL598.

GEOL504: Uncertainty in Geosciences

Fully online course focuses on identification, assessment, reduction and communication of uncertainty in geosciences. Part of the online certificate program in Earth Resource Data Science. Designed to align with MSc in Data Science degree co-sponsored by the AMS and CS Departments. Students can use credits from certificate to complete the full MSc degree program.

3.4 APPLIED MATHEMATICS and STATISTICS

Karin Leiderman

[status: CIM 9/13, Provost approved 9/23]

1 new course MATH588: Introduction to Quantitative and Computational Research

The primary objective of this course is to offer students a formal way to gain skills in reading, critically analyzing, discussing and defending mathematical, computational, and scientific ideas. This course will better prepare first-year graduate students in quantitative and computational fields to conduct research.

3.5 GEOPHYSICS

Ebru Bozdog

[status: CIM 9/29, Provost approved 9/30]

1 new course GPGN559: Reservoir Characterization Seminar

Course has already been held twice as Special Topics, and must receive approval as a permanent course with its own course number, to be held again.

3.6 CHEMICAL and BIOLOGICAL ENGINEERING

David Marr

[status: CIM 9/30, Provost approved 9/30]

1 new course CBEN522: Chemical Engineering Flow Assurance

Providing grad students with fundamental and state of the art industry relevant modeling experience and application to contribute to "professionally oriented postgraduate education" as well as strengthening the "affinity for Mines among our students, alumni, and external partners".

- Research ethics training for all research-active faculty and students
 - Office of Research and Tech Transfer preparing to email all graduate students
 - Encourage research ethics training
 - Signature Student Experience
 - NSF and NIH ethics stipulation in Grant Proposal Guides
 - Enrollment options
 - Existing credit-bearing CSM courses: SYGN 502 (open to all disciplines), CBEN 568, CHGN 540, or PHGN 503
 - Online training (no credit): Collaborative Institutional Training Initiative (CITI)
 - Target date: January 31, 2021
 - Refresher training every five years
 - Training is optional, not required, at this time.

Soon to be encouraged by VPRTT via email, brought up by Council when people heard new course would be required of students in terms of research ethics training. Clarification that it will be encouraged but not required. Silver would like to continue discussing at the next GC meeting.

- Scheduling and Spring Break during the pandemic
 - Keep Spring Break “as-is”
 - Distributing long weekends through single or double days off (like Fall Break)
 - Distribute course-level Spring Breaks across the semester (each course has a bye-week)
 - Move Spring Break towards end of semester; handle it like Thanksgiving Break (unclear)

Provost is currently seeking input, the sooner the better. Calendar Committee met on 10/8 and should be communicating a decision quickly. Councilors requested continued discussion at the next meeting as Spring Break may impact graduate student who have plans for travel and field research and in other ways.

- Ideas on what Graduate Council should work on. Areas of interest include:
 - Targeted subcommittees
 - Graduate student stipends - minimums, variability, and living wages
 - 0 credit courses
 - Research Advisor-Advisee Procedures and Expectations
 - Growing importance of interdisciplinary programs
 - Staffing and instructional credit for interdisciplinary programs
 - Pathways forward when student-advisor relationships fail
 - Staffing of subcommittees

Sullivan would like to create a sign-up sheet for these subcommittees and Councilors were in favor. Sullivan will set up Grad Council subcommittees on Microsoft Teams for more efficient communication and file sharing.

- Post-baccalaureate certificate language revisions
 - Barbari will look at this language*

Meeting adjourned at 5:10 pm.

Next Meeting: October 21, 2020 | 4:00 – 5:00 pm, via Zoom.

Please send all agenda item requests to Jane Ko (jko@mines.edu) one week prior to meeting.