

Colorado School of Mines – UNDERGRADUATE COUNCIL MEETING MINUTES
 October 28, 2020 | 4:00 – 5:00 pm, via Zoom

Attendees:

Voting Members: 19 total (10 - majority needed for quorum). Quorum was present

P	Jeff King (chair)	P	Becky LaFrancois (EB)	P	Mike Nicholas (AMS)	P	Jeff Schowalter (EE)
P	Michael Barankin(CBE)	P	Derrick Hudson (HASS)	P	Corinne Packard (MME)	P	Nicole Smith (MN)
P	Dylan Domaille (CH)	P	Ge Jin (GP)	P	Jeff Paone (CS)	P	Bruce Trudgill (GE)
P	Bill Eustes (PE)	P	Hongyan Liu (CEE)	P	Oyvind Nilsen (ME)	P	Sydney Marchando (USG)
P	Gyasi Evans (LB)	P	Carrie McClelland (EDS)	P	Todd Ruskell (PH)		

Other Regular Attendees and Guests

A	Fran Aguilar (MS)	P	Dixie Cirillo (PA)	A	Jennie Kenney (RO)	A	Ben Moore (CS, EE, ME)
A	Amy Argyris (CASA)	P	Vibhuti Dave (UGS)	P	Jane Ko (RO)	A	Paul Myskiw (RO)
A	Justin Bush (CEE)	P	Jen Drumm (CASA)	A	Cheryl Medford (GE)	P	Terri Snyder (PE)
P	Karla Perez-Velez (CASA)	A	Katie Ludwin (CASA)	P	Kendra Stansbury (RO)		

Guests: Scott Houser, Colin Terry, Brian Trewyn

Welcome

Jeff King

Approval of Minutes – October 28, 2020

Jeff King

MOTION: To approve minutes by Barankin; seconded by Eustes. 1 abstention (King – due to technical issue). APPROVED.

Briefings and Information Items

- Office of Undergraduate Studies

Vibhuti Dave

Status of New UG Program Proposal Template:

Dave is waiting on next steps and has not received any feedback from Councilors on template. This would alter what is programmed as required information in CIM. No further discussion was requested and King called for motion for UGC to approve the template as submitted.

MOTION: To approve new UG program proposal template by Barankin; seconded by LaFrancois. 1 abstention (King – due to technical issue). APPROVED.

Dave will coordinate with Julie Lambert to get on the Faculty Senate agenda for their approval.

- Registrar

Kendra Stansbury

No specifics updates on the scheduling and room situation at this time but will follow up as soon as more information is available. Faculty are waiting to advise their students. Registration begins November 16.

There will be soft roll out for the new degree auditing system, DegreeWorks. The Registrar’s Office offered a presentation on 10/29/20 and Councilors received an invitation via email. Their website dedicated to DegreeWorks can be found at: <https://www.mines.edu/registrar/degreeworksfag>
 All the information from the presentation will be available at this link.

- Steering Committee

Reminder on deadline change: course-related curriculum items must be submitted and **workflow started in CIM by 2:30 pm the Wednesday (1 week) before** the next UGC meeting to give the Steering Committee time to review and Admin to prepare the agenda.

For new courses, the entry in CIM should be as complete as possible, otherwise it will be deemed a major change, or the Steering Committee may kick it back to the originator for more information.

- **Every Oredigger Policy sub-committee and Readmissions**
(from 9/23/20, for vote on 11/11/20)

Colin Terry

Revised and AA approved proposal for GPA Recovery policy
(Files → 2020-2021 UGrad Council Meetings → 2020-10-28 → Agenda Items)

This policy discussion was put on hold the previous meeting to give Academic Affairs upper administration an opportunity to fully vet and endorse the proposal. Only minor edits were made to clarify language, no substantial revisions were requested.

Councilors discussed when the policy would go into effect and how its application to retroactive grades might influence current student choices and behavior. Terry hoped for immediate implementation and so that courses re-taken in Spring and beyond could be eligible to replace Fall grades. Terry reiterated that the Registrar's Office agreed this was only to the benefit of students.

Councilors also debated the some of the parameters of the policy such as:

- Why are retakes only retroactive to this Fall. Why does it stop then and not go farther back to previous semesters?
- Why are only D and F grades eligible for replacement? Why not open up the option to replace any grade if the student chose? The students are the ones paying for these courses?
- What about just limiting the number of chances a student has to retake a particular course instead?

CEE Department provided their feedback, emphasizing the question of limiting replacement to only D and F grades. They would like to promote fairness across all students, including those who may want an opportunity to improve on passing grades or obtain all A's.

Terry suggested that acknowledging the accomplishments of a B vs. an A might be a good life lesson for some students who have set certain expectations of themselves.

An argument against opening up retakes for all grades was that the proposed structure served partly to protect students from themselves. Mines previously practiced more liberal policies and it was not always in the students' best interest.

Terry added that without any restrictions, there was high potential that the time to graduation would lengthen, which would hurt institutional optics. "C's earn degrees" and getting a C grade means the student can move on. Terry also asserted that restricting grade replacement to D and F may in fact accelerate time to graduation because those are the grades actually impeding degree progress. This

also aligns with federal financial aid guidelines. D's and F's do not advance a student in their curriculum so there is a loophole with financial aid, whereas C's are considered a passing grade.

In terms of capping the number of times a class could be retaken vs. the letter grade of the course, Terry conferred with peer institutions and learned it would create a heavy administrative burden on the Registrar's Office, which is already running lean. Other institutions also moved away from this method due to its arbitrary nature (deciding a max number). At Mines, a course grade will stand after the third time it is taken.

Administrative Changes to Curriculum – Request for Council Vote (from 10/14/20)

The following course change was administratively processed in the system. No further discussion was requested.

1.1 HONORS

Wendy Adams

[status: CIM 10/8, Provost approved 10/8]

2 new courses SCED262 / MAED262 (cross-listed): K-12 Field Experience and Building Student Relationships

Creating an opportunity for Mines students to become highly-qualified science, math, and computer science teachers lies at the heart of the Mines@150 goals. Bringing students with technical backgrounds into our local classrooms allows these students to share their passion in a way that meets societal needs and at the same time builds their leadership and communication skills.

Approved by UGC in January 2018 but prefixes were not created in CIM until now.

MOTION: To approve the two new Honors courses as presented by Barankin; seconded by LaFrancois. 1 abstention (King – due to technical issue). APPROVED. Processed in CIM.

Curriculum Items in Progress

Minor Changes to Curriculum (from 10/14/20, for vote on 11/11/20)

The following minor course changes will not be discussed unless specifically requested by Council.

2.1 COMPUTER SCIENCE

Jeff Paone

[status: CIM 10/2]

2 course changes CSCI303: Introduction to Data Science

Adding prereq option

Continued Discussion (from 10/14/20, for vote on 11/11/20)

3.1 HUMANITIES, ARTS, and SOCIAL SCIENCES

Derek Hudson

[status: CIM 9/30 & 10/8, Provost approved 9/30 & 10/8]

5 new courses HASS466: Science, Technology, and Confucian Ethics

This course will help expand course offerings and diversify delivery in professional ethics education. It will contribute to a more innovative and entrepreneurial culture that is focused on employing culturally diverse tools to solve increasingly globalized sociotechnical problems in engineering.

HASS422: Art and Environmentalism

This version of an Art History course uniquely serves Mines students by focusing on how perceptions of humans' place in the natural world have changed over time. Mines @150 mandate that students understand societal context and have the opportunity to pursue personal passions; Art &

Environmentalism does this as it helps students to become hard-working, creative, and collaborative problem solvers with an awareness of global issues.

HASS227: Beginning of Orchestral Strings and Fundamentals of Music

This course advances the Mines@150 initiative by broadening the arts opportunities available at Mines in order to further students' passions. Like the beginning piano class, this provides an opportunity to develop a new passion for instrumental music and provides a new entry point not typically available at any university.

HASS372: History of Medicine

A course on the history of medicine would create a way for students considering careers in the biomedical and health sciences (including those who hope to attend medical school after Mines) to explore this interest while fulfilling their HASS advanced elective requirement.

HASS463: History of Epidemics

A course on the history of epidemics would create a way for students considering careers in the biomedical and health sciences (including those who hope to attend medical school after Mines) to explore this interest while fulfilling their HASS advanced elective requirement.

3.2 **COMPUTER SCIENCE**

Jeff Paone

[status: CIM 10/2]

2 course changes

CSCI470: Introduction to Machine Learning

Updating prereqs

Confirmed that for both CSCI303 and CSCI470, it would be appropriate to have consistent prerequisite options of either CSCI101 or CSCI102 or CSCI261

3.3 **ECONOMICS and BUSINESS**

Becky LaFrancois

[status: CIM 10/6, Provost approved 10/6]

3 new courses

EBGN230: Introduction to Business

This course is an introduction to business for early year students. Business education is a pivotal piece of the Mines@150 mission. This class will introduce the students to all aspects of business, as well as expose our students to the other business classes that the Division of Economics and Business has to offer.

EBGN435: Economics and Water Resources

This course proves a forum for students to understand and analyze water policy and allocation utilizing economic models and analysis. The tools covered will advance students' economic and business acumen, including demand analysis, financial modeling, cost-benefit analysis, data analytics, and policy analysis.

EBGN453: Project Management

This course enhances our offerings in Undergraduate business education. It could also be a feeder for students in the ETM graduate program as well as upcoming online graduate certificate programs.

Ultimate goal for EBN453 is to un-cross-list and separate into UG and Grad sections. EBN435 will probably continue to be cross-listed. The only difference between UG and Grad versions of both courses is the type of final project students are required to submit.

3.4 **CHEMICAL and BIOLOGICAL ENGINEERING**

Michael Barankin

[status: CIM 10/8]

1 program change

Minor in Biomedical Engineering

Updating electives lists

- 3.5 **ECONOMICS and BUSINESS** **Scott Houser & Becky LaFrancois**
[status: CIM 10/13, Provost approved 10/13]
1 new program BS in Business Engineering and Management Science
(need to assign program & CIM codes)
- The new degree will expand on Mines' uniquely quantitative brand of business education that is evident in our very successful professional master's degree in Engineering and Technology Management and support our efforts to be a leader in educating STEM students and professionals. Second, the solutions to the challenges faced by industry are increasingly data-driven so leaders need to be equipped with the analytical tools that inform good business decisions. A new quantitative business degree program will complement the technical skills of Mines students and help Mines be a producer of differentiated and highly desired STEM-educated leaders.*
(Supporting documents available on Canvas in Files → 2020-10-14 → Agenda Items)

New Curriculum Items

Minor Changes to Curriculum

The following minor course changes will not be discussed unless specifically requested by Council.

- 4.1 **MECHANICAL ENGINEERING** **Oyvind Nilsen**
[status: CIM 10/21, Steering 10/21]
2 course changes MEGN391: Automotive Design – SAE Collegiate Design Series (Formula SAE)
Changing to a 3 CH (contact hour) course vs. 1 CH course at request of instructor
 MEGN408: Introduction to Space Exploration
This course will move to 3 CH to support the new minors associated with aerospace, including the newly proposed minor from ME, Aerospace Systems.

Note: CH = Contact Hours & Credit Hours. Both are changing from 1 to 3.

- 4.2 **HUMANITIES, ARTS, and SOCIAL SCIENCES** **Derek Hudson**
[status: CIM 10/21; Provost approved 10/21]
1 new course HASS468: Environmental Justice
Educate and inspire students from all backgrounds: By providing a forum for students to study current and emerging environmental justice issues, this course will make Mines more attractive to qualified students from all backgrounds (including groups that are currently underrepresented in the Mines student body).

Major Changes to Curriculum

- 5.1 **MECHANICAL ENGINEERING** **Oyvind Nilsen**
[status: CIM 10/21; Provost approved 10/21]
1 new course MEGN413: Aerospace Structures
This course has been offered twice as an MEGN498 technical elective. This course will continue to serve as an ME Tech Elective but also support the new Aerospace Systems minor.
Steering Committee had questions as the CIM entry is lacking.

Nilsen shared the syllabus (now uploaded in CIM) with council to provide more details and clarify course outcomes. ME is ready to move this into permanent class and it is meant to be part of Minor in Aerospace Engineering that will be present in the next UGC meeting.

5.2 INTERDISCIPLINARY

Brian Trewyn

[status: CIM 10/22; Provost approved 10/23]

1 new program BS in Quantitative Biosciences and Engineering
(need to assign program & CIM codes)

As the traditional divisions between academic disciplines continue to blur, there is a need at Mines to offer students with the skills and education to address the next generation of challenges the world will encounter in treatment and healing of the environment, new energy, and in healthcare. This multi and interdisciplinary undergraduate program will give the students the skillset to tackle these challenges from every direction and opening up more employment opportunities. This will be a residential program.

Presentation with detailed information has been uploaded to Canvas
(Files → 2020-10-28 → Agenda Items → BS in Quantitative Biosciences and Engineering)

This new interdisciplinary program has already been presented to Faculty Senate. It is unique in bringing disciplines together, eliminating redundancies, and will foster collaborations between Undergraduate students.

Employers have reached out Mines faculty, seeking graduates with these to the faculty looking skillsets.

The procedure moving forward: UGC will take this proposal back to their departments, be deliberate, and not rush through process, to give it proper consideration. Trewyn will return for the next UGC meeting to address questions and concerns. UGC reps can also interact directly with Trewyn offline. If approved in two meeting's time, the vote will go to Senate, then to BOT for final approval.

Councilors were concerned about how students would be assigned to departments if they are enrolled in an interdisciplinary program. In graduate programs, students "sit" in the departments their academic advisors are from but this method would not necessarily apply to undergraduates. Trewyn acknowledged the QBE program development committee did not have all the answers but have posed this issue and other identified challenges to the Provost and upper administration, who are in the position to make these decisions. Trewyn hopes to resolve these questions before the proposal goes to Faculty Senate.

Council was also interested in learning more about the programs overall potential impact with regards to resources, spacing, staffing, advising, budgets, administrative support, and who takes ownership/responsibility.

Each of the new courses in the QBE program will also be proposed and submitted through CIM to be vetted by UGC. These will include more in-depth information about content and prerequisites.

Meeting adjourned at 5:03 pm.

Next Meeting: November 11, 2020 | 4:00 – 5:00 pm, via Zoom.