

Colorado School of Mines – UNDERGRADUATE COUNCIL MEETING MINUTES
November 20, 4:00 – 5:00 pm, via Zoom

Attendees:

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

P	Ventzi Karaivanov (chair)	P	Erik Menke (CH)	P	Adam Olsen (LB)		Rennie Kaunda (MN)
	Jason Ganley (CBE)	P	Jeremy Suiter (EB)	P	Emmanuel De Moor (MME)	P	Mathias Burisch Hassel (GE)
P	Rob Thompson (CS)	P	Ge Jin (GP)	P	Jeff Wheeler (ME)	P	Eliza Buhner (HASS)
P	Linda Battalora (PE)	P	Hongyan Liu (CEE)		Hisham Sager (EE)		Tom Powell (USG)
P	Jack Bringardner (EDS)	P	Gus Greivel (AMS)	P	Chip Durfee (PH)		

Other Regular Attendees and Guests

	Sam Spiegel (Mines Online)	P	Vibhuti Dave (UGS)		Kristeen Serracino (AA)		Paul Myskiw (RO)
P	Karla Pérez-Vélez (CASA)		Danielle Boileau (CASA)		Cheryl Medford (GE)	P	D. Scott Heath (RO)
	Katie Ludwin (CASA)		Megan Sanders (Trefny Center)		Colin Terry (SL)		
	Luke Contreras (UA)		Julia Cable (UA)				

Special Guest(s):

Welcome, Committee Appointments

Ventzi Karaivanov

There was a CAS program change that was originally on the agenda but was removed. This change was prompted by two EB courses (EBGN315 and EBG435) being added to the CAS elective list. However, these courses are already approved but were not listed, therefore, it does not require council vote.

Approval of Minutes – November 13, 2024

Ventzi Karaivanov

MOTION: The motion to approve the previous meeting minutes was moved by J. Suiter and seconded by L. Battalora. The motion to approve the previous meeting minutes was approved with 13 approved, 0 opposed, and 0 abstentions.

Briefings and Information Items

Registrar's Office

D. Scott Heath for
Paul Myskiw

Last week was registration week which went smoothly. The Registrar's Office is seeking feedback from faculty regarding registration. There were some complications around departmental restrictions that were resolved. If any department is having issues with restrictions, please reach out to the Registrar's Office.

- **Comment:** J. Wheeler added that his department experienced some changes in the background (unprompted course cap change) and there was confusion about whether it was a system error. As a result, there is an ME lab class that has bigger enrollment than expected.
- **Comment:** D. Scott Heath added to forward any issues to the Registrar's Office to investigate.
- **Comment:** E. Buhner added that several students reported that when looking for HASS classes prior to registration, they saw all HASS that have ever been offered (including courses that are not offered in the Spring) which caused confusion.
- **Comment:** D. Scott Heath added that this issue has come up with CASA and advising as well. This is an opportunity to review courses to ensure accurate records of classes and take classes off the books that have not been offered in a while. The system is set up to list all potential courses

that could be offered in a term. Once it is filtered down to the section level, it will display only the courses that are actually offered. The hope is that the new planning tool coming in the Spring will help eliminate some of these issues and will provide more guidance to students on how to use the tools available to them.

- **Question:** V. Karaivanov added that the common examination policy regarding exam conflicts within the semester states that if a student is scheduled for two exams on the same evening, the course or bundle of courses where there will be lower total enrollment will be required to provide the makeups for the affected students. What if they are not common exams?
- **Answer:** G. Greivel added that the policy only applies to common exams. This situation applying to non-common exams is not very common and may not have been addressed.
- **Answer:** D. Scott Heath answered that students have asked about having two exams on the same day, but it does not fall under this policy. This would be something to look into.

Undergraduate Studies

Vibhuti Dave

Since HASS215 FUTURES course has been approved by UGC and Faculty Senate, the core curriculum page and catalog will be updated to reflect it. V. Dave is working on the language to include for students who may transition between catalogs. Once completed, this can be presented to UGC to approve.

- **Question:** G. Greivel asked if individual program descriptions and tables will need to be updated to reflect this change?
- **Answer:** V. Dave answered that wherever Global Studies is listed in degree plan tables would need to be replaced with HASS215. It may be a question whether this should be done by K. Serracino or if departments will want to replace the course, especially since HASS215 does not have any prerequisites and therefore does not have to be in the Sophomore year.
- **Comment:** V. Karaivanov added that this might require all departments to review their 4-year plans and add this course in.
- **Comment:** D. Scott Heath added that departments should also examine any of their courses that may have HASS200 set as a prerequisite.

CASA

Karla Pérez-Vélez

Intended vs. Declared

Prior to August 1, 2024, students could select a major (considered intended) when applying and had the option to change their major through the Registrar's Office until mid-July when scheduled are built. Students would start their term based on their intended major and would officially declare a chosen major in the Spring. During the first term, students would work specifically with the CASA first year team and not be officially connected to a department. In the Spring, students completed a form, formally declaring their major whether it changed or not. They were then assigned a CASA major advisor and a faculty mentor and are connected to the department. All continuing students had access to the major change form which they could submit at any time. CASA received feedback from departments that there was interest in having a connection to students in their first year. As a result, CASA came up with an updated model that includes students starting the fall term in the major they chose. When students arrive on campus, CASA reaffirms their major choice. Therefore, instead of three major related change forms, students only have one (removed intended major change form and declaration form). 1st year students are then connected with their CASA major advisor and the department (shows up in departmental lists and invited to department Canvas pages). Data was presented with the number of major changes by department from August 2024 to November 2024, which can also be found on Tableau under Enrollment Management.

- **Comment:** J. Bringardner added that there should be a mechanism in place to discuss the implications of these changes in the undergraduate curriculum or introduce it to the UGC or Faculty Senate before making any changes. Also, many 1st year students tend to declare their major as Mechanical since it is a degree they are most familiar with based on high school

preparation for engineering or is viewed as the most generic form of engineering. There is some discussion to be had around common 1st year programs so that there is no delay in graduation as students figure out what they want to do in the first year. Some students have expressed they feel stuck because they have a declared major whereas the language of intended conveys that they are exploring their options. This may also be difficult for common 1st year programs to navigate with the large influx of incoming students.

- **Comment:** J. Wheeler added it is difficult to identify if the issues ME is experiencing (a large influx of students) is associated with this or due to national trends. Mechanical Engineering across all institutions is growing quickly. However, ME has had difficulty in offering enough seats for declared ME major.
- **Comment:** K. Pérez-Vélez added that the intended vs. declared process is taught to students by CASA when they arrive. Conversations with 1st year students do not differ even if they have a CASA major advisor or declared major. CASA is continuing to talk about major exploration and options at Mines. Additionally, this change was made based on feedback from academic departments about having access to 1st year students. There have been discussions with program directors and department heads. CASA is happy to continue this conversation to get any additional feedback and perspectives.
- **Question:** J. Bringardner asked could data that includes what students listed as their initial intended major in past years as well as what students listed as their declared major this year could be compiled? Do the CASA advisors talk about 4-year planning and flow charts to 1st year students with declared majors?
- **Answer:** K. Pérez-Vélez answered that CASA advisors typically talk to students about what their interests are. If students request 4-year plans or flow charts, it is provided. However, a challenge has been that many 1st year students come in with more credits and are starting in 2nd and 3rd year courses upon arrival.

1 Curriculum Item(s) for Council Vote

***Please complete Canvas voting for the following curriculum item(s) by November 20th at 3:00 pm.**

1.1

CH	Erik Menke
CIM 10/15	
1 program change:	BS-CHM: BS in Chemistry
	<p>We need to do an update to our tech electives list from business/econ as they have deleted some and added some. The below list is what they suggest we should accept for tech electives:</p> <ul style="list-style-type: none"> • EBGN305 – Survey of Accounting • EBGN308 – Principles of Marketing • EBGN309 – Fundamentals of Management • EBGN345 – Principles of Corporate Finance (pre-requisite EBGN305) • EBGN346 – Introduction to Investments (pre-requisite EBGN305) • EBGN351 – Introduction to Decision Science • EBGN360 – Introduction to Entrepreneurship • EBGN453 – Project Management

Canvas Voting Results:

12 approved, 0 opposed, 0 abstentions, 0 additional discussion needed

1.2

Minor Changes – to be considered as a single vote

AMS		Gus Greivel
CIM 10/17		
1 course change:	MATH482: STATISTICS PRACTICUM (CAPSTONE)	
	AMS is removing MATH324 and MATH335 as prerequisites for this course since both are prerequisites for MATH436... which is, in turn, a prerequisite for MATH482.	

Canvas Voting Results:

12 approved, 0 opposed, 0 abstentions, 0 additional discussion needed

4:30-4:40 pm

2 Continued Business

2.1

AMS		Gus Greivel
CIM 10/17		
1 course change:	MATH437: MULTIVARIATE ANALYSIS	
	AMS is removing one redundant prerequisite that is a prerequisite on other courses in the prereq, lest for this course and correcting grammar in the catalog description.	
CIM 10/31		
1 program change:	BS-AMS: BS IN APPLIED MATHEMATICS AND STATISTICS	
	AMS is updating our degree tracks and electives to reflect the fact that CSCI303 is no longer offered and has been replaced by DSCI403. We have updated our electives lists to include relatively new courses in the Data Science IGP. We have also replaced one AMS elective with the explicit requirement of MATH436 since this course is a prerequisite for the DS/STAT capstone course.	

2.2

ME		Jeff Wheeler
CIM 10/24		
1 new course:	MEGN423: APPLIED COMPUTATIONAL FLUID DYNAMICS	
	<p>Computational Fluid Dynamics (CFD) is a powerful tool for mechanical engineers to analyze problems as varied as air distribution HVAC, aircraft in flight, cooling in computer cases, and many other engineering design applications. CFD is a marketable skill for mechanical engineers and a course aimed at an undergraduate audience would bolster the skills of Mines BSME graduates who are interested in pursuing careers in fields with significant analysis of fluid flows.</p> <p>Mines 150+ goals: Studying CFD creates a signature experience for Mines students by allowing them to study a problem that they are personally passionate about. Given the broad applicability of CFD to many design problems, students could choose to study a design problem from their internship or research, a personal hobby such as an</p>	

	<p>automotive problem, or another topic that piques their interest.</p> <p>Online modality details: Oyvind Nilsen completed FOCD 2022 Course Online development completed by end of March 2025 Offer online Summer II 2025 (then Face to face Fall 2025) Open for registration April 2025</p>
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4:40-4:45 pm

3 New Business

3.1

PHYSICS		Chip Durfee
CIM 11/20		
1 program change:	BS-PHE: BS IN ENGINEERING PHYSICS	
	<p>The Department of Physics is making some adjustments to our curriculum in response to the elimination of the CSCI 250 course (Python-Based Computing: Building a Sensor System), which had been a requirement. That was a programming course centered around interfacing with sensors. As part of the core, the programming instruction our students are getting is sufficient, so we will not be replacing that course with another. The reduction of our credit load by three credits allows us to fix a situation where we had two parts of our Senior Design sequence PHGN 471/472 (Senior Design Principles) and 481/482 (Senior Design Practice) that had 1/2 and 2 1/2 credits, respectively. Mines has moved to making all courses have integer credit assignment, so this makes that change official. The net effect on the program is that we are reducing the credit load for the degree by one credit. Finally, we are moving EBGN 321 (economics) from spring Junior year into the slot vacated by CSCI 250 in spring Sophomore year. This allows them to complete the core earlier and lightens a physics-heavy Junior year.</p>	
4 course changes:	PHGN471: SENIOR DESIGN PRINCIPLES I	
	Changing credits from 0.5 to 1 credit hour.	
	PHGN472: SENIOR DESIGN PRINCIPLES II	
	Changing credits from 0.5 to 1 credit hour.	
	PHGN481: SENIOR DESIGN PRACTICE	
	Changing credits from 2 ½ credits to 3 credit hours.	
	PHGN482: SENIOR DESIGN PRACTICE	
	Changing credits from 2 ½ credits to 3 credit hours.	

- **Question:** H. Liu asked how many total credits will students take in 4 years? It looks like the total credits have increased by 2 credit hours.

- **Answer:** C. Durfee answered there is a net decrease of 1 credit because the program change is removing a 3-credit hour class and then 2 credit hours are being put back through the course changes. The total credit hours for the program is 127.

Minor Changes – to be considered as a single vote

3.2

CEE	Hongyan Liu
CIM 11/12	
1 course change:	CEEN491: EROSION CONTROL AND LAND RESTORATION
	<p>Mines’ Vision literally states leading to shared prosperity and sustainable use of Earth’s resources”, and the focus of this new course is on sustainable soil management.</p> <p>Course will be delivered: Residential (less than 50% of course delivered online) or Online. The course will be delivered 100% online. I have taught this course at Mines twice already, both times 100% online and without any problem.</p> <p>FOCD was completed on 4/15/2024</p> <p>Anticipated date for course development completion. It is difficult to define a date because even though the course material is already there, under the new copyright rules each PPT slide should have the proper authorization to be used, meaning that it could take a long time just to get the PPT material ready. I believe that a year is a good estimate (i.e. Summer of 2025).</p> <p>Anticipated first semester of delivery: Summer of 2025 Anticipated date you would like the course to open for registration: Summer of 2025 Added prerequisites: MATH100, CEEN381</p>

Additional Discussion

E. De Moor requested that the discussion on Intended vs. Declared be a continuing agenda item for the next meeting in December. In the meantime, additional feedback and questions can be directed to K. Pérez-Vélez (kperezvelez@mines.edu). A discussion board will be added to the UGC Canvas page as well.

5:00 pm

Adjourn at 4:58 pm

Ventzi Karaivanov

Next meeting: December 11, 4:00-5:00 pm via Zoom. Please send agenda items to Ventzi Karaivanov (vkaraiva@mines.edu) and Kristeen Serracino (kristeen.serracino@mines.edu) one week prior.