

Colorado School of Mines – UNDERGRADUATE COUNCIL MEETING MINUTES
November 13, 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)	P	Rennie Kaunda (MN)
P	Jason Ganley (CBE)	P	Jeremy Suiter (EB)		Emmanuel De Moor (MME)		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)	P	Hisham Sager (EE)	P	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)	P	Kristeen Serracino (AA)	P	Paul Myskiw (RO)
	Karla Perez-Velez (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

Update from the Faculty Senate meeting – V. Karaivanov presented HASS215: FUTURES with the UGC voting results. The Faculty Senate approved FUTURES as a course and as part of the core. Faculty Senate meeting minutes will be shared so that the Council can review discussion on the course approval.

One more member is needed for the Minors & ASIs Analysis Committee as well as a co-chair. Jeff Wheeler was nominated as chair of the Minors & ASIs Analysis Committee.

MOTION: The motion to approve Jeff Wheeler as the chair of the Minors & ASI Analysis Committee was moved by V. Karaivanov and seconded by G. Greivel. The motion to approve Jeff Wheeler as the chair of the Minors & ASI Analysis Committee was approved with 15 approved, 0 opposed, and 0 abstentions.

Approval of Minutes – October 23, 2024

Ventzi Karaivanov

MOTION: The motion to approve the previous meeting minutes was moved by G. Greivel and seconded by J. Wheeler. The motion to approve the previous meeting minutes was approved with 14 approved, 0 opposed, and 0 abstentions.

Briefings and Information Items

Registrar's Office

Paul Myskiw

It is Day 3 of priority registration. Normal issues have come up such as prerequisite issues. A bug has been identified with waitlists that are currently being investigated by the vendor. There are program restrictions on UG courses. In the past, many UG courses had prerequisites but were not restricted by a program. An example is a department is offering a course that is required for their majors, but that course may be a technical elective for a different department. By restricting the course only to students in the major, it is not allowing other students to take that course. A discussion as UG Council may be whether



this should be encouraged or discouraged. The implication is that students who are planning to take that technical elective outside of their major are finding frustration in their registration experience. However, programs may put restrictions in place to ensure enough seats for their majors as it is a requirement. There is a need to strike balance with this approach and to provide clear communication to all students about these courses. These courses can be restricted until there are seats leftover or departments will need to add additional technical electives.

- **Comment:** T. Powell added that departmental restrictions on technical electives seem like a decent compromise. Once there is a stable number from the department, then it can open to other majors. Departments could also be asked to broaden the technical electives that they offer.
- **Comment:** P. Myskiw added that since there are interdisciplinary programs, opening technical electives to be broader could be an option.
- **Comment:** V. Dave added that if a course opens later, this should be communicated clearly to the students since they are looking to build their schedule as soon as their registration time slot opens and worry that a particular course may fill up or not be available. This approach elongates the stress on students and schedule completion time.

- **Question:** V. Karaivanov asked how many courses does this apply to? How big is this issue?
- **Answer:** P. Myskiw answered that a report query will be run and shared with the UG Council.
- **Comment:** V. Karaivanov added it would be interesting to know if it is common practice on campus to have agreements among departments regarding technical electives. Is this being monitored/coordinated between programs?
- **Comment:** P. Myskiw added that if there is a department that has growing enrollment that requires all seats to be available for their majors, is that being communicated back to programs that list these courses as possible technical electives? Now is the time to define and decide what the approach will be to this issue – whether to encourage or discourage it or find a different approach.

- **Question:** J. Wheeler asked are there particular courses that are experiencing this issue?
- **Answer:** P. Myskiw answered any course that also serves as a technical elective in another program is experiencing this issue. If this continues, it will be important for students and advisors to know this will be a reoccurring issue.
- **Comment:** V. Dave added that there are already prerequisite restrictions in place that make the curriculum sequential and registration more complicated. Adding any additional restrictions puts more barriers on registration which students are already frustrated with.

- **Question:** T. Powell asked is it possible through our current system to set aside seats in these courses for non-majors?
- **Answer:** P. Myskiw answered there is a function within Banner called Reserve Seats that could be set up this way. However, it does have nuances so that when students are reviewing the schedule, they will only see the total capacity (it may look like there are open seats, but they are reserved). This could be an option.

Additionally, the Registrar's Office has adjusted registration ticket to the end of class. P. Myskiw asked for feedback and/or if anyone has noticed a difference compared to previous terms?

- **Comment:** E. Buhner added that no students have missed class due to registration whereas this has happened in previous terms.
- **Comment:** V. Karaivanov added that students experienced network issues and pages not loading during registration.

- **Comment:** P. Myskiw added there was a Wi-Fi issue yesterday afternoon, but it has since been resolved. There have been no further issues reported.
- **Comment:** T. Powell added that personal registration fell in the middle of a lab course.
- **Comment:** V. Karaivanov added that there has been some confusion with where things are placed in the new version of Banner. There was initial discussion to create a Canvas discussion to bring up concerns from faculty but there is a link to open an ITS ticket.
- **Comment:** P. Myskiw added the Registrar’s Office is planning to host open sessions for faculty to learn the new navigation in Banner. There are also some guides available which explain replacements from Banner 8. Almost all features are still present. The only features not currently working is the ability to look up any class list or CRN list. The vendor is currently working on getting this restored. If CRN lists or course listing are needed, please reach out to P. Myskiw to receive the lists or to be directed to the data in Tableau.

Undergraduate Studies

Vibhuti Dave

V. Dave received feedback from several students that they experienced a lot of runaround between departments and offices during registration. A suggestion may be to have one point of contact by communicating with all offices instead of sending students to various offices. V. Dave also reminded the Council to work on program overview pages and review prerequisites to ensure not too many prerequisites are in place to prevent the Registrar’s Office from having to process so many prerequisite waivers.

1 Curriculum Item(s) for Council Vote

1.1

AMS	Gus Greivel
CIM 9/26	
2 course change:	MATH310: INTRODUCTION TO MATHEMATICAL MODELING
	We are refining the AMS Computational and Applied Mathematics Modeling Sequence (MATH310, MATH431, and MATH484) to better scaffold modeling concepts as students progress through our curriculum. Topics are being organized to focus on discrete time mathematical models in MATH310, continuous time mathematical models in MATH431, and continuous time models with spatial variables in MATH484. We are also cleaning up the prerequisite structure within this sequence. Remove CSCI28 as a prerequisite.
	MATH431: MATHEMATICAL BIOLOGY
	We are refining the AMS Computational and Applied Mathematics Modeling Sequence (MATH310, MATH431, and MATH484) to better scaffold modeling concepts as students progress through our curriculum. Topics are being organized to focus on discrete time mathematical models in MATH310, continuous time mathematical models in MATH431, and continuous time models with spatial variables in MATH484. We are also cleaning up the prerequisite structure within this sequence.

Canvas Voting Results

MATH310 – 11 approved, 0 oppose, 0 abstain

MATH431 – 10 approved, 0 oppose, 0 abstain



2 Continued Business

2.1

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 	

This program change includes EBGN courses that were listed in the current catalog as technical electives that are no longer active. CH and EBGN met during the summer to identify courses to be considered as technical electives.

3 New Business

3.1

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.	

MATH437 course change is removing a redundant prerequisite and correcting the catalog description. The BS-AMS program change includes replacing CSCI303 with DSCI403, removed one AMS elective and replaced it with MATH436 (Advanced Statistical Modeling) in the Data Science track.

3.2

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 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>
--	--

This new course will be an elective course offered online (in the summer) and on campus (in Fall and Spring). There is an existing Computational Fluid Dynamics course, but it is graduate level. Mechanical would like to have an applications course aimed at undergraduates.

- **Question:** C. Durfee asked what codes are used?
- **Answer:** J. Wheeler answered it is aimed at using Ansys Fluent.
- **Question:** T. Powell is this included in the current Ansys site license that Mines has?
- **Answer:** J. Wheeler answered yes.

3.3 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.	

This course change is cleaning up prerequisite for the AMS Capstone course.

Additional Discussion

T. Powell commented that there seemed to be lower availability of HASS courses this semester. Is there any insight or reasoning behind this? Will it be useful to have a restriction on how many HASS courses can be registered for at once? E. Buhner answered it is typical fluctuation. This can be raised at the next HASS departmental meeting. Students tend to register for multiple HASS courses which is causing a false scarcity. HASS would be in favor of putting restrictions on registering for multiple HASS courses. Can a limit be put on registration from the Registrar's Office?

P. Myskiw added that students tend to wait till later in their career to register for HASS courses. An email was sent out in the Fall to be considerate when registering and only pick one course.

- **Question:** E. Buhner asked is there a way to put a limit on how many HASS courses student can be waitlisted for? One reason that students register for the HASS courses later may be due to these courses being booked by the time sophomores and juniors can register.
- **Answer:** P. Myskiw answered students have said they cannot get into these courses because the course is full or it conflict with other courses in their major. Students will typically waitlist for multiple courses even though they only need one. A seat analysis showed we are short 800 seats which have been addressed with S. Woodson and T. Hogue. For the Spring semester, there are only 14 sections for HASS300 compared to 18 sections last year and 35 400-level sections compared to 29 last year.
- **Comment:** E. Buhner added that there are less 300-level HASS course sections as students can transfer those credits from elsewhere. The 400-level HASS courses are what are required to be taken at Mines.

- **Question:** T. Powell asked would it be possible to consider a larger lecture hall, higher capacity class for a 300 or 400-level course?
- **Answer:** E. Buhner answered no, this would contradict the intention behind the 400-level classes which is that students will receive a seminar experience. However, HASS understands that this is a stressor for students and is committed to making sure no students are unable to graduate because they cannot get into a 400-level course. HASS professors will often go over course caps to accommodate students.

- **Question:** J. Wheeler asked how big are the waitlist for HASS courses?
- **Answer:** E. Buhner answered the waitlists are at 20.
- **Question:** J. Wheeler asked could waitlists be decreased to prevent students from camping on multiple waitlists?
- **Comment:** P. Myskiw recommended taking this feedback back to the Department Heads and Deans to possibly revise and sophisticate the waitlist policy. There was a mandate to put 20 on every waitlist in hopes to identify course demand. This would work if students were only on one waitlist but cannot be identified when students are on multiple waitlists. There is a new tool coming online in the Spring called SmartPlan that will provide departments with how many students will need a course that they have not taken or transferred in before registration opens. This will provide better analytics and schedule building tools to meet the needs of the students.
- **Comment:** J. Wheeler added ff the intent is to identify demand, a more effective approach may be to do a pre-registration survey. In all core classes in Mechanical, students must complete a survey during the first week of class which has helped identify demand for classes without using waitlists and has had high participation.

- **Question:** J. Bringardner asked do the students know what number they are on the waitlist?
- **Answer:** P. Myskiw answered yes, it is displayed in Self-Service but does not show if the waitlist position changes. There is a way for departments to self-manage the order of a waitlist but would require additional work from the departments to do so.

5:00 pm

Adjourn at 4:54 pm

Ventzi Karaivanov

Next meeting: November 20, 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.

