Colorado School of Mines – UNDERGRADUATE COUNCIL MEETING MINUTES February 26, 4:00 – 5:00 pm, via Zoom

Atte	ndees:						
Voti	ng Members: 19 total (10 nee	eded	for quorum). Quorum was pre	sent			
Р	Ventzi Karaivanov (chair)	Р	Erik Menke (CH)		Adam Olsen (LB)	Р	Rennie Kaunda (MN)
Р	Jason Ganley (CBE)	Р	Jeremy Suiter (EB)	Р	Emmanuel De Moor (MME)		Mathias Burisch-Hassel (GE)
Р	Rob Thompson (CS)		Ge Jin (GP)	Р	Jeff Wheeler (ME)	Р	Eliza Buhrer (HASS)
Р	Linda Battalora (PE)	Р	Hongyan Liu (CEE)	Р	Hisham Sager (EE)	Р	Tom Powell (USG)
Р	Jack Bringardner (EDS)	Р	Gus Greivel (AMS)	Р	Laith Haddad (PH)		
Othe	er Regular Attendees and G	uests	ł				
	Sam Spiegel (Mines Online)	Р	Justin Shaffer for Vibhuti Dave (UGS)		Kristeen Serracino (AA)	Р	Paul Myskiw (RO)
Р	Karla Pérez-Vélez (CASA)		Danielle Boileau (CASA)		Cheryl Medford (GE)	Р	D. Scott Heath (RO)
	Katie Ludwin (CASA)		Megan Sanders (Trefny Center)		Colin Terry (SL)		
	Luke Contreras (UA)		Julia Cable (UA)				

Special Guest(s): Wendy Winter-Searcy, Chelsea Salinas

Welcome

Jason Ganley for Ventzi Karaivanov

Approval of Minutes –*February 12, 2025*

MOTION: The motion to approve the previous meeting minutes was approved with 10 approved, 0 opposed, and 1 abstention.

<u>4:10-4:20 pm</u> Briefings and Information Items

Registrar's Office Please report back to departments regarding midterm grades. If anyone has received a notice, please report midterm grades as this will help significantly with advising and retention efforts. Registration for Summer and Fall will begin on March 31st. Room schedules for Fall sections are currently processing and will be available around March 13th. SmartPlan, the new degree mapping tool, is still underway. As completion nears, there will be a demo presentation in UGC later in the semester. Last year, the Graduate Dean brought forth some changes to the combined policy which were implemented in the Fall. However, there are still some violations and confusion among students so the Registrar's Office will slightly change the registration process for undergraduate students taking graduate courses. More details will be provided once they are finalized.

Undergraduate Studies

Please continue to work on Program Overview catalog pages so that they match the template available in Canvas. Also, start entering learning outcomes for all courses in CIM. Lastly, please review degree plans to ensure that EBGN321 is in the junior year or later.



Jason Ganley for Ventzi Karaivanov

Paul Myskiw

Justin Shaffer for Vibhuti Dave

- **Question:** H. Liu asked, there is a committee charged with reviewing core curriculum so that they are completed within the first two years. Is EBGN321 an exception to this?
- <u>Answer:</u> P. Myskiw answered that because of the junior level restriction, this course will not be included.

<u>4:20-4:25 pm</u>

1 Curriculum Item(s) for Council Vote

*Please complete Canvas voting for the following curriculum item(s) by February 26th at 3:00 pm.

1.1

EDS		Chelsea Salinas/ Jack Bringardner
CIM 12/17		
1 program change:	BS-DSGN: BS IN DESIGN ENGINEERING	
*Note: Vote for this program change might be called before the Senate meeting on 2/25.		

UGC voting results were 11 approved, 1 opposed, and 1 abstention with the understanding that EDNS220 will become a CAS elective in the near future. Since Faculty Senate had their meeting yesterday, Ventzi will call for an electronic Senate vote.

- **Question:** E. Buhrer asked, will students outside of this degree program be able to take EDNS220 as an elective? Does this class have a prerequisite?
- <u>Answer:</u> P. Myskiw answered that it will fall into an approved CAS elective and is available for any student to take. C. Salinas answered that there is currently a prerequisite for this course, but EDS is open and willing to remove it.

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MN	Rennie Kaunda	
CIM 1/6; Provost 1.	/6	
3 new courses:	MNGN209: DATA ANALYTICS FOR MINING ENGINEERS	
	The mining industry has adopted various technologies requiring systematic data collection and analysis. Every mining phase in the mine life cycle, from exploration to closure, relies on data collection analysis to improve efficiency, reduce costs, enhance safety, and minimize environmental impact. As the industry adopts more automated and digital technologies, the ability to analyze and interpret vast amounts of data becomes crucial. Mining engineers must be proficient in traditional engineering skills and in managing and analyzing data to make informed decisions that align with business objectives and regulatory standards.	
	MNGN320: MINING AND SUSTAINABILITY	
	The course is residential. It is prepared and was piloted in Fall semester 2024 as a special topics course (398). It will be a required course in our mining engineering undergraduate curriculum and will differentiate our program from others globally, as there are no others that have a required sustainability course. When the course was piloted, it had students from Mining Engineering, as well as Civil and Environmental	



	Engineering, Geology, and Petroleum Engineering. In addition, it will
	provide an opportunity for undergraduate students in other departments
	to learn about key sustainability issues related to the extractive
	industries. The course will be offered again in Fall 2025.
	MNGN412: MINE WATER, WASTE AND CLOSURE
	Mine water, waste, and closure are important aspects to consider for responsible mining. In addition to the ore deposit, water is essential to a mining project. Water supply must be balanced among local and regional water users and managed as a sustainable resource. Large quantities of waste rock, tailings, spent ore residues, and other types of waste are generated during mining and processing, and must be managed or stored in dedicated facilities. These facilities have the potential to adversely impact surface water and groundwater resources, ecological environments and surrounding communities. Mine closure is perhaps the most significant action a mining operation can perform to limit its long-term negative impact on the environment and provide a long-term beneficial end use after mining operations cease. This course will address fundamentals and future trends related to water, tailings and mine waste, and mine closure, with significant emphasis on
	environmental, social, technical, and economic risk management.
3 course changes:	MNGN433: OPERATIONS RESEARCH AND STRATEGIC PLANNING AND OPTIMATZATION TECHNIQUE IN MINING
	1 credit hour reduction to make room for another course in MN
	curriculum. Updated course title.
	MNGN438: GEOSTATISTICS
	Curriculum revision - updated contact hours, added MNGN209, MNGN312 and MNGN316 as prereqs; removed MATH112 prereq.
	MNGN482: RISK AND PROJECT MANAGEMENT
	This course is revised to improve students' understanding of risk associated with mining projects and project management as part of the overall required mining engineering undergraduate curriculum offerings by updating course description.

MNGN209 new course – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MNGN320 new course – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MNGN412 new course – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MNGN433 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MNGN438 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MNGN438 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MNGN438 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed

1.3

CS	Rob Thompson	
CIM 1/8		
2 course change: CSCI403: DATA BASE MANAGEMENT		
	Removing historical prereq of CSCI262 (which no longer exists) and	



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listing strictly CSCI200.
CSCI341: COMPUTER ORGANIZATION
Correcting prereqs – remove CSCI200 and CSCI261

CSCI403 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed CSCI341 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed

1.4

СН	Erik Menke		
CIM 1/9; Provost 1/9			
1 new course:	CHGN413: CHEMISTRY OF THE LANTHANIDES AND ACTINIDES		
	The production of energy with a small carbon footprint is one of the core components of both Mines' teaching and research missions. This course focuses on the chemistry and properties of the elements used in nuclear energy production as well as in many critical materials, e.g. the rare earths, used in almost all modern technologies. Course will meet with a graduate version, CHGN 513, which will be proposed in graduate council parallel to this proposal.		

Canvas Voting Results:

CHGN413 new course – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed

CBE	Jason Ganley		
CIM 1/10			
4 course changes:	CBEN320: CELL BIOLOGY AND PHYSIOLOGYCourse instructors have found that a basic background of organic chemistry is necessary to effectively deliver all course learning objectives to the students in Cell Biology and Physiology – added CHGN221 as a prerequisite.CBEN321: GENETICS		
	The faculty teaching these courses and believe the "Intro to" should be dropped in the following courses: CBEN 311, CBEN 321, and CBEN 412. The current course names led to our students' transcripts having way too many "Intro to" In addition, as there are no "Advanced" versions of these courses, they should stand alone with their direct topical name. Prerequisite addition of Organic Chemistry I, CHGN221. Course instructors have found that a basic background of organic chemistry is necessary to effectively deliver all course learning objectives to the students in Genetics. CBEN311: NEUROSCIENCE		
	The faculty teaching these courses and believe the "Intro to" should be dropped in the following courses: CBEN 311, CBEN 321, and CBEN 412. The current course names led to our students' transcripts		



having way too many "Intro to" In addition, as there are no "Advanced" versions of these courses, they should stand alone with their direct topical name.
CBEN412: PHARMACOLOGY
The faculty teaching these courses and believe the "Intro to" should be dropped in the following courses: CBEN 311, CBEN 321, and CBEN 412. The current course names led to our students' transcripts having way too many "Intro to" In addition, as there are no "Advanced" versions of these courses, they should stand alone with their direct topical name.

CBEN320 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed CBEN321 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed CBEN311 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed CBEN412 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed

1.6

GE	Mathias Burisch Hassel	
CIM 1/13		
1 course deactivation:	GEGN204: GEOLOGICAL PRINCIPLES AND PROCESSES	
	Based on an analysis of our program learning objectives, coupled with a review of the syllabi for each of our sophomore-level courses, we have decided that the critical course content in GEGN 204 can be adequately addressed in other classes and we can remove that course from our curriculum. Furthermore, this addresses a university-level directive to reduce overall course hours in our curriculum.	

Canvas Voting Results:

GEGN204 course deactivation – 14 approved, 0 opposed, 0 abstentions, 0 add'l discussion needed

QBE	Ch	ristian Beren		
CIM 1/14; Provost 1/14				
4 new courses:	BIOL410: ENTREPRENEURSHIP IN THE BIOLOGICAL SCIENCES SEMINAR			
	We are now offering a 3-credit version of bio-entrepreneurship. These changes will align the 1-credit seminar version with the newly offered 3-credit version.			
	The 3-credit course builds on the current 1-credit version, offering students an expanded opportunity to explore the biosciences, a field ich with discovery and innovation. It encourages students to deepen heir understanding and curiosity, fostering an environment for exploration and learning within this dynamic discipline.			
	BIOL412: ENTREPRENEURSHIP IN THE BIOLO SCIENCES			



	This course builds on the current 1-credit version, offering students an expanded opportunity to explore the biosciences, a field rich with
	discovery and innovation. It encourages students to deepen their
	understanding and curiosity, fostering an environment for exploration and learning within this dynamic discipline.
	BIOL490: QUANTITATIVE BIOSCIENCES & ENGINEERING
	UNDERGRADUATE SEMINAR
	QBE is offering a new undergraduate honors track, which will require undergraduate students to perform research and to attend research seminars for increased exposure to diverse areas of ongoing research.
	This course offering will allow QBE students to earn credit by attending seminars given by QBE professionals, develop an enhanced understanding of the breadth of quantitative bioscience disciplines, and present their research projects.
	BIOL491: QBE CAPSTONE DESIGN
	QBE Capstone Design will expand options for open-ended, client- centered design projects at Mines. As a cross-listed course, this will be available for QBE undergraduate students in their final year and QBE graduate students. This supports the Mines@150 mission to expand offerings for professionally oriented pre- and post-graduate education.
	Scientific inquiry and collaboration with external clients through this design course will grow the scale and impact of research in biosciences at Mines while diversifying potential funding sources. External clients engaged through this Capstone Design experience will form the basis of private investment in future Mines endeavors. The research conducted through QBE Capstone Design will be team-oriented, advancing Mines@150 values of developing a more social research culture.
2 course changes:	BIOL300: QUANTITATIVE BIOLOGY I
	Remove "Introduction to" from the course title since there is no advanced version of this course. BIOL301: QUANTITIVE BIOLOGY II
ating Desults:	Remove "Introduction to" from the course title since there is no advanced version of this course.

BIOL410 new course – 13 approved, 1 opposed, 0 abstentions, 0 additional discussion needed BIOL412 new course – 13 approved, 1 opposed, 0 abstentions, 0 additional discussion needed BIOL490 new course – 13 approved, 1 opposed, 0 abstentions, 0 additional discussion needed BIOL491 new course – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed BIOL300 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed BIOL301 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed

CEE		Hongyan Liu
CIM 1/14; Provost 1/1	4	



1 new course:	CEEN361: CONSTRUCTION METHODS		
	The proposed construction methods course directly supports the Colorado School of Mines' mission, vision, and strategic plans by providing students with a deep understanding of the essential construction techniques and their impacts on project success. As Mines continues to advance its commitment to producing highly skilled engineers who can tackle global challenges, this course emphasizes practical, hands-on problem-solving skills essential to real-world construction projects. The construction methods course equips students with critical knowledge of how various construction methods—such as earthwork, excavation, and material handling—interact with the properties of materials and affect the overall design, safety, cost, and durability of the construction projects. In addition, this course will specifically prepare students to navigate the complexities of construction logistics, ensuring that they can make informed decisions that align with both engineering principles and real- world constraints. Understanding the relationship between materials and methods is crucial to ensuring the stability, safety, and efficiency of construction projects. The course content will include industry standards, codes, and regulations, emphasizing Mines' focus on quality assurance, safety, and ethical responsibility in engineering practices. At last, the inclusion of construction industry engagement allows students to learn from professionals, providing them with the insights to make sound, practical decisions as they advance in their careers. The course supports Mines' strategic objectives of fostering interdisciplinary knowledge and encouraging collaboration across fields. The construction methods course will not only ensure Mines graduates possess a solid foundation of engineering knowledge but also prepare them to become leaders who can address the dynamic challenges in current construction industry, contributing to Mines' vision of developing innovative, sustainable, and impactful solutions		
	for the built environment. Provide detail about how the course will be delivered: Residential (less		
	than 50% of course delivered online) or Online. If online is listed, cite date of Mines Online development course. The course will be delivered 100% in person. The proposed course has		
	been piloted in the Spring and Fall of 2024.		

Canvas Voting Results: CEEN361 new course – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed

ME	Jeff Wheeler
CIM 1/15	
4 course changes:	MEGN315: DYNAMICS
	Differential equations are used at the end of the course and can be taken (MATH225) as a coreq instead of a prereq.



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MEGN391: INTRODUCTION TO AUTOMOTIVE DESIGN
Updating prereqs to make the class more accessible as an elective to non-ME students.
MEGN417: VEHICLE DYNAMICS & POWERTRAIN SYSTEMS
Updating prereqs to simplify the requirements to take this course, MEGN491 Intro to Automotive Design is sufficient; removed MEGN3115, MEGN324, MEGN261.
MEGN466: INTRODUCTION TO INTERNAL COMBUSTION ENGINES
Removed MEGN471 Heat Transfer coreq to make the course more accessible to students before their senior year.

MEGN315 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN391 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN417 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additional discussion needed MEGN466 course change – 14 approved, 0 opposed, 0 abstentions, 0 additio

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UHSP	Jack Bringardner/
	Lakshmi Krishma
CIM 1/15; Provost	
4 new courses:	HNRS155: VERTICALLY INTEGRATED PROJECTS FOR
	EXPERIENTIAL RESEARCH
	HNRS255: VERTICALLY INTEGRATED PROJECTS FOR
	EXPERIENTIAL RESEARCH
	HNRS355: VERTICALLY INTEGRATED PROJECTS FOR
	EXPERIENTIAL RESEARCH
	HNRS455: VERTICALLY INTEGRATED PROJECTS FOR
	EXPERIENTIAL RESEARCH
	In Vertically Integrated Projects for Experiential Research (VIPER),
	teams of undergraduate students from various years, disciplines, and
	backgrounds work with faculty and graduate students on their efforts in
	scholarship and exploration. The teams are multidisciplinary – drawing
	students from the disciplines needed by each project; vertically
	integrated - maintaining a mix of undergraduate and graduate students
	from different cohorts; large-scale – often with more than 10
	undergraduates per team; and long-term – undergraduates can earn
	academic credit in VIPER for up to four years, and the projects last for
	many years, even decades. This team structure provides sufficient time,
	the compelling context, and meaningful mentoring needed for students
	to learn and practice both technical and professional skills, from joining
	and learning about a team/project, through making significant
	contributions to the team/project, to leading part of or the entire
	team/project.
	The essence of Vertically Integrated Projects for Experiential Research
	(VIPER) at Mines transcends traditional academic boundaries, merging



technical expertise, business acumen, and a deep sense of passion and
context. This multidisciplinary approach allows students to dive into
authentic research and design experiences, fostering a unique sense of
community, affinity, and belonging. Such projects encourage students
to explore their areas of interest in depth and bring their ideas to reality,
offering a platform for leadership development and a deeper
understanding of societal and entrepreneurial challenges.

HRNS155/HNRS255/HNRS355/HNRS455 new courses – 12 approved, 1 opposed, 1 abstention, 0 additional discussion needed

1.11

EDS	Jack Bringardner
CIM 2/6	
2 course	INNO244: INNOV8X IGNITE
deactivations:	
	At the provost's request, we are removing the INNO prefix and reinstating the ENDS prefix for Innov8x.
	INNO444: INNOV8X CREATE
	At the provost's request, we are removing the INNO prefix and reinstating the ENDS prefix for Innov8x.
1 course change:	EDNS444: INNOV8X
	At the provost's request, we are removing the INNO prefix and reinstating the ENDS prefix for Innov8x.

Canvas Voting Results:

INNO244 course deactivation – 14 approved, 0 opposed, 0 abstentions, 0 add'l discussion needed INNO444 course deactivation – 14 approved, 0 opposed, 0 abstentions, 0 add'l discussion needed EDNS444 course change – 14 approved, 0 opposed, 0 abstentions, 0 add'l discussion needed

<u>4:25-4:40 pm</u>

2 Continued Business

CS	Rob Thompson
CIM 1/15	
4 course changes:	CSCI220: DATA STRUCTURE AND ALGORITHMS
	Added CSCI358 or MATH334 as a prerequisite.
	CSCI400: PRINCIPLES OF PROGRAMMING LANGUAGES
	Added CSCI358 or MATH300 prerequisites.
	CSCI423: COMPUTER SIMULATION
	Added (CSCI210 or CSCI274) AND CSCI306 AND (MATH201 or
	MATH334 as prerequisites.
	CSCI445: WEB PROGRAMMING



	Added Online modality.
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2.2

AMS	Gus Greivel
CIM 2/6	
1 course change:	MATH301: INTRODUCTION TO ANALYSIS
	Modifying the prerequisites to read MATH300 or CSCI358 in order to make this course more accessible to students.

<u>4:40-5:00 pm</u> 3 New Business

HASS	Eliza Buhrer
CIM 1/24; Provost	2/13
3 new courses:	HASS461: QUEER NARRATIVES: PAST, PRESENT, FUTURE
	After the Mines Strategic Plan, at our school "we understand that a diverse and inclusive campus environment inspires creativity and innovation, which are essential to the learning process." Queer Narratives aligns simply by being the first course in our catalogue with "queer" in its title, but more importantly, the nature of its content, specifically its future orientation, invites students to think about how they might diagnose, solve, or even define a problem, abstractly, contextually, and above time. This kind of nuanced thinking and its interconnected ethics (ethos, pathos, kairos) are key components for dynamic and successful engineering careers.
	In NHV (pre-requisite) and Futures / Global Studies (co-requisites), students learn the importance of multipronged approaches through developmentally appropriate hypotheticals like the Trolley Problem, but they don't often think about praxis or contemporary application. In Queer Narratives, they do, using tools including critical fabulation, discursive versatility, and sovereignty and periodization. These real- world investigations, in combination with the history, theory, and criticism we read, enhance our students' resilience, innovation, and communication skills, and strengthen their ability to seek out and build diverse, foundationally sound teams, as opposed to ones that signal virtue but don't really practice it.
	All this helps students graduate in alignment with the Mines Strategic Plan, which describes our emerging professionals as people "with a strong sense of integrity, intellectual curiosity, demonstrated ability to get a job done in collaborative environments, passion to achieve goals, and an enhanced sense of responsibility to promote positive change in the world." Thanks to the structure of this course and its content, which



are both fixed and continuously evolving, students can learn that however they use those skills in their careers, the work will matter and have an impact. Further, and in alignment with ABET and HASS department goals, this trauma-aware, fully-accommodated class, in combination with a rigorous amount of reading, writing, and discussion, enables students to impactfully recognize "the need for and an ability to engage in life-long learning" and "the complex challenges of professional and private life in the 21st century." Only by sincerely, thoughtfully pondering these challenges can we create lasting, positive change.
As Queer Narratives students wrote in Fall 2024, "this class has been an absolute delight in bringing me joy, comfort, introspection, and community." "The course intention aligned so well with how it was set up." "I was able to contribute my thoughts without worrying that I would get a poor grade for having a different interpretation or a hot take." "The class was so close to one another by the end I really feel like I created some lifelong friends." "It turns out that I have really only ever thought about my own queerness from a pathological lens, research papers, and psychology lectures." "Please make this a full- fledged humanities course. It deserves its own code!"
HASS470: SWEAT THE SMALL STUFF: MICROHISTORY AND THE HUMAN EXPERIENCE
Offering students the opportunity to explore new methods through
which they can understand, analyze, and engage with history, giving them a more nuanced perspective on the modern world and its challenges. By thinking about the world through a new lens and conducting research for class, this class can support the goal of being a "go-to-place for use- inspired research and innovation needed for challenges facing industry and society."
• Giving students the opportunity to develop and explore their understanding of history while also
strengthening their research and communication skills, helps create well-rounded engineers, supporting Mines's goal to be "a preferred partner for talent, solutions,
and life-long learning."Challenging our students to approach history from a multi-faceted and interdisciplinary
perspective encourages our students to engage more deeply with a topic and promotes innovative thinking, a skill set that is essential to produce "differentiated and highly desired STEM-educated leaders."
-Providing a unique course that encourages students to use microhistorical methodology to better
understand their subjects and larger trends of change will be useful when our students enter their



	professional careers and engage and interact with various stakeholders,
	supporting the goal of
	being "a leader in educating STEM students and professionals."
	• Encouraging students to further investigate historical subjects, a field
	they have some
	introduction to prior to Mines, provides a basis for meaningful
	conversations and learning that is
	applicable to being an effective student, scientist, engineer and citizen,
	making Mines
	"accessible and attractive to qualified students from all backgrounds."
	• Developing a space where students can critically analyze and discuss
	historical subjects that
	prompt them to better connect with their peers fosters a "great
	community to learn, explore, live,
	and work." HASS482: EMPLOYMENT LAW – UNDERSTANDING HOW TO
	NAVIGATE WORKPLACE ENVIRONMENTS FROM ONBOARDING TO TERMINATION
	Our Mines @ 150 mission focuses on expanding our offerings so that
	our students continue to be distinctive and highly valued in our
	community. This course focuses on building student communication
	skills and developing their understanding of their rights and
	responsibilities as employees and supervisors. The course fosters
	critical thinking and develops traits typical of good employees so that
	our students entering the workforce build and maintain positive
	relationships with coworkers and are recognized as reliable team
	members. These traits include dedication, confidence, reliability,
	teamwork, independence, leadership, interpersonal/communication
	skills, self-awareness, and integrity.
	The development of these traits is gained through text readings,
	lectures, and practical studies including individual and group study of
	state and federal laws and recent court decisions.
2 course changes:	HASS202: TECHNICAL COMMUNICATION
	Added HASS100, HASS200 or HASS215 as a prereq; added HASS200
	or HASS215 as a co-req.
1 program change:	MIN-ESS: MINOR IN ENVIRONMENT AND SUSTAINABILITY
- program change.	STUDIES
	Detailed minor information provided to students.

HASS461 has been piloted twice and has had positive feedback from students, increasing the student's sense of belonging and affinity with Mines. HASS470 has also been piloted twice with positive student responses. HASS482 is a course that developed by Craig Hess, Director of HR, and is an introduction to employment law. HASS202 updating prereqs and the co-req of Futures. The minor program change includes adding a list of CAS electives.

- **Question:** H. Liu asked, what was the enrollment for the piloted HASS461 course?
- <u>Answer:</u> E. Buhrer answered that it was fully enrolled both times with a cap of 25-26 for both semesters.



EB	Jeremy Suiter/
	Becky Lafrancois
CIM 2/11	
2 course changes:	EBGN320: ECONOMICS AND TECHNOLOGY
	Since EBGN201 is no longer in the core, we are removing the pre- requisite for some of the 300 level economics courses that can be used to satisfy the CAS elective credit. The relevant learning outcomes from EBGN201 will be introduced and integrated into these courses. EBGN330: ENERGY ECONOMICS
	Since EBGN201 is no longer in the core, we are removing the pre-
	requisite for some of the 300 level economics courses that can be used to satisfy the CAS elective credit. The relevant learning outcomes from EBGN201 will be introduced and integrated into these courses.
1 new course:	EBGN477: ORGANIZATIONAL LEADERSHIP
	This course is an upper-level management elective that is also approved by the CAS committee as a CAS 400 level writing course. This course provides members of campus an opportunity to learn more about the theoretical underpinnings of corporate leadership and to explore their own leadership styles.

The course changes include removing prerequisites for 300-level economics course to satisfy the CAS elective credit. EBGN477 is a new management elective that has been piloted but is seeking a permanent course number.

- **Question:** J. Ganley asked, will EBGN477 be offered every other semester?
- Answer: J. Suiter answered that this course is taught every Fall.

3.3

ME	Jeff Wheeler
CIM 2/11	
2 course changes:	MEGN487: NONLINEAR OPTIMIZATION
	Minor update to course description; add MATH112 as a prereq
	MEGN488: INTEGER OPTIMIZATION
	Minor update to course description; add "and" instead of "or" for MATH prereqs

The course changes include adding MATH112 as a prereq to ensure that students have the proper math background as well as minor updates to course descriptions.

3.4

CSM	Wendy Winter Searcy
CIM 2/17	
1 course change:	CSM250: ENGINEERING YOUR CAREER PATH
	Updated course description; added online modality.



CSM250 was recently added as an option to complete the S&W core course requirement which has significantly increased enrollment. In the Spring, this course had four full sections with 50 students each, therefore, adding online modality will assist will expanding this course option.

- **Question:** J. Ganley asked, is it still a requirement for these courses to be pre-piloted through the Trefny Center? If so, is there someone assigned to complete that and what is the target date of completion?
- <u>Answer:</u> W. Winter-Searcy answered yes. This course is currently in the process of working with the Trefny Center. Two lead instructors are going through the Foundations of Online Design course. It should be done by the end of the semester. The modality change would not take effect until Spring 2026 as student take CSM101 in the fall and CSM250 in the spring.

5:00 pm Adjourn Ventzi Karaivanov Next meeting: March 12th, 4:00-5:00 pm via Zoom. Please send agenda items to Ventzi Karaivanov (<u>vkaraiva@mines.edu</u>) and Kristeen Serracino (<u>kristeen.serracino@mines.edu</u>) one week prior.

