Colorado School of Mines – UNDERGRADUATE COUNCIL MEETING MINUTES
February 15, 4:00 – 5:00 pm, via Zoom

Attendees:

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

P	Joseph Horan (chair)	P	Andrew Pederson (EB)	P	Mike Nicholas (AMS)	P	Chuck Stone (PH)
P	*Rachel Morrish (CBE) proxy for Michael Barankin (CBE)	P	Cortney Holles (HASS)	P	Corinne Packard (MME)	P	Nicole Smith (MN)
P	Dylan Domaille (CH)	P	Ge Jin (GP)	P	Rob Thompson (CS)	P	Dave Benson (GE)
P	Linda Battalora (PE)	P	Hongyan Liu (CEE)	P	Oyvind Nilsen (ME)	P	Emmelia Ashton (USG)
P	Chelsea Salinas (EDS)	P	Brianna Buljung (LB)	P	Hisham Sager (EE)		

Other Regular Attendees and Guests

A	Sam Spiegel (Mines Online)	P	Dixie Cirillo (PA)	P	Mara Green (AA)	A	Kendra Stansbury (RO)
A	Karla Perez-Velez (CASA)	P	Vibhuti Dave (UGS)	P	Deb Jordan (Trefny Center)	A	Paul Myskiw (RO)
P	Katie Ludwin (CASA)	P	Danielle Boileau (CASA)	A	Cheryl Medford (GE)	A	Rachel McDonald (PE)
P	D. Scott Heath (RO)						

Special Guest(s):

Welcome Joe Horan

Horan thanked Councilors for attending the additional meetings. Horan reported Faculty Senate had approved of the CSCI128 core course. Faculty Senate awaits the Catalog language changes for the core; this item would be presented to both Undergraduate Council and Faculty Senate and up for vote once submitted in CIM.

Horan noted the briefings and information items would follow voting items for future agendas.

Approval of Minutes – February 8, 2023 Joe Horan

MOTION: To approve the Undergraduate Council minutes of February 8, 2023 by Nilsen, seconded by Thompson. Motion passed unanimously.

Briefings and Information Items

Office of Undergraduate Studies Vibhuti Dave

Dave reported a draft of the core curriculum Catalog language has been completed and would come to Council once finalized. Dave working on making sure all course equivalencies are established and had verified these equivalencies in some departments. Minor details are being worked on.

The language would outline the core curriculum for 2023-2024 alongside guidelines for students that may switch Catalogs from 2022-2023. Differences would be outlined between the two Catalogs for transparency.

Dave clarified that CASES/STFutures would not be a part of the core curriculum for 2023-2024 and should be left out of program changes. Dave asked departments and programs to keep EBGN201,

HASS200, and the nine credits of H&SS electives as is within degree requirements for the 2023-2024 Catalog.

- **Question** on the spreadsheets being sent to Dave; Dave had requested departments submit four-year course plans by 2/15. Dave would then reach out with any issues. Once reviewed, the completed flowchart should be submitted in CIM by 3/1 for Council and Faculty Senate review.

Registrar's Office — D. Scott Heath

No updates from the Registrar's Office.

Curriculum Item(s) for Vote – from 1/25/23 and 2/1/23

1.1 **MECHANICAL ENGINEERING** — Oyvind Nilsen
[CIM 1/16]
1 course change: MEGN340: COOPERATIVE EDUCATION
New grading scheme, use pass/fail.

Nilsen reported ME discussed MEGN340 further and there is some disagreement. Nilsen provided a brief presentation on discussions on MEGN340. The course does not have a syllabus to adequately describe what an A, B, C, D, F is with a list of assessments for the course and students would not know what is needed to receive a grade. The course learning outcomes would be fluid as tasks within a co-op would vary, suggestion made for the company to write the course learning outcomes. The level of success would be difficult to assess. The course counts as an elective.

Heath noted the pass/fail option, as outlined in the Catalog, is used for midterms and not final grade options. A change to grading scheme would require discussion at Faculty Senate.

Suggestion made to grade students with an A or F; if the company reports a student not attending or completing tasks or if a student is kicked out of the company, the student would receive an F. Nilsen reported the course is not part of the GPA calculation currently and would not be moving forward.

- **Question** if moving the course forward would be a model from other institutions; Nilsen stated the course would remain the same and would not affect students' GPA if a pass or fail was received. Heath reported pass/fail courses cannot count towards a major requirement.

Nilsen noted the course allows students to remain registered at the university while taking six months off to work for a company.

- **Question** on how a pass/fail effects a student on scholarship or fellowship; Heath noted this would be double-checked with financial aid, but a course not counting toward a degree may not be awarded with financial aid.
- **Question** on why a report would not work for the course if other departments use reports for grading; Nilsen noted the report is written from the narrative of the student and may not reflect how well a student functioned as an engineer within a company. The report skill may be graded, rather than the experience and skills of the student at the company.
- **Question** if it is reasonable to ask the company supervisor to provide an A through F grade for the student; faculty are involved with the course and would provide the final grade, suggestion made to receive a recommendation from the company supervisor.

Councilor noted Introduction to Business functions similarly in that students work with a company and thirty percent of the grade comes from the company individual the student is in contact with. A rubric or learning outcomes are provided, Councilor did note that Mines' alumni were company contacts in some cases.

Councilor reported using the University Honors' practicum model in which students work with faculty and establish learning objectives associated with their internship or project.

The course itself would not be presented to Faculty Senate, but a proposal for a pass/fail grading scheme would be.

MOTION: To approve the course change to MEGN340: Cooperative Education by Nilsen, seconded by Jin. 11 for, 5 no, 3 abstentions.

1.2 **UNIVERSITY HONORS PROGRAMS** Cj McClelland

[CIM 1/27; Provost 1/30]

2 new courses: HNRS110: LEADERSHIP BY DESIGN I

The class was successfully piloted as 198 courses in the falls of 21 & 22. It will continue to be an offering for the University Honors and Scholars Programs. This is a signature first-year experience for our students. Other Info: This course sequence of HNRS 110 and 120 currently counts as equivalent credit for HASS100 and EDNS151 with the understanding that Core revisions are underway, and revisions may be required.

HNRS120: LEADERSHIP BY DESIGN II

The class was successfully piloted as 198 courses in the spring of 22 and is currently being offered now. It will continue to be an offering from the University Honors and Scholars Programs as a signature first-year experience. Other Info: This course sequence of HNRS 110 and 120 currently counts as equivalent credit for HASS100 and EDNS151 with the understanding that Core revisions are underway, and revisions may be required.

MOTION: To approve the two new courses in item 1.2 in an omnibus Council vote by Sager, seconded by Jin. Motion passed unanimously.

1.3 **APPLIED MATHEMATICS & STATISTICS** Mike Nicholas

[CIM 1/26]

1 course change: MATH332: LINEAR ALGEBRA

CS requested we revisit the prerequisites of this class. We did and decided that we could loosen the prereqs from Calc III to Calc II/Phys 1 (students need vectors for linear algebra).

Request made to table item 1.3 for 2/22.

New Curriculum Item(s)

2.1 **CHEMICAL & BIOLOGICAL ENGINEERING** Rachel Morrish

[CIM 2/13]

1 program change: BS-CHE: BS in Chemical Engineering

Updating program requirements in accordance with core revision.

2.2 **GEOPHYSICS** Ge Jin

[CIM 2/13]

1 program change: BS-GPE: BS in Geophysical Engineering

The GP department conducted an update on core courses to fit the campus-wide adjustment. The department also proposes the addition of six tracks that would guide our undergraduate students in their course selection and career development. This is an approach that has been adopted by various other programs, such as Mechanical Engineering.

To attract more undergraduate students, the department proposed introduction of six tracks: Energy Geophysics, Minerals Geophysics, Hazard Geophysics, Humanitarian Geophysics, Climate Geophysics, and Space Geophysics.

2.2.1 [CIM 2/8]

2 course deactivations: GPGN340: COOPERATIVE EDUCATION
GPGN471: GEODYNAMICS AND GEOLOGY

No longer offered or not currently offered.

2.3 **MINING ENGINEERING** Nicole Smith

[CIM 2/7]

1 course change: MNGN444: EXPLOSIVES ENGINEERING II

The instructor needs to verify the qualifications of incoming students to this course since the course involves handling explosives and it requires safety procedures and competency of students in handling of explosives. The proposed changes include adding the minimum grade of C for MNGN333 as a prerequisite for this course.

Department would like students to take the courses in order of MNGN333 to MNGN444 so that safety topics at a detailed level do not need to be repeated in MNGN444. The passing grade assures students moving from MNGN333 to a project-based course like MNGN444 are safe to do so.

Smith reported issues of students outside of Mines wanting to take the course without prior prerequisites and safety precautions.

Continuing Curriculum Item(s) – from 2/8/23

3.1 **CSM GENERAL** Josh O'Brien

[CIM 2/6; Provost 2/6]

1 new course: CSM102: INTRODUCTION TO TECHNICAL WRITING

The purpose of this course is to offer undergraduate students a 1.0 credit course where they are introduced to the foundations of both technical writing and oral communication. The course will be offered through the Writing Center as a free elective that can supplement their writing instruction before they take upper-level classes. The class can act as a bridge between their earlier exposure to writing in core courses such as HASS100 and EDNS151 and the more discipline-specific writing they will encounter in 300 and 400-level courses. There will be no pre or co-requisites.

Learning how to communicate STEM topics to a variety of stakeholders is a key skill in both academia and industry. In this course, students explore a variety of common

communication topics in STEM such as memos, white papers, pitch decks, executive summaries, figures and tables, and poster presentations. This course examines how students can draft and revise related forms of communication so that they have the foundation to further develop these skills in their discipline. The course provides students with a strong foundation to transfer academic writing skills they've learned in the core curriculum to more advanced forms of technical communication that they will encounter in their upper-level courses, internships, and future careers. By taking this class, they gain a valuable introduction to technical writing which they can apply and tailor to future communication needs.

- **Question** on what constitutes courses falling within the Success and Wellness core category and if all CSM courses fall into the category; Student Life proposed CSM250, CSM275, CSM350, and any one credit PAGN2XX course to satisfy the final Success and Wellness credit. Success and Wellness courses would be courses assisting students in developing skills or action-oriented courses. Suggestion made to provide clarification in the core language of the Catalog.

The CSM102 course is presented as a standalone course and not for integration into the Success and Wellness credit of the core. The course could be added to that list.

3.2 **HUMANITIES, ARTS, AND SOCIAL SCIENCES** Shannon Mancus
[CIM 2/5; Provost 2/5]
1 new course: HASS314: INTRODUCTION TO THEATRICAL IMPROVISATION
This class will help develop leadership skills - many major companies use improv techniques to help their executive team continue to hone creative flexibility. This class also will help students follow their passions.

3.3 **ELECTRICAL ENGINEERING** Hisham Sager
[CIM TBD]
1 program change: BS-EE: BS in Electrical Engineering
An analysis of the emphasis areas within the department reveals that approximately 70% of our students do not select an emphasis area and instead pursue our general electrical engineering program. Supporting these emphasis areas places a high teaching demand on our small faculty. The department unanimously supports the removal of emphasis areas. Emphasis areas will be converted to pathways for students to identify specialty areas for study.

Updates to core courses and flowchart.

Adjourn Joe Horan
Meeting adjourned: 4:56 pm.
Next meeting: February 22, 4:00-5:00 pm via Zoom. Please send agenda items to Mara Green (mgreen1@mines.edu) one week prior.