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

Attendees:
Voting Members: 18 total (10 needed for quorum). Quorum was present.

<table>
<thead>
<tr>
<th>P</th>
<th>Brandon Dugan (chair)</th>
<th>A</th>
<th>Andrew Pederson (EB)</th>
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<th>Mike Nicholas (AMS)</th>
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<th>Chuck Stone (PH)</th>
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<tr>
<td>P</td>
<td>Michael Barankin (CBE)</td>
<td>P</td>
<td>Cortney Holles (HASS)</td>
<td>P</td>
<td>Corinne Packard (MME)</td>
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<td>Nicole Smith (MN)</td>
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<td>P</td>
<td>Dylan Domaille (CH)</td>
<td>P</td>
<td>Ge Jin (GP)</td>
<td>P</td>
<td>Rob Thompson (CS)</td>
<td>Bruce Trudgill (GE)</td>
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<td>P</td>
<td>Linda Battalora (PE)</td>
<td>P</td>
<td>Hongyan Liu (CEE)</td>
<td>P</td>
<td>*Adam Duran (ME) proxy for Oyvind Nilsen (ME)</td>
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<td>Emmelia Ashton (USG)</td>
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<td>P</td>
<td>Chelsea Salinas (EDS)</td>
<td>P</td>
<td>Brianna Buljung (LB)</td>
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Other Regular Attendees and Guests

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<tr>
<th>P</th>
<th>Angela Dunn (Mines Online)</th>
<th>A</th>
<th>Dixie Cirillo (PA)</th>
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<th>Mara Green (AA)</th>
<th>A</th>
<th>Kendra Stansbury (RO)</th>
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<tr>
<td>A</td>
<td>Karla Perez-Velez (CASA)</td>
<td>P</td>
<td>Vibhuti Dave (UGS)</td>
<td>A</td>
<td>Deb Jordan (Trefny Center)</td>
<td>A</td>
<td>Paul Myskiw (RO)</td>
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<td>P</td>
<td>Katie Ludwin (CASA)</td>
<td>A</td>
<td>Danielle Boileau (CASA)</td>
<td>A</td>
<td>Cheryl Medford (GE)</td>
<td>A</td>
<td>Rachel McDonald (PE)</td>
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<tr>
<td>A</td>
<td>Sam Spiegel (Mines Online)</td>
<td>A</td>
<td>D. Scott Heath (RO)</td>
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Special Guest(s):

Welcome
Brandon Dugan

Approval of Minutes – October 12, 2022
Brandon Dugan

MOTION: To approve the October 12, 2022 minutes by Packard, seconded by Thompson. 16 for, 1 abstention.

Briefings and Information Items
Office of Undergraduate Studies
Vibhuti Dave
No updates from the Office of Undergraduate Studies.

Registrar’s Office
Paul Myskiw
No updates from the Registrar’s Office.

Executive/Steering Committee and Omnibus Votes
Brandon Dugan
Executive/Steering committee has met and discussed organizational plan for curriculum items appearing on agendas moving forward. Steering committee to meet on the off-weeks of Council to review new curriculum items. New curriculum items that are considered minor, such as number changes or changes effecting the single internal department, would be bundled as one item for an omnibus Council vote. Councilors are encouraged to bring any minor items out of the bundle for further discussion if requested.

Moving forward, items that involve the core curriculum will not be viewed as a bundle for omnibus vote to ensure individual discussion. Comment raised on changes to a departments’ program due to the core
Curriculum Item(s) for Council Vote – from 9/28/22

1.1 METALLURGICAL AND MATERIALS ENGINEERING

1 new program: BS-CERE: Ceramic Engineering

1.1.1 9 new courses:
- MTGN310: POWDER PROCESSING AND FORMING
- MTGN310L: POWDER PROCESSING AND FORMING LABORATORY
- MTGN319: INTRODUCTION TO GLASS SCIENCE AND TECHNOLOGY
- MTGN319L: INTRODUCTION TO GLASS SCIENCE AND TECHNOLOGY LABORATORY
- MTGN345: SINTERING OF CERAMICS
- MTGN345L: SINTERING OF CERAMICS LABORATORY
- MTGN465L: MECHANICAL PROPERTIES OF CERAMICS AND COMPOSITES LABORATORY
- MTGN410: THERMAL PROPERTIES OF CERAMICS
- MTGN465L: MECHANICAL PROPERTIES OF CERAMICS AND COMPOSITES LABORATORY

1.1.2 1 course change: MTGN465: MECHANICAL PROPERTIES OF CERAMICS
A 1-credit laboratory course will be a required co-requisite to support the proposed Ceramics Engineering BS degree program. No other changes will be made. This course has run as lecture-only elective for many years, but will now be a required course for the CerEng degree and can be used as an elective for the MME degree.

1.1.3 1 program change: BS-MME: BS in Metallurgical and Materials Engineering
Pending approval of the newly proposed Ceramic Engineering BS degree, we plan to replace the MME BS degree course requirements: MTGN314/MTGN314L Properties & Processing of Ceramics with MTGN310/MTGN310L Power Processing & Forming. There is no change in the number of credit hours. The new course will address powder processing and forming relevant to ceramics, powder metallurgy, and additive manufacturing, providing students with a cross-cutting education. Both the MME BS and CerEng BS will share MTGN310/310L as a required course. Students interested more specifically in ceramics can take further classes as electives or pursue the CerEng degree.

MOTION: To approve the curriculum items presented in item 1.1 for Metallurgical and Materials Engineering in an omnibus Council vote by Packard, seconded by Jin. 14 for, 1 abstention.

1.2 APPLIED MATHEMATICS & STATISTICS

1 program change: BS-AMS: BS in Applied Mathematics and Statistics
With the new CS structure, we would like to require CSCI101, CS200, and an additional CS elective. We would like to remove CSCI403 (databases) as a required course for the statistics degree. We will instead require MATH436 (advanced stats) and will move CSCI403 to the stat elective list. The statistics faculty feel that MATH436 is too essential to not require it of all stats majors.

- **Question** if there is an estimate on students that may not take CSCI403 as a result of this change; Nicholas noted there are around twenty statistics majors per year that are divided across Fall and Spring. CSCI403 would remain within the statistics electives for the degree and are strongly encouraged as a computing elective for statistics majors. Nicholas would estimate around five per semester.

1.2.1  
[CIM 9/19]  
4 course changes:  
- MATH432: SPATIAL STATISTICS  
  Fall only semester offering, previously Fall and Spring.  
- MATH436: ADVANCED STATISTICAL MODELING  
  Semester offered changed to Fall from Spring and Fall in order to place course before the capstone to create a modeling sequence:  
  MATH310 ➔ MATH424 ➔ MATH436 ➔ MATH482.  
- MATH437: MULTIVARIATE ANALYSIS  
  Spring only semester offering, previously Fall and Spring.  
- MATH482: STATISTICS PRACTICUM (CAPSTONE)  
  Added MATH436 prerequisite to form a modeling sequence:  
  MATH310 ➔ MATH424 ➔ MATH436 ➔ MATH482. MATH482 is stats capstone course and students will do more meaningful projects if they have MATH436 first.

**MOTION:** To approve the curriculum items presented in item 1.2 for Applied Mathematics and Statistics in an omnibus Council vote by Nicholas, seconded by Jin. Motion passed unanimously.

1.3  
CHEMICAL AND BIOLOGICAL ENGINEERING  
Michael Barankin  
[CIM 9/13]  
1 program change:  
- BS-CHE: BS in Chemical Engineering  
  Updates made to the electives list.

**MOTION:** To approve the program change in Chemical and Biological Engineering to BS-CHE: BS in Chemical Engineering by Barankin, seconded by Holles. Motion passed unanimously.

1.4  
HUMANITIES, ARTS, AND SOCIAL SCIENCES  
Cortney Holles  
[CIM 9/20; Provost 9/20]  
1 new course:  
- HASS111: NATURE AND HUMAN VALUES SHORT FORM

Comment raised in Faculty Senate for requiring a student AP/IB score of five and not four or five. Holles in favor of using four or five, Holles noted students required research assistance which is focus in the short form and regular class. Point would be raised with the Registrar. Suggestion raised to grant students on a case-by-case basis. Additional note raised on course focus on English and composition rather than literature due to different skills in literary analysis.

- **Question** on how many sections are offered each semester; Holles reported there are currently
five sections for the Spring with five sections currently running.

**MOTION:** To approve the new course in Humanities, Arts, and Social Sciences HASS111 by Barankin, seconded by Jin. Motion passed unanimously.

1.5 **QUANTITATIVE BIOSCIENCES AND ENGINEERING**
   Justin Shaffer
   [CIM 9/22; Provost 9/22]
   1 new course: BIOL415: QUANTITATIVE BIOSCIENCES AND ENGINEERING FIELD SESSION

**MOTION:** To approve the new course in Quantitative Biosciences and Engineering BIOL415 by Jin, seconded by Barankin. Motion passed unanimously.

Continuing Curriculum Item(s) – from 10/12/22

2.1 **CHEMISTRY**
   Christine Morrison
   [CIM 9/28]
   1 program change: BS-CHM: BS in Chemistry
   *These changes include: fixing course numbers (replacing instances of CHGN4XX with proper course numbers), adding CHGN409 to CHGN elective list, adjusting some courses in fall and senior year of B.S. in Biochem degree to reflect degree flowchart on department website.*

2.2 **ENGINEERING, DESIGN, AND SOCIETY**
   Chelsea Salinas
   [CIM 9/27; Provost 9/27]
   1 new course: EDNS444: INNOV8X
   
   - **Question** if students can use this course as a replacement for HASS400 and if that had been proposed to the H&SS steering committee; Salinas noted this had not been raised but can be brought forward for consideration. Comment raised that around three to four students bring up the course for HASS400.

Additional comment raised on name change for H&SS to halt confusion with HASS. H&SS taskforce currently working on CASES can be assigned with assessing the name within the Catalog and how to handle this moving forward.

2.3 **GEOLOGY AND GEOLOGICAL ENGINEERING**
   Cheryl Medford
   [CIM 9/26]
   1 course change: GEGN466: GROUNDWATER ENGINEERING
   2.3.1 1 course deactivation: GEGN467: GROUNDWATER ENGINEERING
   *The only change being requested here is a course renumbering. Dr. Singha has had a long-standing issue (from before my time) with course numbers that is about to come to a head. The Higher Learning Commission suggests that 400-level courses that graduate students should be 500-level and show additional work to be considered for graduate credit. GEGN 466 (Groundwater Hydrology) has been used as a catch-all for graduate students and undergraduates not majoring in GE, whereas the GE undergraduate students take GEGN 467--the same class, but with a lab. Because Dr. Singha will likely need to develop*
a 566 next year for graduate students to satisfy HLC requirements, it would be much easier if I just had 466 (lecture; 3 credits) and 466L (lab; 1 credit) where students could sign up for either/both, and remove GEGN 467 altogether--thus meaning Dr. Singha still only has two course numbers to manage rather than three. This change is to make GEGN 466 a 3+1 credit class, similar to CEEN 312.

2.4 **APPLIED MATHEMATICS AND STATISTICS**

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<td><strong>1 course change</strong>: MATH440: PARALLEL SCIENTIFIC COMPUTING</td>
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Update to course description to reflect that the professor who used to teach this course has retired.

**Adjourn**

Meeting adjourned: 4:28 pm.

Next meeting: November 9, 4:00-5:00 pm via Zoom. Please send agenda items to Mara Green (mgreen1@mines.edu) one week prior.