Colorado School of Mines – UNDERGRADUATE COUNCIL MEETING MINUTES
September 27, 4:00 – 5:00 pm, via Zoom

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

| P | Ventzi Karaivanov (chair) | P | Andrew Pederson (EB) | P | Mike Nicholas (AMS) | P | Chuck Stone (PH) |
| P | Michael Barankin (CBE) | P | Jay Straker (HASS) | P | Gerald Bourne (MME) | P | Rennie Kaunda (MN) |
| P | Linda Battalora (PE) | P | Hongyan Liu (CEE) | P | Jeff Wheeler (ME) | P | Mark Bowen (USG) |
| P | Jack Bringardner (EDS) | P | Brianna Buljung (LB) | P | Hisham Sager (EE) |

Other Regular Attendees and Guests

| P | Sam Spiegel (Mines Online) | P | Dixie Cirillo (PA) | Nichole Bigley (AA) | P | Paul Myskiw (RO) |
| Karla Perez-Velez (CASA) | P | Vibhuti Dave (UGS) | Deb Jordan (Trefny Center) | Kendra Stansbury (RO) |
| P | Katie Ludwin (CASA) | P | Danielle Boileau (CASA) | Cheryl Medford (GE) | P | D. Scott Heath (RO) |
| P | | P | Colin Terry (SL) |

Special Guest(s):
Chelsea Salinas (EDS), Jeff Ackerman (ME)

Welcome

Ventzi Karaivanov

Approval of Minutes – September 13, 2023

Ventzi Karaivanov

MOTION: Minutes from the last meeting, Michael Barankin made the motion to pass, and Ge Jin seconded. The motion passed with 16 approvals and 2 absentees.

Briefings and Information Items I

Registrar’s Office

Paul Myskiw

If anyone does not have access to CIM please contact Rachel Bishop in the Registrar’s Office.

Update on Program Assistant I position.

There were two interviews today and two more for tomorrow. We will then bring the top candidates to campus for final interviews I the next week or so.

Just as a reminder: when EBGN321 was passed last year as part of the core (to replace 201), there was not enough time to do all the cleanup in the programs, mostly in the matrix of what students take each semester. It was only announced that EBGN321 was a new required course. Therefore, please go into your course grid plans and update/restructure so that it aligns with 321 taken in the appropriate semester.

Dean of Undergraduate Studies

Vibhuti Dave

TRAIL - Transformative Record of Applied Integrated Learning

This is only an update of this program to raise awareness and inform the council of what is going on so
that it does not need to be debated or discussed again. This is something that we are trying to capture and celebrate student learning outside of the classroom. This is a 2-part initiative.

1. **Experiential major menus**: Is a visual that goes beyond an academic flow chart, it is to help students as they are trying to plan out their journey and what their four years will look like. It helps students navigate professional and personal development opportunities that are available outside of the classroom.

2. **Oredigger record of experience**: Is a record students receive when they graduate which highlights what students have learned outside of the classroom. This goes beyond a resume because it helps students tell their story to potential employers as far as the skills that they gained in and out of the classroom at Mines.

There will be learning outcomes associated with these co-curricular and extracurricular experiences that will fall into five buckets.

1. **Leadership & Innovation**
2. **Professional Development**
3. **Research Creative & Scholarly Achievement**
4. **Inclusive & Impactful Civic Engagement**
5. **Health and Wellness**

The idea is that whatever students do outside of the classroom (i.e., president of IEEE, leading a club or organization) students are learning skills and this will help to capture and make these connections.

The Experiential Major Menu (EMM) has been launched and the website has been published. See the presentation uploaded on Canvas. Each EMM is tailored to each degree program highlighting the experiences that enhance the degree the student is pursuing. EMMs provide students the help with options to engage with and what type of skills they will build through that engagement. Making explicit connections for our students and providing a guided timeline (when is it a good time to do certain things?) Find EMMs on the web at: www.mines.edu/undergraduate-studies/trail

The Oredigger record of experience is like a co-curricular transcript – everything they do not necessarily get a grade for. It gives them a clear understanding of what types of skills they built while engaging in some opportunities at Mines or outside of Mines. If you are searching for what this is – google “comprehensive learner record” to get more information about what other universities are doing with this.

We needed a good software that would help us build a database of events, promote those events, and then track attendance and measure what they learn from the experience and from engaging in different opportunities. Our software is called “OreConnect” which will be available for campus use in a semester or so. Implementation has already started, and pilot programs will be rolled-out in a couple of weeks.

A questionnaire is being drafted to get feedback on the 5 experiences and to determine what each department is doing and not just academic departments, we are looking at international center, student life etc. So that we can start building a database to eventually gain a level of understanding of what can go on this co-curricular transcript. Spring 2024 we are hoping to expand OreConnect to student groups and then Fall 2024 we will pilot your OreDigger record of experience before scaling it.

If each faculty member could go to the TRAIL website and familiarize yourself with your specific
program. Also, make sure to respond to the questionnaire once it is sent out. Whomever is responsible for coordinating events and programs should start training on the software. Finally, just spread the word on these programs and resources. Once Susan returns from maternity leave, she can attend your departmental meeting to talk to your faculty about this and answer any questions they may have.

- **Question:** Is the term “learning outcome”? No, it just uses the term “competencies.” Learning outcomes will be drafted with active verbs.
- **Question:** There is concern with using the term “learning outcomes” since there are no actual assessments. Correct, we are using the term “competencies.”
- **Question:** Will OreConnect replace the Daily Blast? I am not sure I can say it will replace the Daily Blast but if you use OreConnect you can do more targeted marketing and promotion and outreach.
- **Questions:** Is this for UG only or is it for Grad students as well? UG only for now but we would like to scale it to Grad students eventually.

1.0 **Curriculum Item(s) for Council Vote (none currently)**

**New Curriculum Item(s)**

2.1 **CHEMISTRY**

[Dilan Domaille]

1 New Course: CHGN 435 - Physical Biochemistry

This course stresses the importance of an interdisciplinary approach to science, discussing biological topics from the perspective of a physical chemist. It will expand and diversify the course offerings in the chemistry department, with a particular focus on serving the growing population of biochemistry and QBE students. Supporting information is posted on Canvas.

This course was piloted once (about 15 students in the course) Likely will be enrolled by chemistry majors as well as CBE UG and QBE majors as well.

Discussion will be brought to the council in 2 weeks and brought for vote in 4 weeks so make sure to bring these to your departments.

2.2 **CEE**

[Hongyan Liu]

1 Course change: CEEN442/542 - Timber and Masonry Design

Change: CEEN442 - Design of Wood Structures.

Supporting information is posted on Canvas.

The new professor has the expertise to teach the whole semester of masonry design, so we are changing the course to focus on just the wood structure.

1 New Course: CEEN478/578 - Erosion control and land restoration

This course was previously offered as 498/498 and now needs a new number. Supporting
information is posted on Canvas.

This course has been run 2-3 times and gets good traction. Students need a technical electives for a good supplement so we are proposing to get an official number.

- **Question:** Do you know how many students they had when it was 98? Around 10 but a more specific number will be shared after consult with Pablo.

### 2.3 Economics and Business

Andrew Pederson

[CIM N/A]

**1 Program change: Business Engineering and Management Science degree**

Proposing the following changes to the BEMS curriculum:
- Require students to take EBGN201 or equivalent
- Reduce free electives from 12 credit hours to 9 credit hours
This results in a net zero change in total credit hours, keeping the BEMS program at 122 credit hours.
Supporting information is posted on Canvas.

- **Question:** Was 201 removed from this major last year by accident? No, just changing from being required in the core to being required in the major. So, it is still required and then dropping the elective due to the additional required course.

Continuing Curriculum Item(s) – from 9/13/23

### 3.1 CHEMICAL AND BIOLOGICAL ENGINEERING

Michael Barankin

[CIM N/A]

**1 Program change: BIOMEDICAL ENGINEERING MINOR**

We wanted to update the BME minor with the following Engineering Elective Courses additions to the electives list:
- **BIOL 300 - INTRODUCTION TO QUANTITATIVE BIOLOGY I**
- **CSCI 478 - INTRODUCTION TO BIOINFORMATICS**
- **MATH 472 - MATHEMATICAL AND COMPUTATIONAL NEUROSCIENCE**

### 3.2 EDS

Chelsea Salinas

[CIM N/A]

**1. Program change: The BS – Design Engineering Program**

*Removal of classes that are no longer taught and updating language.*

**2. Course changes:** EDNS 200 - INTRODUCTION TO DESIGN ENGINEERING

Updating pre-requistition to reflect changes mentioned above.
EDNS 291 - DESIGN UNLEASHED
Updating pre- requisition to reflect changes in the program
- **Question:** All the core courses for every program listed as a possible elective in that major makes it tangibly more difficult to do exec and the steering committee. Whenever there is a course change, we look for other references to it in the program and it’s almost always that. Then we must open it up and make sure it is just in the elective and not the program as if it programmed then it’s a major change but if it’s an elective then it’s a minor thing. Others may come across this as they do course changes in the future. Yes, we choose to put them in the long list to help with degree works so I don’t know which battle to choose. Maybe we can talk offline about the best solution for that to avoid complications?

### 3.3  PA

[CIM N/A]

1. **Course Deactivation:**
   - PAGN133 - OUTDOOR LEADERSHIP
   - No longer taught

3. **Course changes:**
   - PAGN298A – Advanced Racquetball
     - Needs actual course number.
     - i. 1 credit
     - ii. Taught once per week
     - iii. Objective-Advance their understanding and skills in racquetball
     - iv. Fall 2023 second time being taught
     - PAGN298B - Cheer and Dance
     - Needs actual course number.
     - i. 1 credit hour
     - ii. Similar to other PAGN Varsity sport class
     - iii. Gives these athletes credit for their participation in their sports
     - iv. Fall 2023 first time taught
     - PAGN251 – GOLF
       - Course Description: Please add “Course is taught at a local course, requires personal transportation”

### 3.4  PE

[CIM N/A]

1. **Course change:**
   - PEGN430 - Environmental Law & Sustainability
     - Prerequisite: HASS100 - NATURE AND HUMAN VALUES
     - Co-requisite: HASS200 - GLOBAL STUDIES

“PEGN430 Environmental Law & Sustainability is approved for HASS 400-level course credit. To be consistent with other HASS 400-level courses, the following prerequisite and corequisite need to be added to PEGN430 Environmental Law & Sustainability: Prerequisite: HASS100. Co-requisite: HASS200
This topic was discussed with Dr. Cortney Holles, HASS UG Advisor. Dr. Holles agrees with the addition of the above prerequisite and corequisite.”

3.5 CEE

[CIM N/A]

1 Course change: CEEN314 - Structural Theory

name change to: CEEN314 Structural Analysis

This change is to align the course name with other universities/programs national widely. Majority of the programs in the U.S. name this course as Structural analysis. Most textbooks on this topic (e.g., Hibbeler’s book) are also named as Structural Analysis or similar terms. This will benefit the students as the course name in their transcript can be better understood.

3.6 PH

[CIM N/A]

1 New Course Modality: Online version of PHGN462 (summer session only) - Electromagnetic Waves and Optical Physics

We propose the creation of an online version of an existing course (PHGN462). The course is required for the Engineering Physics B.S. degree and the associated combined master’s programs. It is usually taken in the fall of the senior year, and a very long chain of prerequisites makes it unlikely that a student can take it prior to the senior year. Thus, it tends to serve as a bottleneck course, and can produce conflicts with the required senior-year courses from the eleven different combined programs that the physics B.S. anchors.

In response to these problems, the physics department currently offers an in-person version of PHGN462 in the summer. Many students at this stage of their academic careers spend their summers working at internships or research programs, and are not available for in-person courses, but could take an online course. Preliminary data suggest that offering the course online would change the typical enrollment from 10-15 per summer to 20-25 per summer.

This new course primarily satisfies the “Expand offerings and diversify delivery” aspect of MINES@150. The flexibility that it would add to students pursuing combined programs may also improve recruiting, since we lean heavily on the presence and practicality of those combined programs during our departmental recruiting. This could apply to the “Top-of-mind and first-choice university” aspect of MINES@150.

Proposed changes to absence policy

Vibhuti Dave

See presentation uploaded to Canvas
- **Question:** Can we change from the short-term absence policy – can we change it from the student should fill out the form to the student must fill out the form for better tracking. Yes, we can take this back to the group.

- **Question:** We would like to see more room to trust the professor and their decisions. There is too many variables – so we should be able to leave it up to the professor. The current policy reads that the professor “must provide makeup work” so this policy is intended to provide the faculty with more flexibility. But this will also be taken back to the group for review.

- **Question:** How do the drop grades work? When a grade is dropped, there is a setting in Canvas to allow a grade to be “exempt” which is what a “dropped grade” is.

- **Question:** Common practice in the department is to drop the lowest grade, can we use this dropped grade as that dropped grade? There was some debate about this – the student doesn’t (and legal) want an excused absence to be the only opportunity for the dropped grade if everyone else gets an “actual” grade to be dropped. The current practice of dropping the grade is not permissible so we need to change the policy or stop the practice.

- **Question:** How can we define the mental break from the students if they cannot take the exam. If faculty teach multiple sections and now need to provide makeup for each of these students – are we taking into consideration faculty mental health? What is your response now? This policy should be the same. This reworded policy doesn’t impact that specific situation. Student life reviews and approves (or not approves) everything that is not an unexpected illness. The only thing that does not get vetted is the short-term illness as we can’t request documentation for those.

- **Question:** For 3-week field sessions (7a-7p) missing one day is missing a lot of work. Field sessions fall into the category of work that cannot be made up. The committee may need to review the dropped grade policy and incomplete policies surrounding Field Sessions.

- **Question:** Can faculty add to this policy? If this is the base, can they go up from there? Yes, it is important that each faculty be allowed to tailor the policy to their class. This policy is to support faculty and protect students.

**Briefings and Information Items II**

*CDHE grant information and call for collaborations*  
Brianna Buljung & Seth Vuletich

We have applied for funds for the past 5 years for OER funds from the Colorado Department of Higher Education. The focus has shifted towards $0 textbook cost courses to be more inclusive that just funding students. We have had 5 applications so far and about $20,000 to distribute. So, there are at least 15 more spaces to fund. If you have not applied or previously applied or want to develop/adapt an OER to get you a $0 textbook/direct cost to students, we are happy to fund.

Looking for collaborators for the next cycle but they have changed the application this year. If you are interested reach out and they will help. We are especially interested in departmental/program collaborations. Share with your departments as they are willing to fund whole degree programs, course sequences and individual courses.

- **Question:** What are the acronyms? OER is Open Educational Resources. Freely available to be used by anybody, anywhere in the world. OTCC is the Online Technical Communications Center, and the final acronym is the ZTC or the Zero Textbook Cost.

We have received funding for the last several years to develop our accessibility course for education to help people who are creating OER course material and learn how to make your resources accessible. Planning a cohort in December for more information.
- **Question**: Deadlines to apply? The incentive funds link is rolling until we run out of funds. The grant cycle (year 6) is due 12/18 so that would be due in the next month so that we can work with ORA and other administrative processes.

- **Question**: Have you reached out to Lisa Goberis in student life and the impact this could have on the bookstore? Library and the Bookstore work together so that the bookstore is not purchasing textbooks that we already have.

**Adjourn**

Ventzi Karaivanov

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