

Colorado School of Mines – FACULTY SENATE MEETING MINUTES  
December 13, 2:00 – 4:00 pm, in the Guggenheim Boardroom and Zoom

**Attendees:**

**Voting Members:** 15 total (8 needed for quorum). Quorum was present.

P	Jeff King (Chair)	A	Cristian Ciobanu (ME)	P	Linda Figueroa (CEE/MN)	P	Joseph Horan (HASS)
A	Ebru Bozdag (GP)	P	Brandon Dugan (GP)	P	Mansur Ermila (PE)	A	Cynthia Norrgran (CBE)
P	Bettina Voelker (CH)	A	Lawrence Wiencke (PH)	P	Pat Kohl (PH)	P	Ventzi Karaivanov (ME)
P	Sid Saleh (EB)	P	Deb Carney (AMS)	P	Soutir Bandyopadhyay (AMS)		

**Other Regular Attendees and Guests**

P	Tracy Gardner (Trustee)	P	Rick Holz (AA)	P	Paul Myskiw (RO)	A	Colin Terry (Student Life)
P	Sam Spiegel (Mines Online)	P	Emmelia Ashton (USG)	P	Liam Witteman (GSG)	P	Mara Green (AA)
P	Vibhuti Dave (UGS)	A	Tim Barbari (OGS)	P	Lori Kester (EM)	P	Nicole Bewar (LB)
A	Karla Perez-Velez (CASA)	A	Deb Jordan (Trefny)	P	Angela Dunn (Mines Online)	P	Andrew Herring (AA)

**Special Guest(s):** Scott Houser (EB), Dean Nieuwsma (EDS), Sandra Woodson (HASS), Toni Lefton (HASS), Derek Morgan (Student Life), Kirsten Volpi (FAO), Iris Bahar (CS), Roel Snieder (GP), Christine Homer (HR)

**Welcome & Approval of Minutes – November 22, 2022**

Jeff King

King encouraged faculty to participate in the next semester’s Moonlight Breakfast.

Faculty and Staff Trivia night will be held at the end of finals. King has sponsored a table, “El Caudillo de Metallica”.

Senate to establish working meetings on the weeks between official meetings, these can be converted into business meetings with twenty-four hours’ notice. King asked Undergraduate Council to meet every week during February and March 2023 to accommodate changes to the revised core curriculum. The Undergraduate Chair can cancel any meetings that are no longer needed. Senate working meeting scheduled for 12/20.

**MOTION:** To approve the Faculty Senate minutes of November 22, 2022 by Horan, seconded by Dugan. Motion passed unanimously.

**Academic Affairs Announcements**

Rick Holz

Holz thanked faculty; issues regarding finals have not been reported.

National Championship

Mines’ Football team is playing in the National Championship in McKinney, Texas. Several buses will take students alongside the band, cheerleading team, and dance team. Game will air live on ESPNU at 11am.

Budget

Budget was secured for the second quarter adjust to increase the minimum graduate stipends from \$27,000 to \$29,000. Continued increase of stipend dependent on budget, there is general agreement that the minimum stipend is lower than peer institutions.

- **Question** on budget provision and allocation; TA increases would come from general funds and RA increases would come from grant money. Holz noted extenuating circumstances should reach out to the DH and Deans.

#### Student Athlete Exit Interviews

Exit interviews were conducted by Trewyn with the Vice President of Student Life. Issue had been raised that student athlete concussion protocols were not being followed by some faculty; students had reported inability to obtain homework or makeup missed exams. The number of students was not provided. Note made that student athletes may not be able to attend office hours between 4pm and 6pm. Students reported faculty not allowing students to attend Career Days.

- **Question** on making Career Day a non-instruction day, proposed by Student Government; final recommendation had not been received from the Calendar Committee. Myskiw, chair of the committee, reported the committee would recommend against Career Days being non-instruction days as there are not enough days in the academic year to accommodate two additional days off. The start and end of the semester would require a shift to accommodate these days. Final recommendation to go to Provost Holz.

#### **Registrar's Office Announcements**

Paul Myskiw

##### December 2022 Graduation

598 students participating in December 2022 graduation.

##### Final Grades Due 12/19 at 5pm

Myskiw reported more language will be sent out to faculty to turn grades in on time. Grades are due Monday, 12/19 at 5pm. Myskiw reported a few faculty had been extremely late in grade entry, causing delays in end of term processing across campus for Financial Aid, Student Life, and the Registrar's Office.

##### Brown Bag Luncheon – Mental Health Training 1/11

Registrar's Office to hold a brown bag luncheon for faculty and staff on mental health training 1/11. Training will revolve around understanding student mental health and increasing awareness of mental illnesses on campus.

##### Final Exam Recommendation

Due to the large incoming class size PH, CH, and AMS have recommended a final exam schedule for core courses. A fixed date and time would allow department proctoring of over 2,000 students. Final Exam schedule would go into effect Spring 2023. Additional space is being considered in the Student Center, Friedhoff, or a gymnasium.

Comment made on the academic calendar listing non-relevant dates for the online 8-week terms. Recommendation made to remove non-relevant dates.

#### **Briefings, Informational Items, and Updates**

##### Budget Surplus

Kirsten Volpi

Volpi provided a brief overview of FY23. A majority of Mines' revenue comes from tuition and fees (\$198.1 million), state funding (\$36.9 million), and CSM Foundation support (\$33.6 million). The revenue

report included IDC but not direct research revenue. The largest expenses were in labor (\$170.1 million), operating (\$73.6 million), financial aid (\$56.5 million), and debt (\$22.6 million).

As FY20 ended with COVID in March 2020, campus had been asked to halt spending. FY21 ended with \$12 million. FY22 budget expected \$2.5 million in net activity but ended with an actual \$15.99 million.

Late inning surprises and occurrences that are not expected to happen again accrued surplus. Volpi reported spike in investment income and \$5.7 million less in expenses, \$4.6 million would be non-recurring. \$7.2 million in non-recurring funds would not be included in future budgets. Key factors of surplus included housing and dining forecasted conservative \$800,000 due to Mines Park project termination, continuing education, income, gift revenue, scholarship forecast included a cushion due to uncertainty of student acceptance, and spending in 2020 had been typically under original budget and forecast.

Volpi reported of the \$16 million surplus, \$5 million funded capital needs and \$3 million was removed from the FY23 budget and the remaining \$8 million was moved into reserves. Unrestricted net assets are undesignated and designated. Largest chunk of designated reserves for FY22 included startup, research development, and department roll forward. Next largest were financial aid and student fees and health insurance. Project spending from reserves totaled \$33.1 million in capital (not big capital) for renovations, development, and projects. Some examples provided by Volpi were the solar expansion project, 1600 Jackson renovations, Mines Park, and the Early Childhood Education Center.

FY23 shows \$4 million in reserves with first quarter forecast as zero.

- **Question** on how entities or units are found with rollover budgets and entities that are overspending and how these are distinguished or handled; Volpi reported that a trend analysis was started last year and is continuing into this year for all operating funds that do not roll. Team assesses which department has a positive budget at the end of the year, department is cut. Fourth quarter spending is assessed for last minute spending.

Volpi noted it is better to spend what is needed rather than spend in excess to build a real budget.

### Benchmarking and Equity

Christine Homer

Homer provided overview on the compensation journey. Journey began with job content questionnaires in Fall 2020, the EPEW Act January 2021, position benchmarking in Spring 2021, Initial Pay adjustments from September 2021 through February 2022, compensation philosophy and titling initiatives in March 2022, pay grades and ranges in September through October 2022, Internal Equity Analysis in December 2022, with the expectation to bring a transparent employee data view through Workday including employee visibility of pay ranges and position descriptions.

Homer reported benchmark is external and the standard against which [the] job duties are compared to inform pay; Mines benchmarks against peer universities and the Denver market. Equity is internal and is a review of employees who perform similar work to ensure they are paid in a similar way.

Benchmark organizations used include the College and University Professional Association (CUPA) and CompAnalyst. CUPA focuses on higher education positions such as all academic faculty, RTT, global initiatives, and student life; forty-four institutions considered. CompAnalyst focuses on operations

positions and the Denver market for positions such as the President's Office, FA&O, legal, and student life.

Homer provided the Compensation Statement and Guiding Principles. The principles are reviewed by the Executive Team every spring to ensure it is still sound for Mines' leadership and the pay philosophy. Employment arrangements at Mines include classified employees, administrative professionals, and academic faculty. Classified employees are also affiliated with the state of Colorado and have a contract and review process; these are standard across the state with 38,000 employees. Administrative professionals also include administrative faculty. Academic faculty include research faculty, teaching faculty, and tenured and tenure-track faculty.

Next steps include completion of an internal equity analysis with Segal; process began December 2022. Recommendations will be reviewed with the Provost, Deans, and DHs. HR will train leadership on conversations that will need to occur alongside the recommendations. Recommendations expected through Spring 2023.

Homer noted pay differences are acceptable considering factors, known under the law as "compensable factors", these factors include: education, training, or experience related to the work in question; performance or merit, measurable quantity or quality outcomes, seniority, geographic location where the work is performed, and travel if it is regular and necessary for the work performed.

Homer reported administrative professional titles have never had a consistent structure and a title structure will need to be in place to be associated with pay grades and pay ranges. These titles would be transparent in Workday, but adjustments will need to be made between internal and external titles.

Homer concluded that Mines' compensation philosophy is guided by Mines leadership, EPEW Act is not the driving rationale. Changes are being sought to improve transparency and pay equity.

- **Question** on properly identifying and classification for benchmarking between departments and degree programs with an interdisciplinary approach; Homer reported initial internal equity will be done within the department level with a baseline reported to AA, the IGPs will be looked at following achieving a baseline. Classification will be looked at between how much is done within the IGP versus within the department.
- **Question** on benchmarking also considering what is being asked of people; Homer agreed that this is being looked at, tasks per position will be assessed internally and against other institutions.

Segal would provide a quantitative measure while DH would provide the qualitative measure.

- **Question** on benchmarking with CUPA and if a list of the forty-four peer intuitions is available, additional question on if the Denver market cost of living is considered; Homer reported the forty-four peer institutions are provided to DHs, who will provide additional recommendations. CU and Denver are considered.

Suicide Prevention Trainings (QPR)

Tabled for 1/11.

Roel Snieder

## Faculty Trustee Report

Tracy Gardner

### *Approvals*

The Board of Trustees approved the December 2022 graduation list and the newly proposed Bachelor of Science in Ceramic Engineering. Gardner noted this program would be top in the country due to the lack of Ceramic Engineering programs in the United States.

### *Admissions and Enrollment*

An admissions and enrollment report had been provided by Kester on the last five years of admissions trends. Mines has progressed in female and underrepresented groups on campus, not only incoming students. Fall 2023 is on track but running behind on applications. Kester noted applications from admitted to deposited yield is up six percent; students applying are highly interested in coming to Mines. Current goal is 1,450 first-year freshman. Kester noted predicting the future can be tricky and trends are being monitored closely.

### *Mines@150 Campaign*

Winkelbauer had provided the Board an updated on the Mines@150 campaign. Reported approaching \$24 million toward a goal of \$40 million this fiscal year. The annual giving pipeline had 1,727 donors. The pipeline is assessed on how many people are giving and not only total amount. Mines@150 Roadshow provides events across the country on the campaign. 1/18 event in Midland, Texas and 1/25 event in Seattle, Washington ([click here for more information](#)).

Senate suggestion made to hear more regarding the Venture Fund from Mines Foundation.

## CSCI128 Update

Iris Bahar

CSCI128 began in Summer 2022 and led by Rob Thompson, current instructor of CSCI101 and Neil Dantam, chair of the undergraduate curriculum for CS.

CSCI128 would cover basic programming constructs; file I/O, functions, and objects in Python 3, and computing. Topics vital to STEM as well as software ethics. The course is intended for students with no prior experience.

Course learning outcomes include the following:

1. Analyze simple empirical problem, breaking it into smaller components and designing algorithmic solutions to subproblems
2. Implement a design into programmatically correct Python code
3. Communicate in a programming language through code reading, writing, critique
4. Critically discuss and reflect on role of technology in society
5. Model how basic numeric and non-numeric data is represented in a computer
6. Navigate and utilize a computer file system through a GUI, text console, and code
7. Demonstrate effective debugging practices to find, characterize, and correct code errors

Topics include variables, operators, reading code, types, data representation, Boolean logic, branches and conditionals, loops, algorithmic thinking, software ethics, complex logic, debugging, files and shell basics, data science, functions, sorting and searching, and classes and objects.

- **Question** on outcome four and how it would be assessed; Bahar noted the course would have writing and reflection. The full outcome is “critically discuss and reflect on the role technology has on modern society and the positive and negative impacts their software may have on future users.”

### CASES Update

Dean Nieuwma  
Scott Houser  
Sandra Woodson

CASES has been renamed to “Sociotechnical Futures”, Woodson noted suggestions are welcome for the course name. STF would be the only Student Signature Experience in the Mines’ core. The course would focus on exploration of future-oriented themes at the science-society-technology intersection and focus on project-based learning and interdisciplinary instruction.

Possible themes include global energy futures, climate futures, mineral futures, water futures, and innovation futures.

Course learning outcomes include the following:

1. Knowledge of Self Explore and pursue interests and passions...
2. Knowledge of the World Integrate perspectives and tools from the sciences, engineering, design, business, humanities, arts, and social sciences to enhance disciplinary and professional awareness.
3. Build Community & Conversation Collaborate effectively with and be supportive of communities and individuals with diverse perspectives, experiences, and backgrounds.
4. Define Challenges & Opportunities Identify interconnections among technical and societal dimensions of problem identification and solution.
5. Create Meaning and Impact Explore challenges from a variety of perspectives and through multiple representational modalities.

Nieuwma introduced the proposed course structure of seventy-five student lecture lead by a theme instructor and seminars of twenty-five students each over four-week rotations lead by a seminar instructor. The seminar instructors interpret and process the theme through their individual disciplinary lens. The theme instructor oversees the entire theme.

Houser presented the proposed pilot for 2023-2024. Fall 2023 pilots with a single cohort of seventy-five students, one theme instructor, and three seminar instructors. Spring 2024 continues with two cohorts of seventy-five students each, two theme instructors, and six seminar instructors. The course would be presented and proposed to Undergraduate Council; the DHs of HASS, EB, and EDS would identify the four-pilot faculty, and the DHs would work with other faculty to refine learning outcomes, assessments, and the delivery model.

Houser presented the resource implications. An expected total increase of eighty faculty sections predicted per academic year with twenty lecture sections and sixty seminar sections per academic year and a STFutures HASS course coordinator.

- **Question** on if seminar is the correct name; Nieuwma noted in social science a seminar would be formatted around discussion-centric learning.

Faculty excited to teach the course as theirs. Woodson noted the course may provide an opportunity to teach interdisciplinary content through their background. Each course would not be the same.

### CSM202

Derek Morgan

Student Life currently hiring for an assistant director in the student wellness promotions area to coordinate the course and have faculty and staff to teach the course. Morgan met with President Johnson and Provost Holz to obtain feedback. Initially presented course for students' sophomore year, President Johnson recommended teaching as soon as possible. Course would need to accommodate 750 students each semester. Morgan would reach out to faculty teaching larger sections on best practices and recommendations.

Research done on wellness courses at Yale, Washington University, and Georgia Tech. Several schools offer similar classes teaching to over 300 students a semester.

Morgan noted biggest struggle is the course being one credit.

Course will include individual work and small group work. Course will focus on building community and the seven dimensions of wellbeing. Students would create a wellbeing plan to follow during their time at Mines.

### **Confirmations and Appointments**

Cristian Ciobanu

#### Undergraduate Council Chair Appointment Spring 2023

Dugan on sabbatical for Spring 2023; Horan volunteered to chair Undergraduate Council for the Spring 2023 semester.

**MOTION:** To appoint J. Horan as the Undergraduate Council chair for Spring 2023 by Saleh, seconded by Voelker. 8 for, 0 against, 1 abstention. Motion passed.

### **Research Council**

Sid Saleh

Small Research Equipment/Instrumentation (REI) committee meeting 12/14 to discuss awardees and allocation of the \$40,000 award. Council discussed issues for pre- and post-grant awards and consideration of providing options for faculty to gain credit in P&T for E&I efforts through research and other options.

### **Undergraduate Council**

Brandon Dugan

#### Program Change to BS-CHM: BS in Chemistry

Program change was presented to Faculty Senate 11/22; Undergraduate Council approved the change with limited discussion.

**MOTION:** To approve the program change to BS-CHM: BS in Chemistry by Horan, seconded by Voelker. 8 for, 0 against, 1 abstention. Motion passed.

### **Graduate Council**

Tina Voelker

#### Graduate Stipends Increase Proposal

Proposal had been presented at the 11/22 meeting. Council endorsed the suggested proposal of increase stipends by \$3,000 a year. Senate recommended further discussion and following up with Research Council, as similar discussions are occurring in that body.

**Adjourn**

Jeff King

Meeting adjourned: 4:04 pm.

Next meeting: Spring 2023 - January 10, 2023 from 2:00-4:00 pm in the Guggenheim Boardroom and Zoom. Please send all agenda items to Mara Green ([mgreen1@mines.edu](mailto:mgreen1@mines.edu)) 1 week prior.

**Appendix A**  
**For Senate Vote – Presented on 11/22/22**

1.1 **CHEMISTRY**

[CIM 9/28; UGC 11/9]

**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.*