Colorado School of Mines – FACULTY SENATE MEETING MINUTES
January 26, 2:00 – 4:00 pm, via Zoom

Attendees:
Voting Members: 13 total (7 needed for quorum). Quorum was present

P Andy Herring (Chair) P Robin Bullock (EDS) P Sebnem Duzgun (MN/CS) P Linda Figueroa (CEE & MN)
P Alina Handorean (EDS) P Joseph Horan (HASS) P Jeff King (MME) P Yvette Kuiper (GE)
P John McCray (CEE) P Cynthia Norrgran (CBE) P Alexis Sitchler (GE) P Neal Sullivan (ME)
P Bettina Voelker (CH)

Other Regular Attendees and Guests

P Tracy Gardner (Trustee) P Rick Holz (AA) P Paul Myskiw (RO) P Colin Terry (Student Life)
P Sam Spiegel (Trefny) P Sydney Marchando (USG Rep) P Maxwell Silver (GSG) P Mara Green (AA)
P Vibhuti Dave (UGS) P Lori Kester (EM)

*Scott Houser, Angel Abbud-Madrid, President Paul Johnson, Jamal Rostami, Masami Nakgawa, James Ranville

Welcome

Andy Herring

Herring welcomes Maxwell Silver, Graduate Student Government representative, and Tracy Gardner, Faculty Member of the Board of Trustees.

Provost / Academic Affairs

Rick Holz

Holz begins with an update on COVID-19 cases on Mines Campus: there are currently 28 active cases on campus which has dropped from the previous week by five. There was only one faculty case reported the week prior. This individual had not been on campus since 1/11, and there have not been any other reports of faculty cases on campus. A majority of cases have been off-campus.

Holz reports that there have been two to three cases in Spruce Hall and one in Traditional Hall. There has also been a report of a case in one of the fraternities.

The Academic Affairs Executive Committee has begun discussing Fall scheduling and building the Fall schedule in mid-February as Registration start on April 4th. Holz asks faculty to begin conversations surrounding the Fall and what they believe it should look like.

Masks will likely be required, but all classes should be in an in-person format except for those fully online courses offered normally during the academic year. Holz states that feedback from faculty is greatly encouraged and provided for the following Faculty Senate meeting (2/9).

The summer has a preliminary schedule that was put out in Fall 2020 and the final schedule is being worked on. Dave will be sending out spreadsheets to departments to build budgeted and final schedules. Holz suggests that summer lecture courses remain in a remote format; this is done to accommodate students seeking internship and work opportunities during the summer, but this is up to the department.

Holz states that a Town Hall is expected in February and is being tentatively scheduled, there is no date provided. This Town Hall will focus on Mines@150 as there are three years left of the initiative. Academic Affairs highest priority moving forward is implementation of the Mines@150 strategic plan, answering questions and having conversations on this plan, and outlining what the highest priorities are. Working groups will be established moving forward to help in implementation.
Herring informs Senators that conversation has continued with the Provost on the Memorandum of Understanding for Interdisciplinary Programs. Faculty Senate will continue to discuss and draft the MOU, and may send a written document to the Provost for review.

A comment is brought up regarding Fall scheduling being entirely in-person and that this could be considered a riskier approach to what is currently being done on-campus. Holz responds in that the Executive Committee has been discussing this risk as well as issues regarding shifting course modality in the Registrar’s Office and developing that schedule.

Holz states that with the entirely in-person projection, there can be a shift to a hybrid-mode where every class may have some face-to-face component. Larger classes would be split into thirds where on group meets on Monday, the second on Wednesday, and the third on Friday. The worst-case scenario, described by Holz, would be to have students re-registering over the summer.

A question is asked on the effectiveness of the Health Screen app and its format. Faculty question the effectiveness of answering the Health Screen app questions if they are going to remain off-campus with flu-like symptoms. Holz states that he will bring this question up to Peter Han on usage, performance, and information.

A question is asked on lecture courses remaining remote for following summers to provide adequate accommodation for students working or participating in an internship. Holz informs Senators that the goal would to ultimately build-out these courses in an online format and have this maintained summer after summer.

Registrar’s Office

Myskiw continues the discussion regarding building the Fall 2021 schedule; quite a bit of the process requires information regarding the vaccines and what the State of Colorado will allow as far as large gatherings. If classes are held entirely in-person and a full lockdown is implemented, there will be undoing and rearranging that needs to be explored.

Myskiw introduces Senators to the new stage of implementation of DegreeWorks, which is a Transfer Equivalency System. This will mostly have an impact on undergraduate students that will allow for transparency around how courses taken at another institution will apply at Mines. This new implementation will begin on Monday (2/1).

Myskiw informs Senators that Mines received a grant from the Lumina Foundation for a Comprehensive Learner Record or CLR. This has been piloted; Toni Lefton and Colin Terry alongside Myskiw presented the progress to a national group through the American Association of Collegiate Registrars and Admissions Offices (AACRAO). There has been national interest in CLR as it provides a comprehensive record of co-curricular activities that the university endorses or sponsors on the students’ transcript. It allows for the university to keep track of those activities.

A discussion is brought forward on the list of graduates approved by Senate on 12/8 was not the finalized list. Herring suggests that after Senate approves the initial list before the Board of Trustees meeting that an addendum be sent for electronic voting of the final list.

Approval of Minutes – January 12, 2021

MOTION: To approve the Faculty Senate Minutes of January 12, 2021 by Sitchler; seconded by Handorean. No abstentions. APPROVED.
Exemplar for Alumni Affinity, Visibility, and Involvement

President Johnson’s presentation has been posted and can be viewed on the Faculty Senate website under the “Downloads ➔ Documents” tab titled “Mines@150 Review by President Paul Johnson.

Johnson explains that Mines@150 ends in 2024 and is presenting the strategic, big-picture plan for the university.

Johnson begins by outlining three specific topics on threats to Mines’ future: competition, relevance, and complacency.

In Johnson’s presentation, the number of students graduating from high school is expected to peak in 2025 and decrease following that year. While the number of high school students is increasing, the number of students looking to attend college has begun to decrease starting a few years ago (2017).

Johnson also identifies a trend in the Percentage Increase of Graduate Enrollments over the Decade (2009-2018) in which engineering and science have had a significant growth area despite graduate enrollment at Mines having flattened down and decreased for part of this period.

Larger universities have increased enrollment, while smaller institutions are losing enrollment some having gone out of business. Mines is in the middle zone from an enrollment standpoint. Mines is at a point in which half of students that apply are admitted to Mines; leaving it as more selective than some but not quite as selective as others. The yield rate is in the low 20% range with only 1 out of 10 out-of-state students choosing to come to Mines and 1 out of 3 in-state students.

Johnson states that the plan is to be a more attractive and accessible institution for students. Mines is seeking to realign the portfolio of programs in what is offered and how it is offered; student affinity within Mines is also being sought out. Students will be Mines’ best advocate in recruiting new students and eventually becoming donors. Philanthropy has been a greater investment in the university than State funding.

Johnson reports that larger universities will beat Mines in cost due to their costs being spread amongst programs such as English and History whereas Mines offers primarily expensive programs. Mines intends on graduating students with a manageable level of debt that will not look bad relative to potential earnings potential following graduation.

Johnson mentions comments from recruiters on Mines’ students being provided better in professional development; alumni have asked to teach courses on weekends to prepare students for providing PowerPoint presentations to CEOs. Business competencies are becoming increasingly important in producing leaders.

Mines is looking to launch thematic, interdisciplinary and leading-edge programs along with stackable credentials and remote 4+1 completions. Students can then complete their +1 while working. MINES Online is being led in conjunction with MINES Marketing with John Bradford to help students become more aware of the programs beyond Colorado.

Infrastructure is also to be improved on to provide additional student capacity while living and experiencing life on-campus.

The floor is opened to questions:
• How can faculty play a bigger role in moving things forward?

Johnson responds that, dependent on engagement, there are opportunities at all levels. Looking within the sphere of influence; faculty can look to their courses, mentoring for students, and research opportunities provided to students. These are linked to students experience and affinity in the classroom. How students are treated is important.

Students can feel empowered by having a home within a department, and feeling part of Mines.

• How can online education play into both increasing the student enrollment and income at Mines as well as student experience?

Johnson states that every student should have some sort of online learning experience while at Mines because it is more likely that their post-bachelor’s learning will be largely online. This provides students with the opportunity to complete internships or working opportunities over the summer, as well. The remote capabilities also provide students the ability to complete their +1 while working.

Mines is also looking to double-down on hands-on experience.

A comment is brought up regarding infrastructure and where Mines is lacking. Johnson explains that we have already begun to see real-time effects of these issues where, for example, a student graduating in Petroleum Engineering without data analytics background is not competitive within the industry.

The core curriculum committee is working at these curriculum infrastructure issues and statistics.

• Should Mines be thinking about doubling-down on the strengths and emphasizing areas we have a proven track record in or diversifying those?

Johnson answers that recruiters have made points that Mines students are great in technical skills but not so much in context or business. These topics are important as industry needs people to also understand the big picture as much as the details. More than one flavor of graduate should be produced.

Johnson also informs Senators that something Mines experiences is remaining within a box in that not all topics need to be accomplished via a course. This is an idea of pushing the curriculum plus co-curricular opportunities for students. Alumni are working with students to teach how to give good presentations and understanding corporate structures.

Committee and Council Updates

Faculty Senate Secretary        Alina Handorean

Handorean brings to Faculty Senate attention that a Robin Bullock has received courtesy appointment in the Mining Engineering department. According to the Academic Faculty Bylaws, no more than two Senators are to represent from the same academic department, division, or locus. For faculty to hold joint appointment, they are considered as members of all the respective departments—which leaves the Senate with three representatives from Mining.

Handorean has discussed with the President of Faculty Senate to suspend Article II. B.5 “No more than two Senators shall be from the same academic department, division, or locus of appointment. Persons holding
join appointments shall be considered to be members of all departments/divisions in which they hold appointments.” via Faculty Senate Bylaws Article I D.7: “Suspension of Bylaws: A bylaw may be suspended for a given meeting by vote of two-thirds of the members present, a quorum at the meeting being required.”

Herring notes that this will be a larger discussion to be addressed at the end of the semester.

**MOTION:** To approve suspension of Article II B.5 for the remainder of the Spring 2021 semester by Handorean; seconded by King. 1 abstention. **APPROVED.**

Proposal of new Faculty Senate Committee: Online Standards Committee  
Sam Spiegel

Spiegel begins by explaining to Senators that the Higher-Learning Commission requires that Mines has a set of standards that are the minimum requirement for online courses. These online courses are to be reviewed and approved before they can be offered. Previously, there had been a large faculty committee that generated the standards that went through campus review and Faculty Senate would review it, as well.

Mines is still early enough in the online-development that this can be done on an ad-hoc basis; however, a point has been reached in which standards require periodic review and would also need a standing committee that can help with reviewing these online courses. Senators Sullivan and King have suggested to start ad-hoc and proceed to a larger role. A question is asked on the standing of this committee—should it be a Senate committee such as a council where a Faculty Senate Senator must chair. Spiegel explains that the initial proposals was sent to Senate as a committee, but changes have been proposed to establish a Senate Council.

A discussion outside of Senate was done prior between Senators King and Sullivan with Spiegel regarding the status of the Online Standards committee as a Council to avoid overwhelming the undergraduate and graduate councils. Rather than having this as a standing committee, this should be paneled as a council so that there will be responsibility for the online education component at Mines. This council will firmly anchor the online education component at Mines.

Official action will be established at later date during an official Senate meeting to form the Online Standards function. The expectation is for the function to be run and managed via Faculty Senate—a working group should be established this semester and the expectation would be to create an official council in the following year.

The details of the Online Standards function have not been clarified just yet. Establishment of a Council will be a significant Academic Faculty Bylaw change and will go through the next round of Academic Faculty voting.

Herring asks for a Senator that would volunteer to refine the process with Spiegel. Refinement points would be membership of this council, management of membership, and discussion of the working group running parallel with the current councils.

Three Senators expressed interest in helping Spiegel on refining the proposal to Senate prior to proposal of an official motion.

**Handbook Committee**

Linda Figueroa
Figueroa informs Senators of the email sent by John McCray requesting information from the Handbook Committee. The committees are looking to create an agreed upon structure on what needs to be in the Handbook, Procedures, Academic Affairs procedures, Human Resources procedures and policies and the policy page.

There has been an overwhelming amount of changes to be made and wordsmithing within the Handbook which creates an inefficient process. The committee requests that any strong opinions be brought to Figueroa or McCray.

For clarity, McCray states that the Faculty Senate committees for Handbook and Procedure are seeking out feedback on what Faculty sees as important and this is then proposed to the governing bodies whether that be the Provost or Faculty Handbook Committee.

Review and Approval of RFP Proposals

Robin Bullock

The briefing summary from the Proposals discussed for approval have been saved to the Faculty Senate website under “Downloads → Documents” tab titled SSE Proposal Briefing.

Bullock updates Senators on the check-in that occurred the Friday prior (1/22) with Brian Winkelbauer at the Colorado School of Mines Foundation and President Paul Johnson. A summary is provided regarding the conversation. No questions or discussion occurred.

**MOTION:** To approve proposals to move into ad-hoc committee and receive funding by Bullock; seconded by Sitchler. No abstentions. **APPROVED.**

Undergraduate Council Updates

Jeff King

*Approved Undergraduate Council new courses and course changes have been added to the end of this agenda as informational FYI-only items.

Programs for Senate Approval:

1.1 MECHANICAL ENGINEERING

[status: CIM 10/29; Provost: 10/29; UGC: 1/13]  
1 new program: Minor in Aerospace Engineering  
(needs CIM code assignment)  
*This minor was proposed by industry constituents and requested by students in Mechanical Engineering. This minor compliments but does not compete with the other aerospace related activities, including the graduate program in Space Resources, the new CS+Space track, and the newly proposed minor in Space Mining. The undergraduate programs will share one core course, but students then have the opportunity to further their education with the minor/track (or master’s) based on career paths. **Championed by Oyvind Nilsen.***

1.2 MINING

[status: CIM 11/4; Provost: 11/4; UGC: 1/13]  
1 new program: Minor in Space Mining  
(needs CIM code assignment)  
*The proposed Minor program will prepare students for the developing field of space resources, which focuses on exploration, mining, and utilization of materials required for affordable and flexible transportation, facilities construction, manufacturing, energy production, and life support in extraterrestrial environments, including the Moon and Mars. The proposed Minor program is*
expected to draw students from non-traditional mining disciplines and increase the enrollment in the department. In addition, this Minor will provide a potential pipeline of students who may be interested in pursuing a Post-Baccalaureate Certificate, or MS and PhD degrees in the Space Resources graduate program. **Championed by Jurgen Brune.**

1.3 **HONORS**

[status: CIM 11/4; Provost: 11/4; UGC: 1/13]

1 new program: Minor in Teaching

(notes CIM code assignment)

Teach@Mines has been offering courses to Mines students for six years. During the first few years Mines partnered with the University of Northern Colorado to deliver the coursework and for the past two and a half years, Mines has directly delivered the coursework. This program has demonstrated student interest, with approximately 40 students per semester taking courses. By packaging this coursework as a minor, it will provide clear communication to the campus about this opportunity to become a well-prepared educator and it will provide transcript recognition of the student’s preparation to teach.

This minor will be a residential program with some online coursework and a substantial K-12 classroom component. The K-12 classroom component requires interaction between the Mines students and the K-12 classroom students therefore that portion must be face-to-face. However, the coursework can be delivered either face-to-face or online. **Championed by Wendy Adams.**

**MOTION:** To approve 1 new program to Mechanical Engineering in for a Minor in Aerospace Engineering, 1 new program in Mining for a Minor in Space Mining, and 1 new program in Honors for a Minor in Teaching in an omnibus vote by King, seconded by Bullock. No abstentions. **APPROVED.**

**Graduate Council Updates**

Neal Sullivan

**Programs for Senate Approval:**

2.1 **INTERDISCIPLINARY**

[status: CIM 12/2; Provost: 12/3; GC: 1/20]

1 new program: CERT-GE: Certificate and Professional Master’s in Analytical Geochemistry

The addition to the existing Geochemistry Program of a Professional Master’s and Certificate in Analytical Geochemistry supports the Subsurface Frontiers initiatives by training professionals with the skills needed in groundwater resources, mineral exploration and recovery, environmental protection, and basic earth science research. Global challenges address climate change, more efficient energy production, and discovery and utilization of critical materials all can be more fully addressed by a workforce trained in the state-of-the-art methods of analysis. **Championed by James Ranville.**

**Notes from Graduate Council:** credit hours did not properly align, Council requested additional information from Professor Ranville regarding the language in the Professional Master’s portion of the program.

A question is asked regarding the declining numbers of Geochemistry and if this is an effort to boost those numbers. Ranville states that this is being done for both student and faculty numbers. The CIM entry displays the Certificate in Professional Master’s in Analytical Geochemistry under the Chemistry program despite Geochemistry being an interdisciplinary program.
MOTION: To approve the new program in Interdisciplinary Geochemistry: Certificate and Professional Master’s in Analytical Geochemistry as championed by James Ranville by Sullivan; seconded by Sitchler. No abstentions. APPROVED.

Adjourn

MOTION: To adjourn the January 26, 2021 Faculty Senate meeting by Voelker; seconded by Handorean. No abstentions. APPROVED.

Faculty Senate adjourned at 4:00 pm.
Next Meeting: February 10, 2:00 – 4:00 pm, via Zoon. Please send all items for agenda to mgreen1@mines.edu one week prior to the meeting.