FACULTY SENATE MEETING AGENDA
February 22, 2:00 – 4:00 pm, via Zoom

<table>
<thead>
<tr>
<th>Time</th>
<th>Item</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>2:00-2:05 pm</td>
<td>Welcome</td>
<td>Sebnem Duzgun</td>
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<td>2:05-2:15 pm</td>
<td>Academic Affairs</td>
<td>Rick Holz</td>
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<td>2:15-2:25 pm</td>
<td>Registrar’s Office</td>
<td>Paul Myskiw</td>
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<td>2:25-2:30 pm</td>
<td>Approval of Minutes – February 8, 2022</td>
<td>Sebnem Duzgun</td>
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<td>2:30-2:40 pm</td>
<td>Teach@Mines</td>
<td>Wendy Adams</td>
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<td>2:40-2:50 pm</td>
<td>Mines Undergraduate Research Advisory Committee (MURAC)</td>
<td>Lakshmi Krishna</td>
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<td>2:50-3:05 pm</td>
<td>Committee Updates</td>
<td>Joe Horan</td>
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<td>Senate Secretary</td>
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<td>Bylaw Change – Non-voting Representatives on Faculty Senate</td>
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<tr>
<td>3:05-3:25 pm</td>
<td>Briefings, Informational Items, and Updates</td>
<td>Joe Horan</td>
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<td>Posthumous Degree Award – Brennen Ward</td>
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<td>Posthumous Degree Award – David Vasserman</td>
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<td>Faculty Senate March 22 Meeting</td>
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<td>Senate Meeting Format</td>
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<td>3:25-3:35 pm</td>
<td>Undergraduate Council</td>
<td>Jeff King</td>
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<td>Undergraduate Council approved courses and course changes listed at the end of this agenda.</td>
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1.1 MECHANICAL ENGINEERING
[CIM 11/17; UGC 1/26]
2 program changes: BS-MECH: BS in Mechanical Engineering

CHANGE ONE: Addition of eight (8) tracks, consisting of one (1) ME Advanced Engineering Science elective and three (3) approved ME electives: Aerospace, Automation & Controls, Automotive, Biomechanics, Energy, Manufacturing, Materials, and Nuclear Energy.

CHANGE TWO: Providing Mechanical Engineering students more choice (after "request" from our Industrial Advisory Board). Removal of EENG Feedback Control from the required course list and replace it with a ME elective. (EEN will remain an ME elective).

1.2 CHEMICAL & BIOLOGICAL ENGINEERING
[CIM 12/7; GC 2/9]
1 program change: BS in Chemical Engineering
In the current Catalog, double-counting of the four core courses required for the combined BS/MS program is not allowed. This causes unnecessary confusion among students; request to remove this constraint.

3:35-3:45 pm  Graduate Council  Tina Voelker

2.1  CHEMICAL & BIOLOGICAL ENGINEERING  [CIM 1/7; Provost 1/7; GC 2/16]
1 new program:  XCRTG-CEPET: Chemical Engineering Processes in Energy Transitions

2.2  ECONOMICS AND BUSINESS  [CIM 1/27; GC 2/16]
1 program change:  MS-ETM-NT: Engineering and Technology Management (ETM) Master of Science

In the “Further Degree Requirements”, replaced the Economic Evaluation Workshop with an Introductory Python Programming Workshop to better prepare students for using Python in quantitative classes. In addition, the material that was covered in the Economic Evaluation Workshop will be reviewed in the core class - EBGN540 Accounting and Finance. Also added EBGN565 Marketing for Technology-Based Companies back to the Technology Management and Innovation Course list.

2.3  ENGINEERING, DESIGN, AND SOCIETY  [CIM 2/3; GC 2/16]
1 program change:  MSCR-HES: Humanitarian Engineering and Science

Currently not able to provide all interested prospective students with graduate coursework that reflects their professional development goals. Proposing a broader array of “track” options for students who do not easily fit with existing offerings. Proposed revisions to:
1. Add a disciplinary track in Humanitarian Robotics
2. Add a disciplinary track in Data Science
3. Add an interdisciplinary track
4. Modify electives
5. Modify courses for geophysics disciplinary track
6. Modify courses for environmental engineering track

2.4  QUANTITATIVE BIOSCIENCES AND ENGINEERING  [CIM 2/2; GC 2/16]
1 program change:  MSPHD-BIO: MS & PHD – Quantitative Biosciences and Engineering

Updating program to:
- add in new courses, BIOL 501, Advanced Chemistry, and BIOL 590, QBE Graduate Seminar
- update BIOL 500
- update course electives
- remove Independent Study as a core course for the MSNT program
- update language
2.5  **MECHANICAL ENGINEERING**  
[CIM 1/25; GC 2/16]  
1 program deactivation: XCR-ADVMO: Graduate Certificate – Smart Manufacturing  
Deactivating the Graduate Certificate in Smart Manufacturing due to:  
- recent departure of faculty member who would be teaching the required courses  
- lack of student interest  
May reconsider when additional faculty member is hired and more resources placed into recruiting for the certificate.

2.6  **GEOPHYSICS**  
[CIM 2/1; GC 2/16 (Consent Agenda)]  
1 program change: XCRTG-CCUS: Carbon Capture, Utilization, and Storage  
Revision made to bring clarity to wording around courses, no changes to the actual program.

3:45-4:00 pm  **Executive Session**  
Next meeting: March 8, 2:00-4:00 pm via Zoom.

**Undergraduate Council approved course changes:**  
*GEGN330: Geoscientists Thermodynamics* – removal of prerequisite GEGN206  
*GEOL314: Stratigraphy* – removal of prerequisites GEGN203, GEGN204, and GEGN205; added GEGN212 and GEGN217  
*GEOL321: Mineralogy and Mineral Characterization* – removal of prerequisite GEGN206, addition of GEGN212

**Undergraduate Council approved new courses:**  
*PHGN460: Elements of Modern Optics*