### FACULTY SENATE MEETING AGENDA

January 25, 2:00 – 4:00 pm, via Zoom

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<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 – January 11, 2022</td>
<td>Sebnem Duzgun</td>
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<td>2:30-2:45 pm</td>
<td>Committee Updates</td>
<td>Joe Horan</td>
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<td>DI&amp;A Ad Hoc Committee Charge</td>
<td>Joe Horan</td>
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<td>2:45-3:00 pm</td>
<td>Sick Leave System at Mines</td>
<td>Melanie Ulrich</td>
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<td>3:00-3:20 pm</td>
<td>Shared Governance and Faculty Engagement</td>
<td>Sebnem Duzgun</td>
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<td>3:20-3:30 pm</td>
<td>Undergraduate Council</td>
<td>Jeff King</td>
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Approved Undergraduate Council course changes and new courses are located at the bottom of this agenda.

1.1 **PETROLEUM ENGINEERING**

[CIM 10/20; UGC 1/12]

1 program change: BS-PTE: BS in Petroleum Engineering

Move free elective (3cr) from Fall Junior to Fall Senior. Move HASS200 (3cr) from Spring Sophomore to Fall Junior. Move PEGN282 (1cr) from Spring Junior to Spring Sophomore. Move PEGN382 (1cr) from Fall Senior to Fall Junior. Move PEGN482 (1cr) from Spring Senior to Spring Junior.

The changes will allow students entering the PE department in spring of Sophomore year to begin the Professional Skills series. It will also allow transfer students to the PE Department to begin adding earlier the Professional Skills courses to their schedules. By moving the series earlier in the program, students will complete the series prior to Senior year, when implementation of professional skills such as technical writing, Capstone design teamwork, team writing, oral communication skills such as presentations and interviews, cover letters, resume writing are required.

1.2 **PHYSICS**

[CIM 10/20; UGC 1/12]

1 new program: MIN-PH: Minor in Physics

Mines Department of Physics encourages the campus to create a Minor in Physics that can follow two different tracks: A Minor in Engineering Physics (Option One) and Minor in Physics (Option Two). By enabling two options, we go from having a minor that no one
could complete (due to non-physics prerequisite courses that delayed a student’s immersion into physics-rich courses ... which is where we are now) to a minor program that can effectively feature all our undergraduate courses.

3:30-3:50 pm  Graduate Council  
Tina Voelker

2.1  
Catalog Change – 400-level courses and graduate student transcripts

• Approved by GC 1/19

2.2  
PHYSICS

[CIM 12/8; Provost 12/9; UGC 12/19]

1 new program:  CRTG-OPTICS: Optics for Engineering

Optics for Engineering is an interdisciplinary program that seeks to equip students for careers in industries that make use of optics, imaging and lasers. It encompasses a wide range of disciplines that include physics, materials science, computer science, electrical and mechanical engineering, chemistry and mathematics, and is necessarily a collaborative effort among many Mines departments. The “Optics for Engineering” graduate certificate program is aimed at providing students with a range of technical backgrounds the tools they need to succeed in today’s optics-related industries. Optics and lasers are key enabling technologies in many industries, including some recent applications like automotive lidar, advanced manufacturing and quantum computing. At the same time, the design of optical systems requires input from many disciplines: electrical and mechanical engineering, computer programming, materials and chemistry. It is therefore critical for students trained in those areas to learn how their background can be applied to the engineering of optical, imaging or laser systems.

2.3  
CHEMICAL & BIOLOGICAL ENGINEERING

[CIM 11/19; GC 1/19]

1 program change:  MSPHD-CBE: MS & PhD – Chemical and Biological Engineering

In the current catalog, both Ph.D. and master students are required to register every semester for CBEN605 Colloquium; however, it is not currently specified how many colloquium credits can be count towards each degree. Here, we are applying a three-credit maximum for counting towards the degree requirements.

2.4  
GEOLOGY & GEOLOGICAL ENGINEERING

[CIM 11/18; GC 1/19]

1 program change:  MPMEMSPHD-GE: MP, ME, MS & PhD – Geology & Geological Engineering

Updating GEGN Ph.D. catalog language - the current language is unnecessarily vague about the number of course credits required as part of the program. I suggest we change "At least 24 of the hours must be research credit hours" to "At least 24 of the hours must be research credit hours, and at least 24 of the hours must be earned through completion of coursework".

The GEOL PhD language will be discussed at a faculty meeting later.

2.5  
HUMANITIES, ARTS, AND SOCIAL SCIENCES

[CIM 11/29; GC 1/19]
1 program change: MS-NREP: Natural Resources & Energy Policy
Addition of thesis option to the existing MS program.

3:50-3:55 pm  Committee and Councils Update for Board of Trustees  Sebnem Duzgun

3:55-4:00 pm  Adjourn  Sebnem Duzgun

Next meeting: February 8, 2:00-4:00 pm via Zoom. Please send all items for agenda to mgreen1@mines.edu 1 week prior.

Undergraduate Council Approved New Courses
CEEN426: Durability of Concrete
EBGN496: Payne Scholars Program