College of Science and Mathematics Senate Meeting

Monday, February 13, 2023
2:30 PM – 4:00 PM
Virtual Meeting Using Zoom

https://umassboston.zoom.us/j/96667249389

Meeting ID: 966 6724 9389
Passcode: CSMSenate

Agenda:
1. Approval of the December 12, 2022, meetings minutes
2. Announcements
3. New business
   a. Motion to approve undergraduate course change CHEM: 408 - Data Analysis in Chemistry
      
      **Catalog description:** An introduction to data analysis in the chemical sciences. A central approach in the design of chemical experiments is to apply statistical techniques to molecular-scale data that can be used to infer structure property relationships and guide chemical syntheses. The course objective is to acquire the necessary skills to build statistical models to design, conduct and understand experimental chemistry.

      **Existing course name is Chem 408: Chemical Computation**
      
      **Prerequisites:** CHEM 116 and 118, MATH 141
      
      **Rational and syllabus:** See the attachments.

   b. Motion to approve new graduate course CHEM: 608 - Data Analysis in Chemistry
      
      **Catalog description:** An introduction to data analysis in the chemical sciences. The objectives are to acquire the necessary skills to build statistical models to design, conduct, and understand experiments and to gain a basic understanding of machine learning and data science in chemistry.

      **Prerequisites:** Graduate standing or permission of the instructor.
      
      **Rational and syllabus:** See the attachments.

   c. Motion to approve new graduate course BIOL: 649 – Responsible Conduct of Research
      
      **Catalog description:** The overall goals of this course are to: a) sensitize students to and stimulate their interest in ethical issues that arise in biomedical and biological research; b) introduce students to best practices, guidelines and expectations, and available resources regarding the responsible conduct of science; and c) foster critical thinking skills as applied to ethical decision making in research. Topics include bias and objectivity in research,
authorship and peer review, competing interests in research, research data and intellectual property, scientific record keeping, and mentor-mentee relationships.

**Co-requisite:** Enrollment in a graduate program in the biological sciences.

**Course Note:** This course is intended for graduate students in the biological and biomedical sciences. It is an elective for the graduate programs in the Biology Department. However, it is designed to fulfill NIH requirements for Responsible Conduct of Research (RCR) training for all NIH trainees and is required for those who are supported with NIH funding.

**Rational and syllabus:** See the attachments.

d  **Motion to approve Electrical Engineering Major (BS) Program Change**

**Originator description:** We would like the following 3 new courses be included in the list of options for the ECE electives for Electrical Engineering (BS) majors, in their degree audit:

- ENGIN 342 Computer Communications and Security
- ENGIN 441 System on Chip (SoC) Design
- ENGIN 448 Operating Systems

**Rationale:** Please see the attachment.

4. Dean’s office

5. Other Business
   - CSM AY 2024-2027 3-year Tenure Track Line Requests
   - Election committee
   - By-laws

6. Adjourn