Minutes - Nov 17, 2014 - CSM Senate Meeting

Date: Monday, November 17th, 2014
Time: 2:30pm - 4:00pm
Location: CSM Dean's Office Conference Room

Members in attendance:
Catalin Zara, Mathematics, Chair
Chandra Yelleswarapu, Physics, Secretary
Jason Green (for Michelle Foster), Chemistry
Juanita Urban-Rich, SFE
Manickam Sugumaran, Biology
Ping Chen, Engineering
Robert Stevenson, Biology
Wei Ding, Computer Science

Others in attendance:
Andrew Grosovsky, Dean, CSM
Duc Tran, Computer Science

The meeting was called to order at 2:35 pm.

1. Approval of the October 20, 2014 meeting minutes.
   A motion to approve the October 20, 2014 meeting minutes was seconded and approved unanimously.

2. Announcements
   The Academic Affairs Committee approved ENGIN 352, 478, and 480 courses. They will be sent to the CSM Dean's office. Other two engineering courses ENGIN 332 and 352 are still pending, waiting for revisions from the department. MATH 447 has been approved by the CSM Senate and sent to the CSM Dean's office.

3. New business
   3a. Revision of EEOS 476 Capstone - An Integration of Natural and Social Environmental Sciences. Change in pre-requisites.
       Motion: To pre-approve the revision of EEOS 476 Capstone - An Integration of Natural and Social Environmental Science: addition of Senior Status as pre-requisite.
       Rationale: The intent of the Capstone course is to be a culminating experience for students in the major. Hence, senior status is required, as this course is intended to be taken during the final year of the major.
       A motion to pre-approve the revision of EEOS 476 was seconded and approved unanimously. The proposal will be sent to the Academic Affairs Committee.

   3b. Revision of CE curriculum: addition of ENGIN 322 - Probability and Random Processes as a required course in the Computer Engineering curriculum, replacing one ECE or Thematic Elective.
       Motion: To pre-approve the revision of CE curriculum: addition of ENGIN 322 - Probability and Random Processes as a required course in the Computer Engineering curriculum, replacing one ECE or Thematic Elective.
       Rationale: The addition of ENGIN 322 - Probability and Random Processes as a required course
in the Computer Engineering curriculum is needed to satisfy program-specific requirements set by the Accreditation Board of Engineering and Technology (ABET).

A motion to pre-approve the revision of CE curriculum by addition of ENGIN 322 as a required course was seconded and approved unanimously. The proposal will be sent to Majors, Honors, and Special Programs Committee.

3c. **Addition of CS 411 - Competitive Programming.**

**Motion:** To pre-approve the addition of CS 411 - Competitive Programming.

**Rationale:** In the real world, many computing problems need be solved by a deadline. This course promotes critical thinking and helps students improve their ability to come up with a creative and efficient usage of various programming approaches and techniques for a given challenge when time is of the essence. This focus is not usually seen in the traditional Computer Science curriculum.

A motion to pre-approve the addition of CS 411 was seconded and approved unanimously. The proposal will be sent to the Academic Affairs Committee.

3d. **Addition of the Integrative Biosciences Graduate Program (IBGP), with tracks in Biochemistry, Biophysics, and Bioinformatics.**

**Motion:** To approve the addition of the Integrative Biosciences Graduate Program (IBGP), with tracks in Biochemistry, Biophysics, and Bioinformatics.

**Rationale:** The purpose of the Integrative Biosciences Graduate Program is to produce independent researchers able to apply interdisciplinary approaches to solving problems in the areas of Biochemistry, Biophysics, and Bioinformatics. These are rapidly developing fields that require biologists to think like physicists, chemists to have a solid understanding of biology, and computational biologists capable of interpreting the vast amounts of high-throughput data from genome- and proteome-scale experiments. Applying single-discipline approaches cannot adequately solve modern biomedical theoretical and empirical problems.

The greatest advances in research today are made at the intersections of multiple disciplines rather than in single disciplines. Thus the proposed multidisciplinary, integrative Biosciences Graduate program is closely aligned with UMass Boston's strategic plan to enhance research, while continuing to promote teaching excellence and community service. The IBGP program will enhance UMass Boston's national and international status by building on the many strengths of a core of strong, existing faculty research programs across the College of Science and Mathematics (CSM) that have already earned national and international recognition.

The CSM Senate recognizes the academic value of the proposed Program. Some members voiced the concern that the new program may take away resources from existing programs. Following the discussion, there were some questions regarding:

- a fall back provision for students who complete the coursework but do not complete all the requirements. The Senate strongly recommended the addition of an MS degree.
- clarifications on the method of selecting the Program Committee.

A motion to approve the addition of the Integrative Biosciences Graduate Program was seconded and approved unanimously, pending inclusion of suggested modifications to the proposal.

4. Other business.

   None.

5. Adjourn.

   The meeting was adjourned at 3:55 pm.