University Senate Committee: Academic Policies Committee

Brief History of Issue - why the issue is being considered:

The Department of Mathematics requests approval to establish a new major in Bioinformatics. A Bachelor of Science and Bachelor of Arts degrees in Bioinformatics (BS/BA in Bioinformatics) will be offered. Bioinformatics is the science of storing, extracting, organizing, analyzing, interpreting, and using biological information. The program grows out of existing strengths in biology, computer science, and mathematics. The development of the program responds to a projected increase in the need for computer and information research scientists, data scientists, and software developers in bioinformatics (Bureau of Labor Statistics) and a shortage of bioinformatics programs nationwide and in the upper Midwest. This interdisciplinary program will be housed administratively in the Department of Mathematics. The BS/BA in Bioinformatics will require 120 total credits, including required Liberal Education coursework, 60 credits in the major, and electives. The curriculum for the major consists of a core of 60 credits from biology, chemistry, computer science, and mathematics.

Points Discussed by Committee:
1. New courses required for the major.
2. New faculty lines and/or re-assignment of existing faculty lines.
3. How will curricula decisions and advising distributions be determined among the three departments?
4. Lack of Health Sciences alignment in program and/or proposed elective courses based on Mayo Health Systems support.
5. How will new major impact other majors in the three departments enrollment?
6. Impact of new major on course enrollments within the three departments.
7. Required computing skills for undergraduate students.

Pros of Recommendation:

New major adds to UW-Eau Claire academic distinctiveness. Aligns with UW-Eau Claire and Mayo Clinic Health System collaborative research agreement. Undergraduate student interest in this area is growing and will serve as a recruiting tool for prospective students.

Cons of Recommendation:

University resources needed for the major.

Technology/Human Resource Impact:

Utilization of the Blugold Supercomputing Cluster may be needed to assist students in the new major.

Committee Recommendation:

The committee approved the creation of a new major in Bioinformatics as either a Bachelor of Science or Bachelor of Arts degrees in Bioinformatics.
MOTION FOR THE UNIVERSITY SENATE

The University Senate Committee: Academic Policies Committee

by a vote of 10 for to 0 against on March 16, 2021 (Date)

Recommends that:
The creation of a new major in Bioinformatics as either a Bachelor of Science or Bachelor of Arts degrees in Bioinformatics, starting 2022-2023 AY:

Implementation Date: 22/23 catalog

Signed: _______________________________________
        Chair of the Committee

Send to: University Senate Office