ESTABLISH THE MASTER OF SCIENCE IN INTEGRATIVE BIOLOGY, COLLEGE OF LIBERAL ARTS AND SCIENCES AND THE GRADUATE COLLEGE, URBANA

Action: Establish the Master of Science in Integrative Biology, College of Liberal Arts and Sciences and the Graduate College

Funding: The School of Integrative Biology and College of Liberal Arts and Sciences have the faculty, staff, and infrastructure in place to support the launch of the proposed program and expect that enrollment and revenue growth from tuition will provide the resources for expansion of staff and infrastructure as needed when the program is fully implemented.

The Chancellor, University of Illinois Urbana-Champaign, and Vice President, University of Illinois System with the advice of the Urbana-Champaign Senate recommends approval of a proposal from the College of Liberal Arts and Sciences and the Graduate College to establish the Master of Science in Integrative Biology.

The proposed Master of Science in Integrative Biology (M.S. in IB) is a non-thesis program geared toward students seeking advanced preparation for professional school or careers in industry, government, or non-governmental organizations. Currently, students can avail themselves of a traditional, thesis-based M.S. in each of the School of Integrative Biology’s individual departments (Evolution, Ecology and Behavior; Entomology; and Plant Biology) or of interdisciplinary curricula such as the Program in Ecology, Evolution, and Conservation Biology. However, there is no opportunity for an M.S. in Integrative Biology specifically. This program would fill that gap, serving
students who graduate with bachelor’s degrees in the integrative biology areas who are seeking to further develop their knowledge and take next steps in their academic or professional careers.

Bachelor’s-level graduates in integrative biology are put into a wide applicant pool, often needing advanced degrees, lab skills, and work experiences to stand out. The proposed M.S. in IB serves to integrate educational, research, and innovation assets by allowing better connections to be forged through the attainment of advanced-level knowledge, lab experience, and a required mentoring course, which will pair M.S. in IB students with alumni mentors to help them plan their next steps and career growth. By providing an additional year of advanced-level coursework in areas such as bioinformatics and genomics and advanced laboratory coursework, the program affords an opportunity for graduates to be more competitive for placement in applying for either additional graduate or professional school or for employment.

Significant impact on faculty resources, student-to-faculty ratios, library and other instructional resources is not expected. The School of Integrative Biology has capacity in all upper-level courses. Additionally, the proposed program will be capped at 30 students, who would be spread across over 50 upper-level courses across multiple semesters. A recently hired specialized faculty member in the School of Integrative Biology teaches some of these courses and will assist in directing the M.S. in IB program. In addressing the lack of diversity often seen in STEM fields, the School of Integrative Biology plans to offer financial support to underrepresented minorities after the program is in place for three years, when it is expected to be financially stable.
The Board action recommended in this item complies in all material respects with applicable State and federal laws, University of Illinois Statutes, The General Rules Concerning University Organization and Procedure, and Board of Trustees policies and directives.

The Executive Vice President and Vice President for Academic Affairs concurs with this recommendation. The University Senates Conference has indicated that no further Senate jurisdiction is involved.

The President of the University recommends approval. This action is subject to further review and approval by the Illinois Board of Higher Education.