

UNIVERSITY of WISCONSIN
GREEN BAY

Date: March 14, 2016

To: Amy Wolf
Chair, Biology

From: Scott Furlong 
Dean of Liberal Arts and Sciences

Re: Report on the Biology Program Review

The Biology program at the University of Wisconsin-Green Bay is a disciplinary program with four emphases as well as a minor. In addition to serving majors in Biology, the program offers courses that meet general education requirements and also serve other university programs particularly in Human Biology, Environmental Science and Education. A number of the faculty are also involved in the graduate program in Environmental Science and Policy. The AAC noted a concern regarding the assessment results and encouraged the program to focus on developing a "strong assessment approach." They also noted some concern, based on student surveys, of periodicity of courses. The issue of equipment maintenance and updating also was a potential concern. Biology has hired some new faculty recently and current search will also add to the Biology faculty. There continues to be a number of independent learning opportunities provided to our Biology students through undergraduate research and internships.

Enrollment Trends/Resource Issues:

There has been a decrease in the number of Biology majors since the last program review, but even so the program has had between 98-122 majors over the past six years. The decrease is likely due to the overall decrease in students across the university, but it is something to keep an eye on. Biology does not have very many minors probably because of students' abilities to double major in either Human Biology or Environmental Science taking a minimum number of courses. One comment I would make, and something for the program to explore, concerns the number of credits associated with the Biology minor. The current program requires 35-36 credits. Based on looking at a few other UW schools with the UW System, the UWGB Biology minor requires about ten credits more. During the last review I noted that there could be an issue regarding the number of students that are graduated each year, which seemed low given the number of majors declared. This no longer seems to be an issue.

Since the last self-study, there has been some turnover in the Biology faculty due to resignations and new administrative positions. The program has made successful hires and is working to integrate these new faculty. There are also positions currently being searched which would be added to the faculty. Equipment maintenance and updates continue to be a potential issue, particularly with no capital or maintenance budget.

Assessment:

In my opinion the Biology program is working toward an effective assessment plan. While they note some concerns in the existing process and data collection, there are ways to improve. For

example, on page 11, the self-study states “Some of these students might not have taken core courses such as ..., where key concepts would have been covered.” This information is available and could help inform the faculty for this particular learning outcome. The use of the Biology Seminar as the point to do formal assessment in other ways provides a good opportunity. I am also pleased to see a plan for data collection, and specific comments about making adjustments to the curriculum (“closing the loop”). I would encourage Biology to continue on the path they have set out in this area.

Curriculum Development/General Education:

There has been a change to the emphases in the Biology program which now includes Animal Biology, Ecology and Conservation, Cell/Molecular Biology, and Biology for Educators. The program combined the old Plant Biology and Field Biology and Ecology emphases into the Ecology and Conservation (perhaps as a result of the last review). There has been an increase in the required number of electives in the emphases and there is an addition of a one-credit Biology Seminar that all students must take. New courses have been added in Environmental Microbiology, Ichthyology, and Stream Ecology. The Capstone course will likely serve as the program’s general education capstone experience and also as place to do assessment of learning outcomes. The development of the fisheries research (and teaching) program is an important development for the Biology (and Environmental Science) program particularly given the university’s connection to the Great Lakes.

Faculty within the program contribute to general education through Biology 201 and 203, the Introduction to Environmental Science and courses within the Sustainability Perspectives areas.

Concluding Thoughts:

The Biology program continues to be a highly successful program at UWGB and touts faculty that are committed to their students, which is showcased through mentoring, advising, a participation in a number of high impact practices (e.g., undergraduate research, internships, etc.). The program has access to a range of natural resources through a number of university-owned areas, which provide students a unique opportunity for learning. The program continues to feature international travel opportunities and many faculty are involved in external grant activities that provide support for both undergraduate and graduate students along with significant learning opportunities. There continues to be issues related equipment needs and/or maintenance that ideally could be addressed with additional budget. There are perhaps some private fundraising or grant writing opportunities for this.

The program in Biology has a healthy number of majors with faculty that are committed to their students. There has been significant improvement related to their assessment plans. If you would like to meet with me regarding this review, please let me know.

Cc: Lora Warner, Academic Affairs Council
Clif Ganyard, Associate Provost
John Katers, Chair NAS
James Marker, Chair HUB