



To: Scott R. Furlong, Dean
College of Liberal Arts and Sciences

From: Michelle McQuade Dewhirst
Academic Affairs Council

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Overview

The Geoscience program at the University of Wisconsin-Green Bay “takes an application-focused, interdisciplinary approach, known as earth system science, in which the physical environment is investigated as many interacting systems.” Since the last program review, the Geoscience program has addressed previous concerns regarding student assessment (discussed below) and has undergone a process of revising older courses and introducing new ones in response to student and programmatic needs.

The self-study was thorough and well written.

Strengths

The mission of the Geoscience program as stated seems well-suited for the interdisciplinary mission of the campus as a whole. Additionally, the program contributes to UWGB’s “Eco U” branding. The program’s interdisciplinarity is evidenced in part by the course Nature and American History, which is offered for the First Year Seminar program.

The program is led and executed by faculty with a strong and active record of scholarship. This gives the faculty the necessary experience and credibility to engage in meaningful fieldwork with their students.

A number of thoughtful changes have been made to the program since the last program review. The program’s identity and goals have been clarified through its name change to Geoscience (a term more in keeping with current nomenclature in the field). The faculty have demonstrated responsiveness to student needs through the introduction of new courses and the revision of older courses. Students exiting the program given it high marks as evidenced by survey data.



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In the previous program review, the AAC expressed concerns about student assessment. These concerns have been addressed by the Geoscience program in several ways. The program has learning outcomes which are thorough and clearly stated, providing a clear framework for assessment. Formal assessment includes the examination of student writing, and informal assessment Faculty discussions about student performance help to identify common student problems, which can then inform day-to-day classroom approaches.

Concerns

In the previous program review, concerns about gender imbalances in the program were expressed. While gender imbalances are not out of line with national averages, what actions could be taken to encourage more women to pursue geoscience? When asked this question, the Geoscience program discussed the issue; the AAC was then provided with a number of positive examples of achievements by female students and informed that faculty stress the importance of women in the sciences in their courses. These examples are commendable; it is not immediately clear, however, if or how these circumstances impact enrollment.

New General Education requirements call for Capstone courses to have a problem focus and to address interdisciplinarity and communication. It does not appear that this requirement is being fully met at this time. When asked specifically about this, the AAC was provided with a number of options that are being considered (examples include a geology “field camp”, adding additional research and presentation requirements to ES 421, or adding a senior thesis requirement). However, there are financial and logistical obstacles to implementing each of these ideas. If a solution is not found soon, students may find themselves without a viable Capstone course option.

Recommendations

The Geoscience program indicates a desire to build and/or improve relationships with high schools and two-year campuses for recruitment purposes. This goal will be supported through the efforts of Professor John Luczaj during his upcoming sabbatical. This is commendable and, in our current climate, vital. It seems that this could also be an opportunity to address gender imbalances in the program by actively seeking strategies for reaching out to and recruiting female high school students.

The contribution Geoscience makes to the First Year Seminar program is a valuable one, in that it offers an interdisciplinary introduction to environmental issues and could potentially provide a “gateway” that leads incoming students to the Geoscience program. It would seem that the creativity and interdisciplinary



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perspective illustrated by the First Year Seminar course could be brought to bear on the Capstone course issue. The program might consider collaborating with faculty in another unit (i.e., seek another “interacting system”?) in order to broaden its approach. Solving this problem is time-sensitive in that currently enrolled students will run up against this requirement soon; additionally, fulfilling the charge for interdisciplinarity in these courses will help to ensure that the program fulfills its stated mission. Concerns about cost and faculty workload are, of course, valid – these concerns must be discussed with the administration sooner rather than later in order to find viable solutions for students and faculty alike.

CC: Dr. John Luczaj, Chair of Geoscience

Dr. Greg Davis, Associate Provost for Academic Affairs

Secretary of the Faculty