

Dean's Response to the Program Review of the Geosciences Program

May 29, 2013

I greatly appreciate the thought and effort that went into the report from the Program Review Team, as well as the self-study and report response by the Geosciences Department.

During this review cycle, I requested that departments select external reviewers without any ties to the department in order to ensure the most objective review possible. The Geosciences Department is to be commended for selecting reviewers who met these criteria and also comprised an outstanding cross section of disciplinary professionals. During their visit, I provided the reviewers with a list of specific questions that I felt would help guide the evaluation, and assured each review team that their honest and objective observations, responses, opinions and suggestions were expected. They were asked to consider the questions in developing a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats), which would comprise the core of their report. Consequently, the corresponding report reflects solely the views and opinions of the reviewers, and appears to be both thoughtful and comprehensive in its assessment of the Geosciences program at Weber State University.

In their report, the reviewers identified a number of strengths, including the strong student focus and dedication of the active faculty, the curriculum and its strong field basis that effectively utilizes the local geology, the large amount of undergraduate research, student satisfaction, strong advising within the department, and a dedicated staff support person. The department and I agree with these conclusions.

In developing their SWOT analysis, the reviewers made a number of suggestions that are included in the department response. I also address these, below:

- 1) *Mission Statement: As noted by the reviewers, the department is largely succeeding in fulfilling its stated mission, which I perceive to be consistent with the College and University missions. Although not specifically recommended by the reviewers, I recommend that the department should begin as soon as possible to develop a 3-5 year strategic plan to help define future hires (as noted above) and to re-evaluate their curricula relative to the reviewers suggestions (see (2), below). I have learned that the Chair – Dr. Ford – will participate in a national disciplinary workshop - “Geosciences and the 21st Century Workforce”- at Penn State in June, 2013, which should help frame strategic planning discussions within the department. I recommend completion of the strategic plan by not later than the end of the 2014 Spring semester, at which time it should be submitted to the Dean for review.*
- 2) *Curriculum: The review team made several key recommendations regarding the curriculum, which could also help to improve student learning, and should be addressed as part of the strategic planning process recommended above. In general, the department responses indicate agreement with these recommendations, and in some cases (for example: recent decisions to offer Historical Geology and Structural Geology on a yearly basis), they are already moving ahead. The department response nonetheless appears to focus largely on potential curricular changes related to the reviewers GIS recommendations. However, given that the reviewers also noted that “course offerings seem unreasonably large considering number of available faculty,” their suggestions to reduce overlap, to streamline and consolidate, to re-evaluate prerequisites, and to increase the frequency of required courses could, and should be embraced by the department in an effort to develop a leaner yet possibly more flexible curricula that could better meet the needs of students and reduce faculty workload. As a geoscientist who has been involved in such activities in the past, I would be happy to consult with the faculty in this regard.*
- 3) *Student Learning Outcomes and Assessment: The reviewers did not specifically address Student Learning Outcomes and Assessment within the Geoscience programs under review. However, I note in reading the department self-study and in reviewing the checklist provided by the Office of Institutional Effectiveness that the department currently has a reasonably strong Assessment Plan in place. I also urge the department*

to investigate using the ASBOG test as another indicator of student success, per the suggestions of the reviewers.

- 4) Academic Advising: The reviewers noted that academic advising could be improved by 1) providing better advice to students who wish to enter the program, 2) ensuring that consistent advice is given by university and department advisors, and 3) requiring students to meet with department advisors each year. These observations were not translated into recommendations and so there was no response from the department. However, the department is improving their advising, and they should continue to do so. The self-study indicates that most students meet with an advisor yearly, but the department should consider requiring such meetings to ensure that majors stay on track towards graduation.*
- 5) Faculty: In their report, the reviewers commented on several occasions that faculty were being more and more "stretched" as department enrollments and majors increased. However, they also noted that faculty workloads could be reduced by moving to larger introductory sections of courses such as Earthquakes and Volcanoes, and by expanding the use of Canvas, and computer aided-instruction. Moreover, streamlining the curriculum may also lead to workload reductions (see (2)). I support these recommendations and am willing to discuss with the department ways in which I can help them to facilitate such changes. The reviewers also noted that the expected upcoming retirement of essentially one-third of the current faculty should be viewed as an opportunity to recast the department and its programs, enhance geospatial expertise within the department, and increase diversity among the faculty. Moreover, the reviewers also caution the department to plan carefully in this regard, which is a recommendation with which I fully agree and urge the department to embrace. Finally, the reviewers recommended that faculty salary be included as part of external grant funding. Here I assume that the reviewers are recommending that funding for academic year buyouts for faculty involved in research is requested along with summer pay. While this is not the norm, NSF, for example will provide such funding to PIs in institutions with heavy teaching loads such as Weber State. Consequently, I agree with their recommendation.*
- 6) Program support: The reviewers recommended that classroom mediation, storage, and the geospatial lab facilities (GLF) all should be improved. The new Science Lab Building currently in programming and design should help to address each issue. A recently announced NSF award may also help the GLF, and Perkins grant funding may also be an opportunity for future GLF improvements. The reviewers and the department agree that some type of laboratory manager is needed and has been recommended in many past Program Reviews. I have offered the department funding to hire a $\frac{3}{4}$ time lab manager for the upcoming academic year as a proof of concept investment to demonstrate how such a person can improve department programs. Finally, the reviewers suggested that the department establish student teaching assistants via course fees. This is common throughout the college, and I fully support such an incentive in the geosciences.*
- 7) Relationships with external constituencies: The reviewers noted that the department already has strong ties with regional universities and industry. They saw the development of an advisory committee consisting of alumni, industry, and governmental representatives to be an opportunity, and I am aware that the department is already moving in this direction. The reviewers also suggested that the department should encourage its students to develop student chapters of professional organizations such as AEG, SEG, and AAPG (I also suggest AIPG), and that the department should improve communication via social media such as Facebook, etc. I agree with these recommendations and also urge the department to begin to reconnect with its alumni, and to develop a strong alumni network that can serve as a resource for the department and its students. As noted by the reviewers, the very competent and talented Administrative Specialist should be able to help with many of these activities.*

Finally, I recommend that the Geosciences Department undergo a full program review again during the 2017-2018 academic year as per the usual five-year review cycle.

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