



## **Zoology Program Review: Zoology Faculty Response to Site-Visit Report**

30 April 2018

This letter constitutes a response to the Departmental Review Report provided to the Department of Zoology following the site visit that occurred on 22 and 23 February 2018. The review team consisted of Erin O'Brien from Dixie State University, Department of Biological Sciences and Jennifer Turley from Weber State University, Department of Athletic Training and Nutrition. Both team members serve as chairs in their respective departments. This letter responds only to the following recommendations directed to the Department: "(1) faculty engage in more regular discussions about curriculum and lab course content and skills taught, (2) look into the feasibility of adding a shared first-semester life sciences majors course (the equivalent of BIOL 1610/1615), (3) be more consistent in assessing required courses for program learning outcomes, (4) develop an advisement assessment tool, (5) clarify the feasibility and functionality of their external advisory committee".

Responses to Recommendations of the Review Team:

### **Curriculum Recommendations:**

- "The review team recommends that already planned faculty discussions about skills and techniques taught in labs take place to ensure content diversity and prevent overlap."
  - *Agree and Rationale:* Although it is unclear from the Report what skills and techniques overlap among courses, the Department agrees that ongoing discussions are worthwhile. In some cases, overlap is intentional to reinforce and advance specific skills. For example, the Department introduces skills for preparing a scientific manuscripts and lab reports extensively in Zool 1110 and reinforces these skills in Zool 1120. Many upper-division courses then utilize the same skills. Skills for scientific writing and data presentation are critical components of the laboratory curriculum because they are central to being a professional scientist and students need extensive introduction and repeated practice to become proficient.
  - *Action Plan and Timeline:* Discussions on skills and techniques taught in labs will occur as possible during the 2018-2019, 2019-2020, and 2020-2021 school years. The Department will take action if unnecessary overlap exists.
- "Zoology faculty are encouraged to pursue an introductory one-semester majors course such as BIOL 1610/1615 at other USHE schools. The creation of this course could make it easier for students to meet major requirements prior to deciding on which life science to pursue. Release time for one semester for at least one zoology faculty member to engage in this work is recommended along with close collaboration with microbiology and botany."
  - *Agree and Rationale:* Discussions on the possibility of this course have already occurred among the three life science departments (Botany, Microbiology, Zoology). These departments have agreed to explore this possibility. Release time is presently unavailable for this effort.

- *Action Plan and Timeline:* The three life science departments will further explore this possibility during the 2018-2019 school year. If it is determined that such a course is a viable option, then an experimental version of the course would be developed during the following school year and taught at some point thereafter. Any subsequent progress would depend on the success of the experimental course.

**Student Learning Outcomes and Assessment Recommendations:**

- “The review team recommends the department hold a discussion to clean up the majors curriculum map to more accurately reflect the development of topics during a typical four years of coursework keeping in mind that not every class needs to map onto every outcome for assessment purposes.”
  - *Agree and Rationale:* The discrepancies on the curriculum grid are undeniable.
  - *Action Plan and Timeline:* Over the next three school years (2018-2019, 2019-2020, 2020-2021), the department will hold discussions to eventually ensure that the curriculum map is not only complete but logical in its progression. The faculty discussions already describe above will incorporate this topic as well.
- “For core concepts, adopting an outside standardized exam similar to the Majors Field Tests could be used to standardize assessment even though the program emphasis on zoology could create understandable issues with scores relative to peer institutions.”
  - *Agree and Rationale:* Use of a standardized exam would be beneficial. The issue thus far has been identifying a suitable exam along with funds to pay for it.
  - *Action Plan and Timeline:* Over the next four school years (2018-2019, 2019-2020, 2020-2021, 2021-2022), the Department will more seriously investigate this option including determination of the most suitable option and potential funding options.
- “Creating an assessment committee of three Zoology faculty tasked with learning from Weber programs with more developed assessment in place and then proposing a department-wide assessment plan would help to jump start things.”
  - *Disagree and Rationale:* The Department has recently updated the Assessment Plan (2016) and the plan is comprehensive. Broader implementation of the plan is the important next step. The Report outlines the reasons for the difficulties in implementation (i.e. assessment difficulty, lack of institutional assistance, low faculty buy in, lack of follow through from assessment findings).
  - *Action Plan and Timeline:* The Department chair will continue to encourage faculty to follow the assessment plan. Department discussions already planned (described above) will encourage teamwork and idea sharing for facilitating meaningful assessments as part of related efforts to integrate the curriculum (discussed above).
- “End of year department discussions regarding assessment data and appropriate changes to curricula if needed will help close the loop.”
  - *Agree and Rationale:* Department discussions regarding assessment data could be useful, especially for courses taught by multiple professors, although the end of the school year is an inopportune time for such a meeting.
  - *Action Plan and Timeline:* As part of encouraging the assessment process, the Department will hold an annual discussion to review assessment data in November or December each year, after compilation of the data are for the annual assessment report.

### **Academic Advising Recommendations:**

- Add an advisement survey before the start of the senior year or before graduation.
  - *Agree and Rationale:* The department is already working to improve advising opportunities and this is a good idea to receive feedback from students.
  - *Action Plan and Timeline:* Within the next two school years (2018-2019, 2019-2020), the Department will devise two advising surveys. The first will be for students completing the course Diversity of Animals (ZOOL 2220) to gain better insight on early-stage student needs. The second will be for students completing the course Seminar (ZOOL 4990) to gain better insight on needs for students nearing the end of their degrees.

### **Faculty Recommendations:**

- “We suggest targeted advertising of positions in the future to increase the diversity of the pool of applicants.”
  - *Agree and Rationale:* The Department is already working to improve diversity within the Department. We advertised the 2017-2018 positions for new faculty advertised more widely than is required, to all readily available outlets with relevance to each specific position. The two new hires, both women, have increased gender equality within the Department to a 6:7 female-to-male ratio.
    - As part of the hiring process, we provided preference points for applicants from underrepresented groups. For each position, there was a highly qualified diversity candidate in the set of finalists. One of these candidates interviewed, although she did not receive the position. The other initially accepted the interview, but ultimately declined to interview because she took a position at another university.
  - *Action Plan and Timeline:* If even more targeted advertising is possible, the Department is open to this given availability of adequate funding.

### **Relationships with External Communities Recommendations:**

- “Establish more formal and long-term partnerships if you continue your external advisory committee and/or establish a more formal pre-professional advisory committee for student graduates. The requirements of pre-professional students are very different from those looking to work in public lands or zoos after graduation and the department should reflect the diversity of career goals for zoology students in their advisory committee. If this does not allow the advisory committee to be productive, the department should organize their advisory committee(s) by field so that each group is able to provide feedback on the skills needed. Frequent employers of graduates will likely have excellent feedback on skills that could be added to the curriculum. Local companies and non-profits may also be interested in working with student interns. There is no evidence that these employers and intern mentors are helping to inform curriculum development decisions. In addition, advisory committees can be used to help with promoting the program within the regional community and help with assessment of the program (Schaeffer and Rouse 2014).”
  - *Agree and Rationale:* Based on instructions from the Dean, formation of the Department Advisory Board excluded pre-professional advisors because this is already the bailiwick of the College of Science Advising Office. The Department is well aware that this is missing from the Advisory Board but adding members to the board to broaden representation will eventually make the board very large, perhaps too large. The suggestion of separate

advisory committees focused on different fields, perhaps associated with other departments and students clubs as appropriate, seems promising.

- *Action Plan and Timeline:* Within the next four school years (2018-2019, 2019-2020, 2020-2021, 2021-2022), the Department will hold discussions to strategize more formal, long-term use of field-specific advisory committees for Zoology majors in conjunction with other departments in the College of Science and with associated students clubs, placing emphasis on improving departmental curriculum and promoting Zoology within the regional community.