

WSU Five-Year Program Review Self-Study

Executive Summary

The Weber State University Department of Zoology serves diverse roles. Courses meet the life-science general-education requirements, are service courses for students pursuing careers in medicine, and serve science majors from all disciplines. They also facilitate students who major or minor in Zoology or a closely related program.

All courses remain consistent with the Zoology mission statement and measurable learning outcomes. The Zoology curriculum is typical of Zoology and Biology departments elsewhere, meaning it covers the breadth of the field. Courses range from molecular- to ecosystem-scale topics and provide majors with a complete introduction to animal biology. All "major" biological and zoological subjects are covered and many courses also have direct application to medical fields, which makes them important for pre-medical students. Upper-division courses play to the strengths of individual faculty members. This maximizes diversity in content and course design within the curriculum and fosters engaging and enthusiastic teaching.

Although more focused assessment could be done in some cases, there is ample evidence that instruction is effective for student learning. Most courses include active hands-on or high-impact learning opportunities either in laboratories or as part of lecture periods. These activities range from lab reports, dissections, and experiments to term papers, animal collections, and professional presentations. Courses also increasingly establish links between subject matter and external communities.

Along with course content, all Zoology courses also include emphasis on building career skills for students. Depending on the course, there is emphasis on laboratory methods, field methods, data analysis, scientific writing and presentation, and instructional methods. Students have ample and repeated opportunities to develop and become comfortable with skills they will find valuable throughout their education and subsequent careers.

Independent study and professional research are major themes in the Department. Students can enroll in independent-study courses and can gain support for research and travel from the Office of Undergraduate Research. This combination allows many students to gain first-hand research experience. Students also benefit from other research activities of faculty members and are sometimes supported with monies from on- or off-campus research grants. Students routinely present their research findings in classes and at a variety of on- and off-campus venues.

Academic advising is organized to provide career-oriented students with focused, up-to-date direction. Faculty members serve as pre-health-profession (pre-medical, pre-optometry, pre-chiropractic, pre-podiatry), pre-veterinary, wildlife and conservation biology, and graduate-school advisors. Other faculty members serve as general advisors, advisors for Zoology minors, advisors for the Biotechnician program, and advisors for students pursuing Bachelor of Integrated Studies degrees. Much advising also occurs informally during classes and especially (as described above) between faculty mentors and students with whom they conduct research. Graduating students indicate high satisfaction with educational opportunities and advising they received within the Department. Graduating students experience substantial success following departure from WSU.

The Department has a history of maintaining high teaching standards. Many past and present faculty members have received awards for their teaching and they, including long-time Department Chair Sam Zeveloff, set a very high standard for the entire department by their example and by serving as mentors and peer-reviewers for other faculty members. All faculty members are fully qualified within their respective disciplines and are experienced in the classroom. All also conduct research with students and are active and respected within their areas of expertise. All have been promoted to the fullest extent possible given the extent of their employment at WSU. Perhaps most importantly, all faculty members are dedicated to providing an excellent education for students. Thus, it is not surprising that students rank the quality of instruction in the Department to be better than average in all regards. Students give particularly high ratings with regard to course organization and rigor and with regard to instructor enthusiasm and interest.

Administrative support and department facilities are generally adequate for day-to-day operations. Some facilities are relatively old or outdated and a few are only marginally adequate or are problematic. The Department includes a full complement of faculty members qualified to teach the standard curriculum. Classroom and teaching laboratory space is adequate in most cases, with the least suitable space being the teaching laboratory for the Human Anatomy course. All faculty members also have an office and research laboratory space. In some cases, research laboratories are too old or poorly maintained to facilitate research that requires a clean (uncontaminated) environment, ability to accurately regulate temperature, or ability to maintain adequate ventilation.

Regardless, faculty members of the Department make full use of all available facilities and resources. They actively work to improve teaching and research facilities and equipment as time and budgetary constraints allow. They make efficient use of on-campus funding opportunities and also pursue off-campus opportunities when possible. All of these activities in turn improve classes and research opportunities for students and create an environment of scholarship that permeates the Department.

Department faculty members have established myriad links with external communities. These include a variety of collaborations with local-area primary and secondary schools, class and research activities associated with community organizations, and professional service by Zoology faculty members who serve a variety of volunteer roles with community organizations. Zoology faculty members also serve as regional experts within their disciplines and commonly act as experts with regard to community needs or issues or in cases where citizens are seeking expert information. In turn, there are also several alumni or community members that provide monetary support for programs and students within the Department.

As recommended via the last program review, there has been consistent effort over the last five years to focus curriculum in a manner consistent with the Department mission statement and learning outcomes. There has also been continued and increasing use of high-impact and service-learning methodologies within courses and via independent-study. There has been strong emphasis on providing mentoring opportunities and developmental support for newer faculty. Indeed, all faculty members have made maximum-potential progress with regard to tenure and promotion. Overall, the Department remains highly successful and there is a spirit of accomplishment and competence among faculty members and students. There is also a strong desire to continue this success and, where possible, elevate it.