



Departmental Assessment Analysis
(DAA form)

"Capturing the meaning of the assessment for the program."

Program/Degree/ Certificate:	Biology
What does the department think it can do to improve teaching and learning?	<p>One of the largest challenges the Biology Department is facing is having sufficient equipment and staff to meet enrollment demands. While additional modular buildings were recently constructed, this was done to meet inadequate space in the past. Again, there has been another large increase in pre-allied health course offerings to boost campus enrollment numbers. This time, the department has expanded to later evening and weekend offerings. Not all campus resources (open lab hours, testing center, library, etc.) are available to students at these less popular class times. Continuing to keep class sizes small, especially in labs, is critical to maintaining a quality educational experience. All students should have the opportunity to use campus resources. Offering additional "real-world" experiences will help students fully engage with course concepts.</p>
What help or resources are needed from the college to improve teaching and learning?	<p>The Biology Department needs continued help in replacing and supplementing our current equipment to maintain the current curriculum and class sizes.</p> <p>In S-112, the botany lab, we need replacement center benchtops as the current sinks release sewer gas that is dangerous to student health. Replacing benchtop centers in the lab, would also better serve more students in the underutilized room.</p> <p>An increase in department staff, both full time faculty members and instructional assistants (at both the NCC and the Rocklin campus), is desperately needed to avoid overtime and exceeding high reliance on adjunct staff.</p> <p>Some of the aging equipment in Sewell Hall is no longer repairable. The microscopes used for the microbiology class were produced by company that ended production in the early 1970's. In order to replace a part, we have to scavenge from the few extra scopes we have. We need to maintain or replace biology models that are used in labs on all three campuses. Some of the lab sampling equipment required by lab curricula</p>

	<p>are not functional or no longer relevant in “the real world”. Having more modern, electronic probes would give students a chance to train on equipment they are more likely to see in academia or industry.</p> <p>To provide students with practical job skills experiences in field methods for a variety of courses, we need to increase both the department’s transportation budget as well as the available number of appropriate vehicles in the college’s fleet.</p> <p>Lastly, both teaching and learning will be improved if the inequity between lecture-rate salaries and lab-rate salaries can be reduced as this will enable the college to attract and keep the best-qualified faculty.</p>
<p>What are top priorities for improvement?</p>	<p>The top priorities for improvement are (1) to have clean, safe, and adequate physical spaces and equipment on all three campuses in which to teach our students, (2) to have adequate staffing to meet student needs, (3) to increase opportunities for students to interact with course material and concepts in natural (non-lab) situations, both on and off campus, and (4) to work collaboratively through Sierra’s shared governance process to address issues related to the lecture and lab-rate salaries.</p>
<p>How will department implement those priorities?</p>	<p>Department staff will continue to attend Facilities Master Planning Task Force meetings and will be involved in the future building planning process. Department staff will also maintain their involvement with safety issues that affect the working and learning environment in Sewell Hall and on all three campuses. The need for full-time faculty and IA support will continue to be included in the departmental ePAR requests and we will continue to work with Human Resources to ensure that we have an adequate part-time faculty applicant pool from which to hire. The department will continue to rotate Bio 16 courses (field courses) into the schedule, providing students with an ongoing variety of non-classroom experiences, as well as include non-classroom experiences (on- and off-campus field trips) for other Biology courses, where appropriate.</p>
<p>Provide timeline.</p>	<p>This will be an ongoing process as we update our ePAR requests, develop class schedules for the upcoming academic year, and attend pertinent committee meetings throughout the semester as they are scheduled.</p>