

Internal Reviewer Review Report - Animal Science California State Polytechnic University, Pomona

The purpose of this internal review of the Animal Science program is to provide an unbiased examination of the quality of education and service in the program, and to identify opportunities for improvement and growth. After carefully reviewing the program’s Self Study, we met with the Animal and Veterinary Science Department on September 21st. This report is divided into sections based on the lines of inquiry and highlights the strengths, challenges, and recommendations.

Inclusive Polytechnic Identity	Strengths	<p>The mission, vision, and values of the Department of Animal and Veterinary Sciences are well aligned with those of the University and the College of Agriculture. The Department of Animal Science aims at academic excellence “rigorous pedagogy and scholarship environment” and “quality education attuned to the needs of the industry”. Although not explicitly stated in the Mission/Vision/Values Statement, the department is committed to experiential learning by providing students with “hands-on experiences using a ‘Learn by Doing’ philosophy through laboratory activities, internship courses and research”. The Department supports Student Learning and Success through quality education attuned to the needs of the industry and adequate facilities that support quality academic programs. The Department explicitly states their commitment to inclusivity by striving to address “the needs of diverse students who seek knowledge of the animal sciences and their allied industries” and to be “an innovative leader in educating students of diverse ethnicities and urban backgrounds”, as well as to maintaining a “diversity of faculty and students that reflects merit and equity”. Finally, although not explicitly stated in the Mission/Vision/Values Statement, the Department has several initiatives that demonstrate two other University values—Community Engagement and Social and Environmental Responsibility—through volunteering, clubs, and Study Abroad activities.</p> <p>The Department has many initiatives that deliberately address the Polytechnic Identity through: (i) volunteering, where students can apply their knowledge, while engaging in their community and developing their professional skills; (ii) study abroad, which allows students to further develop their knowledge and participating in community services; (iii) internships, where students have the opportunity to prepare themselves for the professions while furthering their knowledge; and (iv) group work, class assignments and research projects embedded in many of the courses, to further students’ knowledge, develop critical thinking, and integrate technology and collaborative learning. Professional skills are further developed through professional advising and Career Day. Finally, student clubs are very active and have a pivotal role in nurturing the department’s Polytechnic Identity.</p>
	Challenges	<p>The Mission/Vision/Values Statement of the Department does not seem to fairly represent some key elements of the Department that are found in alignment with the University’s values:</p> <ol style="list-style-type: none"> 1) The experiential learning and hands-on approach that the Department actually has, as described in the self-report and observed in the curriculum and other initiatives it promotes.

		2) Community Engagement and Social and Environmental Responsibility which the Department develops through volunteering, clubs, and Study Abroad activities.
	Recommendation	We recommend revising the Department’s Mission/Vision/Values Statement to add more explicit language on experiential learning and a “hands-on” approach as well as the Department’s commitment to community engagement and social and environmental responsibility, in order to highlight existing features of the department.

Assessment	Strengths	<p>The Department has a clear and consistent assessment process, in which each SLO is assessed every two or three years, and each year devoted to assessment of one or two SLOs. This assessment plan began to be implemented in the AY 2017-2018.</p> <p>One key finding has been that quantitative reasoning (QR) was below expectation. To improve students’ performance on QR, problem-solving has been emphasized in several courses. The report also notes the efforts to make assignments more accessible to our students. The results of these efforts have not been able to be assessed, because the assessment plan is relatively recent, and because of the COVID pandemic. However, the efforts to improve QR in the students continue to be implemented.</p>
	Challenges	
	Recommendation	

GI 2025	Strengths	<p>For first-time freshmen, the data for 2010-2016 shows the 4-year graduation rates for 2010-2013 were below the GI 2025 goal (38%), ranging between 31% and 35%, but that the 2014-2016 rates were above the goal, ranging 42-52%. The 6-year graduation rates for 2010-2014 were consistently above the GI 2025 goal of 73%, ranging between around 75% and 86.60%.</p> <p>For transfers, according to the data for 2010-2018, AVS achieved the GI 2025 goals of 29% for 2-year graduation, and 85% for 4-year graduation. In</p>
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	<p>addition, there are no perceivable equity gaps for the URM and Pell-eligible students compared to their non-URM or non-Pell-eligible counterparts.</p> <p>One initiative that has proved critical to improve graduation rates was the creation of a general option within AVS, which was added to the Pre-veterinary/Graduate School option. This new option helped many students who now did not have to take a particularly difficult course (Organic Chemistry) that prevented them from graduating or delaying graduation.</p> <p>One initiative that targeted transfer students' success was to reserve some seats for incoming transfers in some courses where they were often unable to enroll because of the timing of their summer orientation.</p> <p>Another key area that helped improve graduation rates has been advising, both at the college (staff advisors) and department level (faculty advisors). The role of advising was particularly helpful to surmount the challenges created by Semester conversion, which advisors solved through course substitutions and other adjustments. AVS faculty expressed their satisfaction with the way faculty advisors work with Student Success advisors.</p> <p>The Department has also implemented some strategies to reduce DWF rates, such as completing the early warning reports to the Office of Student Success, contacting students over the Summer so that they are better prepared when courses begin, placing advising holds to make students meet with an advisor, providing additional material to prepare for exams, to name a few.</p>
Challenges	<p>Despite the observed improvement in DWF rates, the program has identified some courses as having a high DFW rate, and the Self-Report states that the exact causes are not completely known and would require a further dissection of the data would be needed to understand the reasons behind some high DFW rates, and to know if the students that struggle with the courses are majors or non-majors, or for courses with multiple sections, if it is a particular instructor they struggle with. The Self-review also suggests that peer-tutors could further the efforts made by faculty.</p> <p>In addition, the department self-report proposes additional initiatives to improve retention and graduation rates, such as offer more course sections that allow students to graduate timely and encourage student to take bottleneck lower division courses at community colleges and curb uncontrolled intake of new students.</p>
Recommendation	<p>We recommend the department implements all or some of the additional initiatives proposed in the self-report to further improve retention and graduation rates, as well as to lower DFW rates. Some of these initiatives are:</p> <ul style="list-style-type: none"> (i) investigate the reasons for particularly high DFW rate in certain courses; (ii) create—or study the possibility to create—a peer tutoring system; (iii) offer more course sections that allow students to graduate timely, and

		(iv) encourage student to take bottleneck lower division courses at community colleges.
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Technology	Strengths	<p>The self-report offered a good amount of data that gave a clear picture of trends. However, the meeting with the faculty revealed that the data was not very easy to obtain. Both the CSU dashboard and Tableau offered data but this needs to be generated every time and required a lot of work and time. In addition, the authors of the report noticed that the data was not always consistent across these two sources, without a clear understanding of why.</p> <p>The department’s website includes good and clearly presented information, such as the history of the department, the Mission/Vision/Values statement, a brief description of the programs, including the difference between the two options within the Animal Science BS. There is also information about the student clubs, as well as links to resources for students located in the College website.</p>
	Challenges	<p>The faculty indicated that data from students collected through the exit interview would be helpful but that there was a low response rate.</p> <p>The website lacked information that could be useful to current and prospective students: current and previous curriculum sheets and advisors’ availability.</p>
	Recommendation	<p>We recommend the faculty devise some strategies to increase student response rate (e.g., giving class time to complete the surveys).</p> <p>We recommend that the website be updated to include additional information, that will be helpful to current and prospective students, especially, current and previous curriculum sheets, course schedule (that is, in which semesters will each course be (unless all courses are offered each semester) and advisors’ availability. Faculty profiles could also be completed and updated.</p>

Infrastructural/Organizational	Strengths	The program has clear PEOs and SLOs, and the self-study show the alignment between SLOs and the Program Educational Outcomes, as well as the University and College's strategic vision. The AVS faculty we met with reiterated that all initiatives launched within the department are made with the alignment with the College and the University in mind.
	Challenges	
	Recommendations	

Summary

The B.S. in Animal Science is a strong program, providing students with the skills and knowledge needed to be successful in today's industries. The B.S in Animal Science is an impacted program that attracts well-qualified students. It is the only Animal and Veterinary Science Department in Southern California, and it has many livestock species on campus, which allow many students to be exposed to farm animals for the first time during their freshman year. The program prides itself for their learn-by-doing approach to teaching. Almost all of their courses are conducted face-to-face, and many are conducted outside of a physical classroom, where students can work with animals. Some students proceed to a veterinary/graduate school, many are employed in various sectors, including USDA and other federal agencies, state agencies, aquaria, zoos, veterinary hospitals and clinics, food industry, livestock feed industry, and allied industries.

The Self-Review reveals that graduation rates are above the GI 2025 goals and describes the many initiatives that have been implemented to improve these rates. Still, the Self-Review proposes additional initiatives to improve retention and graduation rates as well as to reduce some high DWF rates, which we encourage to pursue.

Two items to highlight here that is not covered in the report sections above is (1) the program's need for additional lab space to be able to offer the required number of lab sections and (2) the concerns the faculty express about their ability to have a successful faculty search process, due to the non-competitive salary and start-up offer to the selected candidate.

We enjoyed reviewing the program's self-study and meeting with the faculty members. We learned a lot about the B.S. in Animal Science, which is an extremely valuable program on our campus. Thank you to all faculty for your hard work and dedication to your program, our students, and our campus community.

Sincerely,

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Signature/Date: Amàlia 09/21/2022

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