



PROGRAM REVIEW

Instructional Program Review Template

Year :
 Plan Type:
 Program :

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- Program Information
- Data Analysis
- Critical Reflection of Assessment Activities
- Evaluation of Previous Plans
- Planning
- Resource Requests
- Author Feedback
- PRC Response

5.1 Program Plans

Based on data analysis, student learning outcomes and program indicators, assessment and review, and your critical reflections, describe the actions to be taken for the next academic year in order of importance (from #1 at the top = highest priority and down from there).

Please be specific. This section and section 6 should include a detailed justification so that the resource prioritization committees understand your needs and their importance. Plans should be actionable, measurable and not just resource requests.

[List related institutional planning goals.](#)

#	Program Plans	<u>Related Institutional Planning Goals</u>	Relationship to Previous Assessment	Expected Impact on Program/Student Learning	Resources Needed
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1	Offer Biol-1 (General Biology) course at Pelican Bay State Prison. It is important that students at PB have the opportunity to take a science course with a laboratory experience in order to fulfill CSU transfer agreements.	Strategic Plan Goal 1: Focus on Learners, Educational Master Plan Goal 1: Ensure Student Success, Education Master Plan Goal 1.2: Improve support for students; and Education Master Plan 1.4: Provide lab equipment and technology to effectively support instructional needs.	Impact on assessment is unknown until we have assessment data from PBSP and current face-to-face sections of BIOL-1. Assessment in the PBSP course must target the same student learning outcomes and all SLOs will be assessed during the first semester to ensure the quality of the adapted PBSP course.	Biology-1 (General Biology) with a laboratory component is scheduled to be offered at PBSP in Fall 2018 and Spring 2019. This course will need new, specialized lab equipment to be stored on the PBSP site (i.e., plastic labware and microscopes with attached tablets). Offering BIOL-1 to PBSP students will fulfill the Districts commitment to providing students with the opportunity to earn a CSU transferable degree which requires a science course with lab. The current biology course (Biol-27) that is being offered at PBSP does not fulfill the science with lab requirement.	Yes	Edit Delete Raise Priority Lower Priority
2	Increase student success by replacing anatomical parts for human multi-torso model at the DN campus.	Strategic Plan Goal 1: Focus on Learners, Educational Master Plan Goal 1: Ensure Student Success, Education Master Plan Goal 1.2: Improve support for students; and Education Master Plan 1.4: Provide lab equipment and technology to effectively support instructional needs.	Practical exams in Biol-6 (Human Anatomy) and Biol-6 (Human Biology) are specimen-based, and often require the ability to recognize and cognitively process three-dimensional information. These anatomical models would help students visualize anatomical structures and help them to achieve learning outcomes. Course learning outcome 1 (Biol-6; Identify and classify the major tissue types, organs and organ systems in the human body, and explain how structure affects function at all levels) and course learning outcome 3 (Biol-8; Relate the structure and function of human organ systems to the maintenance of bodily homeostasis).	The human multi-torso model is an import tool for teaching Biol-6 (Human Anatomy) and Biol-8 (Human Biology). Some of the model parts are missing. Replacing these parts would increase student success with specimen-based lab practical exams. Anatomical models are available to students during open lab periods, independent review, and regularly scheduled class.	Yes	Edit Delete Raise Priority Lower Priority

3	<p>Improve the learning environment in the old Del Norte science lab (DM-26) with new chairs.</p>	<p>Strategic Plan Goal 1: Focus on Learners, Educational Master Plan Goal 1: Ensure Student Success, Education Master Plan Goal 1.2: Improve support for students; and Education Master Plan 1.4: Provide lab equipment and technology to effectively support instructional needs.</p>	<p>The impact of new chairs would create a more comfortable lab experience and help students stay focused during lab classes improving overall student success.</p>	<p>New, comfortable, ergonomic chairs would increase student success and safety in the laboratory. The current chairs are metal benches without back support or cushion that were manufactured in the 60's and 70's. The most common complaint of students in Room 26 is that the chairs are uncomfortable. There are four new chairs in the lab and students compete for access to those chairs over the old ones. Lab courses in this room last 3 hours and 10 minutes, having to sit in a chair with no back support or cushion for that long of a period is uncomfortable and distracts students from learning. It also promotes bad posture and fatigues muscles.</p>	<p>Yes</p>	<p>Edit Delete Raise Priority Lower Priority</p>
4	<p>Improve access to the on-campus community forest. The community forest is an outdoor laboratory used for Environmental Science, Natural History, and General Biology lab courses. There currently is no safe way to cross the creek as the previous foot bridge has rotted away.</p>	<p>Strategic Plan Goal 1: Focus on Learners and Educational Master Plan Goal 1: Ensure Student Success</p>	<p>Impact on assessment is unknown until we have assessment data from both sections that had access to the forest and ones that did not. Having such a rich resource on campus means that there can be fewer off-campus field trips. The college does not provide transportation for students to attend field trips, and lack of transportation is a major barrier for many students. We cannot have a robust field science courses without ready access to the outdoors.</p>	<p>Lack of a suitable bridge impacts the ability of students to use the natural setting of the DN campus for Natural History (Biol-20), Biology (Biol-1), and Environmental Science (Env Sc-10) labs. The lack of a bridge presents accessibility problems, and the faculty cannot use this resource if it is not accessible to all students. The entrance to the forest is adjacent the new Food Forest, which will likely increase interest in accessing the forest. Without a foot bridge, students must climb down a steep creek which is unsafe and hazardous.</p>	<p>Yes</p>	<p>Edit Delete Raise Priority Lower Priority</p>

5	<p>Develop a Canvas-based tutorial for students on how to critically read and logically answer written exam questions, and how to write scientific papers. Students' difficulties with these skills are the subject of ongoing dialog about assessment results in a wide variety of CLOs and courses. We recognize that students can't think or write clearly when they can't recognize clear thinking and writing. The tutorial will use real examples of student responses to exam questions in a quiz-styled tutorial to help them discern between critical analysis with logical exposition and muddled thinking.</p>	<p>Strategic Plan Goal 1: Focus on Learners, Educational Master Plan Goal 1: Ensure Student Success, Education Master Plan Goal 1.2: Improve support for students</p>	<p>Virtually every BIOL department discussion of CLO assessment results leads, eventually, to students' inability to read the question carefully and/or answer the question appropriately and logically. GE Area A, PLO 1 (communicate scientific ideas), Fall 16: The biology faculty have been advocating for a writing prep course that provides the skills for succeeding in science courses.</p>	<p>Expect improved assessment results for all CLOs in all BIOL courses that have written responses as part of the exams and which require students to use the tutorial.</p>	<p>No</p>	<p>Edit Delete Raise Priority Lower Priority</p>
6	<p>Develop and provide promotional flyers for the Biology AS-T degree. This is combined with the request to include "magazine style" racks in the academic buildings to promote these degrees.</p>	<p>2017-2018 Annual Plan "Student Success" goal to increase the number of transfers to 4-year schools (E.P. 4.1.1)</p>	<p>The dialogue session of Institutional Outcome #1 (ILO #1 dialogue at Spring 2017 Flex session) led to a proposal that all areas with ADTs should come up with a plan for the next program review cycle to promote their ADTs. The Biological Sciences are following up on this dialogue-derived directive.</p>	<p>Expect to increase the number of students enrolling in AS-T programs and program courses. This provides better guidance to these students so they are taking the appropriate courses for successful transfer.</p>	<p>Yes</p>	<p>Edit Delete Raise Priority Lower Priority</p>
7	<p>Provide course and program oversight and discipline expertise by hiring a full time biologist with expertise in botany and environmental science to replace Dr. Jeff Hogue, who retired in Spring 2017.</p>	<p>2017-2018 Annual Plan "Student Success" goal to increase the number of transfers to 4-year schools (E.P. 4.1.1) Strategic Plan Goal 1: Focus on Learners, Educational Master Plan Goal 1: Ensure Student Success, Education Master Plan Goal 1.2: Improve support for students</p>	<p>CLOs for majors' BIOL 5 - Botany, ENVSCI 10 - Introduction to Environmental Science, and PLOs for AS-T Biology depend on the level of expertise and continuity that only a full-time faculty member can provide.</p>	<p>Expect to increase number of students, their retention, and success in AS-T Biology, and if approved, AS-T Environmental Science</p>	<p>Yes</p>	<p>Edit Delete Raise Priority Lower Priority</p>

8	<p>Enable hands-on learning with live animals in the field, in the lab, as well as the continued maintenance, specimen replacement, and growth of the of the teaching collection by funding applications for CA Fish and Wildlife Scientific Collecting Permits for Christopher Callahan (DN) and Karen Reiss (EKA)</p>	<p>2017-2018 Annual Plan "Student Success" goal to increase the number of transfers to 4-year schools (E.P. 4.1.1) Strategic Plan Goal 1: Focus on Learners, Educational Master Plan Goal 1: Ensure Student Success</p>	<p>BIOL 15-CLO #4, BIOL 18-CLO #1, BIOL 20-CLO #4, BIOL 4-CLO #4 all depend on examples of zoological diversity.</p>	<p>Increased student engagement and success by using live animals and collected specimens in teaching, as well as continuing specimen-based outreach to the College and wider community.</p>	<p>Yes</p>	<p>Edit Delete Raise Priority Lower Priority</p>
9	<p>Offer Biology-4 (General Zoology) at the Del Norte Education Center to support the new AS-T in Biology. Biol-4 is one of three required core courses for the new AS-T. There are currently no core biology courses offered to students in DN.</p>	<p>Strategic Plan Goal 1: Focus on Learners, Educational Master Plan Goal 1: Ensure Student Success, Education Master Plan Goal 1.2: Improve support for students; and Education Master Plan 1.4: Provide lab equipment and technology to effectively support instructional needs.</p>	<p>New slides will impact student success in course learning outcomes for Biol-4 and PLO's for AS-T in Biology. CLO #2 (Compare and contrast the development, life cycles, anatomical and physiological characteristics of major taxa of animals as well as selected non-photosynthetic unicellular eukaryotes) and CLO #4 (Describe, identify key characteristics, and classify representative specimens to Phylum, or when appropriate, lower taxonomic levels) will be assessed in the Spring 2019 semester.</p>	<p>The new AS-T in Biology is expected to generate student interest in this discipline as many students at the Del Norte campus are interested in transferring into Environmental Science, Biology, Botany, Wildlife, and Forestry programs at Humboldt State. Biology 4 (General Zoology) is one of three required core courses for the new AS-T in Biology. Biol-4 has never been offered at Del Norte and students at this campus are not able to pursue this degree option. The new science lab is equipped to support this course except for specific prepared microscope slides that are unique to this discipline and without these content specific microscope slides, students will not achieve course learning outcomes. Biol-4 will be offered in Spring 2019.</p>	<p>Yes</p>	<p>Edit Delete Raise Priority Lower Priority</p>

10	Increase student success by providing classroom and library access to vital reference materials supporting their major laboratory project.	Strategic Plan Goal 1: Focus on Learners, Educational Master Plan Goal 1: Ensure Student Success, Education Master Plan Goal 1.2: Improve support for students; and Education Master Plan 1.4: Provide lab equipment and technology to effectively support instructional needs.	Biol 2, CLO#1: Describe the anatomy, physiology and biochemistry of microorganisms and the consequential effects of various environmental factors upon them. This plan is intended to increase the low performance noted for some students in this course.	Bergey`s Manual of Systematic Bacteriology is a now available for institutional licensing in an online format. This would dramatically increase student access to this rich and necessary resource. Bergey`s Manual of Determinative Bacteriology is a lower-cost, paperback companion volume containing very brief genus descriptions but extensive tables of biochemical and growth characteristics necessary for the laboratory identification of bacteria. Student labs should include these paperback volumes near every workstation; once students have identified their bacteria, comparing their results to the more comprehensive Systematic volume is needed for writing their final papers. Together, these volumes are indispensable for any well-equipped microbiology course.	Yes	<input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Raise Priority"/> <input type="button" value="Lower Priority"/>
					No ▾	<input type="button" value="Add"/>

The vision for success goals are institutional planning priorities for the next several years. You can find the full Vision for success document at this link ([Vision for Success Goals](#)). Please comment on how your area is planning to address the following during this academic year:

1. Increase the number of completers (including AA-T degrees, AA/AS degrees, and certificates)
2. Decrease the number of average total units a student must take to complete (For example, a discussion of Guided Pathways work in your area might be appropriate here, or larger efforts your area is undertaking to decrease total units to completion)
3. Equity (What is your area doing to promote equity across student groups?)

4. Increase the number of students finding living-wage work in a related field of study (CE areas only need to complete this section)

Plan #5 will help students be more successful the first time around on exams, rather than failing exams and even failing the class while they learn test-taking and question-writing skills. Success breeds persistence.

Plan #6 will ensure students understand the classes they need to take in order to reach their goals and transfer to a four-year institution as a Biology major.

Plan #7 provides for a permanent faculty member to contribute to the newly developed AS-T Biology. The cohesion of the AS-T Biology will suffer without a full time faculty in charge of a core transfer course. This faculty member will provide critical expertise to the program and to the students needing guidance to reach their goals and transfer to a four-year institution as a Biology major.