PROGRAM REVIEW Fall 2021

Program: Environmental Science

Division: STEMS Date: 11/1/2021

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Audience: Deans, Vice Presidents of Student Services and Academic Services, All Planning and Allocation Committees. This document will be available to the public.

Uses: This Program Review will be used to inform the campus and community about your program. It will also be used in the processes of creating Division Summaries, determining College Planning Priorities and allocating resources. A final use is to document fulfillment of accreditation requirements.

Please note: Program Review is NOT in itself a vehicle for making requests. All requests should be made through appropriate processes (e.g., Instructional Equipment Request Process) or directed to your Dean or supervisor.

Time Frame: This Program Review should reflect on program status during the 2021-22 academic year. It should describe plans starting now and continuing through 2022-23.

Sections: There are three sections to this document. Sections and questions identify the name of the committee or office that will use the information and where you can get additional help.

- The first section focuses on general program reflection and planning.
- The second section is a review of curriculum, to be filled out only by programs with curriculum.
- The third section is a review for CTE programs, to be filled out only by these programs.

Topics: The Program Review Glossary defines key terms. Writers should review this glossary before writing: https://bit.ly/2LqPxOW

For Help: Contact Nadiyah Taylor: ntaylor@laspositascollege.edu.

A list of contacts for help with specific sections is provided on the Program Review website under the "tools for writers" tab. [https://bit.ly/3fY7Ead]

Instructions:

- 1) Please respond to each question with enough detail to present your information, but it doesn't have to be very long.
- 2) If the requested information does not apply to your program, write "Not Applicable."
- 3) Optional/suggested: Communicate with your dean while completing this document.
- 4) Send an electronic copy of this form to Nadiyah Taylor and your dean by when?

Links:

Program Review Home Page Fall 2020 Program Reviews Frequently Asked Ouestions

Section One: Your Program In 20-21 – Please check N/A where relevant

A. Accomplishments: How did your Program's accomplishments during AY20-21 support the newly revised college mission, the goals of the Educational Master Plan, and/or the President's Call to Action on anti-racism? Areas to consider include impacts to students by race/ethnicity, gender, sexuality, age, or disability status, or those disproportionately impacted by the shift to remote instruction and services.

- College Mission
- Educational Master Plan
- Presidential Task Force: Call to Action

Description	Mission	Master	Presidential
		Plan	Task Force
1 Established a MOU with University of California to run a section of the California Naturalist Certificate Program. Attempting to run the section through Community Education.	X	X	
2 Continuing to work on a laboratory course that will meet the laboratory science needs of EVST 5 students	X	X	
3 Developed an online version of EVST 5 in both synchronous and hybrid modes.	X	Х	
4			
5			
6			

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B. Challenges, Obstacles and Needs: What significant challenges or obstacles did your Program face during AY20-21 in supporting the newly revised college mission, the goals of the Educational Master Plan, and/or the President's Call to Action on anti-racism? Areas to consider include impacts to students by race/ethnicity, gender, sexuality, age, or disability status, or those disproportionately impacted by the shift to remote instruction and services.

____N/A

Description	Mission	Master Plan	Presidential Task Force
1. There is no faculty release time to work this degree program, including on equity initiatives (e.g. student focus groups and surveys and persistence projects), or on reworking the curriculum to look at department wide policies on topics such as culturally relevant content and grading policies.	X	X	X
2 We see the success gap with Latino and African American students but we do not know why it is happening.	X	X	X
3 Lack of coordination between faculty in this multidisciplinary program that crosses divisions. For example, it is difficult to look at disaggregated SLO data. This	X	X	X

is partially because the program only has one class. As more departments enter SLO data then we may be able to work together look at dissagradated PSLO data for the			
Environmental Science and Environmental Studies majors.			
4 We have tried to offer Field Biology (Bio 70) but had to cancel it due to low enrollment. We are trying again this spring 2022.	X	X	
5 In developing a new lab class for EVST 5 and Bio 40 there are a few challenges besides the lack of time to work on it. There could be a single lab that meets the needs of both courses, but this is problematic in terms of articulation, instructional equivalency, and coordination. Such a lab would meet the needs of students needed a lab in either the physical or natural sciences to graduate, and for Environmental Science students needed to fulfil transfer requirements to local universities.			
6			

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C. Planning: What are the most important plans, either new or continuing, for your Program? $___N/A$

Plan	New	Continuing	Short term	Long term
Complete the curriculum to add a lab component to EVST 5 and Bio 40.		X	X	
Develop certificate programs in Environmental Studies. These can include, but are not limited to, Sustainable Development, Energy Auditing, Wildlife management, and Corporate Sustainability. These certificates could allow students to complete a portion of the EVST (and possibility Biology or Environmental Science) major should they wish to complete the major later.		X		X
Develop a non-credit class for the CA Naturalist Certificate class so we could offer through LPC instead of Community Education		X	X	
Include lab tech support for any new labs that are developed. This may be accomplished by increasing the lab tech position in physics from 10 to 12 months, hiring a part time lab tech in physics, or adding to the load for chemistry and biology lab techs as those departments see fit.			X	X

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D. How have your program's interactions with students? For example, working with allocatio XN/A	the larger campus systems benefitted your n committees, participation on committees, etc.
Campus system or Committee	How has it benefitted your students?
E. If you have outreached to students in your dinformation about what you discovered and ho	ow you have used the feedback
Describe student outreach used to gather feedba For example, through surveys, conversations, etc	
i or example, un ough surveys, conversations, eu	
What did you learn?	
How will you use the feedback?	

Section Two: Data Analysis – Quantitative and Qualitative

A. IR Data Review: Describe any significant trends in your program's data provided by the office of Institutional Research and Planning. (Note: Not all Programs have IR data available; if your program does not have a data packet or dashboard data, you may note that in the response box.) You may also discuss any other data used by your program for decision-making and planning.

- IR Data packets are available here: https://bit.ly/2IYaFu7 will be updated with fall 21 data
- Course Success Rates Dashboard can be found at the bottom of this page: https://bit.ly/2Y9vGpl

There was no IR Data packet for Environmental Science but we were able to use the dashboard to look at some data.

Some groups have very small sample sizes because this program data is based on a single class. This makes it challenging to examine patterns.

Gender: Last year our data show that women were more likely to enroll in EVST 5 (55%) and more likely to succeed (78%) compared to men (41% enrollment, 62% success). Men were also more likely to withdraw (26%) compared to women (15%).

Ethnicity: Some demographics are well above the set standard [Asian, (91%), Filipino (100%), Multi-ethnic (85%), White (73%)] but other groups have much lower success rates [Latino (57%), Filipino (60%), African American (60%), Multi-ethnic (56%)].
Unit Load: Full Time students were more likely to succeed (76%) than Part time low unit (57%) and part time high unit students (62%). Full time students were also less likely to withdraw (18%) than low unit Part Time students (29%) and high unit Part Time students (23%)
Income Status: We did not notice any trends with income status
Disability Status: Success was higher in students with no disability (71%) compared to students with a disability (60%); however, the sample size is small for the second group, only 5 people.
This is a cross-disciplinary program, which makes it difficult to track student success in the entire degree plan because it spans many departments and divisions on campus. We have looked at Bio 40, another important class in this degree. In general the Bio 40 class is usually offered in a DE format. It had a very low success rate (55%) in 2019- 2020 but the success rate increases to 60% in 2020-2021. To examine Race-Ethnicity we would need to get course level data on demographics from Institutional Research.
B. Program-Set Standard (Instructional Programs Only): The program-set standard is a baseline that alerts programs if their student success rates have dipped suddenly. There may be many valid reasons a program does not meet the Program Set Standard; when a program does not meet this standard, they are simply asked to examine possible reasons and note any actions that should be taken, if appropriate.
Program-set standard data can be found on this page:
 Did your program meet its program-set standard for successful course completion? _X_yesno
• If your program did not meet your program-set standard, discuss possible reasons and how this may affect program planning or resource requests.

SLOs/SAOs:

For assistance with these questions, contact the SLO Committee Chair. [https://bit.ly/3fY7Ead]

Each year programs must discuss how their PSLOs, CSLOs, or Service Area Outcomes (SAOs) support the College Mission. This helps us to see how our students are progressing in their learning.

You should complete ONE of the following three sections. Please choose the option that is most appropriate for your program:

C1: Instructional Programs with PSLOs
C2: Instructional Programs without PSLOs or with Special Circumstances
C3: Non-Instructional Programs

Go directly to the section you chose. If you are not sure which option to pick, contact the SLO Committee Chair or Program Review Committee Chair for assistance.

C1: Instructional Programs with PSLOs

(1) Please list the PSLO(s) that were reviewed in this last cycle and explain why these were chosen.
(2) What percentage of faculty completed the planned assessments? (run Faculty Participation report from last year)%
(3) Did you get the assessment data that you needed to complete this report? If not, then describe the barriers that you can identifyYESNo
(4) Discuss the findings of the PSLO(s) that were up for review last year (according to your 3-year planning template). What conclusions can be drawn about student learning?
(5) Was the data disaggregated and, if so, on what parameters? What, if any, equity issues emerged?

(6) List changes that you plan on making to improve student learning and address inequities.

(7) Discuss the challenges, if any, to improving student learning and equity. You may refer back to items listed in Section 1B.
(8) Are you planning on revising on your 3-year planning template? If so, describeYESNo
C2: Instructional Programs without PSLOs or with Special Circumstances
CSLO Assessments: Student Learning
(1) List the CSLO(s) that were up for review last year (according to your 3-year planning template) and explain why your department selected these CSLOs for review.
Upon completion of EVST 5, students should be able to explain the practical meaning of sustainably in terms of climate change and environmental degradation on a planet with limited resources and a growing population.
We chose this CSLO because EVST 5 is a key course common to both the Environmental Studies and Environmental Science degrees. Because both degrees are interdisciplinary, combining data from disparate disciplines is difficult and less meaningful than focusing on outcomes from this single course.
(2) What percentage of faculty completed the planned assessments? (run Faculty
Participation report from last year). 100 %

(3) Discussion-based analysis of student learning: Using the CSLO data and answers to the reflection questions, what type of conclusions can be made about student learning?

The data shows that students off all genders and ages tend to do well in EVST 5. Since the numbers are relatively small for a statistical sample, it is relatively difficult to draw firm conclusions about race, gender, and age. Due to the low numbers, race data was found to be inconclusive.

(4) Describe the pertinent findings. What, if any, equity issues emerged?

Students who stated their gender as female tended to do considerably better than male students in mastery and above average. Male students tended to be overrepresented in the below average and no demonstrable achievement category, but low numbers make gender-based conclusions about the lack of achievement dubious at best.

Regarding performance as a function of age, students under 21 dominate all categories simply as a function of their much greater numbers. However, all students over 21 fell into their mastery or above average category indicating that life experience may play a positive role in both understanding course material and also the importance of issues discussed in class

(5) List changes that you plan on making to improve student learning.

There are no obvious strategies needed to address the disparities noted above. It would appear that topics of interest to male students could be identified and emphasized, or possibly male students may need more frequent reminders about turning in assignments on time, as well more advice and reminders about preparing for quizzes and exams.

Assessment Process: To be completed by the department/program or the SLO Coordinator

(1) List changes that you plan on making to improve student learning and address inequities.

No immediate changes are required, although continued attention to trends may necessitate strategies to improve learning in the near future.

(2) Discuss the challenges, if any, to improving student learning and equity. You may refer back to items listed in Section 1B.

Some students take EVST 5 without significant college experience in classes such as English or Math. The single requirement/advisory for taking the class is "Eligibility for English 1A." **However, the edibility requirement for English 1A has been eliminated college wide so students are taking the class with less than adequate reading and critical thinking abilities**. In a future program review, we will examine student success as a function of English and also math courses completed.

(3) Are you planning on revising your 3-year planning template? If so, describe.
YES No
<u> </u>
C3: Non-Instructional Programs
SAO Assessments:
Support of Student Learning
(1) List the SAO(s) that were up for review last year (according to your 3-year planning template) and explain why your department selected these SAOs for review
(2) What percentage of faculty completed the planned assessments? (run Faculty
Participation report from last year)%
(3) Discussion-based analysis of student learning: Using the SAO data and answers to the reflection questions, what type of conclusions can be made about student
learning?

(4) Describe the pertinent findings. What, if any, equity issues emerged?
(5) List changes that you plan on making to improve student learning.
Assessment Process: To be completed by the department/program or the SLO Coordinator
(6) List changes that you plan on making to improve student learning and address inequities.
(7) Discuss the challenges, if any, to improving student learning and equity. You may refer back to items listed in Section 1B. Are you planning on revising on your 3-year planning template and, if so, describe?
(8) Are you planning on revising on your 3-year planning template? If so, describe. YESNo

Program Review Suggestions (optional): What questions or
suggestions do you have regarding this year's Program Review
forms or process?
C3: Non-Instructional Programs
SAO Assessments:
Support of Student Learning
(1) List the SAO(s) that were up for review last year (according to your 3-year planning
template) and explain why your department selected these SAOs for review.
(2) What percentage of faculty completed the planned assessments? (run Faculty Participation report from last year)%
(3) <u>Discussion-based analysis of student learning</u> : Using the SAO data and answers to the reflection questions, what type of conclusions can be made about student learning?
(4) Describe the pertinent findings. What, if any, equity issues emerged?
(5) List changes that you plan on making to improve student learning.

Assessment Process: To be completed by the department/program or the SLO Coordinator

(6) List changes that you plan on making to improve student learning and address inequities.

Section Three: Curriculum Review (Programs with Courses Only)

For assistance with this section, contact the Curriculum Committee Chair. [https://bit.ly/3fY7Ead]

The following questions ask you to review your program's curriculum. To see the last outline revision date and revision due date:

- 1. Log in to CurricUNET
- 2. Select "Course Outline Report" under "Reports/Interfaces"
- 3. Select the report as an Excel file or as HTML
- A. Title V Updates [Curriculum Committee]: Are any of your courses requiring an update to stay within the 5-year cycle? List courses needing updates below. Reminder: updates to course title or units, and course deactivations, will require updating any program they are associated with. List programs requiring updating in question (B).

Course Name & Number
YESXNo
B. Degree/Certificate Updates [Curriculum Committee]: Are there any programs
requiring modification? If yes, list them below.
requiring mounication. If yes, list them below.
YESXNo
Certificate or Degree
C. Are there any courses or programs for which a non-mandatory update is planned?
YESXNot at this time

If yes, explain details, rationale, or any support that might be helpful
D. Does your program plan to create any new courses or programs this year?
XYESNo
If yes, please provide details and the rationale
We may create a non-credit class for the CA Naturalist Certificate.

Section Four: CTE Updates

(CTE Programs Only) Vicki Shipman will provide you with or support any data needs

A.	Labor Market Conditions: Examine your most recent labor market data (within the last 2 years).
-	Does your program continue to meet a documented labor market demand?YESNo
2)	Does this program represent a training need that is not duplicated in the college's service area?YESNo
Please	explain
В.	Advisory Boards: Has your program complied with advisory board recommendations?YESNo If not, please explain.
	ong Workforce Program Metrics: Utilizing LaunchBoard, review the Strong Workforce am Metrics. Review the data and then answer the following questions.
	es your program meet or exceed the regional and state medians for increased enrollments, etions, and/or transfer since your last program review?
	YESNo
If not,	what program improvements may be made to increase this metric?

C2. Does your program meet or exceed the regional and state medians for students gaining employment in their field of study ?
YESNo
If not, what program improvements may be made to increase this metric?
C3. Does your program meet or exceed the regional and state medians for student employment rates after leaving the college?
YESNo
If not, what program improvements may be made to increase this metric?
C4. Does your program meet or exceed the regional and state medians for increased student earnings and median change in earnings?
YESNo
If not, what program improvements may be made to increase this metric?