

PROGRAM REVIEW Fall 2022

Program: Environmental Science

Division: Science, Technology, Engineering and Mathematics

Date:

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SLO/SAO Point-Person: Robin Rehagen

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 creating Division Summaries, determining College Planning Priorities, and allocating resources. The 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 2022-23 academic year. It should describe plans starting now and continuing through 2023-24.

Sections: There are two 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 focuses on data analysis, including SLOs/SAOs/PSLOs
- The final section is a review of your pathway maps and curriculum, to be filled out only by programs with curriculum offerings.

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 November 1, 2022**

Helpful Links:

[Program Review Home Page](#)

[Fall 2021 Program Reviews](#)

[Frequently Asked Questions](#)

Throughout this document you'll see that equity is a guiding principle.

Here is the LPC definition:

Las Positas College will achieve equity by changing the impacts of structural racism, ableism, homophobia, and systematic poverty on student success and access to higher education, achieved through continuous evaluation and improvement of all services. We believe in a high-quality education focused on learning and an inclusive, culturally-relevant environment that meets the diverse needs of all our students.

LPC Equity Definition: Equity is parity in student educational outcomes. It places student success and belonging for students of color and disproportionately impacted students at the center of focus.

Section One: Your Program In 21-22 – Please check N/A where relevant

A. Accomplishments: Identify accomplishments from the 21-22 AY.

Some areas you may want to note in your explanation are:

- Did your accomplishments support your program's plans identified in 21-22 PR
- Did they relate to guided pathways, and/or
- Did they support areas in the equity definition above

_____ N/A

Accomplishments
1 Developed a laboratory class to pair with EVST 5
2 Developed an Environmental Chemistry (Chem 6) class
3 Working on updating our Environmental Science and Environmental Studies degrees to include these new classes (Chem 6 and EVST 5 lab)
4 Ran the UC California Naturalist Certificate class through Community Education. Class was full with a waitlist.
5 Updated the Field Biology class to allowed for a P/NP option in anticipation of combining it with the UC California Naturalist Program
6 Shuldman attended the UC California Naturalist Program Conference

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B. Challenges, Pain Points, and Needs:

What significant challenges or obstacles did your Program face during AY 21-22 especially related to accomplishing program goals/plans? You may want to consider areas in the equity definition on page 2.

_____ N/A

Challenges/Pain Points/Needs
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.

2. We see the success gap with Latino and African American students but we do not know why it is happening.
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 is partially because the program only has one class. As more departments enter SLO data then we may be able to work together to look at disaggregated 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 plan to run it again in spring 2024 and may combine it with the UC California Naturalist Certificate Program
5.
6.

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C. Reflecting on your program's experiences from 2020 - to 2022, what innovations or new processes did you integrate that you would like to continue?

_____N/A

The major changes this year were the new courses that we developed and offered. Faculty developed a new lab for EVST 5 and a new Environmental Chemistry class (those have not been offered yet). We also updated Field Biology to have a P/NP option and IGETC transfer. We changed Field Biology so we can incorporate the UC California Naturalist Certificate as part of that class. In spring 2022 we offered the UC California Naturalist Certificate through Community Education.

D. Explain one way that your program is connected to the College Mission and/or Educational Master Plan. Identify the specific elements.

- [College Mission](#)
- [Educational Master Plan](#) (see pages 72-76)

_____N/A

We are connected to the part of the mission that states, " offer educational opportunities and support for completion of students' transfer, degree, and career-technical goals while promoting lifelong learning". We added two new lab classes that students can use for GE requirements or these two degrees. In addition, the UC California Naturalist Certificate class was offered through Community Education and the entire class was made up of

community members interested in lifelong learning. That class filled and had a waitlist. Some members of the Naturalist Certificate class were completing the class for their jobs.

E. Planning: What are the most important plans, either new or continuing, for your Program?

_____N/A

Plan	New	Continuing	Short term	Long term
We have considered adding an optional lab to Bio 40. Another option we are considering would be to offer the UC California Climate Stewards program as part of the lab. This would require instructors to attend the UC California Climate Stewards Training.		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	

Tab to add more lines as needed

F. If you have outreached to students in your department, program, or classes, please share information about what you discovered and how you have used the feedback.

___X___N/A

Describe student outreach used to gather feedback. For example, through surveys, conversations, etc.	
What did you learn?	
How will you use the feedback?	

G. Are there institutional barriers to the equity work that your program would like to engage in, and what suggestions do you have for minimizing or eliminating these barriers? (See page 2, for the equity definition)

_____N/A

Barrier	Suggestions
No course release for coordinating these programs. Without course release time to work on improving the program and making changes it is difficult to address equity and make improvements.	Provide some course release for program coordinators.

Section Two: Data Analysis – Quantitative and Qualitative

A. IR Data Review: Discuss any significant trends in the data provided by the Office of Institutional Research and Planning (or any other data you use for decision-making 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.)

- IR Data packets are available here (posted Fall 22): <https://bit.ly/2lYaFu7>
- Course Set Standard Overview & Success Rates Dashboard can be found in the middle of this page: <https://bit.ly/2Y9vGpl>

Looking at the success rate in EVST 5 there was large difference in success this year compared to the previous few years. This year was 58%, 2020-2021 was 70%, 2019-2020 was 61% and 2018-2019 was 70%. There are no discipline packets provided for Environmental Science and Environmental Studies.

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 are 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?
____ Yes ___X___ No
- If your program did not meet your program-set standard, discuss possible reasons and how this may affect program planning or resource requests.

The program set standard for this is based only on EVST 5 (it is 66%) but last year's success was 58%. EVST 5 is an interdisciplinary class as well as being a main course for a major. However, other classes in the degree (Bio 40) had a 72% success rate and Physical Geology (Geol 1) had a 94% success rate. The difference may be that Bio 40 and Geol 1 have been taught online with experienced online instructors for many years, however EVST 5 had to rapidly switch to online format due to the COVID-19 pandemic. Another factor is that EVST 5 was taught in online synchronous format but Geol 1 and Bio 40 were taught in primarily asynchronous online formats.

C. SLOs/SAOs: Assessment of Student Learning and Support

Program Review is our major source of data on student learning for the college and is therefore regularly reviewed. *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.*

For assistance with these questions and instructions on how to run the necessary reports in eLumen, [click here](#).

You should complete at least one of the following three sections. Please choose the option(s) below that are appropriate for your program - Go directly to the section(s) you chose.

- [C1: Instructional Programs with PSLOs \(disaggregated PSLOs\)](#)
- [C2: Instructional Programs with CSLOs \(Departments without degrees, non-major courses, and/or other courses up for assessment\)](#)
- [C3: Non-Instructional Programs \(SAOs\)](#)

C1: Instructional Programs with PSLOs (disaggregated PSLOs)

- 1) To assess PSLOs, CSLOs must be correctly mapped to only one PSLO within eLumen and every mapped CSLO must have assessment data. Please insert a checkmark in one of the following options that correctly describes your data and move on accordingly.
- If the CSLOs are mapped correctly and there is data for each CSLO, then continue to question 2.
 - If the CSLOs have assessment data and the mapping needs to be completed, then complete the mapping within eLumen ([See SLO Handbook, p. 7](#)) and continue to question 2.
 - If not all of the mapped CSLOs have assessment data, then you cannot assess the PSLO. In this case, continue to question C2.

2. Based on your current [3-year plan](#), list the PSLO(s) for the academic year 2021-2022 that your program selected to review and explain why these were chosen.

2) What percentage of faculty completed the planned assessments for the selected PSLO? ([run Faculty Participation report](#) from last year). _____%

3) Non-disaggregated Analysis of PSLO(s): In general, what conclusions can be drawn about student learning in your program?

4) Disaggregated Analysis of PSLO(s) to identify potential inequity: Disaggregation allows you to examine inequities in student learning outcomes within sub-populations in your program. [See the Guide](#) for instructions on how to disaggregate PSLO data.

Which variables did you use to disaggregate the data? Mark all the apply.

- | | |
|-----------------|--------------------|
| ● Gender | ● First Generation |
| ● Age | ● DE |
| ● Ethnicity | ● Online |
| ● EOPS | ● Hybrid |
| ● Veteran | ● Fact-to-Face |
| ● BOG Recipient | |

- 5) Did your data reveal any patterns of inequity? If so, please explain those patterns.

- 6) Identify any challenges facing your department that may contribute to inequitable outcomes as revealed by your disaggregated PSLO data. (Refer to section 1B if needed)

- 7) Based on discussion with others in your program, explain potential changes that will improve student learning and address inequities identified through analysis of disaggregated PSLO data.

- 8) The 2022-2023 Academic year is the last year in our 3-year assessment cycle. [Please review your 3-year plan](#) and verify that all of your courses will be assessed by June 2023.

Will all of your courses be assessed by June 2023?

____ Yes ____ No

If not, please update your 3-year plan to include any courses you missed or if you plan to revise your 3-year plan, then send your updated plan to the [Curriculum and SLO Specialist](#), and the [SLO Chair](#).

- 9) Are you planning on updating any CSLOs or PSLOs?

____ YES ____ NO

(If yes, then you may do this through eLumen, see the [SLO Handbook](#) if you need instructions on how to do this.)

- 10) If you experienced any challenges in completing your PSLO assessment process please list those in the box below along with any items that would help you improve this process in the future.

C2: Instructional Programs With CSLOs - Departments without degrees, non-major courses, and/or other courses up for assessment

1. Based on your current [3-year plan](#), list the CSLO(s) for the academic year 2021-2022 that your program selected to review and explain why these were chosen.

This is an interdisciplinary major. There is only one environmental studies class offered at LPC (EVST 5), so this is the course in which we will evaluate the CSLOs and use them to reflect upon the needs of the program.

Unfortunately, no SLOs were assessed last year, but we are in the process of developing a 3-year plan, and for this coming year (2022-2023) we plan to assess the following CSLO for EVST 5:

“Upon completion of EVST 5, student should be able to evaluate energy efficiency in residential spaces and develop a plan to reduce energy use and cost.”

2. What percentage of faculty completed the planned assessments for the selected CSLO? (run [Faculty Participation](#) report from last year). ____0____%

3. [Using the CSLO data and reflection questions](#), what are some conclusions?

N/A

4. List changes that you plan on making to improve student learning.

N/A

5. The 2022-2023 Academic year is the last year in our 3-year assessment cycle. [Please review your 3-year plan](#) and verify that all of your courses will be assessed by June 2023.

Will all of your courses be assessed by June 2023?

___ Yes ___x___ No

If not, please update your 3-year plan to include any courses you missed or if you plan to revise your 3-year plan, then send your updated plan to the [Curriculum and SLO Specialist](#), and the [SLO Chair](#).

6. Are you planning on updating any CSLOs?

___x (possibly)___ YES _____ NO

(If yes, then you may do this through eLumen, see the [SLO Handbook](#) if you need instructions on how to do this.)

7. If you experienced any challenges in completing your CSLO assessment process please list those in the box below along with any items that would help you improve this process in the future.

We wish it were possible to disaggregate CSLO data.

C3: Non-Instructional Programs (SAOs)

1. Based on your current [3-year plan](#), list the SAO(s) for the academic year 2021-2022 that your program selected to review and explain why these were chosen.

2. What percentage of staff completed the planned assessments for the selected SAO(s)? (run [Faculty Participation report](#) from last year). _____%

3. Based on discussion with others in your area: Using the [SAO data and reflection questions](#) or other sources of data, what conclusions can be made?

* If you used other sources of data, briefly explain below.

4. List changes that you plan to improve outcomes in your service area.

5. The 2022-2023 Academic year is the last year in our 3-year assessment cycle. Please review your [3-year plan](#) and verify that all of your courses will be assessed by June 2023.

Will all of your courses be assessed by June 2023?

☐ Yes ☐ No

If not, please update your 3-year plan to include any courses you missed, or if you plan to revise your 3-year plan, then send your updated plan to the Curriculum and SLO Specialist, and the SLO Chair.

6. Are you planning on updating any SAOs?

☐ YES ☐ NO

(If yes, then you may do this through eLumen, see the SLO Handbook if you need instructions on how to do this.)

7. If you experienced any challenges in completing your SAO assessment process please list those below, along with any items that would help you improve this process in the future.

Note: There is an opportunity to give feedback on the PR template on the last page if you won't be completing the next sections

Section Three: Guided Pathways & Curriculum Review

(Programs with Courses Only)

For assistance with these questions, contact the [Curriculum Committee Chair](#)

Part One: Guided Pathways: Your program's work with guided pathways

A. Program Maps - [The Program Maps \(degree and certificate course sequences\) are found in Academic & Career Pathways](#)

Up-to-date Program Maps are used by students in your pathway, for data collection to support in-reach to students in your Pathway, predictive scheduling recommendations for Discipline Plans, and may influence the allocation of FTEF.

Please compare each Program Map to your current course offerings and course sequencing. Pay close attention to prerequisite information and to classes that may only be offered particular terms.

1) Are your Program Maps accurate?

- Yes, all of my maps are accurate
- **No.** The Program Map for ____ Environmental Studies AA_____(degree/certificate name)_____ Requires an update
 - **Requires a non-curricular change (ie: course sequencing)** Please consult your [Pathway counseling faculty liaison](#)
 - I contacted Jared about changing the map. Students should take chemistry (either Chem 31/6 for Environmental Studies Majors or Chem 1A for Environmental Science majors BEFORE taking EVST 5). Environmental Studies students should take Chem 31 in the fall and EVST 5 in the spring.
 - **Curricular Change** (Program modifications) - Modifications are initiated through the Curriculum Committee. For mapping support contact the [Curriculum & SLO Specialist](#).

Part Two: Curriculum Review

For assistance with this section, contact the [Curriculum Committee Chair](#).

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

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]: Do you need to update any courses to stay within the 5-year cycle? List courses requiring 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 (C).

☒ YES ☐ No

Course Name & Number
EVST 5 - needs to be updated by 11/5/23

B. Degree/Certificate Updates [Curriculum Committee]: Do any programs require modification in this cycle? If yes, list them below.

Reminder: Program modifications sent to the Curriculum Committee for approval require an updated Program Map. For mapping and curriculum support please contact the [Curriculum & SLO Specialist](#).

☐ YES ☒ No

Certificate or Degree

C. Are there any courses or programs for which a non-mandatory update is planned?

Reminder: Program modifications sent to the Curriculum Committee for approval require an updated Program Map. For mapping and curriculum support please contact the [Curriculum & SLO Specialist](#).

☒ X ☐ YES ☐ Not at this time

If yes, explain details, rationale, or any support that might be helpful to the committee.

We are going to update the Environmental Studies and Science degrees. The Environmental Science degree will have the new EVST 5 lab added. The Environmental Studies degree will have the new EVST 5 lab added and students can take either Chem 31 OR the new Chem 6.

D. Does your program plan to create any new courses or programs this year?

Reminder:: New program proposals require a Program Map for Senate approval. Please **contact the Curriculum & SLO Specialist** if you are planning a new program.

☐ YES ☒ X ☐ No

If yes, please provide details and the rationale

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E. Are there any courses that you plan to deactivate or sunset?

☐ YES ☒ X ☐ No

Course Name & Number

Program Review Suggestions (optional): What questions or suggestions do you have regarding this year's Program Review forms or process?

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