Program: Environmental Studies Division: MSEPS Date: Sept. 30, 2017 Writer(s): Eric Harpell SLO/SAO Point-Person: Mike Ansel

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.

Time Frame: This Program Review should reflect on program status during the 2016-17 academic year. It should describe plans starting now and continuing through 2017-18. This document also provides the opportunity to describe more long-term plans (optional).

Sections: The first section of this Program Review focuses on general program reflection and planning. The second section is a review of curriculum. Only programs with curriculum need to complete Section 2. The third section is a CTE update, to be completed by CTE programs only.

Topics: A list of topics of particular interest to Program Review readers can be found here: <u>https://goo.gl/23jrxt</u>

Help: Contact Karin Spirn: kspirn@laspositascollege.edu

Instructions:

- 1) Please respond to each question as completely as possible.
- 2) If the requested information does not apply to your program, write "Not Applicable."
- 3) Optional: Meet with your dean to review this document before October 13.
- 4) Send an electronic copy of this form to Karin Spirn and your Dean by October 16

Links:

Program Review Home Page: <u>https://goo.gl/XATgjJ</u> Fall 2016 Program Review Updates : <u>https://goo.gl/YV8QOt</u> Frequently Asked Questions: <u>https://goo.gl/ilhRtt</u>

A. Data Review: Describe any significant changes to your program's data since last year's Program Review Update (Fall 2016).

Possible sources of relevant information might include, but are not limited to, the following:

- Data generated by your program
- Data from the Office of Institutional Research (<u>https://goo.gl/WuR9cQ</u>)
- CEMC Data
- Labor Market Data
- SLO/SAO Data

The EVST rogram continues to have 0.4 FTEF per year since the Fall of 2014. That means there have continued to be one three-unit section of EVST 5 semester. The classes have continued to remain full or very close to it.

A review of the OIR Data has revealed no significant changes over the past three years. Changes that have occurred are generally positive in terms of enrollment, success rate, and productivity. In particularly are WSCH/FTEF rates have been averaging close to 700.

- Enrollment: In Fall of 2017 there were 41 students enrolled, identical to the enrollment of 41 in 2016 and similar to the enrollment from the previous two fall semesters. In spring of 2017, there were 47 students enrolled, a twelve percent increase over the enrollment of spring in 2016, and about ten percent higher than the average over the past 4 spring semesters.
- 2) Demographics: Overall, approximately equal numbers of male and female students have enrolled if fall 16 and Spring 17 are considered together, similar to enrollment in 2015/2016 and 2014/2015. Other than students reporting as white, Latino students are the next largest demographic. Interestingly a significantly smaller number of Latino students enrolled in fall semester compared with spring (8 to 15) over the past two years. Other than that, the numbers are little changed over the past four years.
- 3) Course Success and Completion rate: 73% of students succeeded in EVST 5 in Fall 16, compared with 69% in fall 2015, while 77% succeeded in Spring 17 while 66% succeeded in spring of 16. Other than the success rate of spring 17 (when the course was taught by a single instructor for the first time), the success rate were very similar over the past four years. Course completion rates show the same trends with somewhat higher numbers—91% completed in Spring 17 vs. 81% in Spring 16, while 87% completed in Fall 16 compared with 85% in fall 2015.
- 4) Productivity: Our WSCH/FTEF was significantly higher in spring 2017 than the average of the past three years with a value of 705. This compares to the average productivity over the three spring semester of 665, while the average over the past three fall semesters has been 595. Prior to that, the course was offered only once a year, typically in the fall semester.

B. Changes to Program and Needs: Describe any significant changes to your program or your program's needs since the previous Program Review Update (Fall 2016).

1) Other than an increase in the spring enrollment, there ha	s Mark an X next to each area
been very little change to the program and its immediate	that is addressed in your
needs. However, there is still significant need for more	response.
support from the entire community at Las Positas College	2. Definitions of terms:
At present, there is only one course in EVST, taught at	https://goo.gl/23jrxt
present by one full time faculty member (Harpell), who is	
also responsible for programmatic changes, and curricula	r Community

	decisions. There are no full time faculty in EVST (or ENSC).		Partnerships/Outreach
	As a major, EVST is a multi-disciplinary program that	х	Curriculum*
	includes biology, geology, geography, economics, political		Enrollment Management
	science, sociology. More coordination between instructors		External Factors
	for these courses is required.		Facilities,** Supplies and
			Equipment (Including
2)	One or more lab course for EVST students is required. This		Software)
	lab could be dedicated to either EVST 5 students, or Bio 40	х	Financial/Budgetary
	students. There could also be single lab that meets the		Human Resources
	needs of both courses, but this is problematic in terms of	х	Learning Support
	articulation, instructional equivalency, and coordination.		LPC Planning Priorities
	Such a lab would also meet the needs of students needed a		https://goo.gl/LU99m1
	lab in either the physical or natural sciences to graduate,	х	Pedagogy
	and for Environmental Science students needed to fulfil	х	Professional
	transfer requirements to local universities.		Development
			Services to Students
		х	SLO/SAO Process
		х	Technology Use
		*Curr	iculum will also be
		addre	ssed in Part 2 (Curriculum
		Revie	w).
		**Fac	ilities will also be
		addre	ssed in Question H.

C. Reflection: What plans from the <u>2016 Program Review Update</u> or any <u>previous Program Reviews/Updates</u> have been achieved and how?

	Mark	an X next to each area
1) Plan from 2016 Program review update: "We need to	that is	addressed in your
update the 6 year-old course outline for EVST 5."	respo	nse.
Result: The course outline has been updated as of Sept 2017.	Defini	tions of terms:
	https:	//goo.gl/23jrxt
2) Plan from 2016 program review update: "We need to		
update the Environmental Studies and Environmental.		Community
Science degrees to update incorrect course descriptors."		Partnerships/Outreach
Result: We have updated the Environmental Science Degree	х	Curriculum*
as of October 2017.		Enrollment Management
		External Factors
3) Plan from 2016 program review update: "Complete the		Facilities,** Supplies and
course outline for an EVST lab course and submit for		Equipment (Including
approval."		Software)
Result: This course outline has not been completed.		Financial/Budgetary
Discussions are ongoing with members of the Bio and Chem		Human Resources
faculty to determine the proper direction for this lab as	х	Learning Support
described above.		LPC Planning Priorities
		https://goo.gl/LU99m1
	х	Pedagogy

Professional
Development
Services to Students
SLO/SAO Process
Technology Use
*Curriculum will also be
addressed in Part 2 (Curriculum
Review).
**Facilities will also be
addressed in Question H.

D. Impacts to Students (Optional): Discuss at least one example of how students have been impacted by the work of your program since the last Program Review Update (only if you did not already answer this in Questions A, B or C).

Chudonte cooling dogrado and wishing to opticulate to local two ofer	Marti	
Students seeking degrees and wishing to articulate to local transfer		an X next to each area
institutions will have a more direct pathway to their transfer goals.		s addressed in your
	respo	
		itions of terms:
	<u>https</u>	://goo.gl/23jrxt
		Community
		Partnerships/Outreach
	х	Curriculum*
	х	Enrollment Management
		External Factors
		Facilities,** Supplies and
		Equipment (Including
		Software)
		Financial/Budgetary
		Human Resources
	х	Learning Support
	х	LPC Planning Priorities
		https://goo.gl/LU99m1
		Pedagogy
		Professional
		Development
		Services to Students
	х	SLO/SAO Process
		Technology Use
	*Curr	iculum will also be
	addre	essed in Part 2 (Curriculum
	Revie	w).
	**Fac	cilities will also be
	addre	essed in Question H.

E. Obstacles: What obstacles has your program faced in achieving plans and goals?

 programs with courses in the Environmental Science degree program. Part of this problem is the division structure at Las Positas College, since these courses are not all part of STEMPS, but reside in two or three different divisions. It is likely, however, that our new division dean, Nan Ho, will assist in providing leadership in this area. 2) There is not a full time instructor dedicated to this program as their primary responsibility. Several of us have contributed as a secondary program. At present, only Eric Harpell has taken on the responsibility of writing the program review and updating the curriculum for this major. However, Help has been available from Chemistry and biology instructors (Ansel, Flores, Shuldman). As mentioned previously, all full time faculty for EVGT alea have primary responsibility in other program. 	ons of terms: goo.gl/23jrxt Community
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Shuldman). As mentioned previously, all full time faculty for	Equipment (Including
	Software)
EVST also have primary responsibility in other programs	inancial/Budgetary
	Human Resources
(physics, chemistry, biology).	earning Support
2) The field of Environmental Chudies showers descentionly from	.PC Planning Priorities
3) The field of Environmental Studies changes dramatically from	https://goo.gl/LU99m1
year to year. This makes the choice of a textbook difficult if not	Pedagogy
impossible, and requires considerable change in course material from semester to semester.	Professional
	Development
2	Services to Students
	SLO/SAO Process
x 1	Technology Use
*Curricu	ılum will also be
address	ed in Part 2 (Curriculum
Review)	-
**Facilit	
address	ties will also be

F. Short Term Planning: What are your most important plans (either new or continuing) for next year?

4)	Develop contificate and means in Environmental Chudica. These	Mauli	
1)	Develop certificate programs in Environmental Studies. These	IVIARK	an X next to each area
	can include, but are not limited to, Sustainable Development,	that is	addressed in your
	Energy Auditing, Wildlife management, and Corporate	respo	nse.
	Sustainability. These certificates could allow students to	Defini	tions of terms:
	complete a portion of the EVST (and possibility Biology or	https:	//goo.gl/23jrxt
	Environmental Science) major should they wish to complete the		
	major later.		Community
			xPartnerships/Outreach
2)	Develop a lab course to accompany EVST 5, and Bio 40 as	х	Curriculum*
	mentioned in section B (3).		Enrollment Management
			External Factors

3)	Update the course outline for Field Biology (Bio 70).	х	Facilities,** Supplies and
			Equipment (Including
4)	Include lab tech support for any new labs that are developed.		Software)
	This may be accomplished by increasing the lab tech position in	х	Financial/Budgetary
	physics from 10 to 12 months, hiring a part time lab tech in	х	Human Resources
	physics, or adding to the load for chemistry and biology lab	х	Learning Support
	techs as those departments see fit.		LPC Planning Priorities
			https://goo.gl/LU99m1
		х	Pedagogy
			Professional
			Development
			Services to Students
			SLO/SAO Process
		х	Technology Use
		*Curri	culum will also be
		addre	ssed in Part 2 (Curriculum
		Review	w).
1		**Fac	ilities will also be
		addre	ssed in Question H.

G. Long Term Planning (Optional): Please detail any long-term plans for the next 3-5 years. (Only if you have significant plans, such as implementation of a grant project, creation of long-term initiatives including those using restricted funds such as Equity or SSSP, construction and outfitting of a new building).

		T	
1)	Increase budget for EVST to allow purchasing and		an X next to each area
	maintaining lab equipment not covered in instructional	that is	s addressed in your
	grant requests.	respo	nse.
		Defin	itions of terms:
2)	Appoint a coordinator for the EVST/ENSC program. This	https:	://goo.gl/23jrxt
	coordinator could be a current full time faculty member or		
	a new faculty member hired to teach in the EVST/ENSC		Community
	program.		Partnerships/Outreach
			Curriculum*
			Enrollment Management
			External Factors
		х	Facilities,** Supplies and
			Equipment (Including
			Software)
		х	Financial/Budgetary
		х	Human Resources
			Learning Support
			LPC Planning Priorities
			https://goo.gl/LU99m1
			Pedagogy
			Professional
			Development
			Services to Students
			SLO/SAO Process

Technology Use
*Curriculum will also be
addressed in Part 2 (Curriculum
Review).
**Facilities will also be
addressed in Question H.

H. Do you have any facilities needs that are currently unmet? If yes, please describe.

- 1) Identify a lab room where a new lab can be held. As mentioned in the physics and astronomy program review, a lab for EVST 5 could be held in the same room as the physics labs, but these labs are already fully booked in the single lab room (1831). As described in the physics and astronomy program review, if a new dedicated lab space was identified for Physics and astronomy (such as room 1826), then the EVST lab would be able to use that space as well.
- 2) A field research site where students could conduct ongoing research in Enviornmental students. Possibly a portion of the Mitigation land could be set aside for field research. This site would be used by EVST 5 students, Bio 40 students, students in existing biology classes, and students in one or both the new labs that will be developed for the EVST/ENSC majors.

I. Mission: Explain how your program's plans and accomplishments support the mission of Las Positas College:

Las Positas College is an inclusive learning-centered institution providing educational opportunities and support for completion of students' transfer, degree, basic skills, career-technical, and retraining goals.

Achievement: We have updated update all course outlines and degree program in the EVST department.

This change supports the completion of students' transfer degrees by solidifying the articulation to transfer institutions.

J. Program-Set Standard (Instructional Programs Only): Did your program meet its program-set standard for successful course completion? ____x_yes _____no

(This data can be found here: https://goo.gl/b59nCy)

If your program did not meet your program-set standard, discuss possible reasons and how this may affect program planning or resource requests.

K. SLO/SAO Reflection: Describe an example of how your program used course SLO data (CSLOs), Student Service Area Outcome (SAO) data or Program SLO data (PSLOs) from last year (2016-17) to impact student learning or achievement. Focus on PSLOs or CSLOs where you have multiple semesters of data to analyze. (Copy the box below if you would like to discuss multiple examples.)

Course Name, Program Name or Student Service Area: EVST 5 CSLO

Text of the CSLO, SAO, or PSLO: Students must be able to perform and analyze a home Energy Audit.

Describe the quantitative or qualitative results: This SLO aims to determine how well the students were able to perform a home energy audit demonstrating their mastery and understanding of course material.

Discuss and reflect upon student achievement for this CSLO/PSLO/SAO. Discuss any actions taken so far (and results, if known) and your action plan for the future:

Since the home energy audit combines a student's understanding of theoretical processes with practical applications, their ability to apply this knowledge to an assessment of their homes energy use and determine methods of improvement are critical to an assessment of their achievement of course learning goals.

To test whether this long-term plan is working, we should try to chart the content-oriented SLO for each course in the sequence, and see if the average score goes up or down further on into the sequence.

What changes in student achievement are evident across the semesters you analyzed? What are some possible explanations for these changes in student achievement?

Performance has been consistent across the past six semesters. Approximately 80% of students have been able to satisfactorily complete this CSLO.

L. Plans for Analysis of SLO/SAO Data: Identify the PSLOs, CSLOs, or SAOs that your program plans on focusing on the upcoming year with subsequent analysis. (Copy the box below as needed.)

Circle C)ne:	
CSLO	***PSLO***	SAO
Course,	, Program Name	e, or Student Service Area:
EVST		
Text of	CSLO/PSLO/SAC	D: Students must be able to perform and analyze a home Energy Audit.
If you p assesse		g a PSLO, identify the CSLOs that feed into the PSLO that will need to be
	-	to nonform and another a barra France Audit

Students must be able to perform and analyze a home Energy Audit.

Section Two: Curriculum Review (Programs with Courses Only)

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

Log in to CurricUNET
 Select "Course Outline Report" under "Reports/Interfaces"
 Select the report as an Excel file or as HTML

Curriculum Updates

A. Title V Updates: Are any of your courses requiring an update to stay within the 5 year cycle? List courses needing updates below.

No. Course outlines are updated as of Oct 2017

B. Degree/Certificate Updates: Are any degrees/certificates requiring an update to do changes to courses (title, units) or addition/deactivation of courses? List needed changes below.

No. Degree/Certificate programs are updated as of Oct 2017. Two of the courses required for the major (in Political Science) have not been properly updated however.

C. DE Courses/Degrees/Certificates: Detail your department's plans, if any, for adding DE courses, degrees, and/or certificates. For new DE degrees and/or certificates, (those offered completely online), please include a brief rationale as to why the degree/certificate will be offered online.

No new plans.

Section Three: CTE Updates (CTE Programs Only)

A. Labor Market Conditions: Examine your most recent labor market data. Does your program continue to meet a documented labor market demand? Does this program not represent unnecessary duplication of other training programs in the college's service area? (Please note: your labor market data should be current within two years. Contact <u>Vicki Shipman</u> or the current CTE Project Manager for access to data).

B. Advisory Boards: Has your program complied with advisory board recommendations? If not, please explain.

C. Strong Workforce Program Metrics: Utilizing LaunchBoard, review the Strong Workforce Program Metrics. Review the data and then answer the following questions.

(Contact Vicki Shipman or the current CTE Project Manager for help accessing the data).

C1. Does your program meet or exceed the regional and state medians for increased enrollments, completions, and/or transfer since your last program review? 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? 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? 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?** If not, what program improvements may be made to increase this metric?