PROGRAM REVIEW Fall 2020

Program: Geology
Division: STEM
Date: 11-2-20
Writer(s): Ruth Hanna, Christina Flora, Carol Edson
SLO/SAO Point-Person: Ruth Hanna

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 2020-21 academic year. It should describe plans starting now and continuing through 2021-22.

Sections: This Program Review has been shortened due to the COVID-19 pandemic. The Program Review Committee understands that you are completing this program review in a time of stress and disruption and that this may affect many of your responses. Sections and questions are marked with the name of the committee or office that will use the information.

- The first section focuses on general program reflection and planning.
- The second section has specific questions to be filled out by all programs this year.
- The third section is a review of curriculum, to be filled out only by programs with curriculum.

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 as completely as possible.
2) If the requested information does not apply to your program, write "Not Applicable."
3) Optional: Communicate with your dean about completing this document.
4) Send an electronic copy of this form to Nadiyah Taylor and your dean by Monday, November 2.

Links:
Program Review Home Page: laspositascollege.edu/instructionalprogramreview
Fall 2019 Program Reviews: laspositascollege.edu/programreview/pr2019.php
Frequently Asked Questions: laspositascollege.edu/instructionalprogramreview/programreviewfaqs.php

Section One: Program Snapshot [Program Review Committee]

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

No Significant Changes Option

☐

Contact person: _____

By marking an X in the box above, the writers of this Program Review indicate that there have been no significant changes to their program or their program's needs in the past year. In this case, programs may opt not to complete Program Review Section One: Program Snapshot. **Programs must still complete all other sections (as applicable).**

Please note: Choosing this option means that your program's information may not be included in the yearly Division Summary.

The No Significant Changes Option may only be used for two years in a row; after two years, programs must complete a full Program Review including the Program Snapshot. Our program's most recent Program Snapshot was submitted in the following semester: Fall 20_____.

A. Accomplishments: What plans were achieved during AY19-20? You may describe achievements that were or were not planned in earlier Program Review. Your response may include actions regarding COVID-19. Please highlight any positive impacts to students.

- Collaboration with Geography increased, with the sharing of the Geoscience Technician (Christina Flora) as the official lab tech now for both programs.
- Fully online Geology and Oceanography labs planned, implemented, and refined/modified as new materials were developed by instructors and Geology lab tech.
- Students have been supported with breakout rooms during labs and before and after Geology 1 Zoom lecture sessions to allow collaboration.
- We have increased the number of late start/Fast Track courses to now include Oceanography in addition to the Environmental Geology courses. In sum, the students continued to get rich, appropriate and complete Geology courses, even with the additional challenges of Covid. While we regret the inability to do in -person labs, in that students would have a more tactile and social experience, we know we have created -and continue to improve -all the online course offerings in the Geology Program.
- DE Addendums were completed and submitted for Geology 1 and Geology 12 laboratory courses.
- Oliver Christen and Ruth Hanna worked over the summer to create Oliver's Fall Geology 1 online laboratory courses in Canvas to fulfill and be in-line with OEI requirements, and those course materials are now ready to start through the OEI certification process.

- LPC Geology now has 4 courses and 2 instructors approved in the OEI system, with the Geology 1 laboratory ready to go through the OEI certification process.
- Materials from the virtual provider Labster were evaluated, and while they had strong offerings in Biology and Ecology, there were few relevant to Geology/Oceanography at this time. NO appropriate online Physical Geology or Oceanography lab templates were found after extensive research.
- Of note: Covid shelter-in-place and school closures meant that the Christina Flora's (Geoscience Technician) introduction and orientation to the lab tech position was not the expected one, and she has responded with creativity and energy.
- Christina rose to the occasion by taking home materials in batches to work on creating an incredible photo and video library for student use in labs, both as exercises and for use in lab practicals. In addition to Cappasity, Christina is self-learning Photoshop, Lighthouse and Encoder software. She also attended a full day seminar at UC Berkeley's Paleontology museum and gathered great ideas for how to display many of our fossils in new ways.
- Christina researched, collaborated with the LPC Photography dept. and implemented Cappasity 360 imaging software. This allows the preparation of learning materials including video demonstrations of hundreds and hundreds of rocks and minerals to highlight their features, and allow students a virtual experience similar to holding the sample themselves. Covid 19 drove the decision, but the demand for online labs had increased in the years before Covid . Christina Flora got IT to fund CAPPASITY for the Geology department to host and upload 3D photos of Rocks and Minerals. CAPPASITY highlighted the LPC Geology dept. on Social Media, showcasing how creatively we use their software.
- In addition, a Google Drive account was set up, to share larger files and photos that Canvas cannot accommodate.
- Of note: Ruth Hanna has her students complete a 10-question 'How Is It Going' response form, and one of the students spent half of their response enthusing about their lab section (we don't know which lab section the student is in)
  - Here is what the student said about their online geology lab:
  - "Ive had group work assignments for my geology lab. It is very very helpful because I learn things I did not know or might have missed. It is quick and easy to complete assignments together and most of all fun because you get to know your classmates. So I think group-work is key in succeeding in school and for the rest of our lives. An example is we had to describe rocks and tell the instructor what rock it is. Also if it is igneous, sedimentary, or metamorphic based on the looks it had. As a group we asked questions and guesses and we figured it out. I dont have any problems with this class and it is my favorite because the assignments are not a huge load. It is very easy and simple, consistent, I am able to learn, and it is interesting. Everyone participates and the vibe of the class is perfect, and the class is not long."

Mark an X before each area that is addressed in your response.			Definitions of terms: https://bit.ly/2LqPxOW			
	Community Partnerships/Outreach	x	Facilities, Supplies and Equipment, Software		LPC Planning Priorities	X	Services to Students
X	Course Offerings		Financial/Budgetary		LPC Collaborations		SLO/SAO Process

X	Curriculum Committee Items			Human Resources		Pedagogy		Student Equity
x	External Factors	x		Learning Support		Professional Development	x	Technology Use

B. Challenges, Obstacles and Needs: Describe any significant challenges, obstacles or needs for your program. Your response may include issues regarding COVID-19. Please highlight any negative impacts for students.

Students' success at course completion is tied to having a stable position on Maslow's hierarchy of needs. If they have housing insecurity and /or food insecurity, have lost their jobs due to Covid, as so many have, or if they have family members who are sick, their stress levels are very high. Covid alone has added to everyone's anxiety, student and instructor alike. Internet insecurity is also a big issue, as many students were dependent on using on -campus facilities for computer access and tech support. We deeply appreciate all that IT has done to help with tablets, laptops and wireless access, but it is still difficult for some students. PG&E power outages and the terrible fires have added additional stress, with smoke, anxiety, and the need to be prepared to evacuate for many. Fears of personal illness, or of bringing home COVID to family members, has completely changed the rhythm of everyone's life. Lack of physical comforts like hugs, and face to face interactions have contributed to depression, frustration and a sense of hopelessness. Many students have had family responsibilities supersede their academics. Some families have providers who can work from home, but many do not, and must accept the risk of showing up to work in person to put food on the table. The exhaustion and workload on instructors has been massive as well. Being kind in our expectations of ourselves, and our students has been necessary- none of us can 'do it all' in this climate. Supporting good mental health and stress management is necessary for all of us.

The Geology program had a robust set of distance education options for all its lecture courses in place. It will be interesting to see the change as almost all students starting in Fall 2020 have had to do 100% of their learning online. Most Geology students were taking a mix of online and in person courses up until the Covid lockdown. Having the labs fully online -as opposed to hybrid in some cases -will be new.

A concerning issue is that the OEI course exchange search process, using Quottly is not easy for student or instructors to use. I am not a computer Luddite – and I can not easily run the Quottly search to bring up any of the LPC Geology courses in a reasonably easy – or even a reasonably difficult – fashion!   Communication so far has been unable to resolve this.

Mark an X before each area that is addressed in your response.				Definitions of terms: https://bit.ly/2LqPxOW				
	Community Partnerships/Outreach		Facilities, Supplies and Equipment, Software		LPC Planning Priorities			Services to Students
	Course Offerings		Financial/Budgetary		LPC Collaborations			SLO/SAO Process
	Curriculum Committee Items		Human Resources	x	Pedagogy			Student Equity
x	External Factors	x	Learning Support		Professional Development	x		Technology Use

C. IR Data Review: Describe any significant trends in your program's data from 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 generated for your program by the Office of Institutional Research and Planning.

IR Data packets are available here: https://bit.ly/2IYaFu7

Course Success Rates Dashboard can be found at the bottom of this page: https://bit.ly/2Y9vGpI

For assistance with this question, contact the Director of Institutional Research and Planning. **[https://bit.ly/3fY7Ead]**

Increase over time in the percentage of students taking both online and F2F courses, covering the 2015-2019 time period. Due to the switch to online for all mid semester Spring 2019 it does not seem helpful to try for comparisons with previous semesters.

	Mark an X before each area that is addressed in your response.				Definitions of terms: https://bit.ly/2LqPxOW		
	Community Partnerships/Outreach		Facilities, Supplies and Equipment, Software		LPC Planning Priorities		Services to Students
X	Course Offerings		Financial/Budgetary		LPC Collaborations		SLO/SAO Process
	Curriculum Committee Items	X	Human Resources	X	Pedagogy		Student Equity
X	External Factors	X	Learning Support		Professional Development		Technology Use

D. Short Term Planning: What are your most important plans, either new or continuing, for next year? Describe plans starting now and continuing through AY 21-22. (Optional: You may also describe long-term plans if desired.)

The work load for a single full time instructor program is brutal under the best of times, and during Covid it has only ramped up, plus the camaraderie of being together to support each other is harder to arrange, if possible at all. Everything is virtual and it is both a gift and a burden to communicate/educate hundreds of students this way each semester.   The plan is to survive this time, and do the best that is reasonable. We are very grateful for the tremendous support in providing access to the internet and tablets/laptops to students in need that was arranged by our IT folks. Assuring access is a huge ongoing challenge, for students and instructors alike. Just as wars improve trauma care by necessity, our skills and materials for online education have been massively upgraded by this pandemic. Continuing to use them where ever possible after Covid has receded will be prudent and smart. We will continue to enlarge and refine the LPC Geology materials in virtual form, including adding many of our spectacular fossils from our fossil collections and other specialized specimens. This is in process and will be exciting to see evolve.

	Mark an X before each area that is addressed in your response.				Definitions of terms: https://bit.ly/2LqPxOW		
	Community Partnerships/Outreach	X	Facilities, Supplies and Equipment, Software		LPC Planning Priorities	X	Services to Students
	Course Offerings		Financial/Budgetary	X	LPC Collaborations		SLO/SAO Process
	Curriculum Committee Items		Human Resources		Pedagogy	X	Student Equity

x	External Factors	x	Learning Support		Professional Development	x	Technology Use

Section Two: Institutional Planning Topics (Required for All Programs)

A. Equity [Student Equity and Achievement Committee]: Please describe any recent actions your program has taken to increase equity and/or any challenges your program faces in promoting equity and equity-based decision-making? Areas to consider include students impacted by race/ethnicity, gender, sexuality, age, or disability status, as well as students who are disproportionately impacted due to the shift to remote instruction.

For assistance with this question, contact the Director of Student Equity and Achievement**. [https://bit.ly/3fY7Ead]**

> The students who are having the most additional challenge in their educational progress are the ones for whom computer use has always been difficult, but even more it is impacting students who do not have secure housing and a stable food source. Job loss, family financial crises, and illnesses are impacting both students and their families. IT is trying to help those who self identify as needing a tablet to borrow . But again it is Catch 22. If you can't access the internet, it is hard to tell someone that you need a computer SO you can access the internet. Where possible, instructors reach out electronically to students to help guide them to the online places where they can request what they need to succeed (e.g. requesting to borrow a laptop).

B. SLOs/SAOs [SLO Committee]:

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

B1: Instructional Programs with PSLOs
B2: Instructional Programs without PSLOs or with Special Circumstances
B3: Non-Instructional Programs

Skip 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.

B1: Instructional Programs with PSLOs

In this year's Program Review, and in support of Accreditation, we would like a snap-shot on how your program plans to collect, discuss and report assessment findings to develop best practices for teaching and student learning ("closing the loop").

As a program, please select one PSLO for a degree or certificate to focus on. This PSLO should reflect one area of your program that you would like to investigate in depth. For example, your selection may focus on an area to improve student success, to update pedagogy, equity issues, or to examine a new degree/certificate, etc.

In this section, describe your plan for assessment data to be collected, analyzed and discussed, and reported out in next year's Program Review. Your plan should identify the CSLOs that feed into your selected PSLO so that a complete data set is collected. You may choose to do this over one or two semesters. In next year's Program Review, you will be asked to summarize your SLO assessments, analysis of those findings, and proposed changes that may be implemented to improve teaching and student learning.

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

B1a. **In the space below, insert the complete wording of the PSLO and potential reason(s) for selecting it for analysis.**

PSLO: Upon Completion of the Certificate of Achievement in Geology, students are able to demonstrate proficiency with geological analysis and/or geologic tools (e.g., unraveling the chronology of geologic events, earth materials identification/evaluation, etc). This PSLO was selected because it is one of the essential foundations of Geological Science.

B1b. In the table below, list the CSLOs that feed up to the identified PSLO and check the semester or semester(s) that the CSLO will be assessed and data entered into eLumen.
(If this different than the submitted SLO template plan, please update and resubmit the template plan. Send the updated template to mwiest@laspositascollege.edu and ahight@laspositascollege.edu)

Complete Name of CSLO	Fall 2020	Spring 2021	Summer 2021
Upon completion of Geology 1, students will be able to identify and define the basic properties of minerals.	X	X	
Upon completion of Geology 1, students will be able to identify and differentiate the basic ages of the Geologic Time Scale	X	X	
Upon completion of Geology 12 laboratory, students will be able to construct bathymetric contours.	X	X	
Upon completion of Geology 12 laboratory, students will be able to interpret bathymetric maps.	X	X	
Upon completion of Geology 1 laboratory, students will be able to evaluate and differentiate mineral samples.	X	X	
Upon completion of Geology 1 laboratory, students will be able to evaluate and differentiate rock samples.	X	X	

Upon completion of Geology 1 laboratory, students will be able to evaluate and interpret geologic diagrams encapsulating geologic histories	X	X	

B1c. When will analysis and discussion of the assessment data be completed (during next year's Program Review is an option)? The reporting out of the "closing the loop" analysis will be part of next year's Program Review.

Next year's program review.

B2: Instructional Programs without PSLOs or with Special Circumstances

If your department does not have PSLOs, you may choose one CSLO to focus on. This option may also be used if there is a strong departmental rationale for focusing on a single CSLO.

As a department, please select a course to focus on. The selected course and one of its CSLOs should reflect an area that you would like to investigate in depth. For example, your selection may focus on a course to improve student success, to update pedagogy, to analyze equity issues, etc.

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

B2a. In the space below, describe the rationale (such as this is not a degree-granting program, we focus mainly on non-degree courses, etc.)

B2b. In the space below, insert the complete wording of the CSLO and reason(s) for selecting it for analysis.

B2c. In the table below, list the CSLO and check the semester or semester(s) that the CSLO will be assessed and data entered into eLumen.

(If this is different than the submitted SLO template plan, please update and resubmit the template plan. Send the updated template to mwiest@laspositascollege.edu and ahight@laspositascollege.edu)

Complete Name of CSLO	Fall 2020	Spring 2021	Summer 2021

B2d. When will analysis and discussion of the assessment data be completed? (During next year's Program Review is an option.) The reporting out of the "closing the loop" analysis will be part of next year's Program Review.

B3: Non-Instructional Programs

In this year's Program Review, and in support of Accreditation, we would like a snap-shot of how your student service area plans to collect, discuss, and report assessment findings to develop best practices for teaching and student learning ("closing the loop").

Please select one SAO to focus on. This SAO should reflect an area of your program that you would like to investigate in depth. For example, your selection may focus on an area to improve student success, increase best practices, to address equity issues, or to examine a new service/program, etc. The intent is for this section to be useful for reflection to develop best practices for serving students.

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

B3a. **In the space below, insert the complete wording of the SAO and potential reason(s) for selecting it for analysis.**

B3b. When and how will this SAO be assessed and data entered into eLumen? (If this different than the submitted template plan, please update and resubmit the template plan. Send the updated template to mwiest@laspositascollege.edu and ahight@laspositascollege.edu)

B3c. When will analysis of the assessment data will be completed (during next year's Program Review is an option)? The reporting out of the "closing the loop" analysis will be part of next year's Program Review.

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).

All LPC Geology courses are currently still within their 5-year cycle. None currently need updates.

B. Degree/Certificate Updates [Curriculum Committee]: Are there any programs requiring modification? List needed changes below.

No.

C. DE Courses/Degrees/Certificates [Distance Education Committee]: 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.

There has been a pressing request from students over the past 5-10 years for online geology laboratories. Until the current Covid pandemic forced the issue, we were not able to conceive and create appropriate online materials. As a result of the requirements of the pandemic, we now have online geology and oceanography laboratory courses, with the Geology 1 laboratory course in particular, ready to go though OEI evaluation and certification.