PROGRAM REVIEW Fall 2021

Program: Geology
Division: STEM
Date: Oct 26, 2021
Writer(s): Ruth Hanna
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 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 Questions

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 Plan	Presidential Task Force
1Bulletin boards showing race/gender/cultural /ability diversity	x	x	x
2 Connecting students to Internet access with LPC laptops	x		
3 Office hours online including helping students access support.		x	
4High impact teaching practices including quizzes thoughtout synchronous lectures to assist engagement.		x	
5 Flexibility in textbook format used to lower costs		x	
6 Approval of Geology 20 course	x	x	
7 At least 4 Geology courses are OEI approved		x	

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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 Coping with the uncertainty created by the constantly changing dates and polices created by the Covid pandemic; this made planning exceptionally difficult		X	
2 Creating and offering online laboratory courses		X	
3			
4			
5			
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
The heartfelt wish for less stress, more clarity and ability to plan long term. This is probably not realistic right now as we see Covid becoming a chronic public health issue, which will remain dynamic and unpredictable.		x		
Focus on self care and staff well being to promote flexibility and health in the Geology team so that we remain as agile, and able to adapt, as possible. Zoom meetings to share ideas and give each other support will remain crucial.		x		
Maintaining a positive outlook even in the face of so much complexity and uncertainty. Listening well to each other and problem solving together rather than focusing on the negative.		x		
Awareness of need for mental health support for all who are struggling; being sure students are aware of LPC resources		x		

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D. How have your program's interactions with the larger campus systems benefitted your students? For example, working with allocation committees, participation on committees, etc.
_____N/A

Campus system or Committee	How has it benefitted your students?
Serving on the District IT committee meant knowledge of the plan to implement Laptop loans for students who needed them. Clarity about the available software/updates to Canvas, etc.	Information and recommendations given to students who expressed technological difficulties and/or needs
Town Meeting explanations of how federal funding assistance helped make courses and salaries viable	Courses continued to be offered during the pandemic, even when enrollments dropped

E. 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

_____N/A

Describe student outreach used to gather feedback? For example, through surveys, conversations, etc.	Conversations regarding adjusting to the need to work in isolation, creative ways to foster 'study groups' and information regarding support and help available including laptops , mental health support, and addressing food insecurity. The volunteer hours of the retired Geology lab tech allowed her to keep in touch with many former students on social media during this isolating time.
What did you learn?	That many students (and their families) lost income during the pandemic. Many students were forced to take fewer units, work longer hours in high risk 'essential job' positions, and had to live in situations where the likelihood of catching Covid was high due to multigenerational households.
How will you use the feedback?	Continue to support students access to information, the Health center, local testing, how to get vaccinated, etc.

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

The Geology Program total course enrollments for Fall 2016 & Fall 2020 were 469 & 468 respectively (essentially no appreciable change). Comparison with the provided campus data shows Fall 2016 & Fall 2021 at 25,496 and 22,385 , which is a 12% drop for the campus as a whole. The Geology Progran total course enrollments for Spring 2017 & Spring 2021 were 472 & 353 respectively. Campus data also shows a drop with Spring 2017 at 24,691 and Spring 2021 at 20,865

For overall Geology program demographics, there was little change in the age distribution and a slight increase in the % of female to male students (Fall 2016 was 49 & 51%, and Spring 2021 was reversed at 51 & 49% (female & male))

In the Race-Ethnicity demographics, there was an increase in the % of Latino students, from 27% to 34% (F16 to S21) and a decrease in the % of those identifying as White students from 37% to 32% (F16 to S21). College-wide demographics were around

30% Latino (F16 to S21) and then saw a drop of 39% to 32% White (F16 to S21) and an increase of 14% to 19% Asian (F16 to S21). The Geology program did not see this same change, and instead had 14-15% Asian over the same period.

Student Enrollment status was similar to that of previous years, with Fall semesters between 69-74% Returning students and then Spring semesters at 88-89% Returning students.

Compared to the campus-wide data, the Geology program has a significantly lower percentage of students who only take Face-To-Face courses, with Geology program numbers ranging between 30-42% in the Fall and only 25-28% in the Spring. In contrast, the campus wide numbers are 65-71% in the Fall and 66-71% in the Spring.

This is appropriate as there has been a statewide drive to create online education, with a particular focus on GE courses - which are all of the LPC Geology courses. The state's purpose was to create more access to these courses for all community college students. As a result, if we do not offer a large portion of our courses online – we will lose those students to the other colleges who are offering the courses online. We need to be able to offer courses through the online delivery platform in order to maintain enrollments. *Note – the data in this paragraph did not include the pandemic-created completely online data from Fall 2020.

Prior to the 'pandemic years' Geology students in Face-to-Face classes tended to demonstrate higher success rates (86-86%) than DE sections (72-78%). In comparison, during 'pandemic semesters' Fall 2020 & Spring 2021 Geology DE students had 86% success rates. In comparison campus wide pre-pandemic success rates ranged between 71-77% for Face-To Face classes and 61-71% for DE students, with campus-wide DE students having a 73% success rate for Fall 2020 and a 74% success rate for Spring 2021. In summary, Geology DE students demonstrated success rates higher than the campus average both before and during the pandemic.

The overall educational goal of most Geology students is Transfer (80-84%).

Course success rates ranged between 81-86% (F16 to S21), with no significant difference between the success rates during the pandemic compared to the numbers before the pandemic. In comparison, campus-wide success rates ranged from 70-76% over the same time period.

Geology productivities (WCSH/FTEF) ranged between 518 and 615, with the higher productivities more often in the Fall. For comparison, over the same time period campus wide productivities ranged from 429 to 507, with Fall semesters showing a steady decline. For Fall Geology productivities: Fall 2016 was 615 and Fall 2020 was 594

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__yes ____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 threshold set standard was 79% and the achieved standard was 87%.

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

PSLO Assessments:

(1) Please list the PSLO(s) that were reviewed in this last cycle and explain why these were chosen. **Upon completion of the Certificate of Achievement in Geology, students are able to demonstrate proficiency in the evaluation and identification of basic earth materials (e.g., rocks and minerals). Demonstrating an ability to define, evaluate and identify rocks and minerals and their properties are core concepts and skills expected for the Geology AS-T degree**

(2) What percentage of faculty completed the planned assessments? (run Faculty Participation report from last year). _100% _____

(3) Did you get the assessment data that you needed to complete this report? If not, then describe the barriers that you can identify. _X____YES _____No

(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?

For Fall 2020, 70% of the students demonstrated mastery, 91.7% demonstrated Above Average proficiency or higher, and 96.5% demonstrated Average or higher proficiency. For Spring 2021, 72% of the students demonstrated mastery, 88.5% demonstrated Above Average proficiency or higher, and 97.5% demonstrated Average or higher proficiency. **Demonstrating an ability to define, evaluate and identify rocks and minerals and their properties are core concepts and skills expected for the Geology AS-T degree and these PSLO results illustrate that Geology students are demonstrating proficiency in this area.**

(5) Was the data disaggregated and, if so, on what parameters? What, if any, equity issues emerged?

The data was not disaggregated

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

Continue to fine tune pedagogical methods as the situtations and circumstances evolve. Continue to allow students access to the ever-growing online virtual resources that the geology staff are continuously creating. Giving student recommendations for accessing campus support such as the LPC Computer and/or Health Center services.

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

Even before the 'pandemic years', Geology courses (even the labs) utilized the campus online software, which requires student access to computers to complete and submit course work. As a result, the campus IT department has offered tremendous support by making sure that the Geo lab room has a small set of laptops for students to use. It's not enough for every student to have their own – but most students prefer to use their own, so a small set of laptops has worked wonderfully to provide that technology to those students who do not have a laptop of their own to have on-campus. Before the 'pandemic years' most students had access to computers at home or in the LPC Computer Center. During the pandemic, we have directed students to the campus laptop and wifi hotspot loaner programs and this has worked well. So we really need to extend our heartfelt thanks to our stellar IT department!

(8) Are you planning on revising on your 3-year planning template? If so, describe.
____Yes _____x No

We have just started the evaluation of the PSLO listed above (the pandemic pushed things later than originally planned). After we have finished evaluating the Earth Materials PSLO, then we will focus on evaluating the Earth Processes SLO.

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.

(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 CSLO 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

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

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

(3) Are you planning on revising your 3-year planning template? If so, describe.

_____YES _____No

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.

_____YES _____No

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

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).*

__X___YES _____No

Course Name & Number – note: all of these updated course outlines were updated this Fall and are currently in the Curricunet review process
Physical Geology 1 and Physical Geology 1 Laboratory and Historical Geology 2
Oceanography Geology 12 and Oceanography Geology 12 Laboratory
Environmental Geology 5: Hazards and Environmental Geology 7: Pollution & Resources
Geology 20: Earth Science for Educators

B. **Degree/Certificate Updates [Curriculum Committee]: Are there any programs requiring modification? If yes, list them below.**

_____YES ___X_____No

Certificate or Degree

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

_____YES ___X_____Not 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?

_____YES ___X_____No

If yes, please provide details and the rationale

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).

1) **Does your program continue to meet a documented labor market demand?**
_____YES _____No

2) Does this program represent a training need that is not duplicated in the college's service area?
_____YES _____No

Please explain

B. Advisory Boards: Has your program complied with advisory board recommendations?
_____YES _____No

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.

C1. Does your program meet or exceed the regional and state medians **for increased enrollments, completions, and/or transfer since your last program review**?

_____YES _____No

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**?

_____YES _____No

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**?

_____YES _____No

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?**

_____YES _____No

If not, what program improvements may be made to increase this metric?
