CAL POLY POMONA
ASSESSMENT & PROGRAM REVIEW

Annual Assessment Report 2020-2021

BS Geology

Geological Sciences

College of Science

CONTACT

Name of Program Assessment Lead Stephen Osborn

Name of Person Completing Report Stephen Osborn

DISCIPLINARY ACCREDITATION No

DEVELOPMENT AND DOCUMENTATION OF STUDENT LEARNING OUTCOMES

How were the program's SLOs developed? (select all that apply)

- We do not have disciplinary accreditation but drew from our disciplinary/professional organizations, and developed our SLOs as a program/department.
- We developed them as a program/department using our own knowledge and expertise of the field.

Other than the CPP Catalog and the Office of Assessment and Program Review website, where else are your SLOs published? Select all that apply.

- Department Website - provide URL: https://www.cpp.edu/sci/geologicalsciences/index.shtml
- Course Syllabi
- Brochures or other printed material

ASSESSMENT ACTIVITIES IN 2020-2021

This section provides the opportunity for programs to share and discuss assessment activities conducted in **AY 2020-2021.** This includes data collection, rubric development, data analysis, discussion of findings, development or implementation of closing the loop improvement strategies, update of your assessment plan and/or curriculum matrix, etc.

How many total SLOs does your program assess according to your assessment plan?

- 7

How many SLOs did your program assess this past year in 2020-2021?

- My program assessed SLOs in AY 2020-2021

Please list the SLOs examined

- SLO #1: 2. Effectively communicate results of Geologic investigations in written and oral format
- SLO #2: "3. Recognize common Earth materials, structures, and landforms, describe their properties, and determine their age relationships."
- SLO #3: "6. Use maps, cross sections, and other imagery to analyze and interpret spatial and temporal relationships displayed by Earth features or geologic data sets."
- SLO #4: "7. Utilize quantitative reasoning, experiential judgment, and computer technology to assess data, draw conclusions, and solve problems"

Student Learning Outcome (SLO): **SLO 1: 2. Effectively communicate results of Geologic investigations in written and oral format**

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Created/modified/discussed assessment procedures (e.g., SLOs, curriculum matrix, mechanism to collect student work, rubric, survey, etc.)		
• Collected direct evidence (e.g., student work, exam items, etc.)	• Oral performance (e,g., presentation, defense, conference presentation etc)	

Findings			
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result

Student Learning Outcome (SLO): **SLO 2: "3. Recognize common Earth materials, structures, and landforms, describe their properties, and determine their age relationships."**

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Created/modified/discussed assessment procedures (e.g., SLOs, curriculum matrix, mechanism to collect student work, rubric, survey, etc.)		
• Collected direct evidence (e.g., student work, exam items, etc.) • Scored direct evidence of student learning	• Assignment/exam/paper as part of regular coursework	• Used rubric or scoring guide

Findings			
N of Artifacts	**Criterion Used**	**Goal Met**	**Eye-opening Result**
17	Percentage at a certain level	Yes	The average score was 4 out 5. This was better than I was expecting given past years

Student Learning Outcome (SLO): **SLO 3: "6. Use maps, cross sections, and other imagery to analyze and interpret spatial and temporal relationships displayed by Earth features or geologic data sets."**

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Created/modified/discussed assessment procedures (e.g., SLOs, curriculum matrix, mechanism to collect student work, rubric, survey, etc.)		
• Scored direct evidence of student learning		• Used rubric or scoring guide

Findings			
N of Artifacts	**Criterion Used**	**Goal Met**	**Eye-opening Result**
20	Average score	Yes	This class is a field class that analyzes maps, etc. The previous year, students took this class remotely which significantly decreased the quality of student results based on the instructor's observation. In the current assessment year (Spring 2021), students were assess and average scores were just under a score of 3 on a scale of 4. The instructor noted that the overall quality was better due to meeting in-person.

Student Learning Outcome (SLO): **SLO 4: "7. Utilize quantitative reasoning, experiential judgment, and computer technology to assess data, draw conclusions, and solve problems"**

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Created/modified/discussed assessment procedures (e.g., SLOs, curriculum matrix, mechanism to collect student work, rubric, survey, etc.)		
• Collected direct evidence (e.g., student work, exam items, etc.) • Scored direct evidence of student learning	• Assignment/exam/paper as part of regular coursework	• Used rubric or scoring guide

Findings			
N of Artifacts	**Criterion Used**	**Goal Met**	**Eye-opening Result**
7	Average score	Almost	Most students did well and met goals with respect to data representation and calculations, but were clearly developing the application/analysis of quantitative data

IMPROVING THROUGH ASSESSMENT

Overall, what best describes how the program used the results in 2020-2021? Select all that apply.

- Assessment procedure changes (SLOs, curriculum matrix, rubrics, evidence collected, sampling, communications with faculty, etc.)
- Course-level changes (e.g., syllabus, content, pedagogy)
- Results indicated no action needed because students met expectations:

Ideas to improve student learning can come from different constituents. With whom did the program discuss assessment planning and/or share results during AY 2020-2021? Select all that apply.

- Program/department faculty as whole
- College assessment committee
- College Assessment Liaison

The past academic year posed both challenges and opportunities. Please share any assessment discoveries (e.g., insights about assessment procedures, great achievements, etc.) regarding program assessment in 2020-2021 so that others may learn from your experiences.

It was very clear that assessment results needed to be standardized. So, I prepared a standard form that faculty will fill out to turn in to me. The next step will be to standardize and upgrade rubrics. We also plan to re-evaluate our assessment plan and curriculum matrix in the following year. We tried to do a senior survey as indirect evidence, but there was concern by some faculty and we did not do a survey. Im working this year to get all faculty on board with an exit survey of our seniors at the end of the year. Finally, this year was also challenging to collect assessment data due to the pandemic.

CPP's GI2025 goals focus on eliminating equity gaps. What plans do you already implement, or would implement to support the campus' diversity, equity, and inclusion (DEI) efforts? (e.g., planned or current disaggregation of assessment data by race/ethnicity, etc.)

The department completed a program review last year and this was one of our Key action items. We are in discussion this year to address

The most current assessment plan and curriculum matrix we have on file for your program may be found here. To ensure we have the most updated assessment plan and curriculum matrix for your program, and for posting on our website, please upload the following documents:

Assessment Plan No

Curriculum Matrix No