



C U Y A M A C A
• C O L L E G E •

Annual Update Report

Program Review - Geography (Geol & Astr)

Design more Equitable Courses (Goal 1)

Program Goal: Design more Equitable Courses

Goal Status: Active

Mapping

2022 - 2028 Strategic Plan: (X)

- **Eliminate Equity Gaps in Course Success:** Design more Equitable Courses (X)
- **Increase Completion and Eliminate Equity Gaps:** Design more Equitable Courses (X)
- **Increase Equitable Access:** Design more Equitable Courses (X)
- **Increase Persistence and Eliminate Equity Gaps:** Design more Equitable Courses (X)

Summary of Progress or Results

Summary Date: 11/29/2024

Summary of Progress or Results: To be continued

Reporting Period: 2024 - 2025

Status: In Progress - will carry forward into next year

Action steps for this academic year.:

With the full-time faculty member's hiring finalized in Fall 2024, after delays in Spring 2024 and Fall 2023, we are ready to move forward with our program goals in Spring 2025, with the new faculty member playing a central and supportive role in shaping and achieving these objectives.

Update Curriculum (Goal 2)

Program Goal: Update Curriculum

Goal Status: Active

Mapping

2022 - 2028 Strategic Plan: (X)

- **Eliminate Equity Gaps in Course Success:** Update Curriculum (X)
- **Increase Completion and Eliminate Equity Gaps:** Update Curriculum (X)
- **Increase Equitable Access:** Update Curriculum (X)
- **Increase Hiring and Retention of Diverse Employees:** Update Curriculum (X)
- **Increase Persistence and Eliminate Equity Gaps:** Update Curriculum (X)

Summary of Progress or Results**Summary Date:** 11/29/2024**Summary of Progress or Results:** To be continued**Reporting Period:** 2024 - 2025**Status:** In Progress - will carry forward into next year**Action steps for this academic year.:**

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Program Redesign in collaboration with Kumeyaay Studies (Goal 3)**Program Goal:** Program Redesign in collaboration with Kumeyaay Studies**Goal Status:** Active**Mapping**2022 - 2028 Strategic Plan: (X)

- **Increase Equitable Access:** Program Redesign in collaboration with Kumeyaay Studies (X)
- **Increase Hiring and Retention of Diverse Employees:** Program Redesign in collaboration with Kumeyaay Studies (X)

Summary of Progress or Results**Summary Date:** 11/29/2024**Summary of Progress or Results:** To be continued**Reporting Period:** 2024 - 2025**Status:** In Progress - will carry forward into next year**Action steps for this academic year.:**

With the full-time faculty member's hiring finalized in Fall 2024, after delays in Spring 2024 and Fall 2023, we are ready to move forward with our program goals in Spring 2025, with the new faculty member playing a central and supportive role in shaping and achieving these objectives.

Create GIS Courses & Certificates (Goal 4)**Program Goal:** Create GIS Courses & Certificates**Goal Status:** Active**Mapping**2022 - 2028 Strategic Plan: (X)

- **Increase Equitable Access:** Create GIS Courses & Certificates (X)

Summary of Progress or Results**Summary Date:** 11/29/2024**Summary of Progress or Results:** To be continued**Reporting Period:** 2024 - 2025**Status:** In Progress - will carry forward into next year**Action steps for this academic year.:**

With the full-time faculty member's hiring finalized in Fall 2024, after delays in Spring 2024 and Fall 2023, we are ready to move forward with our program goals in Spring 2025, with the new faculty member playing a central and supportive role in shaping and achieving these objectives.

Program Overview and Update

Lead Author

Keenan Murray

Dean/Manager(s)

Tammi Marshall

Initial Collaboration Date with Dean

12/06/2024

Please summarize the changes, additions, and achievements that have occurred in your program since the last program review.

In Fall 2023, the program planned to focus on curriculum and course development that integrated Earth Science with Native knowledge and practices. Central to this effort was the hiring of a full-time tenure-track faculty member. However, the hiring process was delayed at the administrative level, first to Spring 2024, and then again to Fall 2024. The process was completed in Fall 2024, and it is expected that the new hire will start in Spring 2025, although final confirmation is still pending.

Because the new hire was anticipated earlier, we postponed significant program changes to allow their involvement in the program's development. As a result, the past year has focused on maintaining the current curriculum and addressing student needs rather than implementing new initiatives.

Assessment and Student Achievement

After looking at the SLO information for the past year in Nuventive Improve, are you on track for the 4-year assessment cycle?

No

If you answered no above, please describe the department's plan to ensure SLOs are assessed every 4 years.

With the arrival of the new full-time faculty member, who will be the sole full-time instructor in Earth Sciences, we plan to establish a regular and comprehensive process for assessing Student Learning Outcomes (SLOs). This transition provides an opportunity to shift from the current practice of assessing only a portion of a course's SLOs to evaluating all SLOs for each course. While many courses have been partially assessed in the past, we aim to standardize our methodology to ensure that all SLOs within a course are assessed simultaneously, promoting a more thorough and consistent evaluation process.

Which courses have not been assessed in the last 4 years?

The following recently offered courses have not yet had all their SLOs fully assessed:

- GEOG 120 - Partially assessed
- GEOG 121 - Assessed in FA22, but there are now updated SLOs
- GEOL 104 - Partially assessed
- GEOL 105 - Assessed in FA22, but there are now updated SLOs
- GEOL 110 - Partially assessed
- OCEA 112 - Partially assessed
- OCEA 113 - Partially assessed

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If you did not assess in the last year, please share why, including whether your program is experiencing barriers to assessment or data submission, and/or if your program would benefit from outcomes and assessment support.

Once the new hire for Earth Sciences is officially confirmed, it would be highly beneficial to have support with training, scheduling, and emphasizing the importance of SLO assessments. As chair, I recognize this is part of my responsibility, but managing three different programs has made it challenging to prioritize SLO assessment. Having additional support to train the new hire and establish clear and effective SLO practices would be greatly appreciated.

Please share any outcomes assessment projects your program has worked on in the last year, including SLOs on Canvas, PLOs by ACP, Equitable Assessment Strategies (innovative collective/common assessments, project-based, work-based learning, student-centered, etc.), or other.

During our Spring 2024 department meeting in Flex Week, we dedicated an hour to introducing SLOs on Canvas to promote and encourage SLO assessment.

Student Achievement

Please discuss any equity gaps in access or success.

The Earth Sciences program consistently demonstrates high retention rates across its disciplines of Geography (GEOG), Geology (GEOL), and Oceanography (OCEA), often exceeding 90%. In Fall 2023, retention rates for Geography and Oceanography were 84% and 94%, respectively, while Geology achieved a perfect retention rate of 100%. Similarly, Spring 2024 retention rates for all three disciplines remained robust, with Oceanography leading at 97%, followed by Geology at 92% and Geography at 79%. These figures indicate strong student engagement and a commitment to completing courses, even amidst the challenges posed by shifts in delivery modes, such as the transition to online learning.

Success rates have shown variability, reflecting challenges in achieving course completion with passing grades. In Oceanography, while retention rates remained high, success rates were lower, at 77% in Fall 2023 and 73% in Spring 2024. Geography followed a similar trend, with success rates of 77% in Fall 2023 and 79% in Spring 2024. Geology consistently performed better than the other disciplines, maintaining success rates of 84% in Fall 2023 and 83% in Spring 2024, demonstrating strong engagement and academic achievement. When compared to campus-wide success rates of 75% in Fall 2023 and 79% in Spring 2024, the Earth Sciences program is performing at or above the institutional average.

Hispanic/Latinx Students

Hispanic/Latinx students represent a significant portion of the program's enrollment, particularly in Oceanography. However, their success rates consistently trail those of other demographic groups. For example, in Fall 2023, Hispanic/Latinx students in Oceanography had a success rate of 70%, which is below the overall program average of 76%. This trend of lower success rates, compared to peers such as White students who achieved 80%, has been observed across multiple terms and disciplines. Fluctuating success rates suggest persistent disparities requiring continued focus.

What action will the department or discipline take to address these equity gaps?

With the new full-time faculty member starting in Spring 2025, we will collaborate to address equity gap issues by sharing data and working together to develop strategies aimed at closing these gaps.

Please describe any enrollment changes (increases/decreases) over the past year and the context for these changes.

Since Fall 2023, enrollment in the Earth Sciences program has shown diverse trends across its three disciplines. Geography enrollment increased significantly, reaching 90 students in Fall 2023 compared to 58 students in Fall 2022, largely due to the introduction of GEOG-106 to the Fall schedule. Spring 2024 Geography enrollment remained consistent with Spring 2023.

Oceanography also saw growth, with Fall 2023 enrollment rising to 101 students from 78 students in Fall 2022. Enrollment in Spring 2024, however, remained consistent with Spring 2023 levels. Geology enrollment in Fall 2023 remained steady compared to Fall 2022, but Spring 2024 saw a substantial increase, with 95 students enrolled compared to 29 students in Spring 2023. These trends reflect notable changes in student engagement across the program.

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If your program has seen a significant decline in enrollment over the past year, what resources or support would be helpful to improve program enrollment and access?

N/A

What has this data revealed about the progress of the program review goals you set?

Our program goals have been closely tied to the hiring of a new full-time faculty member, initially planned for Fall 2023. However, hiring setbacks in Fall 2023 and Spring 2024 delayed this process. We are now finalizing the hire, with the new faculty member set to begin in Spring 2025, marking the point when we can fully initiate major efforts toward achieving our program goals.

Distance Education Course Success (If Applicable)

If your department offers distance education classes, how do you ensure Regular and Substantive Interaction (RSI) is being implemented?

Our Earth Sciences instructors are deeply committed to enhancing the student experience and ensuring student success. Many have participated in professional development programs such as EMTLI and Humanizing STEM, which have equipped them with innovative strategies to engage online students. These include providing iterative feedback on assignments, fostering engaging classroom discussions, involving students in the creation of the syllabus to promote buy-in, and designing multi-step projects to enhance learning outcomes.

Program Goals

Program Goals Status

I have updated the progress on my previous goals.

Program Goals Mapping

Mapping for all active Program Goals complete.

Submission

Program Review response is complete and ready for review.

Yes - Response complete and ready for review