



College of Alameda

2023-24 Program Review - GEOGRAPHY

Lead Author:

Cady Carmichael

Program Overview

Provide your program's mission statement. If your program does not have a mission statement, what is your timeline for creating a mission statement?

The mission of the Geography Department is to teach our diverse student community to understand the natural and cultural environments of the region and around the world, to be critical consumers of environmental advocacy, and to appreciate the beauty and wonder of the planet and its diversity.

The department directly supports the College of Alameda's mission, which is: To serve the educational needs of its diverse community by providing comprehensive and flexible programs and resources that empower students to achieve their goals. In order to support this mission, we, (a) provide a variety of courses and dynamic scheduling options in coordination with other departments and disciplines within the Peralta Community College District, (b) create ethical and inclusive learning environments, (c) support the needs of all students and advocate for those programs and offices designed to help meet those needs, and (d) encourage involvement and investment outside of the classroom by supporting and engaging in a variety of programs and initiatives at College of Alameda and the larger community.

List your program faculty and/or staff

Cady Carmichael (Full time Geography faculty; Department Co-Chair)
Jeremy Patrich (Part time Geography faculty)
Aubrey Rose (Part time Geography faculty)
Danielle Widemann (Part time Geography faculty)
Maret Bartlett (Part time Geography faculty)
Chevonn Herbert (STEAM Division Staff Assistant)

Describe your current utilization of facilities, including labs and other space

As stated in the 2022-23 Annual Program Update, the College of Alameda administration removed the historic Geography classroom (D-222) space from use by college faculty (in October 2021). This was done without notice or consultation of the department and chairs. Since this occurred, the chairs and administration have discussed several alternatives and in-person classes have been held temporarily in H-222. It was decided in September 2023 that D-222 would be available for use by the Geography Department again. This space is anticipated to be ready for in-person classes for the Spring 2024 term.

D-222 is only another temporary solution. The Geography and Geology Departments need a safe, sufficient dedicated lecture and lab shared space.

List your program goals from your most recent Program Review or APU. Then, provide an update on the status of the goal. Has your program achieved the goal? Have any of your goals been revised or any still in progress? Lastly, make sure to discuss which College or District goal your program goal aligns to.

If no program goals exist or if this is your first program review, work to create 2-3 goals and align them with a College or District goal.

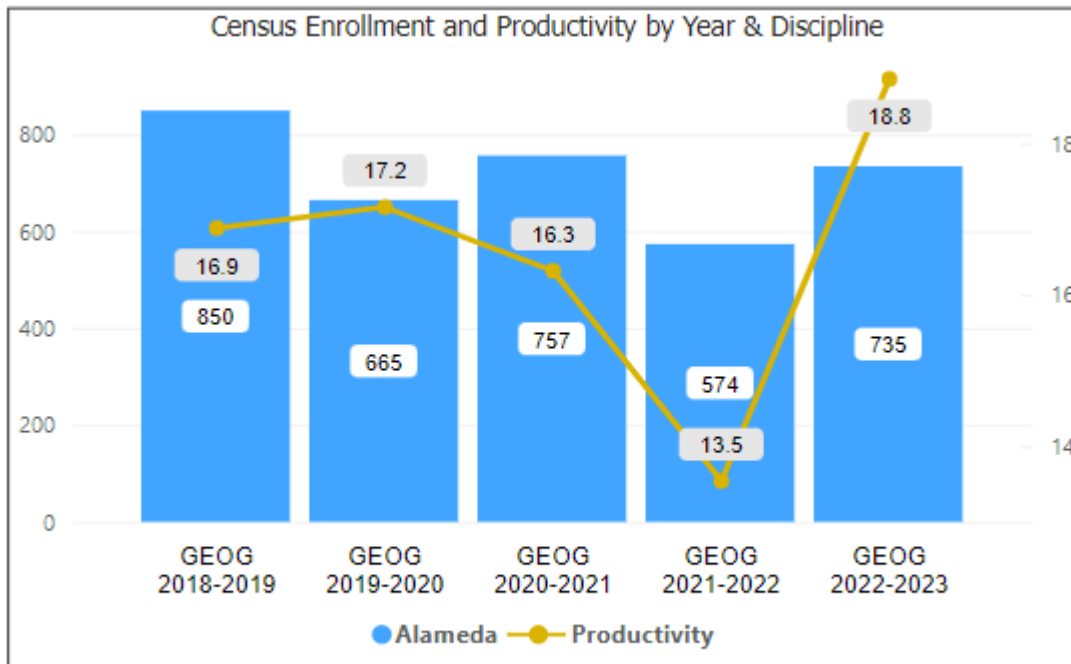
Program Goal	Student learning outcomes (SLOs) for all Geography courses have been assessed (2022-23 APU).
Status: In-Progress or Complete?	In-Progress; the department has created a plan to assess the remaining SLOs for GEOG 1, 1L, 2, 3, 14, 15, & 18. This will take place during the Fall 2023 and Spring 2024 terms.
Which college or district goal is aligned with your program goal?	Establish integrated planning and evaluation system (College Goal); Build Programs of Distinction (District Goal).

Program Goal	Establish and offer course(s) in Geographic Information Systems (GIS) and World Regional Geography (2022-23 APU).
Status: In-Progress or Complete?	Complete; GEOG 14: Introduction to Geographic Information Systems (GIS) and GEOG 3: World Regional Geography are now approved courses and have both been offered at least one semester. These courses are integrated into our department planning schedule.
Which college or district goal is aligned with your program goal?	Advance CoA Teaching and Learning (College Goal); Build Programs of Distinction (District Goal).

Program Goal	Expand other/additional course offerings, such as Environmental Geography, Climatology, Weather and Climate, and California Geography will be submitted for approval on an ongoing basis (2022-23 APU).
Status: In-Progress or Complete?	Both Complete and In-Progress; GEOG 15: Introduction to Weather and Climate and GEOG 18: California Geography are both approved and active courses. GEOG 18 and GEOG 15 have both been offered one semester. GEOG 15 is scheduled again for the Spring 2024 term. Additional courses will be submitted for approval on an ongoing basis.
Which college or district goal is aligned with your program goal?	Advance CoA Teaching and Learning (College Goal); Build Programs of Distinction (District Goal).

Program Goal	Participate in STEM outreach, recruitment efforts, and student service partnerships to expand student awareness of our course offerings and science-based careers (2022-23 APU).
Status: In-Progress or Complete?	In-Progress; The Geography Department faculty will become involved with the MESA Connect Program as well as other programs, events, and partnerships.
Which college or district goal is aligned with your program goal?	Advance CoA Teaching and Learning (College Goal); Build Programs of Distinction (District Goal).

Enrollment Trends



[Enrollment Trends Dashboard link](#)

Discuss enrollment trends over the past three years.

For additional analysis, click on the Enrollment Trends Dashboard, set the filters to Alameda and your discipline

Enrollment in Geography courses and productivity values has fluctuated over the past 3 years. Enrollment has ranged from 574 to 850 students, while productivity has ranged from 13.5 to 18.8. The highest enrollment value (850 students) occurred between Spring 2018 – Fall 2019, prior to the COVID 19-pandemic. Enrollment fell significantly to 574 between Spring 2021 – Fall 2022.

From Spring 2018 – Fall 2021, productivity remained stable, ranging from 16.3 to 17.2. Between Spring 2021 – Fall 2022 productivity declined significantly to 13.5 but then rose to its highest value (18.8) between Spring 2022 – Fall 2023.

There are a few factors that contributed to these trends. The COVID-19 pandemic obviously played a significant role in enrollment fluctuations, not just within the Geography Department, but college-, state-, and nation-wide. Colleges had to adapt to remote learning and changing students' preferences. The rebound in productivity and enrollment might reflect a return of some degree of normalcy, as well as the departments and colleges efforts to successfully adapt to the changing circumstances and regain the interest of students. Another factor is increased marketing and outreach efforts being done by the District Office, College of Alameda, Student Services, administration, and faculty. Lastly, another factor is curriculum changes and scheduling. As mentioned on pg. 2, the Geography Department has expanded its offerings to include two new courses. We have also been proactive in coordinating scheduling efforts with the Geography Departments district-wide to avoid scheduling conflicts and competition for students. Additionally, faculty have implemented strategies to engage students and address the challenges posed by the pandemic. This has included utilizing more interactive tools and resources, maintaining open and frequent communication, promoting peer-to-peer learning and collaboration, allowing flexibility in how students demonstrate their understanding of the materials, improving digital literacy skills, recognizing the diverse backgrounds and experiences of students and incorporating culturally responsive teaching practices, adopting more open educational resources (OER) and zero-textbook cost (ZTC) resources, engaging in more professional development opportunities, and acknowledging the emotional and psychological challenges students may be facing and connecting them with college resources and support services.

Describe effective and innovative teaching strategies used by faculty to increase student learning and engagement.

As mentioned in the previous section, faculty have implemented strategies to increase student learning and engagement. This has included:

- Utilizing more interactive tools, resources, and multimedia in their courses.
- Maintaining open and frequent communication with students, including providing prompt and constructive feedback on their assessments and progress.
- Promoting peer-to-peer learning and collaboration to build a sense of community.
- Allowing flexibility in how students demonstrate their understanding of the materials. This may include offering different types of assignments, such as essays, projects, or presentations to accommodate various learning styles.
- Improving digital literacy skills through resources and assessments.
- Recognizing the diverse backgrounds and experiences of students and incorporating culturally responsive teaching practices.
- Adopting more open educational resources (OER) and zero-textbook cost (ZTC) resources to reduce economic barriers and improve accessibility.
- Engaging in more professional development opportunities.
- Leveraging learning analytics tools to track student engagement and identify at-risk students in need of further support.
- Increasing understanding of students' challenges and needs during uncertain times and promoting the support and resources available to them as College of Alameda students.

How does the discipline, department, or program maintain the integrity and consistency of academic standards with all methods of delivery, including face to face, hybrid, and Distance Education courses?

Maintaining the integrity and consistency of academic standards is crucial for the success and reputation of the Geography Department. Faculty have utilized several strategies to ensure academic standards are upheld across all modes of instruction, including:

- Ensuring that all learning objectives, content, assessments, and grading criteria for each course are consistent across all modalities.
- Regularly reviewing and updating course materials to keep them relevant and aligned with the department's academic standards.
- Clearly communicating all course expectations, policies, and academic standards to students (which are consistent across all modalities).
- Ensuring that course materials are accessible to all students, including those with disabilities.
- Engaging students with consistent support services across all modalities (i.e., tutoring, counseling, etc.).
- Participating in ongoing professional development to keep faculty up to date with pedagogical methods and technologies.
- Participating in department meetings to collaborate and share best practices.
- Continuously assessing and measuring students learning outcomes to ensure that the department's academic standards are met.

Curriculum

Have all your course outlines of record in CurriQūnet been reviewed within the past three years?



<https://peralta.curricunet.com/>

Yes No, please explain:

All Geography course outlines of record (CORs) have been reviewed within the past three years.

Please list any planned changes from the current semester forward for curriculum (courses, degrees, and/or certificates) and the rationale for those changes (e.g., labor market data, advisory committee recommendations, transfer institution changes, industry trends, state-wide transfer model curriculum).

According to Association of American Geographers, geography-related occupations have high-growth potential (40-60%). Most of this growth will occur within the sub-fields of Geographic Information Systems (GIS), urban and regional planning, and environmental planning. GIS is software designed to capture, manage, analyze, and display all forms of geographically referenced information. GIS allows us to view, understand, question, interpret, and visualize our world in ways that reveal relationships, patterns, and trends in the form of maps, globes, reports, and charts. This technology provides cost saving through greater efficiency, better decision making, improved communication, improved records keeping, and management of spatial problems. Understanding and utilizing this technology is becoming increasingly important as it benefits organizations of all sizes and in almost every industry.

Since there is a growing interest in Geography and an awareness of the economic and strategic value of GIS, our department has committed to offer a GIS Certificate Program in addition to the recently developed Associate of Arts in Geography Transfer Degree (AA-T). Program Learning Outcomes for the ADT and A.A. degree in Geography are, 1) Describe the spatial organization of the world's peoples, nations, cultural environments; 2) Demonstrate knowledge of global physical and environmental processes and develop an appreciation of landscapes; and 3) Demonstrate an understanding of how human activities impact the physical environment.

The Geography Department is planning to create several new courses, such as Environmental Geography, Database Management, GIS Applications and Programming, GIS Analysis, GIS Internship, Remote Sensing, Cartography and Computer Mapping, Environmental Applications of GIS, and WebGIS. These will be components of the future GIS Certificate and GIS Associate of Science degree programs.

How is your program meeting the needs of students, and/or articulation with four-year institutions?

The following courses are all C-ID articulated:

- GEOG 1: Physical Geography
- GEOG 1L: Physical Geography Lab
- GEOG 2: Cultural Geography
- GEOG 3: World Regional Geography
- GEOG 14: Introduction to Geographic Information Systems
- GEOG 18: California Geography

Students will soon be able to obtain an A.A. and AA-T degree in Geography from College of Alameda (these degrees are currently pending state approval as of October 2023). GEOG 1, 1L, 2, 3, and 14 are all acceptable for transfer credit at CSUs and UCs as well as local A.A./A.S. degrees and certificates throughout the Peralta Community College District.

Student Learning Outcomes Assessment

List your Student Learning Outcomes

GEOG 1: Physical Geography

1. Students will develop and understanding of Earths interconnected systems.
2. Students will demonstrate spatial knowledge and an understanding of the underlying processes that shape Earth's landscape.
3. Students will demonstrate an understanding of the uses, organization, and analysis of data.

GEOG 1L: Physical Geography Lab

1. Students will develop and understanding of Earths interconnected systems.
2. Students will demonstrate spatial knowledge and use practical examples to explain the underlying processes that shape Earth's landscape.
3. Students will demonstrate an understanding of the uses, organization, and analysis of data.

GEOG 2: Cultural Geography

1. Discuss the history and diffusion modes of such cultural features as religion, language, and material culture.
2. Compare and contrast the ways in which different human cultures interact with their environments to produce the cultural landscape and build cultural identity.
3. Apply concepts relating to the operation of Earth systems and human culture to evaluate the environmental effects of human activities and natural environments.

GEOG 3: World Regional Geography

1. Interpret information about spatial features and relationships revealed through maps.
2. Describe and analyze the relationships between cultures and the environment in creating landscapes and changing our environment.
3. Explain the origins, spread, and development of major nations and regions using major geographic concepts.
4. Compare and contrast the major regions of the world with respect to their relative locations, natural environments, peoples, resources, economies, and contemporary problems.

GEOG 14: Introduction to Geographic Information Systems

1. Students will develop an understanding of the key principles of Geographic Information Systems and cartographic design.
2. Students will demonstrate an understanding of the uses, organization, and analysis of geographical data.
3. Students will demonstrate technical skills in data management including data input, editing, query, analysis, and display.

GEOG 15: Introduction to Weather and Climate

1. Identify the basic composition and structure of the atmosphere, and the temporal and spatial characteristics of weather events and climate patterns.
2. Apply concepts relating to the key forces and physical processes driving changing weather and climate patterns and determine the impacts of these changes on the cultural landscape.
3. Analyze, discuss, and interpret data presented in standard measurements, charts, maps, and diagrams as it relates to meteorological patterns and variables.

GEOG 18: California Geography

1. Compare and contrast the major geographical regions of California in terms of their cultural and physical geography.
2. Describe the relationships among climate, agriculture, economy, population, and urbanization in California.
3. Investigate and explain cultural diversity in California.

GEOG 049: Independent Study in Geography

1. Investigate, assess, and communicate findings of specific independent project(s) as discussed with instructor.

Please provide a high-level summary and your program's interpretation of your SLO findings over the past year.

The department has created a plan to assess the remaining SLOs for GEOG 1, 1L, 2, 3, 14, 15, & 18. This will take place during the Fall 2023 and Spring 2024 terms and will then follow a three-year repeatable pattern. The new assessment sequence will begin using courses offered in Fall 2023. SLO 1 will be assessed in all courses offered Fall 2023. SLO 2 will be assessed in all courses offered in the 2023-2024 academic year, and SLO 3 will be assessed in all courses in the 2024-2025 academic year. This will ensure all SLOs continue to be assessed within the three-year cycle at least once during the academic year in which the courses are offered.

SLO findings over the past year have indicated that all courses have met the intended learning objectives and academic standards, and that student learning has aligned with the stated learning objectives for the course and department. Faculty have used this valuable data to (a) reinforce teaching methods and technologies being successfully implemented, (b) allocate supply and equipment funds appropriately and effectively, and (c) identify areas where students may be struggling to target support and improve student success rates.

What were the most important things your department learned from assessment? Did implementation of your action plans result in better student learning?

Based on the ongoing assessment, faculty have engaged in collaborative data-driven decision making about course content, teaching strategies, and resource allocation. Overall, students are consistently surpassing the criteria established for success (i.e., in which 75% of students who completed this assessment must earn at least 70% of the points in order to meet the expectations for this outcome). Minor changes in course content and teaching strategies have been implemented, including implementing more engaging, interactive materials and providing more opportunities for students to collaborate. The ongoing assessment has also helped faculty determine where supply and equipment funds may best be utilized.

What percent of your programs have been assessed? (Mainly based on evidence in the report, attach other evidence as necessary; note: a complete program assessment means all Program Learning Outcomes (PLOs) have been assessed for that program)

As mentioned previously on pg. 5, the A.A. and AA-T degrees in Geography are new and currently pending state approval as of October 2023. Once these programs are active, the following program learning outcomes will be assessed regularly:

1. Describe the spatial organization of the world's peoples, nations, and cultural environments.
2. Demonstrate knowledge of global physical and environmental processes and develop an appreciation of landscapes.
3. Demonstrate an understanding of how human activities impact the physical environment.

College of Alameda Institutional Learning Outcomes (ILOs) were created to guide educational programs and services. They include:

- **Problem Solving:** Solve problems and make decisions in life and work using critical thinking, quantitative reasoning, community resources, and civil engagement.
- **Communication and Technology:** Use technology and written and oral communication to discover, develop, and relate critical ideas in multiple environments.
- **Creativity:** Exhibit aesthetic reflection to promote, participate and contribute to human development, expression, creativity, and curiosity.
- **Diversity:** Engage in respectful interpersonal communications, acknowledging ideas and values of diverse individuals that represent different ethnic, racial, cultural, and gender expressions.
- **Civic Responsibility:** Accept personal, civic, social and environmental responsibility in order to become a productive local and global community member.

How does your program participate in assessing the Institutional Learning Outcomes (ILOs)? If your program has not participated, how will you plan to incorporate these outcomes within your program?

The SLOs for all Geography courses have been linked with the ILOs established at the College of Alameda. This linkage has been facilitated through the utilization of the Institutional Outcome Map feature integrated within the CurriQunet system. Additionally, the regular assessment of SLOs in these Geography courses serves as a concurrent mechanism for assessing the alignment and attainment of the overarching ILOs established by the institution.

Course Completion

Alameda	Total Graded	Course Completions	Course Completion Success Rate
2023	190	140	74%
GEOG			
Online	190	140	74%
2022	507	357	70%
GEOG			
In-Person	12	8	67%
Online	495	349	71%
2021	734	586	80%
GEOG			
Online	734	586	80%
2020	598	481	80%
GEOG			
In-Person	102	84	82%
Online	496	397	80%
2019	850	636	75%
GEOG			
Hybrid	40	34	85%
In-Person	170	113	66%
Online	640	489	76%

Consider your course completion rates over the past three to five years (% of students who earned a grade of "C" or better).

[Course Completion Dashboard link](#)

How does the course completion rate for your program or discipline compared to your college's Institution-Set Standard for course completion of 72% and the stretch goal of 78%?

The Geography Department has maintained consistent, high course completion rates for the past 5 years. The department exceeded the college's Institution-Set Standard for course completion each year aside from 2022 in which the rate was 70%. The department has also exceeded the stretch goal in 2020 and 2021 with 80% completion achieved both years.

Are there substantial differences in course completion rates between face to face and Distance Education/hybrid courses? If so, how does the discipline, department, or program address this?

The course completion rates between face to face and distance education/hybrid courses varies. In 2019 and 2022 in-person courses had *lower* completion rates (66% and 67% respectively) compared to online and hybrid courses. However, in 2020, the completion rate was *higher* (82%) in in-person classes compared to online (80%). In 2019, the hybrid course achieved the highest completion rate of all modalities at 85%. The post-COVID comparisons in the chart above may not accurately reflect comparative completion rates. This discrepancy arises from the significantly reduced enrollment of in-person offerings and therefore students in Geography courses during 2022.

The Geography Department is committed to continuing to expand in-person and hybrid offerings as student demand and enrollment data supports it. We are also committed to continuously improving and updating our courses and teaching strategies to provide a consistent experience for all

students across modalities. This includes taking advantage of professional development opportunities, setting clear and consistent expectations, implementing an onboarding process for students in in-person, online, and hybrid courses, maintaining regular and effective communication, ensuring that the same support services are accessible, implement early warning assessments and provide interventions, build strong relationships with students and encourage students to build strong relationships with their peers, incorporate flexible assessment tools, and encourage student feedback to assess their needs.

If your program offers dual enrollment courses, examine the data, and discuss the course completion rates compared to the overall program rate.

N/A

Alameda	Census Enrollment	Total Retained	Course Retention Rate
2023	190	161	85%
GEOG			
Online	190	161	85%
2022	519	433	83%
GEOG			
In-Person	12	10	83%
Online	507	423	83%
2021	759	657	87%
GEOG			
Online	759	657	87%
2020	674	533	79%
GEOG			
In-Person	121	94	78%
Online	553	439	79%
2019	868	727	84%
GEOG			
Hybrid	40	38	95%
In-Person	171	142	83%
Online	657	547	83%

On average the course retention rate (number of students are retained in the course) for College of Alameda has been **85%** for the past three years. Examine the course retention rates for your program over the last three years. How does your program or discipline course retention rates compare to the college?

Overall, the retention rates in Geography courses have remained high and fairly consistent. The Geography Department has exceeded the average college retention rate for the past three years with the exception of 2020 and 2022 (at 79% and 83% respectively). The highest retention rate was achieved by a hybrid course in 2019, with a rate of 95%. The lowest retention rate occurred in in-person courses in 2020, which coincides with the disruption in learning created by the COVID-19 pandemic.

College of Alameda continues to focus on access, equity, and success. The goal is to create an inclusive environment where all students can thrive and meet their education and career goals.

To address equity gaps and work towards achieving equity in educational outcomes, examine your program data for evidence of disproportionate impact (DI). Using the percentage point gap method to identify DI, subgroups whose course completion rate falls more than -3 percentage points below the All-Students success rate are highlighted red. The Margin of Error value (MOE) is used to determine the presence of DI using the Point Gap Method. Values lower than the corresponding MOE are reflective of disproportionate impact (i.e., pink highlighted cells). Groups with 10 students or less are excluded from the analysis.

DATA TBD

What can your discipline, department, or program do to improve course completion for disproportionate impacted groups?

There are several ongoing gaps that need to be addressed college-wide and within our Geography courses. As discussed in the 2021-2022 APU, significant improvements were made in the success and retention rates among Black/African American and Hispanic/Latino students. Among Black/African American students, the success rate increased by 21.7% and the retention rate increased 18%. Among Hispanic/Latino students, the success rate increased 7.6% and the retention rate increased 10.6%. It should be noted that these rates were still lower than the success and retention rates among Asian and White students.

However, in looking at the data equity data provided significant and unfortunate gaps have increased since the gains that occurred in the previous years. The subgroups most impacted are Black/African American students, Hispanic/Latino students, female students, and first-generation students.

The department and College have made, and will continue to make, tremendous efforts to connect students with available support systems and programs. Continuing discussions within our shared governance structure, ongoing course assessment, and improvements to course curriculum and communication with students (including culturally responsive teaching) are necessary to ensure that overall student success and accomplishment of student goals is equitable. Since many of our students plan on transferring, a visible and measurable commitment to student support and achievement is essential. The Geography Department is committed to continue to work with student support services and outreach, as well as the larger guided pathways framework to address these gaps.

Degrees & Certificates Conferred

Does your program offer any degree/certificate programs? If your program does not, skip this section and continue to **Engagement**.

Since the last program review, what has the discipline, department, or program done to improve the number of degrees and certificates awarded?

N/A

For more information on awards: [**Degrees & Certificates Dashboard link**](#)

Increasing the number of students who complete a certificate or degree is a shared goal across CoA's Ed Master Plan Goals, PCCD Goals, the Chancellor's Office Vision for Success, the Student-Centered Funding Formula, and Guided Pathways. What is planned for the next 3 years to increase the number of certificates and degrees awarded?

N/A

Engagement

Discuss how faculty and staff have engaged in institutional efforts such as committees, presentations, and departmental activities. Please list the committees that full-time faculty participate in.

Chair committee (present)
Academic Senate (present)

MESA Co-Director (past)
Zero Textbook Cost Degree Program Co-Director (past)
Guided Pathways Steering Committee (past)
Budget Committee (past)

Discuss how faculty and staff have engaged in community activities, partnerships and/or collaborations.

Geography faculty actively engage in numerous professional affiliations, which encompass organizations such as BayGeo, the American Geographical Society, the Association of American Geographers, the California Geographical Society, and the Society of Woman Geographers. Additionally, faculty members have been involved in various initiatives and collaborative undertakings with staff and faculty at Encinal High School, Alameda Unified School District, Girls INC., UC Berkeley, San Francisco State University, and the University of San Francisco.

Discuss how adjunct faculty members are included in departmental training, discussions, and decision-making.

Adjunct faculty are an essential component of the Geography Department at College of Alameda. To start, all adjunct faculty are provided with a comprehensive orientation and onboarding process that includes mentorship by the full-time faculty. Adjunct faculty are included in all departmental meetings and discussions, and are encouraged to participate in professional development opportunities and shared governance. Adjunct faculty are also asked to participate in inclusive decision-making in scheduling, assessment, and funding allocations.

Prioritized Resource Requests Summary

In the boxes below, please add resource requests for your program. If there are no resources requested, leave the boxes blank.

Resource Category	Description/Justification	Total Estimated Cost
Personnel: Classified Staff		
Personnel: Student Worker		
Personnel: Part Time Faculty	As post-pandemic enrollment recovers and the department continues to grow and expand its offerings, additional part-time faculty members may be needed to help meet demand.	\$15,000 - \$30,000
Personnel: Full Time Faculty		

Resource Category	Description/Justification	Total Estimated Cost
Professional Development: Department wide PD needed		
Professional Development: Personal/Individual PD needed		
Supplies: Software	Upgraded and continued funding of the ArcGIS software license is critical to the offering of GEOG 14 as well as providing faculty with the opportunity to integrate mapping components into their courses.	\$2,000
Supplies: Books, Magazines, and/or Periodicals		
Supplies: Instructional Supplies	At least \$1,000 is needed to maintain and/or replace instructional supplies for lecture and lab activities.	\$1,000
Supplies: Non-Instructional Supplies		
Supplies: Library Collections		
Technology & Equipment		
Library: Library materials/collections		
Facilities: Classrooms/Labs	Tables have been requested to replace the individual desks in D-222. This will allow for better facilitation of group activities and lab work. Renovations leading to the development of a dedicated lecture and lab teaching space for the Geography and Geology Departments are need as soon as possible.	Unknown \$4,000

Facilities: Offices		
Other		