

# Comprehensive Program Review Report



## Program Review - Geography

### Program Summary

#### 2021-2022

**Prepared by:** Christopher Krause

**What are the strengths of your area?:** The Geography program continues to be one of the most popular offerings in the science and social science divisions. Many students enroll in GEOG 001 (Physical Geography) and GEOG 001L (Physical Geography Lab) seeking general education and transfer credit as these courses are classified as a physical science. Similarly, many students who enroll in GEOG 002 (World Regional Geography) are seeking general education and transfer credit as this course is classified as a social science. Since Spring 2017, GEOG 002 has been a major requirement for the Associate in Arts in Elementary Teacher Education for Transfer major, one of the most common majors on campus.

Between the 2015-16 school year and the 2019-2020, enrollment in geography courses increased ~14% from 75.8 FTEs to 86.6 FTEs. Due to the COVID-19 pandemic, enrollment in the 2021-2021 school year declined ~8% to 80.4 FTEs. Enrollment concentrated in GEOG 001 and GEOG 001L accounts for ~72% and ~8% (respectively) of the department's FTEs. Enrollment in GEOG 002 accounts for ~20% of the department FTEs.

Overall student success rates in geography courses have been consistently increasing for at least the past six academic years from 79.9% in the 2015-2016 academic year to 88.4% in the 2020-2021 academic year. During this timeframe, success rates in GEOG 002 increased the most, increasing from 74% to 93%.

**What improvements are needed?:** Disaggregating success rates by equity groups resulted in the discovery of some disparities. The overall success rates for geography courses in the past six academic years was 84.0%. However, among African-American students, the success rate was only 71.8%. Success rates among all over race/ethnicities were similar to the overall rate or higher (e.g. the success rates among white students was 88.0% and among Asian students was 94.6%). Differences were also identified between full-time students (success rate of 86.6%) versus part-time students (77.1%) and students receiving a Pell grant (87.9%) and students who did not (81.8%). Taken together, these disparities suggest that additional support such as study guides and/or out-of-class tutoring should be provided to all students to make success more equitable.

GEOG 001 (Physical Geography) is taught by multiple instructors. This is not inherently a problem. However, regardless of GEOG 001 section, all students enrolled in GEOG 001L (Physical Geography Lab) have the same instructor. Increased consistency between course content among the GEOG 001 sections would facilitate closer integration between the courses. Collaboration and sharing of materials between instructors could make this possible.

**Describe any external opportunities or challenges.:** In Fall 2021, the division invested into acquiring a site license for Esri, a leading geospatial technologies company. These technologies are already being used to supplement instruction in all geography courses and provide students the opportunity to interact with more modern forms of geographic data than the existing inventory of paper maps could provide. The impact of implementing these new technologies has not yet been fully assessed since their adoption was so recent.

Within the Central Valley, there is a dearth of qualified geographers who could adjunct here at COS. For example, the most recent job posting had only two applicants apply. This severely limits the number of course sections that can be offered.

**Overall SLO Achievement:** Reporting of SLOs has been inconsistent in past years. There appears to be a misalignment of SLO assessment and reporting. Guidance has been sought out from the Outcomes & Assessment Committee Co-Chair.

Currently in the Fall 2021 semester, SLOs are being assessed both through in-class assignments as well as out-of-class exams. Across the different geography courses, the majority of students are demonstrating satisfactory achievement to the course

outcomes.

**Changes Based on SLO Achievement:** In future semesters, more authentic assessments should be developed which require the students to apply their geographic understanding to analyze and address real-world scenarios. Presently, students are asked to do so during in-class discussions but they are not currently formally assessed in this way. Additionally, assessments developed for the course SLOs will be shared among all instructors teaching the course so assessment will be consistently reportable among all course sections.

**Overall PLO Achievement:** NA

**Changes Based on PLO Achievement:** NA

**Outcome cycle evaluation:** During the 2020-2021 academic year, no geography courses were in their year for assessment within the outcome assessment cycle. In preparation for GEOG 002 SLOs to be assessed during the 2021-2022 academic year, assessments are being developed and implemented for the course outcomes.

## Action: Maps

Create a replacement plan for major continental maps.

**Leave Blank:** Continued Action

**Implementation Timeline:** 2020 - 2021

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:** Demonstrate an ability to read maps and identify numerous locations on the surface of the earth.

**Person(s) Responsible (Name and Position):** Dave Howell

**Rationale (With supporting data):** We need to remain current on all geopolitical events.

**Priority:** Medium

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

### Update on Action

#### Updates

**Update Year:** 2021-2022

10/15/2021

**Status:** Action Completed

Funding was used to purchase a site license for the Esri suite of geospatial technologies now used by our geography students.

**Impact on District Objectives/Unit Outcomes (Not Required):**

## Resources Description

**Equipment - Instructional** - Meteorology and geomorphology maps, charts and equipment. (Active)

**Why is this resource required for this action?:** The geographical maps are old, and some are outdated.

**Notes (optional):**

**Cost of Request (Nothing will be funded over the amount listed.):** 1500

## Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 1.1** - The District will increase FTES by 1.75% over the three years

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

**District Objective 2.2** - Increase the number of students who transfer to a four-year institution by 10 percent over three years

District Objectives: 2015-2018

**District Objectives - 2.1** - Increase the number of students who are transfer-prepared annually.

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**District Objectives** - 2.2 - Increase the number of students who earn an associate degree or certificate annually.

## Action: Replacement Geography Instructor

Retirement replacement

**Leave Blank:**

**Implementation Timeline:** 2020 - 2021

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:**

**Person(s) Responsible (Name and Position):** Ryan Freose, Francisco Banuelos, Dave Howell

**Rationale (With supporting data):**

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

### Update on Action

#### Updates

**Update Year:** 2021-2022

10/15/2021

**Status:** Action Completed

Hired Christopher Krause as a full-time tenure track geography instructor.

**Impact on District Objectives/Unit Outcomes (Not Required):**

## Resources Description

**Personnel - Faculty** - Full-time faculty replacement (Active)

**Why is this resource required for this action?:** The department only has one full-time faculty, who is retiring at the end of this fiscal year. The department maintains efficient enrollment/FTES. The courses contribute to general education and transfer requirements. There is a scarcity of adjunct faculty to meet the demand for the courses.

**Notes (optional):**

**Cost of Request (Nothing will be funded over the amount listed.):** 120000

## Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 1.1** - The District will increase FTES by 1.75% over the three years

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## Action: Growth Position

Over the past decade, geography has offered on average 25.6 LHE. This course load has historically been taught by a combination of one full-time faculty member, retired Dave Howell, an assortment of adjuncts, and often times Eric Hetherington teaching a section of Physical Geography. For a variety of reasons, the individuals who had been adjuncting are now unable to do so. Securing replacements adjuncts has proven to be quite difficult. One of the most limiting factors is that no nearby institutions offer a graduate level geography program. A growth position would facilitate a wider applicant pool as individuals from further away would be more likely to apply for a full-time position than an adjunct one. Having a second full-time geographer would allow the department to provide additional sections of courses to better support the general education program with GEOG 001 (Physical Geography), GEOG 001L (Physical Geography Lab), and GEOG 002 (World Regional Geography). Academic counseling has expressed

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a specific need to offer more GEOG 002 sections as it is a requirement for elementary education majors (the third largest major on campus). GEOG 001 & GEOG 001L continue to be quite popular courses filling every section offered (often overcapacity even). With an additional faculty member, providing these courses at the satellite campuses in Tulare and Hanford is planned. These courses have successfully been offered there before but this semester due to lack of adjuncts a course was unable to be offered in Hanford. The addition of another geography faculty would also allow flexibility to Eric Hetherington to teach more geology courses by relieving him of teaching a Physical Geography section (unless he would like to continue doing so). Lastly, with the foreseen growth of the geography program with a second full-time geographer, recruiting enough students to make enrollment for an introductory geographic information systems course would be much more likely. This course (ESCI 155) is already on the books (thank you Larry Owens and Dustin White) but has struggled to meet enrollment. As more students get engaged in geography through general education coursework, there will be a larger pool of students who could consider enrolling in this course.

**Leave Blank:**

**Implementation Timeline:** 2021 - 2022

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:**

**Person(s) Responsible (Name and Position):** Francisco Banuelos, Ryan Freose, and Christopher Krause

**Rationale (With supporting data):**

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

## Resources Description

**Personnel - Faculty - Growth faculty position (Active)**

**Why is this resource required for this action?:** Geography courses are very popular within the general education program and we have been unable to offer enough in-person sections to meet student demand because of the unavailability of in-person adjunct instructors.

**Notes (optional):**

**Cost of Request (Nothing will be funded over the amount listed.):** 120000

## Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 1.1** - The District will increase FTES by 1.75% over the three years

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## Action: Monthly Departmental Meeting

To facilitate more consistent instruction and assessment between different instructors of geography courses, we are proposing monthly departmental meetings. Reoccurring agenda ideas include discussion of course schedule, sharing of activities and assessments, and ensuring integration of the physical geography lab with the physical geography lecture section.

**Leave Blank:**

**Implementation Timeline:** 2021 - 2022

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:**

**Person(s) Responsible (Name and Position):** Christopher Krause

**Rationale (With supporting data):**

**Priority:** Medium

**Safety Issue:** No

**External Mandate:** No

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Safety/Mandate Explanation:

## Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

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## Action: Renewal of Esri Site License

To maintain student's access to modern the cutting-edge geospatial technologies, we are requested a renewal of our college's site license with ESRI.

Leave Blank:

Implementation Timeline: 2021 - 2022

Leave Blank:

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Identify related course/program outcomes:

Person(s) Responsible (Name and Position): Francisco Banuelos and Christopher Krause

Rationale (With supporting data): GEOG 001 SLO #1-3, GEOG 001L #1-2, GEOG 002 #1

Priority: High

Safety Issue: No

External Mandate: No

Safety/Mandate Explanation:

## Resources Description

**Equipment - Instructional** - Annual site license for Esri geospatial technologies. (This proposes augmentation to the base budget.) (Active)

**Why is this resource required for this action?:** These geospatial technologies allow students to integrate and apply their geographic understandings in modern and innovative ways.

**Notes (optional):** This is a reoccurring cost of \$2,500 annually.

**Cost of Request (Nothing will be funded over the amount listed.):** 2500

## Link Actions to District Objectives

District Objectives: 2018-2021

**District Objective 1.1** - The District will increase FTES by 1.75% over the three years