Ohlone College
Program Review Report

• Program Description and Scope:
  1. Program Review Title: Geography & Geographic Information Systems
  3. Review Type: Instructional Disciplines
  4. Program/Departments: Geography/Geographic Information Systems (22002, 22004)
  5. Authority Code: 44-Dean, Science, Engineering, and Mathematics
  6. External Regulations: Yes__ No_X_
  7. Provide a brief narrative that describes the instructional program/discipline.

The Geography/GIS program has several common sutras – increasing high enrollment, high retention rates and successful completion rates. George Rodgers was hired 20 years ago to teach Geography, Anthropology and Geology. He is the first graduate of Ohlone College to be hired as a full timer. Until recently, he divided his time between teaching Anthropology and Geography classes. George also taught Geology until eleven years ago when Paul Belasky was hired to teach Geology. He currently teaches a World Regional Geography class and has taught this class since he was hired in addition to his Geology classes In August of 2007, Narinder Bansal was hired full time as the District’s new Environmental Studies instructor. Narinder is a former Geography student here and has been teaching Geography and GIS on a part-time basis here at Ohlone for the past 8 years. He will continue to teach some Geography and GIS classes in addition to his Environmental Studies courses. This dynamic growing program is and has always been until recently, staffed by part-time professors. George, Paul and Narinder are full time staff, but none have had Geography as their full time assignment. Our team has been augmented by some great adjunct professors over the years.

8. Describe how the program specifically serves students, faculty and staff.

All of the courses are articulated and meet the general education requirements for the AA degree, as well as transfer requirements for the four-year higher learning institutions.

9. Describe how the program addresses current needs and applies current technologies.

Geography and GIS use the latest technologies provided by the smart classrooms, meeting the needs of a technically savvy and diverse student population.
10. *Discuss the impact of the program on the college and/or other programs.*

Geography and GIS provides the college and our division with high FTES which is a testament to our adjunct faculty, because there are no fulltime faculty members assigned to the department.

From 1967 to SP of 2010, when George had to give up some of his teaching load and concentrate only on Geography, the course offerings at Ohlone College were dependant upon hybrid full timers and part-time instructors. Today we average approximately 480 students per semester in our Geography and GIS courses. The courses that we offer are as follows:

a. Physical Geography – lecture (fulfillment of physical science requirements)
b. Physical Geography – lab (fulfillment of physical science requirements)
c. Cultural Geography – lecture (fulfillment of social science requirements)
d. World Regional Geography – lecture (fulfillment of social science requirements)
e. California Geography – lecture (fulfillment of social science requirements)
f. GIS certificate. Which include: Intro. To GIS; GIS Projects; Intro. To GPS; Environmental GIS

11. *Discuss the impact of the program on the community and the impact of the community on the program.*

Geography and GIS provides the students/community with a better understanding of their physical environment, and how it affects their daily lives.

### College Mission

1. *Mission Statement*

The mission of Ohlone College is to serve the community by offering instruction for basic skills, career entry, university transfer, economic development, and personal enrichment for all who can benefit from our instruction in an environment where student learning success is highly valued, supported and continually assessed.

2. *Vision Statement*

Ohlone College will be known throughout California for our inclusiveness, innovation and superior rates of student success.

3. *Core Values, Goals & Objectives:*

#### College Core Values

- We provide life-long learning opportunities for students, college personnel and the community.
- We open access to higher education and actively reach out to under-served populations.
- We promote diversity and inclusiveness.
- We maintain high standards in our constant pursuit of excellence.
- We value trust, respect and integrity.
- We promote team work and open communication.
• We practice innovation and actively encourage risk-taking and entrepreneurship.
• We demonstrate stewardship for our human, financial, physical and environmental resources.

College Goals/Objectives

1. Through innovative programs and services, improve student learning and achievement.

   1. By 2013, have in place an ongoing system for identifying and assessing student learning outcomes at the program and course levels, which includes faculty dialogue and appropriate improvement plans.
   6. By spring 2013, the number of students receiving associate degrees to a rate at or above the peer group average.
   7. By spring 2013, increase the number of students receiving certificates of accomplishment and certificates of achievement to a rate at or above the peer group average.
   8. By 2015, increase the number of students taking 12.0 units or more per semester to a rate of 30% compared to headcount enrollment.

2. Support the economic vitality of the community through educational programs and services that respond to identified employment needs.

   4. By 2013 provide opportunities across the curriculum for students to acquire key skill sets and concepts that will help them succeed in the workplace.

6. Enhance college-wide interaction with, and acceptance of, diverse peoples, cultures, arts, and perspectives.

4. Briefly describe how the program supports the college mission, vision selected college values.

The Geography/GIS program provides courses for career entry, university transfer, economic development, and personal enrichment.

College Core Value #3 states "we promote diversity and inclusiveness."

The Geography/GIS Program offers courses in cultural, world regional, and California geography. These classes provide students and the community cross-cultural and diverse education.

College Core Value #4 states "we maintain high standards in our constant pursuit of excellence." This is evident in the effusive praise by students that attest to the dedication of the faculty, the innovative teaching and the relevance of the curriculum to students' lives in the 21st century.

5. Briefly describe how the program supports selected college goals.

College Goal #1 & #2: Developed strategies to increase the proportion of full-time students including learning communities, cohort groups, enhanced
facilities, and improved course availability. The Geography/GIS Program has in the recent past developed learning communities combining history and geography, geography/GIS/environmental studies, and by teaching geography and GIS course at the Newark Campus the department invasions an increase in to the already high enrollment.

College Goal #6: The Geography/GIS Program offers courses in cultural, world regional, and California geography. These classes provide students and the community cross-cultural and diverse education.

6. Briefly describe how the program supports selected college objectives.

1.1 Course and program assessment is ongoing.

1.6 Courses are fully transferable to both CSU and UC.

1.7/2.4 Plan to establish an AA in Geography/GIS by Fall 2013.

1.8 Students are encouraged to complete current certificates in Geography and GIS.

1. "By 2015, increase the number of students taking 12.0 units or more per semester to a rate of 30% compared to headcount enrollment."

The Geography/GIS Program has in the recent past developed learning communities combining history and geography, geography/GIS/environmental studies, and by teaching geography and GIS course at the Newark Campus this program has increased the already high enrollment.

- Program SLOs & Assessment
  1. Program SLO -

  Investigate their physical environment and explain how various physical forces shape the environment in which they live.

  a. Indicate program assessment strategies used.
     i. Other

     1. A questionnaire was developed and is passed around to all students within the first 2 weeks of the semester. It is attached to (but not be counted as part of the first quiz they have to take). The questionnaire assess the student knowledge of the topics as pertaining to each student learning outcome (see above). It will contain objective questions that will ask them to rate their knowledge of that general topic on the scale of 1 to 10, then answer specific questions (matching, lists, multiple choice) on that general topic or pertaining to the short text provided. To insure objectivity, the students will be able to use Scantron sheets for
most of the questions.

2. The students are asked to rate their geographic knowledge on the scale of 1 to 10. The students will then be given a copy of a large-scale map of the world and a topographic map of the Fremont area. They will be asked questions locating some continents, major physical features, oceans and seas on the map of the world. The are asked to determine latitude and longitude of a few features on the map. The are also asked to determine the location and elevation of the Mission Peak.

These 2 methods are used for all 6 program SLOs.

b. Describe the criteria and standards used to appraise student work.

Pre and post test are reviewed to determine what the students have learned.

c. Enter assessment results and analyze student success in achieving this program SLO.

Results will be available Spring 2013

d. Describe revisions in curriculum or teaching strategies implemented to promote student success.

Over the years, the Geography and GIS programs stressed the traditional methods of teaching the earth and social sciences, such as formal, structured lectures, more informal, specimen-based hands-on labs, emphasis on classroom instruction, attendance, note-taking, etc. These techniques are still being used and are quite effective. At the same time, new technologies such as the computer-based learning, electronic student response devices, in-class links to the Web, on-line instruction, and other innovative methods of teaching have been introduced. The current goal of the Geography and GIS program is to incorporate both of the traditional and electronic teaching approaches. To that end, the digital image data base has been (and is being assembled), new media were added (new videos, animation sequences, DVD’s, PowerPoint presentations with web links) were added to aid student learning and better utilize the “smart” classroom in 8109, 8110 and 8112 in Fremont and rooms, 1222, 1224, in Newark. Since the last program review, a new course - Geog 105 California Geography has been created and had been linked to a learning community which combines this course with California History. Our GIS program which moved back to the main campus from Newark and housed in Hyman Hall is now being taught on line. The Environmental Studies Studies Department continues to partner with Geography utilizing the skill sets of the Geography and GIS faculty. The Geography and GIS program will continue to utilize innovative, web-enhanced teaching techniques. In the future, on-line classes will be created as needs arise.
It is this combination of the traditional and innovative teaching methods that is believed to be the key to student success in our Geography/GIS program.

Assessment of Program Improvement since Previous Program Review:

The Geography and GIS program has experienced a metamorphic growth over the last several years. It has seen growth and maturation. This has been accomplished through the efforts of mainly adjunct faculty. There has never been a fulltime position in geography. The three fulltime faculty members – George Rodgers, Paul Blasky and Narinder S. Bansal – have only been assigned to the program. However, since 2010, George has taught only Geography. For the past 20 years, George Rodgers has also taught Cultural Anthropology, Archaeology, Native American studies and Geology.

Describe Review and Dissemination Team Involvement:

i. George Rodgers – has been a fulltime professor at Ohlone College for the past 20 years. Until 2010, he shared his time between Geography and Anthropology. He is also the curator of the Anthropology Museum.  
ii. Other full-time faculty members that teach Geography on a part-time basis are Dr. Paul Balasky whose main area of focus is Geology and Narindar Bansal who teaches in the Environmental Studies Department. 
iii. Our adjunct team member is Dr. Ausauf Rahman. 

Future Action (Improvements)

Maintain current student learning plan

2. Program SLO -

Demonstrate and assess the component elements of their natural environment and the interrelationships of these environments which are crucial to the continuance of all life on earth.

a. Indicate program assessment strategies used.
   i. Other

See information listed under PSLO #1.

b. Describe the criteria and standards used to appraise student work.

c. Enter assessment results and analyze student success in achieving this program SLO.

d. Describe revisions in curriculum or teaching strategies implemented to promote student success.

e. Future Action (Improvements)

3. Program SLO -

Describe an understanding of the background, sequence, and effects of the
origin and spread of people as users and change agents of the earth, with particular reference to how different cultures have used and interacted with the natural environment.

a. Indicate program assessment strategies used.
   i. Other

   See information listed under PSLO #1.

   The students are given a plate tectonic map of the world and asked multiple choice questions testing students’ familiarity with concepts of plate tectonics, continental drift, seafloor spreading, Pangea, and types of geological phenomena (e.g., earthquakes, volcanoes, mountain ranges) associated with different plate boundaries. They also determine locations of several geographical localities on particular tectonic plates.

b. Describe the criteria and standards used to appraise student work.

   Pre and Post Test Results are compared.

c. Enter assessment results and analyze student success in achieving this program SLO.

   Results will be available Spring 2013.

d. Describe revisions in curriculum or teaching strategies implemented to promote student success.

e. Future Action (Improvements)
   Maintain current student learning plan

4. Program SLO -

   Explain how the successive cultural changes people have made directly affect the present balance between human population and our delicate ecosystems on the earth.

   a. Indicate program assessment strategies used.
   b. Describe the criteria and standards used to appraise student work.

      See information in PSLO #1.

c. Enter assessment results and analyze student success in achieving this program SLO.

d. Describe revisions in curriculum or teaching strategies implemented to promote student success.

e. Future Action (Improvements)

5. Program SLO -

   Discuss and describe the major concepts in human geography including place, space, scale, and landscape,

   a. Indicate program assessment strategies used.
   b. Describe the criteria and standards used to appraise student work.

      See information in PSLO #1.
c. Enter assessment results and analyze student success in achieving this program SLO.
d. Describe revisions in curriculum or teaching strategies implemented to promote student success.
e. Future Action (Improvements)

6. Program SLO -

Demonstrate and explain important characteristics of the major world regions and discuss and compare the major issues confronting the world today.

a. Indicate program assessment strategies used.
   i. Rubrics
b. Describe the criteria and standards used to appraise student work.

   See information in PSLO #1.

c. Enter assessment results and analyze student success in achieving this program SLO.
d. Describe revisions in curriculum or teaching strategies implemented to promote student success.
e. Future Action (Improvements)

• SLO Matrix

   Key: I-Introduced, P-Practiced with Feedback, M-Demonstrated at the Mastery Level

<table>
<thead>
<tr>
<th>Course</th>
<th>SLO-1</th>
<th>SLO-2</th>
<th>SLO-3</th>
<th>SLO-4</th>
<th>SLO-5</th>
<th>SLO-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 101</td>
<td>M</td>
<td>M</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>I</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>I</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>P</td>
</tr>
<tr>
<td>GEOG 104</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>P</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>M</td>
<td>M</td>
<td>P</td>
<td>M</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>GEOG 121</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I</td>
</tr>
<tr>
<td>GEOG 122</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I</td>
</tr>
<tr>
<td>GEOG 123</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I</td>
</tr>
</tbody>
</table>

• SLO Matrix Comments

Geographical Information System (GIS) courses: GEOG 121, 122, and 123

The Geographical Information System (GIS) is a computer system that is used as a spatial tool to identify geographical landscapes, natural hazards and various cultural landscapes. It does not require the student to learn about people and their culture. A basic knowledge of mapping and computers is all that's required.

• Course SLO & Assessment

GEOG 101 Physical Geography

1. Investigate their physical environment and explain how various physical forces shape the environments in which they live.
2. Demonstrate and assess the component elements of their natural environment and the interrelationships of these environments which are crucial to the continuance of all life on earth.
Indicate planned course assessment strategies

Describe the criteria and/or performance standards used to appraise student work.

These CSLOs align with the PSLOs #1 and #2. See assessment plans in PSLO #1.

Enter assessment results and analyze student success in achieving course SLOs.

Describe revisions in curriculum or teaching strategies implemented to promote student success.

Future Action (Improvements)

- **Student Achievement:** A series of measures including course completion, course retention, persistence, program completion, and others.
  1. List expected student achievement outcomes:
  2. Analyze changes in data, identify trends, and provide possible contextual explanations for each measure used. (Example measures include: course completion, course retention, persistence, program completion).

     See below.

  3. Analyze program budget trends and expenditures. Comment on how the program can best use budget resources.
  4. Analyze the program's current use of staff, equipment, technology, facilities, and/or other resources. Comment on how the program can best use these resources.
  5. Describe any additional notable program achievements (optional).
  6. Additional Program Table Data

     **DATA_PR GEOG**

     Course offerings have decreased because of budgetary constraints but during the same period of time our student retention and success rates have increased.

     **GEOG_FTES**

     FTES has increased over the past three years as compared to the three years prior to that.

  7. **Future Action**

- **Program Analysis**

After assessing student learning outcomes/impacts, student/program achievement, and the status of previous program improvement objectives (PIOs), analyze the data and any identified trends, and summarize your findings. Use these data and trends to prioritize, revise, or develop new PIOs.

  1. **Describe program achievements and successes.**

     Over the past three years, we have increased our use of technology. For example we now use tablets to download mini-lectures and use blackboard to upload lecture notes. GIS software is updated annually and we have
purchased hand held GPS devices for use in our labs.

2. According to the evidence, what are the areas needing improvement?

1. Develop the AA degree program.
2. Increase our collection of DVDs with close captioning.
3. Purchase up-to-date maps and globes.

- **Program Improvement Objectives:**
  
  1. **Objective:**
     
     Develop an Associate in Arts degree in Geography/GIS to provide students an incentive to study geography and to enhance their ability to transfer to a four-year college.

    a. *Action Plan*
    
    **Year 1:**
    
    1. Adopt the new state transfer degree program for geography.

    2. Obtain program approval from the Ohlone College curriculum committee, the Board of Trustees, and then the Chancelors Office.

    b. *Assessment Plan: List Assessment Strategies*
    
    **Year 1:**
    
    AA in Geography/GIS is approved and ready for implementation Fall 2013.

    c. *Which college goal(s) does this program improvement objective work to achieve? Clearly describe how your PIO will help achieve one or more of the college goals and objectives, has impact beyond the particular department, and contributes to student learning/success.*
    
    1. Through innovative programs and services, improve student learning and achievement.

    **Rationale:**
    
    Successful implementation of the AA in Geography/GIS with the opportunity to transfer to a variety of four year colleges. It will also enhance their employment opportunites by achieving an AA in the GIS component of the degree.

  2. **PIO Assessment**
    
    a. *Future Action*

    1. **Objective:**
Modernize and upgrade the Geography and GIS programs to instill in students an appreciation for the world and its physical and cultural environments, which help shape student lives and which they, in turn, impact.

a. Action Plan

Year 1:

1. Increase the geography department collection of DVDs and convert existing DVDs to electronic, closed captioned format.

2. Update maps and globes to include current nations and significant geographical features.

b. Assessment Plan: List Assessment Strategies

Year 1:

Geography course content will be revised to include updated materials.

c. Which college goal(s) does this program improvement objective work to achieve? Clearly describe how your PIO will help achieve one or more of the college goals and objectives, has impact beyond the particular department, and contributes to student learning/success.

1. Through innovative programs and services, improve student learning and achievement.

Rationale:

Updating maps, globes and films for the department will support student academic goals and enhance the learning experience. Updated department materials will better prepare students to transfer with an AA-T degree to a four year institution.

2. PIO Assessment

   a. Future Action

• Outside Review Results

   1. List each team members name and title.
      None.

   2. Discuss key feedback provided by team and how it was incorporated into the report.
      None.

• Attached Files