Annual Instructional Program Review for GEOG & GIS 2011-2012

**Introduction to The Program Review Process for Instructional Programs**

Program Review at Foothill College

Purpose

An effective program review supports continuous quality improvement to enhance student learning outcomes and, ultimately, increase student achievement rates. Program review aims to be a sustainable process that reviews, discusses, and analyzes current practices. The purpose is to encourage program reflection, and to ensure that program planning is related to goals at the institutional and course levels.

Process

Foothill College academic programs that lead to an A.A./A.S. or Certificate(s), or are part of a specialized pathway, such as ESL, Developmental English, Math My Way are reviewed annually using this template, with an in-depth review occurring on a three-year cycle. The specialized pathways may be included as part of the program review for the department, or may be done as a separate document if they are not part of a department that offers a degree or certificate. Faculty and staff in contributing departments will participate in the process. Deans provide feedback upon completion of the template and will forward the program review on to the next stage of the process, including prioritization at the Vice Presidential level, and at OPC and PaRC.

Annual review will address five core areas, and include a place for comments for the faculty and the dean or director.

1. Data and trend analysis
2. Outcomes assessment
3. Program goals and rationale
4. Program resources and support
5. Program strengths/opportunities for improvement
6. Administrator's comments/reflection/next steps

**Foothill College Program Review Cycle:**

2011-2012 All academic programs participate in an annual program review

2012-2013 1/3 of academic programs participate in comprehensive review, remaining 2/3 of programs update their annual program review

Contact: Office of Instruction and Institutional Research, 650-949-7240

Instructions: Complete this template with data on any degree, certificate, or pathway your department offers. Return the completed form to your Dean on the last day of Fall quarter.

Website: http://foothill.edu/staff/irs/programplans/index.php

2011-2012 Submission Deadline:

All program review documents are due to Deans by December 16

## Basic Program Information

Department Name: Geography and Geographic Information Systems

Program Mission(s):

Geography provides an integrated perspective on social, political, economic, and physical phenomena occurring over space. Geography fulfills transfer requirements for four-year schools and emphasizes themes of the natural and built environment, human caused change to the natural world, and sustainability. Geography challenges students to grow into informed global citizens equipped with the tools to examine and assess the impacts of their actions.

Geospatial technology is the unifying tool with which spatial phenomena is explored. Geospatial technology consists of Geographic Information Systems (GIS), Global Positioning Systems (GPS) and Remote Sensing (RS). The Geographic Information Systems Certificate program provides opportunities for career preparation, lifelong learning and transfer by providing courses that lead to a set of scaled certificates that meet workforce needs and fulfill transfer requirements.

Program review team:

| Name | Department | Position |
|---|---|---|
| **K. Allison Lenkeit Meezan** | GEOG/GIS | Full time faculty |
| | | |

Programs* covered by this review

| Program Name | Program Type (A.S., C.A., Pathway, etc.) | Units** |
|---|---|---|
| **Geography & GIS** | AA/ Certificate | Units required for Major: 33<br>Units required for Certificate: 36 |

*If you have a supporting program or pathway in your area for which you will be making resource requests, please analyze it within this program review. For example, ESLL, Math My Way, etc. You will only need to address those data elements that apply.

**Certificates of 27 or more units must be state approved. If you have certificates that are 27 or more units that are not state approved, please indicate your progress on gaining state approval, with the tentative timeline for approval, or your plan for phasing out the certificate.

## Section 1. Data and Trend Analysis

1.1. Program Data will be posted on: http://foothill.edu/staff/irs/programplans/programreviewdata.php for all measures except non-transcriptable completion. Please attach all applicable data sheets to the final Program Review document submitted to your Dean. You may use the boxes below to manually copy data if desired.

| Transcriptable Program | 2008-2009 | 2009-2010 | 2010-2011 | % Change |
|---|---|---|---|---|
| **See attached** | | | | |
| | | | | |

Please provide any non-transcriptable completion data you have available.

| Non-Transcriptable Program | 2008-2009 | 2009-2010 | 2010-2011 | % Change |
|---|---|---|---|---|
| **Career Certificate in GIS** | 0 | 7 | 8 | **800%** |
| | | | | |

1.2 Department Data

| Dimension | 2008-2009 | 2009-2010 | 2010-2011 | % Change |
|---|---|---|---|---|
| **Enrollment** | See attached | | | |
| **Productivity (Goal: 546)** | | | | |
| **Success** | | | | |
| **Full-time FTEF** | | | | |
| **Part-time FTEF** | | | | |
| **Full-time Staff** | | | | |
| **Part-time Staff** | | | | |

Department Course Data

| | 2008-2009 | | | 2009-2010 | | | 2010-2011 | | |
|---|---|---|---|---|---|---|---|---|---|
| **Course** | Enroll. | Prod. | Success | Enroll. | Prod. | Success | Enroll. | Prod. | Success |
| | See attached | | | | | | | | |
| | | | | | | | | | |

1.3 Using the data and prompts, provide a short narrative analysis of the following indicators.

1. Enrollment trends over the last three years: Is the enrollment in your program holding steady, or is there a noticeable increase or decline? Please comment on the data and analyze the trends.

An examination of the Geography program numeric profile shows a pattern of growing enrollment, FTES and class size. In the last three years the enrollment has increased 11% (from 865 to 1058), and WSCH increased over the same time period (from 5518 to 5865), and it has increased markedly (79%) from the 2001-2002 rate of 3271.

The Geographic Information Systems (GIS) certificate program was introduced in the 2001-2002 academic year, and has continued to grow and enhance the Geography program. GIS skills are widely sought by traditional employers of Geography majors, as well as by many nontraditional ones (e.g. business, journalism, social services etc.). Foothill College is the only community college in the region to offer a comprehensive GIS certificate program. The program has flourished, despite the recent economic downturn and the corresponding enrollment drop in other computer-related training programs. The Geography program is confident that its enrollment will continue to grow as societal awareness of the critical importance of geotechnology to a liberal education also grows.

The Geography program would like to expand to consistently offer sections of its core courses both on campus and online (currently, one of the four courses required for the major is only offered online). The faculty is also exploring new modes of hybrid course delivery to better meet student learning needs.

In addition, the GIS Certificate program has recently expanded the number of sections of the introductory course that it offers from one to two per year, allowing double the number of students to enter the pipeline to attain a certificate in GIS. The GIS program is exploring curriculum partnerships with the Environmental Sciences program at the DeAnza Kirsh center as an additional method to increase the student pipeline.

The enrollment and productivity of the GIS courses is hampered by their technical nature and the fact that the computer classrooms in which they are taught can accommodate no more than 29 students, leaving the class seat limit well below the division goal of 37 students per class.

2. Completion Rates (Has the number of degrees/certificates held steady, or increased or declined in the last three years? Please comment on the data and analyze the trends.
    a. AA, AS, transcriptable certificates
    b. Local, non-State approved certificates
    c. Certificates less than 27 units: All certificates less than 27 units should be reviewed carefully to determine if the certificate provides a tangible occupational benefit to

the student, such as a job or promotion or higher salary, and documentation should be attached.

The Geography Department is strongly committed to maintaining high academic standards, while offering high quality education that meets the diverse learning styles of our students. Our faculty employ many tools to continually improve student success. These include class websites, hands-on activities, small group discussions, research papers, videos, multi-media classroom presentations and guest speakers. In addition, our faculty has made frequent presentations to the counselors to communicate the expectations and benefits of a geography education.

While the student success rate in Geography classes remains below the college average, the faculty feel that this is due to the rigorous nature of Geography education which demands strong written and analytical skills, along with computational and spatial skills.

Reported program completion data for the GIS certificate program are significantly lower than the unofficial numbers kept by the faculty program coordinator. Between 2008 and 2011, 15-22 students annually completed the requirements for the transcriptable certificate of achievement. The fact that these numbers are not reflected in the college program completion data suggest that the additional steps that students must take to receive an official certificate are overly complicated and time consuming, resulting in numerous students not receiving the certificate that they have completed the coursework for. The counseling department could help the Geography & GIS program improve certificate numbers by streamlining the certificate application process.

The Geography department is examining using a new technology to reach diverse learning styles and help bolster student success, and will continue to work closely with the counselors to communicate the academic rigors of the discipline. The Geography department is committed to maintain the academic rigor and integrity of the coursework, while striving to achieve the highest possible level of student success.

Retention remains high (91%), student success rates (78%) continue to increase. Much of the flux in numeric trends can be attributed to external factors relating to the sole full time faculty (PDL leave), and the associated lack of a full time presence on campus.

Of note, is the extremely high retention (98%) and success (89%) in the GIS program classes. While these classes have a relatively small enrollment base, they boast a higher than average success rate among minorities and females, groups that are traditionally underrepresented in the technical fields. The number of certificates awarded in the GIS program needs to be increased. This could be achieved by providing better student tracking and follow up for students completing the program.

3. Productivity: The college productivity goal is 546. (Please analyze the productivity trends in your program and explain factors that affect your productivity, i.e. GE students, size restrictions)

Productivity for the Geography department has dropped slightly over the past three years, despite an increase in enrollment, due to the loss of the TBA student contact hour. Productivity varies greatly by course within Geography. The department averages a productivity of 501, but an examination of the different course offerings reveals a range from 587 in GEOG02 and 527 in GEOG01 to productivity of 390 in GEOG54.

The primary factor leading to the lower than division average productivity is the seat count in several courses. Geography 1 is a lab science course, so must be limited to 35 students per section to maintain instructor-student ratios and a high standard of pedagogy. Geography 1 is, however, the most frequently offered courses in Geography. It fills an important role as a GE laboratory science course, needed for graduation and transfer. Further, it is the only lab science course offered online, which makes it possible for the college to offer online degrees. The department is experimenting with innovative hybrid delivery methods to increase retention in this course.

Similarly, the GIS courses (GEOG 12 and higher) have a seat limit of 29 due to the computer classroom (4008) that they are offered in. This puts their maximum possible productivity at 387. The productivity has been slightly higher because faculty consistently come up with creative ways to accommodate additional students despite the sub-optimal facilities.

Due to the technical nature of GIS, it is not practical to have a significantly higher seat count without the addition of laboratory technician support in the classroom. The productivity of the GIS program is further hampered by the 'pipeline' problem that not all students who take the first course in the GIS sequence are planning to continue on to earn a certificate. Therefore, the subsequent courses in the certificate program are under enrolled.

Class sizes in GEOG 2, 5, and 10 vary greatly. The traditional sections of the course generally do not reach maximum enrollment. This is because they are offered infrequently, and by part time faculty who do not have a significant presence on campus. The productivity of the Geography department could be greatly increased by offering more frequent sections of GEOG 2, 5, and 10 on campus to build up the visibility and reputation of these courses. These courses have a seat count of 50 and therefore have a potential to generate much higher productivity.

4. Course Offerings (Comment on the frequency, variety, demand, pre-requisites.) Review the enrollment trends by course. Are there particular courses that are not getting the enrollment or are regularly cancelled due to low enrollment?)

Over half of the Geography class sections are offered online. This is primarily because of the difficulty in finding adjunct faculty who can teach traditional face to face sections.

The GIS courses are offered entirely in the evenings to meet the needs of the CWE students. Most GIS students work full time. Afternoon offerings of GIS classes has met with limited success. It is a long term goal of the GIS program to design a bridge to GIS course that will transfer as a GE to CSU and UC. This course would be modeled on a course developed with funding from the National Science Foundation at San Diego Mesa college and CSU San Diego. The Geography major courses do not follow a specific sequence.

The GIS certificate courses are offered in a pattern to allow students to complete the certificate in one academic year.

5. Curriculum and SLOs
    a. Comment on the currency of your curriculum, i.e. are all CORs reviewed for Title 5 compliance at least every three years and do all prerequisites, co-requisites and advisories undergo content review at that time? If not, what is your action plan for bringing your curriculum into compliance?

The Geography & GIS program curriculum is current as of June 2011 with regards to Title 5. The only full time faculty member in the department was on Professional Development Leave in fall 2011, so Title 5 and curriculum requirements that have been added in the intervening time period have not been updated. However, the program's curriculum should become updated and current by March 2012.

    b. Comment on program mapping and how it ties to the college Mission(s).

The Geography & GIS program is well mapped and directly links to multiple elements of the college mission. The first program outcome for Geography, *Evaluate core concepts in cultural and physical geography and apply them to contemporary events and issues* maps to the **transfer** mission and directly supports the *communication, critical thinking, and community and global consciousness* institutional learning outcomes. The second program outcome for Geography, *Interpret spatially distributed data and draw valid conclusions by using maps, graphs and/or Geographic Information Systems (GIS)* , maps to the *computation* and *critical thinking* institutional learning outcomes and supports the college missions of **transfer** and **workforce**.

    c. Identify any other programs with which your program has overlap, and comment on the purpose of the overlap.

The Geography & GIS program has no overlaps at this time.

    d. Comment on any recent developments in your discipline which might require modification of existing curriculum and/or the development of new curriculum?

Geographic Information Systems and Geospatial technology are rapidly changing as Geospatial becomes integral to mobile and web devices. This is a growing area of the employment sector (Geospatial technology was listed by the Department of Labor as one of the top three growing fields). As such it is critical that program faculty continue to receive college support to attend industry conferences and workshops to obtain the most up to date skill sets to teach to students.

    e. Do all of the courses in your program have SLOs identified? Do all programs have program-level student learning outcomes? If not, what is your plan for completing these?

A few GEOG courses are lacking SLOs in the computer system. These courses were approved by the curriculum committee in the past 6 weeks. The plan is to enter the SLOs into the computer system in the upcoming quarter, before the courses are taught.

6. Basic Skills Programs (Please describe your Program's connection to this core mission, if applicable):

Geography is a transfer level discipline. All courses are taught with the assumption that the student has attained college level English skills and (for GEOG01) math skills. Unfortunately, this is not always the case, and as such, the faculty continually work with the Basic Skills instructors to integrate supportive materials, particularly in math, into their curriculum.

7. Transfer Programs: Articulation (Please describe your Program's connection to this core mission, if applicable)

Geography is a transfer level discipline. The department currently has articulation agreements with all UC and CSU schools. Geography spans the social and physical sciences. As such, the social science Geography courses (such as Human Geography, World Regional Geography and Economic Geography) are supporting courses for numerous social science majors. In addition, Geography is a required subject for pre-service K-12 teachers.

The physical science side of Geography (Physical Geography) is a laboratory science course that transfers to all CSU and UC schools. It is the only lab science at Foothill to be offered online. In addition, it provides an alternative lab science class to Chemistry or Physics. As such, Geography plays a critical role for transfer students. Therefore, while the number of majors in the discipline is small, the program enrollment is robust.

8. CTE Programs: Labor/Industry Alignment (Please describe your Program's connection to this core mission, if applicable)

Geographic Information Systems (GIS) is widely used both in 'industry' and as a research tool by nearly every academic discipline at the university level. GIS skills are highly desirable in agriculture, cartography, city management, urban planning, law enforcement, real estate, archaeology and much, much more. GIS is a growing area of the employment sector (Geospatial technology was listed by the Department of Labor as one of the top three growing fields).

## Section 2. Learning Outcomes Assessment Summary

2.1. Attach 2010-2011 Program Level – Four Column Report for PL-SLO Assessment from TracDat, please contact the Office of Instruction to assist you with this step if needed.

Please see attached

2.2 Attach 2010-2011 Course-Level – Four Column Report for CL-SLO Assessment from TracDat

Please see attached

## Section 2 Continued: SLO Assessment and Reflection

2.3 Please provide observations and reflection below.

2.3.a Course-Level SLO

What findings can be gathered from the Course Level Assessments?

The course level assessment data has provided support to the general assessment that department faculty are doing an outstanding job of maintaining high standards of pedagogy across section offerings. Students generally are highly successful based on the established department rubrics.

What curricular changes or review do the data suggest in order for students to be more successful in completing the program?

The present curriculum appears to be relatively successful. No major curriculum changes are suggested.

How well do the CL-SLOs reflect the knowledge, skills, and abilities students need in order to succeed in this program?

The KSA necessary for success in this program are well reflected in the SLO's associated with the courses.

How has assessment of course-level student learning outcomes led to improvement in student learning in the program?

The course level assessment has resulted in an affirmation that faculty in GEOG/GIS are continuing to teach to a very high standard.

2.3.b Program-Level SLO

What summative findings can be gathered from the Program Level Assessments?

None. The institutional research support has not provided the program with requested data.

How has assessment of program-level student learning outcomes led to certificate/degree program improvements?

The institutional research support has not provided the program with requested data.

2.4 Annual Action Plan and Summary: Using the information above, list the program's action steps, the related Core Mission objective, SLO assessment data and the expected impact on student success.

| Action Step | Related SLO assessment (Note applicable data) | Related ESMP Core Mission Goals (Basic Skills, Transfer, Work Force, Stewardship of Resources) | How will this action improve student learning/success? |
|---|---|---|---|
| **1 Continue to offer classes with innovative and engaging teaching methods reflecting high standards of pedagogy** | None | Transfer & Workforce | Student success will continue to remain high in GEOG/GIS because engaged, enthusiastic and knowledgeable faculty will inspire each student to achieve his/her best |

## Section 3: Program Goals and Rationale

Program goals should be broad issues and concerns that incorporate some sort of measurable action and should connect to Foothill's core missions, Educational & Strategic Master Plan (ESMP), the division plan, and SLOs.

3.1 Program relation to college mission/core missions

Geography provides transfer, career technical education and lifelong learning. The geographic approach engages students through multiple teaching styles and promotes a global awareness, sustainable practices, and the effects of human environment interactions.

3.2 Previous Program Goals from last academic year

| Goal | Original Timeline | Actions Taken | Status/Modifications |
|---|---|---|---|
| **1) The first goal is to increase outreach for the GIS program and align curriculum with workforce and job needs as well as to build up K-16 curricular partnerships and 4 year university articulation in GIS. The action plan to achieve this goal is to attain 10% release time for the Geography and GIS program chair.** | **1 year** | No action taken as this goal was **not funded** | This continues to be the most important goal for the program to maintain currency and grow. |
| **2) The second goal of the department is to convene a professional advisory board for the GIS program. To achieve this goal the department needs $200 to provide lunch to advisory board members. *If* the 10% release time for the program chair is not granted, the department needs $500 to organize and convene the GIS** | Advisory board meeting in spring 2011 | Advisory board meeting was held, but request was underfunded by $300 | This continues to be a critical need of the GIS department to maintain currency. |

| | | | |
|---|---|---|---|
| **program advisory board.** | | | |
| **3) Maintain GIS program currency. The action plan to achieve this goal is to acquire the requested funds to pay for the software licenses for ArcGIS and Idrisi software.** | 2010-11 | $2,700 in one time funds awarded. Need funding for 2011-12 | $2,700 in one time funds awarded. Need funding for 2011-12 |
| **4) Maintain the currency of materials presented in Geography classes. The action plan to achieve this goal is to acquire new DVDs for the program.** | 2010-11 academic year | $450 requested. $200 funded through department B budget Several DVDs were purchased. | If funding is provided, additional materials will be purchased |
| **5) Participate in professional meetings and conferences: Participating in professional meetings and attending conferences promotes a** community of scholars **and** access to action **by allowing department faculty to engage with the wider academic community, learn about innovations in the field and new methods of effective pedagogy.** | 2010-11 academic year | Faculty attended one industry conference using professional conference funds. | Faculty attended one industry conference using professional conference funds. |
| **6) Funding for a writing tutor to support social sciences classes in the tutorial center. The social science Geography courses require a significant amount of writing. Many students take Geography courses without having taken college** | 2010-11 academic year | 100 hours of writing tutors in the tutorial center at $12 per hour. Funded through division funds. | 100 hours of writing tutors in the tutorial center at $12 per hour. Funded through division funds. |

| | | | |
|---|---|---|---|
| **level English coursework and are underprepared to write analytical essays. Access to writing tutors for social sciences students will increase** access to action **by promoting student success in social science classes. The college needs to continue to support general writing tutors in the tutorial center for students in all social** | | | |
| **7) Funding for Marketing brochures for the GIS Certificate program. GIS Certificate program brochures would help to market the GIS program at student outreach events. This would support the strategic initiative of** access to action **by increasing the number of degrees and certificates awarded.** | 2010-11 academic year | Funds were initially allocated through CTE PFE funding, but later revoked | Funding request still stands. |

3.3 New Goals: Goals can be multi-year

**Because department goals were provided with a negligible amount of funding last year, 2012 goals remain the same.**

| Goal | Timeline (long/short-term) | Supporting Action Steps from section 2.4 (if applicable) | How will this goal improve student success or respond to other key college initiatives |
|---|---|---|---|
| 1) The first goal is to increase outreach for the GIS program and align curriculum with workforce and job needs as well as to build up K-16 curricular partnerships and 4 year university articulation in GIS. The action plan to achieve this goal is to attain 10% release time for the Geography and GIS program chair. | **1 year** | Continue to offer classes with innovative and engaging teaching methods reflecting high standards of pedagogy – Note that this is highly dependent on department faculty not being overly burdened with administrative tasks so that they can focus on teaching and students. Release time directly supports this Action. | The Geographic Information Systems certificate program needs 10% annual release time for a full-time faculty member to administer the GIS Career program. The only full time GEOG/GIS full time faculty member currently works 4 hours per week conducting GIS-program related outreach, program administration, student mentoring and internship acquisition. However, both the Geography and GIS programs could benefit from additional time and attention to advertising and curricular awareness. These significant demands are placed on the only full time Geography/GIS faculty member, and extend beyond the collegial duties expected of all full time faculty. |
| 2) The second goal of the department is to convene a professional advisory board for the GIS program. To achieve this goal the department needs $200 to provide lunch to advisory board members. *If* the 10% release time for the program chair is not granted, the department needs $500 to organize and convene the GIS program advisory board. | Advisory board meeting in spring 2011 | Continue to offer classes with innovative and engaging teaching methods reflecting high standards of pedagogy<br><br>Note that a strong connection to employers and industry are critical to program success, and an advisory board is the most direct and cost effective method to achieve this goal. | This continues to be a critical need of the GIS department to maintain currency. |
| 3) Maintain GIS program currency. The action plan to achieve this goal is to acquire the requested funds to pay for the | 2010-11 | Continue to offer classes with innovative and engaging teaching methods reflecting high standards of pedagogy | $2,700 in one time funds awarded. Need funding for 2011-12 |

| | | | |
|---|---|---|---|
| software licenses for ArcGIS and Idrisi software. | | Note – Current software is necessary to maintain pedagogy standards in this program | |
| 6) Funding for a writing tutor to support social sciences classes in the tutorial center. The social science Geography courses require a significant amount of writing. Many students take Geography courses without having taken college level English coursework and are underprepared to write analytical essays. Access to writing tutors for social sciences students will increase **access to action** by promoting student success in social science classes. The college needs to continue to support general writing tutors in the tutorial center for students in all social | 2010-11 academic year | Continue to offer classes with innovative and engaging teaching methods reflecting high standards of pedagogy | 100 hours of writing tutors in the tutorial center at $12 per hour. Funded through division funds. |
| 7) Funding for Marketing brochures for the GIS Certificate program. GIS Certificate program brochures would help to market the GIS program at student outreach events. This would support the strategic initiative of **access to action** by increasing the number of degrees and certificates awarded. | 2010-11 academic year | | Funding request still stands. |

## Section 4: Program Resources and Support

4.1 Using the tables below, summarize your program's resource requests.

Full Time Faculty and/or Staff Positions

| Position | $ Amount | Related Goal from Table in section 3.3 | Possible funding sources (Lottery, Measure C, Basic Skills, Perkins, etc.) |
|---|---|---|---|
| **1 full time faculty member** | | The program has 3.5 FTEF and was taught 21% by full time faculty.<br><br>It is a long-term goal of the Geography program to increase the number of sections offered in its GIS courses and to consistently offer its core transfer courses both in person and online. Currently, over half of the program offerings are online.<br><br>It is a goal of the Geography department to increase its on campus presence. Because of the difficult nature of recruiting and retaining adjunct faculty, the Geography department would like to add an additional full time faculty member. | |

Reassigned Time

| Position | $ Amount | Related Goal from Table in section 3.3 | Possible funding sources (Lottery, Measure C, Basic Skills, Perkins, etc.) |
|---|---|---|---|
| **Geog/GIS full time faculty 10% as department chair** | $10000 | Goals 1-3 | |

B Budget Augmentation

| B Budget FOAP | $ Amount | Related Goal from Table in section 3.3 | Possible funding sources (Lottery, Measure C, Basic Skills, Perkins, etc.) |
|---|---|---|---|
| **$ for Advisory Board meeting** | $500 | Goals 2 & 3 | |
| **Writing tutor through the Foothill Tutorial center** | $1200 | Goal 6 | |

Facilities and Equipment

| Facilities/Equipment Description | $ Amount | Related Goal from Table in section 3.3 | Possible funding sources (Lottery, Measure C, Basic Skills, Perkins, etc.) |
|---|---|---|---|
| **GeoSpatial software** | $3500 | Goal 3 | |

One-time/Other: (Release time, training, etc.?

| Description | $ Amount | Related Goal from Table in section 3.3 | Possible funding sources (Lottery, Measure C, Basic Skills, Perkins, etc.) |
|---|---|---|---|
| **10% release time for Geography & GIS program chair and student advisor* NOTE: it was unclear which category to put this request in** | $10,000 | Goals 1-3 | |
| **Marketing materials** | $1200 | Goal 7 | |

## Section 5: Program Strengths/Opportunities for Improvement

5.1 Use the matrix provided below and, reflect on the program relative to students' needs, briefly analyze the program's strengths and weaknesses and identify opportunities and challenges to the program. Consider external and internal factors, such as demographic, economic, educational, and societal trends. Some considerations may include current and future demand for the program, similar programs at other comparable institutions, and potential auxiliary funding.

| | INTERNAL FACTORS | EXTERNAL FACTORS |
|---|---|---|
| **Strengths** | An examination of the Geography program numeric profile shows a pattern of growing enrollment, FTES and class size. In the last three years the enrollment has increased 11% (from 865 to 1058), and WSCH increased over the same time period (from 5518 to 5865), and it has increased markedly (79%) from the 2001-2002 rate of 3271.<br><br>The Geographic Information Systems (GIS) certificate program was introduced in the 2001-2002 academic year, and has continued to grow and enhance the Geography program. GIS skills are widely sought by traditional employers of Geography majors, as well as by many nontraditional ones (e.g. business, journalism, social services etc.). Foothill College is the only community college in the region to offer a comprehensive GIS certificate program. The program has flourished, despite the recent economic downturn and the corresponding enrollment drop in other computer-related training programs. The Geography program is confident that its enrollment will continue to grow as societal awareness of the critical importance of geotechnology to a liberal education also grows. | Program has an excellent reputation in the surrounding Geospatial community and a full suite of transfer agreements to CSU and UC campuses |

| | | |
|---|---|---|
| **Weaknesses** | Productivity for the Geography department has dropped slightly over the past three years, despite an increase in enrollment, due to the loss of the TBA student contact hour. Productivity varies greatly by course within Geography. The department averages a productivity of 501, but an examination of the different course offerings reveals a range from 587 in GEOG02 and 527 in GEOG01 to productivity of 390 in GEOG54.<br><br>The primary factor leading to the lower than division average productivity is the seat count in several courses. Geography 1 is a lab science course, so must be limited to 35 students per section to maintain instructor-student ratios and a high standard of pedagogy. Geography 1 is, however, the most frequently offered courses in Geography. It fills an important role as a GE laboratory science course, needed for graduation and transfer. Further, it is the only lab science course offered online, which makes it possible for the college to offer online degrees. The department is experimenting with innovative hybrid delivery methods to increase retention in this course.<br><br>Similarly, the GIS courses (GEOG 12 and higher) have a seat limit of 29 due to the computer classroom (4008) that they are offered in. This puts their maximum possible productivity at 387. The productivity has been slightly higher because faculty consistently come up with creative ways to accommodate additional students despite the sub-optimal facilities. | The decline in the technology sector has reduced the number of job openings in Geospatial technology in the region. |

| | | |
|---|---|---|
| | Due to the technical nature of GIS, it is not practical to have a significantly higher seat count without the addition of laboratory technician support in the classroom. The productivity of the GIS program is further hampered by the 'pipeline' problem that not all students who take the first course in the GIS sequence are planning to continue on to earn a certificate. Therefore, the subsequent courses in the certificate program are under enrolled. | |
| **Opportunities** | 1) Program growth can be sustained by the addition of a full time faculty member and/or release time for the one current full time faculty member. | |
| **Threats** | The state of the budget, VTEA funds are threatened, and the workload associated with a department and a CTE program focused on a single full time faculty member | |

5.2 Are there any critical issues you expect to face in the coming year? How will you address those challenges?

There are no new critical issues, only continuing issues of lack of administrative support for a one-person department that is solely responsible for completing all SLO, PLO and program review materials as well as advising the GeoSpatial Technology CTE program. This could be greatly alleviated by either providing the release time that has been requested for many years, or providing greater administrative support.

5.3 What statements of concern have been raised in the course of conducting the program review by faculty, administrators, students, or by any member of the program review team regarding overall program viability?

The Geography and GIS program remains robust and growing. The only major concerns raised by the program review team is the purpose of the program review itself as past program review requests and observations have been largely ignored by the administration and gone unfunded, likely because the details of these cumbersome and lengthy reviews are not read by administrators.

5.4 Address the concerns or recommendations that were made in prior program review cycles.

Geography & GIS has completed program review each year as required. However, it has thus far been unclear whether the review has had any real impact on the program as resource requests have not been funded in any real connection to the material presented in the program review. It is also not clear whether the program review has even been read by the administrative chain of command. This has been greatly detrimental to faculty morale as the program review form has changed completely nearly every year over the past decade requiring many hours of faculty time to fill out, only to have the material be summarily ignored by administrators.

5.5 After reviewing the data, what strengths or positive trends would you like to highlight about your program?

- Enrollment has increased 11% in 3 years
- WSCH increased 6% over the same time period (from 5518 to 5865), and it has increased markedly (79%) from the 2001-2002 rate of 3271 which was the last time a full time faculty member was hired.
- The program has grown significantly over the past decade and continues to maintain very high levels of retention and success.

## Section 6: Feedback and Follow Up

This section is for the Dean to provide feedback.

6.1 Strengths and successes of the program as evidenced by the data and analysis: Review of your information indicates you know what is needed to make your program even more successful. However, there appears to be a discrepancy between completion data reported to the college and the state, and the data the department maintains. Although the program review indicates that counseling should do a better job of streamlining processes and following up, the onus is really on the student. This is a greater discussion we all need to have soon. When we request data it should be correct and our hope is that through this process we can identify if there are data we need to improve on our program review.

6.2 Areas of concern, if any: I am concerned if you were missing data and understand you may already have the data that is needed for section 2.4. We can ask for this data to be attached to the review. Again this is where I find out what data does not seem to match and then seek to find out where we can get the correct data.

6.3 Recommendations for improvement: Kimberlee Messina and I are looking very closely at all of the program reviews and I know in the past we were always wondering what happens after we turn them in. I think your review in many ways is how we felt in the past. Rest assure things are changing; slowly yes. Next year this process will be even smoother since we know how to use Trac.dat and begin this on fall 2011's SLO's. We can then identify where we need improved data, assistance etc. As a division I am asking for assistance to discuss areas of

concerns some had in finding the correct information. Hopefully this will be a work in progress for improvement for all of us as we move forward in streamlining the process so that faculty can focus on the classroom.
I know some of the items requested are the same as we asked for in Perkins and Lottery. It does not hurt us to ask if the Division will have money to pay for some of these items. Only time will tell. As for tutors this a larger institutional issue which is being addressed and the hope is by the end of this year we will have a better understanding of how Tutors will work for each division.

6.4 Recommended Next steps:
__xx_ Proceed as planned on program review schedule
___ Further review/Out of cycle in-depth review

# Unit Assessment Report - Four Column

## Foothill College

## Program (BSS-GEOG) - Geography AA/CA

| PL-SLOs | Means of Assessment & Target / Tasks | Assessment Findings | Action & Follow-Up |
|---|---|---|---|
| Program (BSS-GEOG) - Geography AA/CA - 1 - Interpret spatially distributed data and draw valid conclusions by using maps, graphs and/or Geographic Information Systems (GIS)<br><br>**PL-SLO Status:**<br>Active | **Assessment Method:**<br>Upon completing first GEOG course, Indirect assessment of<br>student knowledge based on final grade in first GEOG course<br>taken. Data categorized by course (eg. Number of students with<br>A?s B?s C?s etc in GEOG1 as first GEOG course; Number of<br>students with A?s B?s C?s etc in GEOG2 as first GEOG<br>course?)<br>Upon completing second GEOG course, Indirect assessment of<br>student knowledge based on final grade in second GEOG course<br>taken. Data categorized by course (eg. Number of students with<br>A?s B?s C?s etc in GEOG1 having completed GEOG2; Number<br>of students with A?s B?s C?s etc in GEOG1 having completed<br>GEOG5; Number of students with A?s B?s C?s in GEOG01<br>having completed GEOG10; Number of students with A?s B?s<br>C?s in GEOG2 having completed GEOG1 etc).<br>Upon graduating/transferring with AA in GEOG, number of<br>successful graduation/transfer with AA in GEOG<br>**Assessment Method Type:**<br>Portfolio Review<br>**Target:**<br>Students enrolled in GEOG courses | | |

| PL-SLOs | Means of Assessment & Target / Tasks | Assessment Findings | Action & Follow-Up |
|---|---|---|---|
| | | | |
| Program (BSS-GEOG) - Geography AA/CA - 2 - Evaluate core concepts in cultural and physical geography and apply them to contemporary events and issues.<br><br>**PL-SLO Status:**<br>Active | **Assessment Method:**<br>Upon completing first GEOG course, Indirect assessment of<br>student knowledge based on final grade in first GEOG course<br>taken. Data categorized by course (eg. Number of students with<br>A?s B?s C?s etc in GEOG1 as first GEOG course; Number of<br>students with A?s B?s C?s etc in GEOG2 as first GEOG<br>course?)<br>Upon completing second GEOG course, Indirect assessment of<br>student knowledge based on final grade in second GEOG course<br>taken. Data categorized by course (eg. Number of students with<br>A?s B?s C?s etc in GEOG1 having completed GEOG2; Number<br>of students with A?s B?s C?s etc in GEOG1 having completed<br>GEOG5; Number of students with A?s B?s C?s in GEOG01<br>having completed GEOG10; Number of students with A?s B?s<br>C?s in GEOG2 having completed GEOG1 etc).<br>Upon graduating/transferring with AA in GEOG, number of<br>successful graduation/transfer with AA in GEOG<br>**Assessment Method Type:**<br>Portfolio Review<br>**Target:**<br>Students enrolled in GEOG courses | | |

# Unit Course Assessment Report - Four Column

## Foothill College

## Department - Geography (GEOG)

**Mission Statement:** Geography provides an integrated perspective on social, political, economic, and physical phenomena occurring over space. Geography fulfills transfer requirements for four-year schools and emphasizes themes of the natural and built environment, human caused change to the natural world, and sustainability. Geography challenges students to grow into informed global citizens equipped with the tools to examine and assess the impacts of their actions.

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| Department - Geography (GEOG) - GEOG 1 - PHYSICAL GEOGRAPHY - SLO 1 - Drawing conclusions - Use maps, graphs and/or Geographic Information Systems (GIS) to analyze and interpret data and draw valid conclusions (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 1 - PHYSICAL GEOGRAPHY - SLO 2 - Seasons - Explain the causes of seasons (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 1 - PHYSICAL GEOGRAPHY - SLO 3 - Global climate patterns - Analyze the factors that contribute to global climate patterns. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012 | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| 2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 1 - PHYSICAL GEOGRAPHY - SLO 4 - Landform formation - Discuss the formation of major landforms. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 1 - PHYSICAL GEOGRAPHY - SLO 5 - Atmosphere - Discuss the function, temperature profile and composition of the atmosphere. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 1 - PHYSICAL GEOGRAPHY - SLO 6 - Water - Discuss the hydrologic cycle, and the distribution and allocation of water resources for humans. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 1 - PHYSICAL GEOGRAPHY - SLO 7 - | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| Human-environment interaction - Analyze patterns and consequences of human environment interaction. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 10 - WORLD REGIONAL GEOGRAPHY - SLO 1 - Drawing conclusions - Use maps, graphs and/or Geographic Information Systems (GIS) to analyze and interpret data and draw valid conclusions (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 10 - WORLD REGIONAL GEOGRAPHY - SLO 2 - Geographic themes and concepts - Apply major geographic themes and concepts to explain the origins and development of major nations and regions. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 10 - WORLD REGIONAL GEOGRAPHY - SLO 3 - Major world regions - Compare and contrast major regions of the world with | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| regard to their natural environments, peoples, natural resources, economies and contemporary problems. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 100A - INTRODUCTION TO ARC VIEW GIS - SLO 1 - GIS project - create a GIS project from a set of given files (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 100A - INTRODUCTION TO ARC VIEW GIS - SLO 2 - Map creation - manipulate GIS data to create a printed map (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 100B - INTRODUCTION TO GEO MEDIA & GEO MEDIA PRO - SLO 1 - GeoWorkspace - create and manipulate data displays within the GeoWorkspace (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012 | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| 2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 100B - INTRODUCTION TO GEO MEDIA & GEO MEDIA PRO - SLO 2 - Data Warehouse - connect to, and manipulate data within the Data Warehouse (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 12 - INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS) - SLO 1 - Definition - Define a Geographic Information System. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 12 - INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS) - SLO 2 - Vector and raster GIS - Identify, compare and Contrast vector and raster GIS. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| Department - Geography (GEOG) - GEOG 12 - INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS) - SLO 3 - Cartographic principles - Apply cartographic principles of scale, resolution, projection, data management and spatial analysis to a geographic nature using a GIS. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 2 - HUMAN GEOGRAPHY - SLO 1 - Drawing conclusions - Use maps, graphs and/or Geographic Information Systems (GIS) to analyze and interpret data and draw valid conclusions (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 2 - HUMAN GEOGRAPHY - SLO 2 - Context - Place contemporary developments in cultural, historical, environmental and spatial context. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 2 - HUMAN GEOGRAPHY - SLO 3 - Human | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| relationship with the natural world - Analyze relationships between humans and the natural world in which they live. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 2 - HUMAN GEOGRAPHY - SLO 4 - Population growth and change - Discuss patterns of population growth and change around the world. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 36 - SPECIAL PROJECTS IN GEOGRAPHY - SLO 1 - Assessment using geographical perspective - assess complexities and patterns of issue/project covered using a geographic perspective (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 36X - SPECIAL PROJECTS IN GEOGRAPHY - SLO 1 - Assessment using geographical perspective - assess complexities and patterns of issue/project covered using a geographic perspective | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 36Y - SPECIAL PROJECTS IN GEOGRAPHY - SLO 1 - Assessment using geographical perspective - assess complexities and patterns of issue/project covered using a geographic perspective (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 36Z - SPECIAL PROJECTS IN GEOGRAPHY - SLO 1 - Assessment using geographical perspective - assess complexities and patterns of issue/project covered using a geographic perspective (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 5 - INTRODUCTION TO ECONOMIC GEOGRAPHY - SLO 1 - Drawing conclusions - Use maps, graphs and/or Geographic Information Systems (GIS) to | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| analyze and interpret data and draw valid conclusions (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 5 - INTRODUCTION TO ECONOMIC GEOGRAPHY - SLO 2 - Economic activities - Examine how society organizes its economic activities over space at both a local, regional and global scale. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 5 - INTRODUCTION TO ECONOMIC GEOGRAPHY - SLO 3 - Economic development and prosperity - Compare and contrast economic development and prosperity as they relate to human geography and the distribution of natural resources. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 52 - ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (GIS) - SLO 1 - Data conversion - Demonstrate the process | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| of converting analogue data to digital data for us in GIS. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 52 - ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (GIS) - SLO 2 - Data sources - Identify and discuss GIS data sources. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 52 - ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (GIS) - SLO 3 - GIS databases - Create new GIS databases. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 52 - ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (GIS) - SLO 4 - GIS project - Plan, evaluate and execute an original GIS project. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012 | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| 2012-2013 | | | |
| Department - Geography (GEOG) - GEOG 54A - SEMINAR IN SPECIALIZED APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS I - SLO 1 - GIS applications - Discuss the diverse applications of Geographic Information Systems. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 54B - SEMINAR IN SPECIALIZED APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS II - SLO 1 - GIS project - Create and present a GIS project. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 58 - REMOTE SENSING & DIGITAL IMAGE PROCESSING - SLO 1 - Definition - Define remote sensing. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| Department - Geography (GEOG) - GEOG 58 - REMOTE SENSING & DIGITAL IMAGE PROCESSING - SLO 2 - Remote sensing applications - Discuss the applications of remote sensing with Geographic Information Systems (GIS) (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 58 - REMOTE SENSING & DIGITAL IMAGE PROCESSING - SLO 3 - Electromagnetic spectrum and remote sensing - Discuss the physical basis for remote sensing in terms of the electromagnetic spectrum. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 59 - CARTOGRAPHY, MAP PRESENTATION & DESIGN - SLO 1 - Map creation - Create maps that demonstrate an understanding of the fundamentals of composition, color, and symbol selection at different scales. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| 73 - DYNAMIC & INTERACTIVE MAPPING - SLO 1 - User interfaces and animations - Critically evaluate cartographic user interfaces and animations (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 73 - DYNAMIC & INTERACTIVE MAPPING - SLO 2 - Interface design and creation - Design and create interfaces for interactive mapping systems (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 73 - DYNAMIC & INTERACTIVE MAPPING - SLO 3 - Animation design and creation - Design and create animations for dynamic cartographic presentations (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 78 - GEOGRAPHIC INFORMATION SCIENCE PROJECTS - SLO 1 - Interfaces - Design, create, test, and document interfaces for interactive mapping systems (Created By Department - Geography | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 78 - GEOGRAPHIC INFORMATION SCIENCE PROJECTS - SLO 2 - Dynamic Cartographic Presentations - Design, create, test, and document animations for dynamic cartographic presentations (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 9 - CALIFORNIA GEOGRAPHY - SLO 1 - Identification - Identify California's physical and cultural regions and characteristics. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 9 - CALIFORNIA GEOGRAPHY - SLO 2 - Activities and historical processes - Examine activities and historic processes which modified California's natural and cultural aspects. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012 | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| 2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 90A - INTRODUCTION TO GIS FOR K-12 TEACHERS I: FUNDAMENTALS OF GEOGRAPHIC INFORMATION SYSTEMS SCIENCE - SLO 1 - Spatial problems - apply GIS to problems of a spatial nature (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 90A - INTRODUCTION TO GIS FOR K-12 TEACHERS I: FUNDAMENTALS OF GEOGRAPHIC INFORMATION SYSTEMS SCIENCE - SLO 2 - GIS applications - discuss the value and applications of GIS in student's major or area of interest (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 90B - INTRODUCTION TO GIS FOR K-12 TEACHERS II: UTILIZING SPATIAL DATA & DATA ANALYSIS IN THE CLASSROOM - SLO 1 - Geospatial problems - Apply spatial analysis functions on a GIS to a Geospatial problem. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012 | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| 2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 90B - INTRODUCTION TO GIS FOR K-12 TEACHERS II: UTILIZING SPATIAL DATA & DATA ANALYSIS IN THE CLASSROOM - SLO 2 - Curriculum applications - Discuss applications of GIS to standard curriculum. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 90C - INTRODUCTION TO GIS FOR K-12 TEACHERS III: DESIGNING & IMPLEMENTING A GIS - SLO 1 - GIS databases - Create new GIS databases through scanning and heads-up digitizing. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012<br>2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |
| Department - Geography (GEOG) - GEOG 90C - INTRODUCTION TO GIS FOR K-12 TEACHERS III: DESIGNING & IMPLEMENTING A GIS - SLO 2 - Inquiry activity - Design a project based inquiry activity around a GIS. (Created By Department - Geography (GEOG))<br>**Assessment Cycles:**<br>2011-2012 | | | |

| Course-Level SLOs | Means of Assessment & Targets for Success / Tasks | Assessment Findings | Reflection/Action Plan & Follow-Up |
|---|---|---|---|
| 2012-2013<br><br>**Course-Level SLO Status:**<br>Active | | | |

| Course ID | Title | Refections |
|---|---|---|
| FASH 50 | INTRODUCTION TO FASHION MERCHANDISING | No SLO record. |

23 of 29 Course IDs for *GEOG* in the Business and Social Sciences Division have SLOs Defined. 2010-2011

| Course ID | Title | Refections |
|---|---|---|
| GEOG 1 | PHYSICAL GEOGRAPHY | |

Finding This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Content This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Method This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Assignment This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Evaluation This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Current SLO This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Assessment. This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Other This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Resource Obtain a better SLO system

Comments This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

*Forth Reflection set*

Finding The most important findings from our data are that the majority of students rated 'excellent' 'competent' or 'adequate' in our assessment. This indicates that our current teaching methods for this assessment are appropriate. Results: Excellent -- 62; Competent -- 10; Adequate -- 14; Poor -- 1; Fail -- 12.

Content None.

Method None.

Assignment None.

Evaluation None.

Current SLO None.
Assessment. None.
Other None.
Resource Continue to have access to current films, instructor computer and high speed internet access in the classroom with digital projector.

*Fifth Reflection set*
Finding Did not use this SLO
Content Did not use this SLO
Method Did not use this SLO
Assignment Did not use this SLO
Evaluation Did not use this SLO
Current SLO Did not use this SLO
Assessment. Did not use this SLO
Other Did not use this SLO
Resource Did not use this SLO
Comments Did not use this SLO

GEOG 2 HUMAN GEOGRAPHY
Finding Use maps, graphs and/or GIS to analyze and interpret data and draw valid conclusions.

Students were given an assignment in which they were presented with a thematic map relevant to the course material and asked to interpret it using the map key.

Students were given the following instructions:
In lecture we have talked about ecological footprint as a way of thinking about our impact on the earth and on each other. The lectures included several examples of ways in which ecological footprint is an effective way of understanding our impact on the natural environment. One benefit is that it can be mapped, allowing us to visualize our (and others') impact on the environment, which also provides the opportunity for more detailed analysis.

Using the key below the map for your analysis respond to the following questions:
1. What country has the largest footprint? What regions have the largest footprint? Smallest?
2. Locate a country with a global footprint less than 1. What is the country? Why do you think it has such a small footprint? (Look at the region and surrounding countries to help your analysis.)
3. What is the one country in South America with the largest footprint? Why do you think this particular country has the largest footprint in the region?
4. What conclusions can you draw about ecological sustainability and the future from this map? (Using only the map and legend)

Students were evaluated according to the following criteria:

• Excellent (4): Student accurately applies the map key to identify the relevant location(s), and draws valid conclusions based on the thematic map.
• Competent (3): Student accurately applies the map key to identify relevant location(s), conclusions are drawn that are partially but not completely valid based on the thematic map, or a major element of the conclusion is omitted.
• Adequate (2): Student accurately applies the map key to identify the relevant location(s), conclusions are drawn that are inaccurate.
• Poor (1): Student does not accurately apply the map key to identify the relevant locations(s), and conclusions are drawn that are inaccurate.
• Not Acceptable (0): Student does not accurately apply the map key to identify the relevant location(s) and conclusions are not drawn, or answer is missing or irrelevant.

31 Students completed the assignment with the following results:
• Excellent (4): 24
• Competent (3): 5
• Adequate (2): 1

• Not Acceptable: 1

Content Reflection on Assessment Results

1. What were the most important findings from your data? Students did very well on this assignment with most of them completing the task at the highest level. The five students who rated competent did not include enough detailed analysis or missed some parts of the questions. The one student who rated adequate did not accurately apply the map key and answers were missing. The one student at the lowest level only completed part of the assignment. Prior to students beginning this assignment we spent class sessions looking at and analyzing various different maps. This seems to be an effective way to help students understand that maps are for more than just identifying where places are.

2. Given the results of this assessment, describe what changes will be made, if any to the following:

a. Content of the Course:
b. And c. Teaching Methods/Assignments: Students responded well to classroom discussion in which we analyzed maps showing spatial distribution of population, religion, and ecological issues. Because this assignment was so successful I plan to introduce more visual analysis into the course.
c. Course Evaluation Procedures: I will include map analysis on an exam in the future to evaluate how students perform in a shorter time frame than the week allowed for assignments. I think this might be a more accurate reflection of their ability to analyze data presented visually.

Method No change
Assignment No change
Evaluation No change
Current SLO No change
Assessment. No change
Other Do the next SLO...
Resource Nope
Comments This form stinks and the process is an administrative hoop.

*Forth Reflection set*

Finding On the midterm I gave them a population pyramid and asked them to analyze it in a short essay. A: 23 students wrote a very thorough analysis with only minor omissions

B: 12 students wrote a good analysis in which they missed one major thing. For example, there was a section of the pyramid where the number of men ages about 15-30 was significantly diminished. This was the most common omission -- basically no comment at all for the most part.

C: 9 students included little to no analysis, providing the most basic visual information.

I don't think I would do much differently except maybe go over the pyramid a little more thoroughly in terms of how to make assumptions about what may have happened to particular age groups.

Content No changes
Method No changes
Assignment No changes
Evaluation No changes
Current SLO No changes
Assessment. No changes
Other Do the next SLO to keep the bean counters happy
Resource Nope.
Comments This form stinks and the process is an administrative hoop.

GEOG 5 INTRODUCTION TO ECONOMIC GEOGRAPHY

Finding This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been

assessed.

Content This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Method This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Assignment This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Evaluation This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Current SLO This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Assessment. This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Other This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Resource Get a better SLO system

Comments This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

*Second Reflection set*

Finding Excellent: 7
Competent: 14
Adequate: 9
Poor: 1
Fail: 1
Most of the students understood the scale and discussed all 3 scales. It is interesting that local was the scale students had the most difficulty with. Some of them only thought of it in terms of local consumption of globally traded products.

Content • Content of course:
o Lectures: I plan to make changes to lectures in the following ways:
 Add more specific information and detail about the local, regional, and global scales and include visual information in the form of maps and charts that show detail on how scale functions.

Method  Include a separate lecture on transportation networks. This was the consistent “missing link” in the essay answers as well as in their commodity chain papers. I have a short section on transportation in the lecture on manufacturing. This is another area that visual aids will help. I plan to find and include maps and other images that will help students better understand how these networks operate at all three scales.

Assignment None.

Evaluation • Course Evaluation Procedures: I think I should have written the question differently for the exam. Next time I will use something like this:
o Describe how society organizes its economic activities over space at both a local, regional, and global scale. Use specific examples that include industrial location, transportation networks, and

natural resource activity.
Current SLO None.
Assessment. As in D above
Other None.
Resource None.
Comments None.

GEOG 9 CALIFORNIA GEOGRAPHY
Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

*Second Reflection set*
Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

GEOG 10 WORLD REGIONAL GEOGRAPHY
Finding This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Content This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Method This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Assignment This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Evaluation This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Current SLO This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been

assessed.

Assessment. This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Other This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Resource This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Comments This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

*Third Reflection set*

Finding A: 40 students included comparative information in their analysis and responses to other student postings.
B: 3 students posted a current event, but did not include much comparative information in their analysis
C: 4 students posted the current event, but only hit the major points and lacked any real analysis

SLO EVALUATED:

Compare and contrast major regions of the world with regard to their natural environments, peoples, natural resources, economies and contemporary problems.

This SLO was evaluated using an essay question on the final exam. Students were given the following instructions:

Select one of the following sets of 2 regions. Compare and contrast them with regard to natural environments (including climate & weather patterns), people, natural resources, economy, and contemporary problems. Use specific examples in your essay.
• North America and Sub-Saharan Africa
• Europe and Latin America
• Southeast Asia and Northern Africa/Southwest Asia
• East Asia and South Asia
Having read the chapters in the book and the lecture modules and participating in current events you should be able to draw on plenty of information to write this essay. Please write in essay form, not bullet points. Double-space your essay please.

Essays were graded according to the following rubric:

• Excellent (4): Student accurately compares and contrasts two regions of the world in terms of their natural environments including climate and weather patterns, peoples, natural resources, economies and contemporary problems. Specific examples for each element are discussed.
• Competent (3): Student accurately compares and contrasts two regions of the world in terms of most but not all of the following: natural environments including climate and weather patterns, peoples, natural resources, economies and contemporary problems. Specific examples for each element are discussed.
• Adequate (2): Student accurately compares and contrasts two regions of the world in terms of some but not all of the following: natural environments including climate and weather patterns, peoples, natural resources, economies and contemporary problems. Specific examples for most elements are discussed.
• Poor (1): Student accurately compares and contrasts two regions of the world in terms of at least one the following: natural environments including climate and weather patterns, peoples, natural

resources, economies and contemporary problems. Specific examples are not discussed.
• Not Acceptable (0): Answer is missing or irrelevant.

33 students completed the exam with the following results:
• Excellent (4): 20
• Competent (3): 8
• Adequate (2): 5
• No students scored 1 or 0

Content Reflection on Assessment Results
1. What were the most important findings from your data? Students are capable of comparing and contrasting major regions while considering a variety of factors. While 20 students addressed all 5 factors requested, 8 students only considered 4, 3 considered 3 and 2 students only considered 2 of the factors. The factor most often ignored was Contemporary Problems with Climate second. In a couple of cases, students included all 5 factors, but not in enough depth. I am heartened by the fact that so many of the students did address all the factors, but will continue working on finding ways to bring all students up to that level.

2. Given the results of this assessment, describe what changes will be made, if any to the following:

a. Content of the Course: I will revise lectures to cover both climate issues and contemporary problems in more depth and emphasize the importance of considering environmental as well as human factors in studying regional geography.
b. Teaching Methods: no change
c. Assignments: no change
d. Course Evaluation Procedures: When evaluating this SLO next time I will provide more detailed instructions, reminding the students that they need to consider all aspects of the question.
3. Additional Resources: None needed

Method No change
Assignment No change
Evaluation No change
Current SLO No change
Assessment. No change
Other Do the next SLO evaluation
Resource no
Comments no

GEOG 12 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Finding A+ 4
A 14
A- 9
B+ 4
B 4
B- 1
C 3
D 1
F 4
I 1

Content Overall this assessment was a success. Given the differing motivations of students in this CTE program, the distribution of scores on this assessment was highly successful.
Method no changes.
Assignment no changes.
Evaluation no changes.
Current SLO no changes.
Assessment. no changes.
Other Assess. Repeat.
Resource no changes.
Comments Filling out this form is a pain in the neck.

*Third Reflection set*

Finding Students in general were successful in completing this SLO.
A 22

B 11

C 8

D 0

F 6

Students' success was determined more by their ability to attend class and complete the assigned work. Students who had outside commitments that kept them from completing their work or attending class were less successful.

Content none.
Method none
Assignment none
Evaluation none
Current SLO none
Assessment. none
Other Do the next assessment. Repeat.
Resource No.
Comments This is a terrible form!

GEOG 34H HONORS INSTITUTE SEMINAR IN GEOGRAPHY
GEOG 35 DEPARTMENT HONORS PROJECTS IN GEOGRAPHY No SLO record.
GEOG 36 SPECIAL PROJECTS IN GEOGRAPHY

Finding This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Content This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Method This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Assignment This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Evaluation This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Current SLO This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Assessment. This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Other This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Resource This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Comments This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.

GEOG 36X SPECIAL PROJECTS IN GEOGRAPHY

Finding This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Content This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Method This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.

Assignment This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Evaluation This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Current SLO This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Assessment. This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Other This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Resource This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Comments This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.

GEOG 36Y SPECIAL PROJECTS IN GEOGRAPHY
Finding This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Content This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Method This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Assignment This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Evaluation This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Current SLO This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Assessment. This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Other This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Resource This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Comments This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.

GEOG 36Z SPECIAL PROJECTS IN GEOGRAPHY
Finding This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Content This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Method This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Assignment This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Evaluation This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Current SLO This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Assessment. This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Other This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.
Resource This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.

Comments This course was not offered in a manner to assess reflections for 10-11 school year. This special projects class differs in each offering and does not allow it to be easily assessed in this format.

GEOG 52 ADVANCED GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Finding This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Content This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Method This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Assignment This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Evaluation This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Current SLO This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Assessment. This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Other This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Resource This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Comments This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

*Forth Reflection set*

Finding A 16
A- 2
B+ 4
B 1
C 1
F 2

Content Based on this result and the fact that most students in GEOG52 were working full time, the results were very positive

Method The result of the assessment is that the teaching methods are working

Assignment The assignments appear to be reinforcing the material introduced in class.

Evaluation These too appear to work well

Current SLO ... is a good one.

Assessment. ??? Don't know what this means.
Other Continue on doing what we are doing.
Resource nope. Keep funding computer labs with current hardware and site license fees for the GIS software.
Comments Nope.

GEOG 54A SEMINAR IN SPECIALIZED APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS I
Finding "Excellent" - 19, "Competent" - 1
Our current strategy is working.
Content None.
Method None.
Assignment None.
Evaluation None.
Current SLO None.
Assessment. None.
Other None.
Resource Continue to provide support to this critical workforce development class.

GEOG 54B SEMINAR IN SPECIALIZED APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS II
Finding Excellent -- 14, Competent -- 0, Adequate -- 0, Poor -- 0, Fail -- 2. Students who failed did so primarily because of outside commitments that prevented them from completing the course material.
Content None.
Method Provide more support in class in the form of a teaching assistant or lab assistant.
Assignment None.
Evaluation None.
Current SLO None.
Assessment. None.
Other None.
Resource Funding for a teaching or lab assistant to help students better troubleshoot software issues.
Comments No.

GEOG 58 REMOTE SENSING & DIGITAL IMAGE PROCESSING
Finding This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Content This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Method This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Assignment This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Evaluation This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.
Current SLO This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been

assessed.

Assessment. This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Other This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Resource This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

Comments This is a place holder so that the system reflects that the reflections have been completed. The CMS system indicates that 'No Reflections are on file' when we simply did not assess and reflect on this SLO. Please contact the System Administrator to fix this bug to reflect that this SLO has been assessed.

*Second Reflection set*

Finding 21 As, 1 B, 1 B-, 2 Fs This is evidence that the majority of the students were successful in attaining this learning outcomes. Students who did not reach mastery were, in general, not fully engaged in class (missed several class sections) or in one case, not fluent in English.

Content None. The assessment showed that the pedagogy is reaching the goal of teaching the outcome.

Method none.

Assignment none.

Evaluation Perhaps have an attendance requirements to the course. This would eliminate the students who were not successful from being a part of the final assessment.

Current SLO none.

Assessment. none.

Other Assess again next year.

Resource No. However, as this course is a supporting course to the GIS certificate program, it is critical that institutional resources continue to support the program as a whole.

Comments nope.

GEOG 59 CARTOGRAPHY, MAP PRESENTATION & DESIGN

GEOG 73 DYNAMIC & INTERACTIVE MAPPING

Finding This class was not taught this year

Content This class was not taught this year

Method This class was not taught this year

Assignment This class was not taught this year

Evaluation This class was not taught this year

Current SLO This class was not taught this year

Assessment. This class was not taught this year

Other This class was not taught this year

Resource This class was not taught this year

Comments This class was not taught this year

*Second Reflection set*

Finding This class was not taught this year

Content This class was not taught this year

Method This class was not taught this year

Assignment This class was not taught this year

Evaluation This class was not taught this year

Current SLO This class was not taught this year

Assessment. This class was not taught this year

Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

*Third Reflection set*
Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

GEOG 78 GEOGRAPHIC INFORMATION SCIENCE PROJECTS
Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

*Second Reflection set*
Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

GEOG 90A INTRODUCTION TO GIS FOR K-12 TEACHERS I: FUNDAMENTALS OF GEOGRAPHIC INFORMATION SYSTEMS SCIENCE
GEOG 90B INTRODUCTION TO GIS FOR K-12 TEACHERS II: UTILIZING SPATIAL DATA & DATA ANALYSIS IN THE CLASSROOM
Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year

Comments This class was not taught this year

*Second Reflection set*

Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

GEOG 90C INTRODUCTION TO GIS FOR K-12 TEACHERS III: DESIGNING & IMPLEMENTING A GIS

Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

*Second Reflection set*

Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

GEOG 100A INTRODUCTION TO ARC VIEW GIS

Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

*Second Reflection set*

Finding This class was not taught this year

Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

GEOG 100B INTRODUCTION TO GEO MEDIA & GEO MEDIA PRO
Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

*Second Reflection set*
Finding This class was not taught this year
Content This class was not taught this year
Method This class was not taught this year
Assignment This class was not taught this year
Evaluation This class was not taught this year
Current SLO This class was not taught this year
Assessment. This class was not taught this year
Other This class was not taught this year
Resource This class was not taught this year
Comments This class was not taught this year

| | | |
|---|---|---|
| GEOG 101 | A PREFACE TO GIS: AN INTRODUCTION TO COMPUTER-BASED MAPPING & GIS | No SLO record. |
| GEOG 101A | INTRODUCTION TO MAPPING & COMPUTERIZED CARTOGRAPHY | No SLO record. |
| GEOG 101B | A PREFACE TO GIS: COMPUTER-BASED MAPPING & GIS | No SLO record. |
| GEOG 101C | GLOBAL POSITIONING SYSTEMS (GPS) FUNDAMENTALS | No SLO record. |
| GEOG 101D | TECHNOLOGY CAREERS & WORKFORCE PREPARATION | No SLO record. |

## 0 of 1 Course IDs for *GERM* in the Language Arts Division have SLOs Defined. 2010-2011

| Course ID | Title | Refections |
|---|---|---|
| GERM 8 | POST WORLD WAR II GERMANY | No SLO record. |

## 0 of 7 Course IDs for *GERN* in the Adaptive Learning Division have SLOs Defined. 2010-2011

| Course ID | Title | Refections |
|---|---|---|
| GERN 50 | SOCIOLOGY OF AGING | No SLO record. |
| GERN 51 | PSYCHOLOGY OF AGING | No SLO record. |