

2016-2017 Annual Assessment Report Template

For instructions and guidelines visit our [website](#)
or [contact us](#) for more help.

Please begin by selecting your program name in the drop down. If the program name is not listed, please enter it below:

BA Geography

OR

Question 1: Program Learning Outcomes

Q1.1.

Which of the following Program Learning Outcomes (PLOs), Sac State Baccalaureate Learning Goals (BLGs), and emboldened Graduate Learning Goals (GLGs) **did you assess?** [**Check all that apply**]

- 1. **Critical Thinking**
- 2. **Information Literacy**
- 3. **Written Communication**
- 4. **Oral Communication**
- 5. Quantitative Literacy
- 6. **Inquiry and Analysis**
- 7. Creative Thinking
- 8. Reading
- 9. Team Work
- 10. Problem Solving
- 11. Civic Knowledge and Engagement
- 12. **Intercultural Knowledge, Competency, and Perspectives**
- 13. Ethical Reasoning
- 14. Foundations and Skills for Lifelong Learning
- 15. **Global Learning and Perspectives**
- 16. Integrative and Applied Learning
- 17. Overall Competencies for GE Knowledge
- 18. **Overall Disciplinary Knowledge**
- 19. **Professionalism**
- 20. Other, specify any assessed PLOs not included above:

a.

b.

c.

Q1.2.

Please provide more detailed background information about **EACH PLO** you checked above and other information including how your specific PLOs are **explicitly** linked to the Sac State **BLGs/GLGs**:

This year, Geography's annual assessment report picks up from where last year's report concluded. It does not focus on one or more of our PLOs, but continues to turn its attention to one of our concentrations: Human Geography. Last year, as the result of previous assessment reports, we took an uncommon and unconventional turn by assessing why one of our concentrations—Human Geography—had low graduation rates. This means that students who hold (or held) the Human concentration are either leaving the concentration or diversifying at comparatively higher rates than all the other concentrations. That is where last year's assessment report concluded, and the obvious next step is to determine why. To this end, we surveyed our graduating students. Our current assessment report is attached, and it includes an exit interview (indirect measure) and analysis.

Q1.2.1.

Do you have rubrics for your PLOs?

1. Yes, for all PLOs
2. Yes, but for some PLOs
3. No rubrics for PLOs
4. N/A
5. Other, specify:

Q1.3.

Are your PLOs closely aligned with the mission of the university?

1. Yes
2. No
3. Don't know

Q1.4.

Is your program externally accredited (other than through WASC Senior College and University Commission (WSCUC))?

1. Yes
2. No (skip to **Q1.5**)
3. Don't know (skip to **Q1.5**)

Q1.4.1.

If the answer to Q1.4 is **yes**, are your PLOs closely aligned with the mission/goals/outcomes of the accreditation agency?

1. Yes
2. No
3. Don't know

Q1.5.

Did your program use the *Degree Qualification Profile* ("DQP", see <http://degreeprofile.org>) to develop your PLO(s)?

1. Yes
2. No, but I know what the DQP is
3. No, I don't know what the DQP is
4. Don't know

Q1.6.

Did you use action verbs to make each PLO measurable?

1. Yes
2. No
3. Don't know

(Remember: Save your progress)

Question 2: Standard of Performance for the Selected PLO

Q2.1.

Select **OR** type in **ONE(1)** PLO here as an example to illustrate how you conducted assessment (be sure you *checked the correct box* for this PLO in Q1.1):

Select PLO

If your PLO is **not listed**, please enter it here:

Q2.1.1.

Please provide more background information about the **specific PLO** you've chosen in Q2.1.

Q2.2.

Has the program developed or adopted **explicit** standards of performance for this PLO?

- 1. Yes
- 2. No
- 3. Don't know
- 4. N/A

Q2.3.

Please **provide the rubric(s)** and **standards of performance** that you have developed for this PLO here or in the appendix.

No file attached

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Q2.4. PLO	Q2.5. Stdrd	Q2.6. Rubric	Please indicate where you have published the PLO , the standard of performance, and the rubric that was used to measure the PLO:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. In SOME course syllabi/assignments in the program that address the PLO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. In ALL course syllabi/assignments in the program that address the PLO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. In the student handbook/advising handbook
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. In the university catalogue
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. On the academic unit website or in newsletters

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. In the assessment or program review reports, plans, resources, or activities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. In new course proposal forms in the department/college/university
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. In the department/college/university's strategic plans and other planning documents
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. In the department/college/university's budget plans and other resource allocation documents
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Other, specify: <input type="text"/>

Question 3: Data Collection Methods and Evaluation of Data Quality for the Selected PLO

Q3.1.

Was assessment data/evidence **collected** for the selected PLO?

1. Yes
2. No (skip to **Q6**)
3. Don't know (skip to **Q6**)
4. N/A (skip to **Q6**)

Q3.1.1.

How many assessment tools/methods/measures **in total** did you use to assess this PLO?

Q3.2.

Was the data **scored/evaluated** for this PLO?

1. Yes
2. No (skip to **Q6**)
3. Don't know (skip to **Q6**)
4. N/A (skip to **Q6**)

Q3.2.1.

Please describe how you collected the assessment data for the selected PLO. For example, in what course(s) or by what means were data collected:

(Remember: Save your progress)

Question 3A: Direct Measures (key assignments, projects, portfolios, etc.)

Q3.3.

Were direct measures (key assignments, projects, portfolios, course work, student tests, etc.) used to assess this PLO?

1. Yes
2. No (skip to **Q3.7**)
3. Don't know (skip to **Q3.7**)

Q3.3.1.

Which of the following direct measures (key assignments, projects, portfolios, course work, student tests, etc.) were used?

[Check all that apply]

- 1. Capstone project (e.g. theses, senior theses), courses, or experiences
- 2. Key assignments from required classes in the program
- 3. Key assignments from elective classes
- 4. Classroom based performance assessment such as simulations, comprehensive exams, or critiques
- 5. External performance assessments such as internships or other community-based projects
- 6. E-Portfolios
- 7. Other Portfolios
- 8. Other, specify:

Q3.3.2.

Please **provide** the direct measure (key assignments, projects, portfolios, course work, student tests, etc.) you used to collect data, THEN **explain** how it assesses the PLO:

 No file attached

 No file attached

Q3.4.

What tool was used to evaluate the data?

- 1. No rubric is used to interpret the evidence (skip to **Q3.4.4.**)
- 2. Used rubric developed/modified by the faculty who teaches the class (skip to **Q3.4.2.**)
- 3. Used rubric developed/modified by a group of faculty (skip to **Q3.4.2.**)
- 4. Used rubric pilot-tested and refined by a group of faculty (skip to **Q3.4.2.**)
- 5. The VALUE rubric(s) (skip to **Q3.4.2.**)
- 6. Modified VALUE rubric(s) (skip to **Q3.4.2.**)
- 7. Used other means (Answer **Q3.4.1.**)

Q3.4.1.

If you used other means, which of the following measures was used? [Check all that apply]

- 1. National disciplinary exams or state/professional licensure exams (skip to **Q3.4.4.**)
- 2. General knowledge and skills measures (e.g. CLA, ETS PP, etc.) (skip to **Q3.4.4.**)
- 3. Other standardized knowledge and skill exams (e.g. ETC, GRE, etc.) (skip to **Q3.4.4.**)
- 4. Other, specify: (skip to **Q3.4.4.**)

Q3.4.2.

Was the **rubric** aligned directly and explicitly **with the PLO**?

- 1. Yes
- 2. No
- 3. Don't know
- 4. N/A

Q3.4.3.

Was the **direct measure** (e.g. assignment, thesis, etc.) aligned directly and explicitly **with the rubric**?

- 1. Yes
- 2. No
- 3. Don't know
- 4. N/A

Q3.4.4.

Was the **direct measure** (e.g. assignment, thesis, etc.) aligned directly and explicitly **with the PLO**?

- 1. Yes
- 2. No
- 3. Don't know
- 4. N/A

Q3.5.

How many faculty members participated in planning the assessment data **collection** of the selected PLO?

Q3.5.1.

How many faculty members participated in the **evaluation** of the assessment data for the selected PLO?

Q3.5.2.

If the data was evaluated by multiple scorers, was there a norming process (a procedure to make sure everyone was scoring similarly)?

- 1. Yes
- 2. No
- 3. Don't know
- 4. N/A

Q3.6.

How did you **select** the sample of student work (papers, projects, portfolios, etc.)?

Q3.6.1.

How did you **decide** how many samples of student work to review?

Q3.6.2.

How many students were in the class or program?

Q3.6.3.

How many samples of student work did you evaluated?

Q3.6.4.

Was the sample size of student work for the direct measure adequate?

1. Yes
2. No
3. Don't know

(Remember: Save your progress)

Question 3B: Indirect Measures (surveys, focus groups, interviews, etc.)

Q3.7.

Were indirect measures used to assess the PLO?

1. Yes
2. No (skip to **Q3.8**)
3. Don't Know (skip to **Q3.8**)

Q3.7.1.

Which of the following indirect measures were used? [**Check all that apply**]

1. National student surveys (e.g. NSSE)
2. University conducted student surveys (e.g. OIR)
3. College/department/program student surveys or focus groups
4. Alumni surveys, focus groups, or interviews
5. Employer surveys, focus groups, or interviews
6. Advisory board surveys, focus groups, or interviews
7. Other, specify:

Q3.7.1.1.

Please explain and attach the indirect measure you used to collect data:

Q3.7.2.

If surveys were used, how was the sample size **decided**?

Q3.7.3.

If surveys were used, how did you **select** your sample:

Q3.7.4.

If surveys were used, what was the response rate?

Question 3C: Other Measures (external benchmarking, licensing exams, standardized tests, etc.)

Q3.8.

Were external benchmarking data, such as licensing exams or standardized tests, used to assess the PLO?

1. Yes
2. No (skip to **Q3.8.2**)
3. Don't Know (skip to **Q3.8.2**)

Q3.8.1.

Which of the following measures was used? [**Check all that apply**]

1. National disciplinary exams or state/professional licensure exams

2. General knowledge and skills measures (e.g. CLA, ETS PP, etc.)
3. Other standardized knowledge and skill exams (e.g. ETC, GRE, etc.)
4. Other, specify:


Q3.8.2.


Were other measures used to assess the PLO?

1. Yes
2. No (skip to **Q4.1**)
3. Don't know (skip to **Q4.1**)

Q3.8.3.

If other measures were used, please specify:

 No file attached


 No file attached


(Remember: Save your progress)

Question 4: Data, Findings, and Conclusions

Q4.1.


Please provide simple tables and/or graphs to summarize the assessment data, findings, and conclusions for the selected PLO in **Q2.1**:


 No file attached

 No file attached

Q4.2.

Are students doing well and meeting the program standard? If not, how will the program work to improve student performance of the selected PLO?

 No file attached

 No file attached

Q4.3.

For the selected PLO, the student performance:

- 1. **Exceeded** expectation/standard
- 2. **Met** expectation/standard
- 3. **Partially** met expectation/standard
- 4. Did not meet expectation/standard
- 5. No expectation/standard has been specified
- 6. Don't know

Question 4A: Alignment and Quality

Q4.4.

Did the data, including the direct measures, from all the different assessment tools/measures/methods directly align with the PLO?

- 1. Yes
- 2. No
- 3. Don't know

Q4.5.

Were **all** the assessment tools/measures/methods that were used good measures of the PLO?

- 1. Yes
- 2. No
- 3. Don't know

Question 5: Use of Assessment Data (Closing the Loop)

Q5.1.

As a result of the assessment effort and based on prior feedback from OAPA, do you anticipate *making any changes* for your program (e.g. course structure, course content, or modification of PLOs)?

- 1. Yes
- 2. No (skip to **Q5.2**)
- 3. Don't know (skip to **Q5.2**)

Q5.1.1.

Please describe *what changes* you plan to make in your program as a result of your assessment of this PLO. Include a description of how you plan to assess the impact of these changes.

Q5.1.2.

Do you have a plan to assess the *impact of the changes* that you anticipate making?

- 1. Yes
- 2. No
- 3. Don't know

Q5.2.

Since your last assessment report, **how have the assessment data from then been used** so far?

	1. Very Much	2. Quite a Bit	3. Some	4. Not at All	5. N/A
1. Improving specific courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Modifying curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Improving advising and mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Revising learning outcomes/goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Revising rubrics and/or expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Developing/updating assessment plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Annual assessment reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Program review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Prospective student and family information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Alumni communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. WSCUC accreditation (regional accreditation)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Program accreditation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. External accountability reporting requirement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Trustee/Governing Board deliberations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Strategic planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Institutional benchmarking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Academic policy development or modifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Institutional improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Resource allocation and budgeting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. New faculty hiring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Professional development for faculty and staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Recruitment of new students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Other, specify:

Q5.2.1.

Please provide a detailed example of how you used the assessment data above:

Q5.3.

To what extent did you apply **last year's feedback** from the Office of Academic Program Assessment in the following areas?

	1. Very Much	2. Quite a bit	3. Some	4. Not at All	5. N/A
1. Program Learning Outcomes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Standards of Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Rubrics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Alignment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Data Collection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Data Analysis and Presentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Use of Assessment Data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Other, please specify: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5.3.1.

Please share with us an example of how you applied **last year's feedback** from the Office of Academic Program Assessment in any of the areas above:

(Remember: Save your progress)

Additional Assessment Activities

Q6.

Many academic units have collected assessment data on aspect of their program *that are not related to the PLOs* (i.e. impacts of an advising center, etc.). **If** your program/academic unit has collected data on program *elements*, please briefly report your results here:

As described above, this year, Geography's annual assessment did not focus on one or more of our PLOs, but again it turns its attention to our Human Geography concentration. Last year, we found that students who hold (or held) the Human concentration are either leaving the concentration or diversifying at comparatively higher rates than all the other concentrations. We know there is a problem, and now we focus on why. To do so, we sent an exit interview to all of our graduating seniors. Their responses and an analysis of their responses are attached.



Human Geography Concentration Assessment Report II 2016_2017.docx
58.52 KB

No file attached

Q7.

What PLO(s) do you plan to assess next year? [**Check all that apply**]

- 1. **Critical Thinking**
- 2. **Information Literacy**
- 3. **Written Communication**
- 4. **Oral Communication**
- 5. Quantitative Literacy
- 6. **Inquiry and Analysis**
- 7. Creative Thinking
- 8. Reading
- 9. Team Work
- 10. Problem Solving
- 11. Civic Knowledge and Engagement
- 12. **Intercultural Knowledge, Competency, and Perspectives**
- 13. Ethical Reasoning
- 14. Foundations and Skills for Lifelong Learning
- 15. **Global Learning and Perspectives**
- 16. Integrative and Applied Learning
- 17. Overall Competencies for GE Knowledge
- 18. **Overall Disciplinary Knowledge**
- 19. **Professionalism**
- 20. Other, specify any PLOs not included above:

a.

b.

c.

Q8. Please attach any additional files here:



No file attached



No file attached



No file attached



No file attached

Q8.1.

Have you attached any files to this form? If yes, please list every attached file here:

Human Geography Concentration Assessment Report II 2016_2017

Program Information (**Required**)

Program:

(If you typed your program name at the beginning, please skip to Q10)

Q9.

Program/Concentration Name: [skip if program name appears above]

BA Geography

Q10.

Report Author(s):

Michael Schmandt

Q10.1.

Department Chair/Program Director:

Michael Schmandt

Q10.2.

Assessment Coordinator:

Michael Schmandt

Q11.

Department/Division/Program of Academic Unit

Geography

Q12.

College:

College of Natural Science & Mathematics

Q13.

Total enrollment for Academic Unit during assessment semester (see Departmental Fact Book):

Internal department data suggests between 110-120 majors. Factbook suggests 93.

Q14.

Program Type:

1. Undergraduate baccalaureate major
2. Credential
3. Master's Degree
4. Doctorate (Ph.D./Ed.D./Ed.S./D.P.T./etc.)
5. Other, specify:

Q15. Number of **undergraduate degree programs** the academic unit has?

4

Q15.1. List all the names:

B.A. in Geography with four different concentrations: Physical Geography, Geographic Information Systems and Analysis, Metropolitan Area Planning, and Human.

Q15.2. How many concentrations appear on the diploma for this undergraduate program?

4

Q16. Number of **master's degree programs** the academic unit has?

0

Q16.1. List all the names:

Q16.2. How many concentrations appear on the diploma for this master's program?

Don't know

Q17. Number of **credential programs** the academic unit has?

0

Q17.1. List all the names:

Q18. Number of **doctorate degree programs** the academic unit has?

0

Q18.1. List all the names:

When was your assessment plan ...	1. Before 2011-12	2. 2012-13	3. 2013-14	4. 2014-15	5. 2015-16	6. 2016-17	7. No Plan	8. Don't know
Q19. developed?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q19.1. last updated?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q19.2. (REQUIRED)

Please **obtain** and **attach** your latest **assessment plan**:


GEOG-Assessment-Plan 2012.pdf
327.42 KB

Q20.

Has your program developed a **curriculum map**?

- 1. Yes
- 2. No
- 3. Don't know

Q20.1.

Please **obtain** and **attach** your latest **curriculum map**:


No file attached

Q21.

Has your program indicated in the curriculum map where assessment **of student learning** occurs?

- 1. Yes
- 2. No
- 3. Don't know

Q22.

Does your program have a capstone class?

- 1. Yes, indicate:
- 2. No
- 3. Don't know

Q22.1.

Does your program have **any** capstone project?

- 1. Yes
- 2. No
- 3. Don't know

(Remember: Save your progress)

ver. 5.15/17

Human Geography Concentration Assessment Report (2016-2017)

1. Introduction

This study picks up where last year’s assessment report concluded. Last year, as the result of previous assessment reports, we took an uncommon and unconventional turn by assessing why one of our concentrations—Human Geography—had low graduation rates. On the surface, the Human Geography concentration’s numbers looked good. The number of majors with a Human Geography concentration was consistently in the low 20s, but something happened as those majors approached graduation. Last year, three direct measures were used to assess the condition of this concentration. First, we looked at the number of majors by concentration. To do that we pieced together data from the Cognos database (SacVault) and the annual department *Fact Books* for Fall 2015, Spring 2016, and Fall 2016. The numbers were in the low 20s each semester. Second, we created a list of all of our graduates back to 2012 and sorted them by concentration. Even though 16.67 percent of our majors over the past three semesters had the Human Geography concentration, only 6.1 percent of our majors graduated (over the previous four years) with this concentration (see table below).

<i>Graduates</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>4yrTotal</i>	<i>Percent</i>
<i>Physical</i>	9	18	12	16	55	33.54
<i>GIS and Analysis</i>	10	10	22	15	57	34.76
<i>Human</i>	2	3	4	1	10	6.10
<i>Metro Planning</i>	6	6	12	8	32	19.51
<i>Other Concentration</i>	8	1	0	1	10	6.10
<i>Total Graduating</i>	35	38	50	41	164	100

Table 1: Number and Percent of Graduates by Concentration for 2012-2015.

That is when we knew there was a problem. Something happens as our students progress through the major. With this information, we created a third report—a long one—that tracked when and if each of our students changed their major and their concentration as they progressed towards graduation. To create such a report, we went through the student records of all of our current geography majors (for Spring 2016). By tracking all majors, we determined if those students with the Human concentration behaved differently than students in other concentrations. They did.

<i>Concentrations</i>	<i>Initial Count</i>	<i>No changes (kept concentration)</i>	<i>Dropped (dropped original concentration)</i>	<i>Diversified (added a concentration)</i>	<i>Picked up (gained a major)</i>	<i>Final Count</i>	<i>% with 2nd concentration</i>
<i>Physical</i>	45	40 (88.8%)	4 (8.9%)	1 (2.2%)	9 (20.0%)	50 +5	2 (4.0%)
<i>GIS and Analysis</i>	26	22 (84.6)	3 (11.5)	1 (3.8)	8 (30.7)	31 +5	4 (12.9)
<i>Human</i>	23	12 (52.2)	7 (30.4)	4 (17.4)	4 (17.4)	20 -3	8 (40.0)
<i>Metro Planning</i>	12	9 (75.0)	2 (16.0)	1 (8.3)	11 (91.6)	21 +9	8 (38.1)

Table 2: Number and Types of Concentration Changes for All Geography Students that Enrolled in Spring 2016.

The table above summarized last year’s findings. Focus on the Human Geography numbers, but compare these numbers to the other concentrations. The Human concentration has the lowest percentage of *No changes (kept concentration)*, the highest percentage of *Dropped (dropped original concentration)*, the highest percentage of *Diversified (added a concentration)*, the lowest percentage of *Picked up (gained a major)*, and it is the only concentration to lose students in the *Final Count*. This means that students who hold (or held) the Human concentration are either leaving the concentration or diversifying at comparatively higher rates than all the other concentrations. From these results, the Human concentration underperformed all of the other concentrations in all categories. Not only does it have a comparative problem with graduation rates, but students are leaving or diversifying at much higher rates.

That is where last year’s assessment report concluded, and the obvious next step is to determine why. From the table above we can begin to speculate. One reason for the high diversification (or changing concentrations) rate might be due to a perceived weakness in how the Human concentration prepares students for the job market. We know from last year’s detailed data that many with the Human concentration gravitate to the Metro Area Planning (MAP) or the GIS and Analysis (GISA) concentrations (either by changing or by adding a concentration). Another reason may be that these students lose interest in the concentration because of the course’s subject matter. Many of the human and regional courses are offered once every two years, and if transferring students miss an opportunity to take a particular desired course (perhaps because they did not have the prerequisites or it did not fit their schedule), they may become less interested in the concentration.

This assessment report looks at “why,” and to do that we start by surveying our students.

2. Background

The Geography major is both broad and deep. Thirty-one units constitutes the core (both lower and upper division courses), which covers all broad geographic subfields, ranging from the natural sciences

to the social sciences (and even some humanities too). Fifteen units of depth—the concentrations—deliver a more specialized knowledge on one of four geographic subfields. The concentrations meet the diverse interests of students and also prepare them for the most likely career paths they will follow after graduating. Geographic Information Systems & Analysis (GISA) emphasizes working with spatial data and technology. Metropolitan Area Planning (MAP) emphasizes geography as an applied discipline aimed at creating better places; there is no city planning program at Sacramento State or UCD, so this concentration is key in meeting a local need. Physical Geography presents an integrated understanding of climate and weather, water resources, landforms, and biogeography. Finally, the Human Geography concentration emphasizes the social science side of the discipline as well as the regional approach to understanding places. While this range of subject matter may surprise some readers, it is held together by the common threads of the spatial perspective and human-environment interaction.

3. Data Collection Methods

3.1. Direct Measures

No direct measures were used to assess this concentration.

3.2. Indirect Measures

One indirect measure—a department interview for graduating students was used to assess all four of our concentrations. This “exit interview” consisted of the following open-ended questions:

Question One: Did you begin your Sac State career as a Geography major? If not, what was your major?

Question Two: What concentration(s) did you initially select when you joined our program?

Question Three: What attracted you to this initial concentration(s)?

Question Four: Did you add a concentration or change your concentration as you went through our program? What changes did you make?

Question Five: If applicable, if you removed your initial concentration, what reasons caused you to leave?

Question Six: If applicable, if you removed your initial concentration, what attracted you to the new concentration?

Question Seven: If applicable, if you kept your original concentration but added a concentration, how was your initial concentration lacking what you wanted? What attracted you to the new concentration?

Question Eight: On reflection, what would you change about the concentration(s) that you selected?

Question Nine: What is your next step? What are you planning to do now that you have graduated?

Question Ten: Do you have any additional comments?

We surveyed twenty-nine students. Almost all of the students were part of our Spring 2017 graduating class (one had graduated Fall 2016 and two others were expected to graduate Summer 2017). Of the twenty-nine students, only five did not respond (a response rate of 82.8 percent) to our interview questions. Most of the student responses were delivered and received by e-mail, but several required a follow-up attempt given either in person (two) or by telephone (one). We would have liked to have surveyed previous graduates as well, but time demands required that we focus our survey on present graduates.

4. Data, Findings, and Conclusions

4.1. Data

Exit Interview.

Again, we received 24 responses back from the Spring 2017 graduates. They graduated with the following concentrations (note: five students have two concentrations and one has three concentrations for a total of 31 concentrations):

	<i>Spring 2017</i>	<i>Percent by Concentration</i>
<i>Physical</i>	12	38.71
<i>GIS and Analysis</i>	10	32.26
<i>Human</i>	3	9.68
<i>Metro Planning</i>	6	19.35
<i>Total Concentrations</i>	31	100
<i>Total Majors</i>	24	

Table 3: Number of Graduating Students by Concentration, Spring 2017.

Looking at the table above, the 9.68 percent of students graduating with the Human geography concentration is not as poor as the 6.1 percent reported in last year’s assessment report (see Table 1). Still, it is not a good number or as high as the 16.67 percent of our majors that once held the concentration over three previous semesters (Spring 15, Fall 15, and Spring 16).

What are the results of the survey data?

Question One: Did you begin your Sac State career as a Geography major? If not, what was your major?

This question gets to why they choose geography and the students particular concentration. We included it because we wanted to see why so many students first selected the Human concentration. Of the 24 responses, six students indicated that they officially had a different major before joining our department, and one student double majored with Government (International Relations). Their diverse responses were:

Film, then Business
Geology
Computer Science
Economics
Psychology
Chemistry

Six additional students mentioned that they were headed towards different majors (either here or at another institution) but discovered geography along the way. Those six students were initially interested in:

Graphic Design
Biology
Business
Environmental Science (She might have meant Env. Studies, but perhaps she was at a different institution)
Economics
Geology

Question Two: What concentration(s) did you initially select when you joined our program?

Table 4 (below) summarizes initial concentrations by count. All entering students initially selected a single concentration. We see that 50 percent of the students come into the program with the Physical concentration. Twenty five percent are focused on Human Geography. For the current graduating class, few initially selected the GISA or MAP concentrations.

Question Three: What attracted you to this initial concentration(s)?

Many of the following talk about a particular course they took at one of the community colleges. Some discuss how they may have wanted a different major originally, but how they were happy to find a major they enjoy. Here are their responses.

My concentration was Physical Geography. To be honest, the initial way that I came to Physical Geography was that I originally was going to do an Environmental Science concentration, but was really struggling in Chemistry. I was going downhill fast and needed to change my direction. I have a long work history in Forestry and Agriculture and wanted to stay in a field of study that would keep me in line with that type of work, that's when I discovered Geography. Discovering Physical Geography was amazing, it gave me so much knowledge on such a wide spectrum of things that I really don't think I would have received in any other concentration. It was a blessing in disguise. I thought about adding the GIS concentration, but with work and a full load in units, I couldn't take the 3 more units I needed for the extra concentration. After actually having a brief conversation with you, as well as Professor Wanket, I decided I was going to be just fine without it. I ended up having most of the classes under my belt and I figured that should take me a long enough way in the work force. In all honesty, GIS was not really my favorite, with the exception of Cartography. I'm pretty artsy and I loved the process of map designing. I'm much more of a person that enjoys working outdoors and being strapped to a desk, only working on GIS projects was not super exciting to me, but I felt the knowledge in combination with the Physical Geography would make me a good candidate for employment in the fields I'm interested in. [Stayed Physical]

I loved all things in human geography. Carol Cox at Sierra is a mentor of mine, and I took all of her human-related courses. I was on the path to become an economics major at Sac State, but her courses made me focus on Geography when I came to Sac State. [Left Human for MAP]

I loved one of Judy Kusnick's courses, but every other Geology course I took did nothing with humans. Finally, I talked with her and she said that is something that geographers do. So I took Marius's physical geography course and loved it. He brought me over (but I still got a minor in Geology!). [Left Physical for Human and MAP]

My initial concentration was Physical Geography. What attracted me to Physical Geography was a mixture of things. One being influenced by Dr. Lyons at San Joaquin Delta College and another is being an outdoors person. I enjoy the outdoors and always wondered how rivers, mountains, and landforms were formed. Whenever I was out hiking, fishing, or on the mountains, I had an interest in learning how the earth became what it is today. I wanted to learn the physical aspects of our earth. [Stayed Physical, but added GISA]

It was GIS. I learned about GIS when I was returning to school after a four year break and searching for a new major, which I found in Geography. It seemed to combine many of my skills and interests. I had been studying graphic design, but wasn't excited about my career options. I've always had an interest in geography and maps, as well as computers and design. I enrolled in some geography classes at Folsom Lake where I met Prof. Jason Pittman. He introduced me to remote sensing which I found very intriguing as a career field. I decided to focus on GIS until eventually moving into remote sensing and ultimately starting a small, local aerial imaging company (hopefully!). [Stayed GISA]

Ah yes, the good old study of humans. It was the human concentration, and I still kind of wish I stuck around and finished out the concentration, because the intersection of human behavior and geography is one of those things I cannot get enough of. Simple put - it sparks my curiosity! [Left Human for MAP]

I choose the physical concentration because I was originally going to focus on weather. When I transferred into Sac State I was going to be a business major, but a geography class I took at ARC during the application process convinced me to switch to a more science based major. [Stayed Physical, but wished to change to GISA]

Human was my concentration. I took a course at my JC and loved how it blended people and places. [Stayed Human but added MAP]

I started in metro planning because I was drawn to the aspect that I could get a position as a city planner or something similar. [Left MAP for GISA]

I started with the human concentration. I really loved all three of the classes that I took with Marsha Dillon. I like studying people and their place in the world. I'm into psychology and languages, and this sort of goes with those themes. The main reason is because I had advising with you, and informed you that I wanted something to tie in with my envs studies minor, and I wanted a job not in front of the computer all day, and you thought Human would work well. [Left Human for MAP]

Human concentration. Took Human course in Stockton. Loved it. [Left Human for MAP and Physical]

Physical geography. I always enjoyed my physical geography classes. I felt that I had a natural interest in them, and always found myself eager to answer and ask questions in those classes. And while I found myself not agreeing with certain things (due to religious beliefs) I enjoy studying and learning things from another perspective. [Stayed Physical, but added GISA]

I started years ago in the Human Geography concentration because of how much I enjoyed my Human Geography class at American River. I can't remember what the professor's name was. I made a 99% in the class and was just intrigued by how much the subject covered and it was really the first class that I felt I learned things that could actually be used in the real world. [Left Human for Physical]

GIS concentration. Your wife and Scott Crozier brought me into geography. They both told me how much GIS would help me get a job. [Stayed GISA]

My concentration is physical. Took the course in Fresno. That is how I discovered geography. [Stayed Physical but added Human and GISA].

Took Physical Geography at Sierra College and became a physical geographer when I came to Sac State. [Left Physical for GISA]

Learned about Physical Geography in the military. Originally, before my service, I wanted to be a biologist, but I did not have the grades. [Stayed Physical]

GISA is my concentration. It was going to take me too long to get my computer science degree. I took Mile's course and loved it. I could see how I could attach my programming skills to interesting subject matter. [Stayed GISA]

I was introduced to Physical Geography in an Earth Science course years ago at the JC and ended up taking "fun" courses related to the subject each semester in addition to Chemistry requirements. When I returned to college, I had been out of the Chemistry for so long and decided to pursue Physical Geography after researching majors in the CSUS catalog. [Left Physical for GISA]

As one who had always enjoyed travel and maps, I had always felt Geography would have been a good match. However, most importantly, I have wanted to join the military as an officer ever since I was a child. I felt that Geography would help provide me with a foundation in maps, satellites, and navigation. These are all similar skills utilized by pilots and navigators in the military. Geography and the "lay of the land" have always been fundamental in the defense of nations and warfare since ancient times. This was a decision of mine that I wish I had more time to reflect upon. I believe for me, having a heavier physical and computer science-based curriculum would help me improve my weakness with the latter. I firmly believe I had never received a proper scientific curriculum while in high school. Thus, engaging in a scientific-heavy course load was imperative in learning how to write academically, not just creatively. The physical aspects of our planet, rather than its politics or culture, was more attractive at the time. However, I feel as though both cultural and physical geography would have been enjoyable for me. [Stayed Physical]

I started and ended as a physical geography major. My primary interests have always been math and the physical sciences. My AS was in math/physical science and after working for the geological survey for years, I really wanted to get my BA. Unfortunately, it would have taken me additional years for the geology BA, so I went with physical geography to happily study the physical aspects of the world in a more broad way. I stayed with physical geography because I was very determined to graduate. I would have added a GIS concentration and/or a geology minor if I had the time and if the class time slots would have allowed it. [Stayed Physical]

I wanted a construction major, and urban planning was the closest thing. [Stayed MAP]

Loved camping and the outdoors, and I did not want a desk job! So I took a physical course from your wife (please say hello) and never looked back. [Stayed Physical]

I started here 5 or 6 years ago in the General concentration. I took your Urban Planning course, and it changed my direction. After taking a little time off, I added the human concentration because I had enough classes for it. [Left General for MAP and Human]

Question Four: Did you add a concentration or change your concentration as you went through the program? What changes did you make?

To analyze this question, we begin by looking at the major as a whole. We see 11 of 24 students (45.8 percent) declared a concentration and stayed with only that concentration throughout their tenure in our department. Four of 24 graduating students stayed with their original concentration but picked up an additional concentration (one student picked up two). The reason to declare a second (or third) concentration may occur for a number of reasons, including interest in a different subject matter; marketability; and while pursuing one's concentration, a student discovered that he or she has met all or almost all of another concentration's requirements. Finally, there were nine students that abandoned their original concentration for one or more concentrations. Five of those nine were part of the Human concentration.

<i>Concentrations</i>	<i>Initial Count</i>	<i>No changes (kept concentration)</i>	<i>Dropped (dropped original concentration)</i>	<i>Diversified (added a concentration)</i>	<i>Picked up (gained a major)</i>	<i>Final Count</i>	<i>% with 2nd concentration</i>
<i>Physical</i>	12	7 (58.3%)	2 (16.7%)	3 (25.0%)	2 (16.7%)	12	4 (33.3%)
<i>GIS and Analysis</i>	3	3 (100.0)	0 (0.0)	0 (0.0)	7 (70.0)	10	3 (30.0)
<i>Human</i>	6	0 (0.0)	5 (83.3)	1 (16.7)	2 (66.7)	3	3 (100.0)
<i>Metro Planning</i>	2	1 (50.0)	1 (50.0)	0 (0.0)	5 (83.3)	6	3 (50.0)
<i>General (legacy concentration)</i>	1	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)	0	0 (0.0)
<i>Total</i>	24	11 (45.8)	9 (37.5)			31	

Table 4: Number and Types of Concentration Changes for All Geography Students Graduating Spring 2017. This table summarizes the respondent's survey data by looking at their concentration and to any changes that they may have made. To get this information, we looked largely at interview questions two and four, but at times, we consulted their student records.

Now let us look specifically at the human concentration. Of the six students who originally declared the Human concentration, five dropped it (going to Physical, Physical & MAP, MAP (2), and GISA) and the remaining member added a concentration (MAP) to her initial concentration. Two students (one with Physical and GISA concentrations and another with the MAP concentration) added the Human concentration to lift the number of graduating seniors with the Human concentration from one to three. Still, this concentration lost half of its initial count, and it is the only contemporary concentration to lose majors. Finally, no students graduated this term with only this concentration.

Question Five: *If applicable, if you removed your initial concentration, what reasons caused you to leave?*

Some of the students provided critical feedback about why they left the concentration for another concentration. Those responses are below. Other students talked more about what brought them to a different choice, and their responses are in the next section. A couple students provided responses for questions five or six that clearly needed to be split between these push and pull factors, so they were moved for this report.

Unfortunately for me, the reason why I switched from Human to GIS was entirely practical. It was a more marketable skill, and I had a finite amount of classes I could take to fit in my other major in 4 years. What do human geographers do? What skills do they need to know? Certainly, there is more to it than the subject matter. [Left Human for GISA]

While there is a meteorology class, I either didn't know of any other forms of studying weather or knew of internships to get into that field. [Left Physical for GISA]

My girlfriend's sister is in the metro planning field, and she informed me that it was very hard to get a city planning job unless you have a master's degree in it. I think I would have stayed in the metro planning concentration if there was a certificate or something offered as well. [Left MAP for GISA]

I figured it would be very hard to find a job with the Human concentration compared to the other three concentrations. [Left Human for MAP]

The human concentration needs to connect to the workplace. Some geography classes are only offered every two years. It took a lot of schedule planning, semesters ahead, to calculate what classes I could take to graduate in the time that I did. [Left Human for MAP]

It was honestly a really hard decision. I really enjoyed all aspects of geography and looking back, would have probably double concentrated if I realized that was an option when I first arrived. With Human Geography, I started to feel disconnected with what I was learning, and I didn't know how to apply it to real life anymore. I think those things are why I decided to move into Physical instead. [Left Human for Physical]

Question Six: If applicable, if you removed your initial concentration, what attracted you to the new concentration?

I switched from Physical to GISA after taking 109 with Professor Roberts. I was fascinated by the scope of questions that could be answered with principles of spatial analysis- both Physical and Human Geography related. I actually wish I had done the dual major and probably would have if I could have afforded another semester...not much the department could have done there =) [Left Physical for GISA]

It was the passion I witnessed from Professors Gervais and Wanket that just really hooked me into the physical geography world. Also, the love I have for the environment and the outdoor excursions were useful in applying our knowledge outside the classroom. I also enjoyed the field time with the assignments for the Transportation and the Urban Field courses. [Left Human for Physical]

I enjoyed the hands-on experiences of the physical geography classes and really connected with the whole sustainability movement. [Left Human for Physical and MAP]

During my time at sac state I discovered how dynamic GIS is as both a form of study and a method of analysis (not to mention its demand in the work force). I decided that the GIS concentration was something that would be more useful for me to get a job in the future and to learn about. [Left Physical for GISA]

I had heard from some friends in the field that a GIS concentration was probably the most useful one that Sac State offers. I really like making maps and such, so it felt like a good fit for me. I also really enjoy statistics, so I wanted to learn about the analysis processes as well. Thank you for helping me with my 190 poster! I'm thrilled to win the URISA best GIS poster award! [Left MAP for GISA]

I wanted to major in something that had a job title in its name, that I could build off of easier than Human. When I first took 109 I was so offput from ArcGIS, I absolutely hated it, the class was so hard and Miles was hardly any help. I had panic attacks during the class because of how disorganized it felt! I decided that I never ever wanted a job doing ArcGIS. After a few semesters went by and I realized the importance of the skill, and that I don't have to get a job doing ArcGIS 100% of the time, that there are jobs where it is a minor but important roll, so I figured I should go for it. Metro Planning comes with the skill of ArcGIS, while also gives skills in other areas, so it seemed more well rounded than the GIS concentration. It also had a lot of classes in common with Human so I wouldn't have to be here an extra semester! [Left Human for MAP]

Question Seven: If applicable, if you kept your original concentration but added a concentration, how was your initial concentration lacking what you wanted? What attracted you to the new concentration?

Three responses focused on the availability of jobs.

I added the GISA concentration due to speaking with a few peers and professor Wanket. Everyone agreed that adding GIS would be a good idea due to learning the concept of ArcMap (which is a powerful tool). Professor Wanket also suggested that GIS is an important fundamental to have overall. I took his advice and decided to go for it which in the end I really enjoyed (cartography being the most memorable and fun experience). [Stayed Physical, but added GISA]

The jobs are in GIS! Not physical. [Stayed Physical but added GISA]

I added MAP - urban planning because of interest in the subject matter from an early age, and the availability of jobs in planning. Really, I always intended to add it. Many of the positions that you sent us are in urban or transportation planning. [Stayed Human but added MAP]

Question Eight: On reflection, what would you change about the concentration(s) that you selected?

Here is a question that was relevant to all of the students, but surprisingly, very few students provided a reflective answer for this question. Many of the responses focus more on a particular class or the major as a whole. Several noted that they would not change anything.

There is too much emphasis on GIS in the department. What about other techniques? I would have loved to learn some statistical programs. What about other methods? Geography does not equal GIS! [Left Human for MAP]

While I was in your recent 163 class, I noticed a significant amount of the coursework was based on urban geography. Personally, I feel that an applied GIS course should focus more on just GIS. I would have loved to learn about all the different sorts of analysis that could be performed. To phrase it a different way: I would rather spend an hour and a half learning about the GIS tools then on the way we're going to use it for class. [Stayed Physical]

I feel like I didn't really learn very many job applicable skills, other than ArcGIS. Especially in Metro. I realize to get a job as a planner 90% of the time you need a masters, but I wish it taught a few more skills. [Left Human for MAP]

If I could go back in time I'd major in Envs and minor in Geog. Despite that I don't regret anything, because I seriously love geography! Just not as a career. I'm not planning on getting my masters at this time, because school was the utmost stressful thing in my life. Also ES jobs require a masters less so than Geog jobs. [Stayed Physical]

My only suggestion would be a field work course requirement for GISA. I know courses were offered, but not required. I recently did a job for my father-in-law (he's a surveyor) where he wanted an aerial photograph, one-foot contours, and parcel boundary overlay for a client who was experiencing flooding on his property. I tagged along for the survey and was able to gain so much insight into the properties of the area by physically being there. He had me calculate the area of inundation within the software at specific dates based on survey data and I felt much more confident in the accuracy from the field work. [Left Physical for GISA]

Here is a minor suggestion. Many jobs I'm applying for ask for experience in creating and modifying metadata which I don't recall doing very much...maybe a short lab on the topic. [Stayed GISA]

If there were any online geography classes, that would have made my time much more useful. It took a lot of my time to drive to CSUS, park, and wait in between the class times offered (which I did use to study, but this required additional child care during the day and time away from my child while she was awake). The few upper division GE classes that I took in music were awesome, I learned a lot, and I could work on them from home at my convenience (while she slept or when my family could come over to babysit). I think even a few geography classes online would book up so fast with the students. I will say that of all of my classes, your GIS classes were great. You gave us time to actually learn what was being taught. I particularly love your cart class! In some of my other classes, it was a stressful overload of non-stop information that

nobody could remember all of for an exam (one class in particular, which I will not name). I found your classes extremely useful, interesting, and relatable though and it was nice that you let us just get the assignments done however we needed to. Some of us like working in lab, some of us at home where it's quiet. I liked the flexibility of that. [Stayed Physical]

As a physical geographer, I do wish that I had the opportunity to take some kind of world geography classes. This sounds bad, but as a physical geographer I can't really tell you where anything is in the world, with the exception of Africa thanks to Krabacher's class. I do plan to learn the rest of the continents on my own someday. [Stayed Physical]

Question Nine: What is your next step? What are you planning to do now that you have graduated?

The questionnaire went out in early summer, so as you will see below, most of the students were looking for work. Some students with internships hope to continue with their current employer in a full-time capacity. Several are planning to take some time off.

The job search is going well enough- I'm trying for state and county jobs and have become a little impatient with the whole process. I've started applying for office-type positions within departments I want to work for to gain some experience and "get my foot in the door." I have a ton of office experience and hope the degree will provide an advantage over other applicants as I know state jobs are highly competitive. [Left Physical for GISA]

Right now I'm staying home with my daughter while my husband can work a normal workload now that I'm home and not in school. He flies for a living, so life is busy. In a few years I may return back to the workforce. [Stayed Physical]

For now, I will focus on my health and daughter. The exhaustion is never-ending. Thank you so much for your support and kindness. I am still holding my retail pharmacy job. Some shifts are hard but I somehow manage despite my low energy. My battle with Kidney Disease has been an uphill one since we've last spoken [...] for the first time since I was diagnosed with Lupus Disease four years ago, my auto-immune system is functioning normally and all my blood complement levels are finally normal. [Stayed GISA]

I'm currently working for the State of California, CDFA, Division of Measurement Standards, Petroleum Enforcement Unit. I'm working on trying to help implement GIS into our Dept. and trying to build a niche for myself here. This job was something I sort of fell into because they were very flexible with me going to school, but ultimately it's not my normal field of expertise. I'm looking to stay with the CDFA and looking to get an Environmental Scientist position. I'm waiting to see if one opens up in the dept. I'm already in, because then it would be a guarantee that I would pass my one year probation, but I'm also looking in many other departments. Honestly, I'm more interested in a long term career with some other departments. I'm currently applying for positions with CalRecycle, Department of Water Resources, Emergency Pest Detection Department as well as with the Feed and Fertilizer Department. I've traded the time that I would normally be writing papers, or doing labs, for filling out job applications for the State, lol. I actually met a former Sac State Physical Geography student who works with CalRecycle, Nicholas Oliver, and he told me that my Physical degree was the way to go, that in his experience opens more doors than just the GIS. So, I'm crossing my fingers that he is right! [Stayed Physical]

I am working at my family's business in Stockton (non-geography related). I am looking for work that relates to my field, which is Environmental Scientist. I'm also interested in jobs that relates with Fisheries such as the Fisheries Branch from Fish and Wildlife. The job search isn't so good at the moment but I'm hoping it will turn around sooner or later. [Stayed Physical but added GISA]

I have gone to a couple interviews (one in Ukiah). I turned down an opportunity to work for Apple. It did not look like I could afford to live in Sunnyvale for what they (really a contract agency) was going to pay me. Placer County is a possibility. From the interviews, I have decided that I probably want to stay local for my first job because it will be cheaper to live. [Stayed GISA]

I'm lost. Prof. Datel has been great in trying to encourage me. I want to go to grad school, but people (including professors) tell me I do not have the grades at least for some schools. It's sad for me, to, considering this is something I naturally excel at. Urban planning and transportation have always been my favorite aspects of geography, but, between my husband's schooling, my increasing physical health issues, my older son nearly failing high school, having only one car, and

the sheer amount of work that needed to be done this past semester, the future may be lost in the shuffle. [Stayed Human but added MAP]

I would love to eventually get into military intelligence. As of now, I am applying for the Air Force and the Navy with hopes of getting into it. That process is arduous and there are absolutely no guarantees, so I will have to have a backup. My hope is to transition into a full-time position with my current job as a legislative analyst as to support myself while I go through the application process (which may take a few years). Even that is uncertain however, so right now I am going through some turbulent times. [Left Human for GISA]

I will look into pursuing a future career in maritime transportation after my (hopeful) future career as a U.S. Navy officer. That is my path. UPDATE: I found out two weeks ago that I had been accepted to the U.S. Navy Officer Candidate School (OCS) as an NFO (Naval Flight Officer). I was under the impression that although my GPA was not competitive, they may have selected me because of my major as well as scoring well on the ASTB (aviation officer selection exam). Despite the geography department here being a bachelor of arts, it arguably felt like a bachelor of science to me. The science-based curriculum I encountered with my major (in particular: landforms, meteorology and remote sensing) helped me score very well on the physical science, critical thinking, and mathematics portions of the exam. [Stayed Physical]

I am currently still with my internship through UEI. I work at the city of Sacramento's department of utilities as sort of a staff support kind of role. However, I am heavily looking for a new job as my internship ends on the 31st of August now that I have graduated. A quick note on the current setting of GIS careers: It seems most firms are looking for folks who have several years of professional consulting experience - even for the entry level roles. Good news for you, many are looking for cartography. I wish I would have taken that. [Stayed Physical]

I had thought about going back to Fresno and taking teacher training, but the Napa winery that I work for has just offered me a great promotion that I cannot turn down. [Stayed Physical, but added Human and GISA]

I'm hoping to be hired on here at USGS full time. Thanks for sending the completion letter. It looks like I will be converted into a full-time position. [Stayed Physical]

Right now I have moved back to Grass Valley and am staying with my mother helping her on her house, while saving money so I can get my own place here. The job search has barely started as relocating has taken up some time and energy. They transferred my job back up here, so I still have had the blessing of being employed through the transition home. I have created a state profile, uploaded my resume, and transcripts, and started gathering references together to upload. After this I plan on taking some various tests to qualify for entry level positions. Misty Calhoun (former student of yours) has been helpful in providing me with some help through this process. [Stayed Physical but added GISA]

I am looking into Cal Trans. I was put into a hard spot where I had to find a job quickly and now I am working as a Supervisor for Hornblower Cruises here in Sacramento. I do have an upcoming interview though for an Assistant Planning position for Roseville and I am hoping that leads somewhere. I have also tried to keep in touch with Sac State and continue working with Grounds Maintenance on the citrus orchard we started. That would be my dream if any type of career came out of the work I am doing on campus and with Harvest Sacramento. [Left Human for Physical]

Technically I am still employed as a student with DWR, they've moved up my pay grade, but I don't have a full time job yet. I'm pretty sure that they are going to offer me a position in the next month or so though. I actually had two interviews yesterday. One was with CalTrans in Marysville for a Research Analyst II position they have in their engineering department, and the other was with CalFire here in Sac, for a position as a Research Program Specialist I in their IT department. I really hope I stay with DWR though, as I'm pretty comfortable here. I'm applying at all sorts of private places too though, usually via LinkedIn. I was "activated" to work up in Oroville at the spillway recovery site, and I'm there 3 days a week, working in the GIS trailer. I'm the newest one up there, but I definitely know more about GIS than anyone else working with me there, mostly thanks to my education at CSUS. [Left MAP for GISA]

I am still interning at the CEC until the end of summer. I have applied for a position there which I will likely be offered. I've also submitted applications to DWR, the Governor's Office of Emergency Services, a private consulting firm, and recently the Placer County Clerk Elections Division. Since I live in Colfax, I would much prefer to work in Auburn over downtown Sacramento, so I am really hoping to hear from Placer County. [Stayed GISA]

I am now engaged and working. Right now I am working for my dad's development corporation. Knowing the ins and outs of the planning process has really helped. [Stayed MAP]

My internship turned into a full-time position at the end of last year. I currently work for California Department of Health Care Services, and slowly I am integrating GIS into my duties. [Left Physical for GISA]

I am will be ending my Internship with the City of Sacramento Department of Utilities DOU, as an environmental program specialist. I have gained a tremendous amount of experience while working as an Intern. I have gained knowledge and insight with working in the community, developing programs like Leak-Free Sacramento, and being involved in Key Performance Measure for the DOU. I plan to grow and advance to a permanent position with the city. The position that I will be applied for and has been offered is an environmental program specialist. However, there is also opportunity in the Marijuana Policy and Regulation division and is one that is very promising in advancement. They are both amazing opportunities that I am going to go after. [Stayed Physical]

Had an interview with San Joaquin County yesterday for a planning position. I feel really good about it, but there are lots of applicants. Well see. [Left Human for Physical and MAP]

Q10: Do you have any additional comments?

Many students simply offered a "thank you" and a contented message that they would not change a thing. We did not include those messages unless they had something else, even minor, to offer.

I had the most amazing experience within the Geography Department at Sacramento State. I feel I was able to get the "college experience," even at my age. The approachability and "down-to-earth-ness" of the faculty and staff was so amazing. I've kept in contact with many Geography majors and feel I've made life long friends. I also feel I was more than prepared for real-world application of GIS; the metadata thing was actually the only concept on many of the "training and experience" questionnaires that I wasn't familiar with. I was so impressed with the quality of lectures and only regret I didn't record more (I still listen to them on walks- even Professor Schmidlein's quant lectures!). Thank you for the time you take with students and all your hard work- it really makes a difference! [Left Physical for GISA]

I wish there had been more classes and times offered each semester, although I completely understand that it is a small major and there are only so many professors and so many students to attend the classes. Sometimes there was a class only offered once every two years that I couldn't take because it overlapped with a required class or there'd be a class that I was interested in that would have fit my schedule, but it wasn't allowed as part of my concentration. [Stayed Physical]

I don't have any questions for now, but I really do want to thank you personally for being such a great professor. You were always so informative, but also very patient and approachable. I generally can get intimidated about asking professors for help, but you were very warm and helpful, thank you. Also, in general, I feel so lucky to have been part of this major, the professors overall were amazing and I really walked away with so much. I can't thank the Geography Dept. enough, you all are a great group of people and I hope to stay in touch. Can't wait to come back as Alumni. [Stayed Physical]

I didn't do any internship or volunteer works that related to geography. I believe that is one my biggest regret during my undergraduate years and I would encourage new undergraduates to look for internships. [Stayed Physical but added GISA]

I do have something to say to make the Department better - keep doing what you are doing! I am beyond blessed to have been part of such a welcoming and caring Department, with professors who genuinely care about their students and what they do with their lives. It is inspiring and heartwarming. If only other students at Sac State knew what they were missing. I truly believe that one of the reasons for this welcoming environment is the existence of the 312 lab. That area is an incubator for future student success and relationships. More students should be prodded by staff to suffer in there - building camaraderie as a result. [Left Human for GISA]

I miss all of you great professors, and think about the many times in class with all of you. I think you prepared me for the future. Thank you. Please tell everyone I say hello, and intend on visiting soon at some point when I know most of you will be around campus. [Stayed Physical but added GISA]

I just want to thank the whole geography department at Sac State. When I started, I never thought I would become so attached and every day I miss talking with you and the other professors. It was an unforgettable experience and I hope to keep in touch as much as I can. [Left Human for Physical]

I just would like to say thank you to you and the rest of the faculty at CSUS. I learned a whole lot there, and it's helping me in my job and will help advance my career. [Left MAP for GISA]

The curriculum I encountered with this major was difficult for me, but I would not have changed it. I did not have as strong of a background in science as the majority of my peers seemed to have, so I struggled much more in learning the concepts early on. However, I must emphasize that our Geography lab (where other students and I would study for exams/homework together) was the sole reason I did well this last semester taking 20 credit hours with a 3.1 term GPA. My most sincerest regret is not befriending my fellow students in earlier semesters. Studying by myself at home was a terrible decision and ultimately cost me poor academic performance, integrity, and GPA. I was not aware of the geography lab until I had been introduced to the "team" by the Geography club leads: (Dennis Tyukayev and Michelle Maldonado). Everyone in that room studied together with me, lifted me out of a significant depression due to previous poor academic performance, and shared endless laughs along the way. If it was not for the Geography club members in the lab, I would have never realized that studying with others was the key to my academic success -- something I had been unaware of my entire life in struggling with STEM-based academics. If there is a way the department can reach out to students who are not performing well, and provide awareness to the club in the lab (study groups), I believe it would significantly lessen their odds of failing and also further foster a sense of community. I would not have succeeded without my peers in Geography 312. [Stayed Physical]

4.2. Findings and Conclusions

Looking at the responses to the questions, we are glad that we cast the net widely to include all of our graduating students—regardless of concentration. Their responses provide comments, opinions, and reflections that are helpful to many concentrations and the department as a whole.

In looking at the findings, let us begin with Table 4. Although there are a lot of interesting numbers in it, for our current purpose, focus on the Human concentration. This concentration has the lowest percentage of *no changes* (everyone changed their Human concentration to some degree!) and the highest number and percentage of *dropped* (5 dropped, 83.3 percent). Five of the six students who initially signed up for the Human concentration dropped it. The one remaining student diversified her degree by adding the MAP concentration. Two other students diversified by adding the Human concentration to their initial concentrations. Another key number is that this is the only concentration to lose students in the *final count*. Like last year, these numbers are not good.

Similar to last year's report, it is clear that the Human concentration has the worst graduation rate. Even though 16.67 percent of our majors over the past three semesters had the Human Geography concentration, only 6.1 percent of our majors graduated (over the years from 2012 to 2015) with this concentration. For the Spring 2017 graduates, the number only improves to 9.68 percent of our department's graduates for Spring 2017, but 25 percent of Spring 2017's graduates initially selected the Human concentration when they began their academic careers in our department (2nd highest initial concentration). Perhaps the most damning statistic, however, is that no graduating student held only the human concentration (all students with the Human concentration had diversified with multiple concentrations). From these clear results, the Human concentration again underperforms the other concentrations. This we knew from last year, and it is reconfirmed with the exit interview data.

Now our purpose is to determine why students abandon the Human concentration, and what measures could be undertaken to remedy this situation. Looking at their responses, they had two major areas of concern.

Perceived Lack of Jobs

From the student responses, we can see that many students believe there is a weakness between the Human concentration and their own preparation for the job market. We know that three of the students that dropped the Human concentration added MAP (one of those students actually triple) and another switched to GISA. Both the MAP and GISA concentrations are perceived as having job opportunities.

Here are some pertinent responses:

I figured it would be very hard to find a job with the Human concentration compared to the other three concentrations. [Left Human for MAP]

The human concentration needs to connect to the workplace. [Left Human for MAP]

I wanted to major in something that had a job title in its name, that I could build off of easier than Human. [Left Human for MAP]

I added MAP - urban planning because of interest in the subject matter from an early age, and the availability of jobs in planning. Really, I always intended to add it. Many of the positions that you sent us are in urban or transportation planning. [Stayed Human but added MAP]

Concentration's Courses are Deficient or Not Offered Regularly.

Another reason students leave the Human concentration is due to its courses and subject matter. Although only one student brought up the schedule and how some courses are offered only once every two years, there were four responses that desired additional skills and techniques—other than GIS. One additional respondent felt lost because she could not see how human geographers apply knowledge to real world situations. This response might also be construed as a critique on the concentration's techniques.

Unfortunately for me, the reason why I switched from Human to GIS was entirely practical. It was a more marketable skill, and I had a finite amount of classes I could take to fit in my other major in 4 years. What do human geographers do? What skills do they need to know? Certainly, there is more to it than the subject matter. [Left Human for GISA]

Some geography classes are only offered every two years. It took a lot of schedule planning, semesters ahead, to calculate what classes I could take to graduate in the time that I did. [Left Human for MAP]

It was honestly a really hard decision. I really enjoyed all aspects of geography and looking back, would have probably double concentrated if I realized that was an option when I first arrived. With Human Geography, I started to feel disconnected with what I was learning, and I didn't know how to apply it to real life anymore. I think those things are why I decided to move into Physical instead. [Left Human for Physical]

Metro Planning comes with the skill of ArcGIS, while also gives skills in other areas, so it seemed more well rounded than the GIS concentration. [Left Human for MAP]

There is too much emphasis on GIS in the department. What about other techniques? I would have loved to learn some statistical programs. What about other methods? Geography does not equal GIS! [Left Human for MAP]

I feel like I didn't really learn very many job applicable skills, other than ArcGIS. Especially in Metro. I realize to get a job as a planner 90% of the time you need a masters, but I wish it taught a few more skills. [Left Human for MAP]

5. Use of Assessment Data (Closing the Loop)

These responses, although not many, give us a sense of what our department can do to revive and create a healthy Human Geography concentration. We are also aware of what other CSU Geography departments do for their human or cultural majors. We have looked over their curriculum and the courses that they offer, but it is difficult to directly compare concentrations because of name and description differences. Still, looking at their curriculum gives us a sense—especially when it comes to courses—of what other Geography departments offer their majors. We will continue to look at these courses.

At the end of last year's report, we speculated that we might be able to "close the loop" and strengthen the concentration with the following measures:

1. Modify existing courses,
2. Create new courses,
3. Make changes to the Human concentration curriculum,
4. Incorporate courses from outside the department,
5. Improve advising and mentoring,
6. Make connections to external internships and jobs,
7. Change the current teaching assignments of faculty, and
8. Justify new faculty requests.

The questionnaire data from section 4.1 (and the subsequent discussion in section 4.2) suggests that we need to better connect students in the Human concentration with job opportunities and offer them alternative method and technique courses.

Connection to Jobs

Looking at our alumni list and their current positions, we see that there are jobs for Human geographers. All of our students, regardless of concentration, need to know how to find internships and apply for jobs.

There are several things that we can do to build a better connection to the job market. We can:

1. Reach out to former students and their employers to identify and develop business and professional contacts. In the past, we have done this for our GISA concentration. What skills do they need our students to have? How will they come to see our department as their first stop in trying to fill a position?
2. Make an active connection to our university's career center to help channel jobs and internships towards our students. We will invite Kelly Van Zandt, Career Counselor and Experiential Learning Coordinator, to an upcoming department meeting.
3. Improve our advising to direct students to existing resources including the Career Center and the UEI Internship webpage.

4. Help our students by disseminating job opportunities and preparing them for the job market. We currently broadcast some opportunities by emailing specific students or sending messages out broadly to all majors, but we will also place a bulletin board outside the door of Amador 312 where jobs and internships could be posted. While we have a course that includes a resume exercise, we could teach our students search strategies, tips for taking state exams, how to get on “lists,” and the little things that an applicant does to take them out of the running. Much of this can be done by leading workshop courses, preparing written materials or videos that walk students through the process, and creating projects in existing courses.
5. Provide our students with a skill set that employer’s need. This is an obvious one, and the subject of the next section.

Offer a New Techniques Course.

Many Geography departments across the CSU system offer a course in Qualitative Methods, which introduces students to various techniques including surveys, questionnaires, interviewing, ethnographic research, focus groups, and others. Some departments also include additional technique courses, but frequently at the graduate level. A basic qualitative methods course would make a good complement to our quantitative statistics and GIS courses. This course would probably be attractive to both students with the Human or the MAP concentrations. The specifics of the course can be modified to make sure that our students are getting the skill sets that the area’s employers need them to have.

By implementing the measures above, we can “close the loop” and strengthen the Human concentration.

ASSESSMENT PLAN

Our Assessment Process

The primary mission of Geography Program, as identified in the self-study for its 2005 program review, is to provide students in the geography major (B.A.) with a solid undergraduate liberal arts education focused on geography. A secondary goal is to prepare majors with the knowledge and skills needed to pursue a graduate degree in geography or to obtain employment in a geography-related field. The Geography Department has been formally assessing its performance in these areas via its own internal assessment process since 2000-2001. The process has undergone continuous modification since then, most notably as part of a 2002-2003 university-wide assessment initiative undertaken by Academic Affairs under the direction of Linda Buckley, and in response to recommendations from the Department's 2005 program review. The current assessment process described below builds on these earlier efforts.

Goals and Learning Outcomes

The Geography Department has identified the following goals and learning objectives for students in the undergraduate Geography program. The numbers in brackets after each goal indicate related campus Baccalaureate Learning Goals.

Goals: Students completing the B.A. degree in Geography will:

1. Have an understanding of the nature of Geography as an academic discipline, including familiarity with its history and principal subfields [1,2];
2. Demonstrate (a) a knowledge of the basic concepts of physical and human geography [1, 2] and (b) competency in selected geographic techniques [1,3];
3. Display competency in the graphic expression of geographic/spatial data (maps, photographs, graphs, data bases) [1,3];
4. Display competency in written expression with respect to clarity, logical expression, and effective argument [1, 2, 3];
5. Understand and apply the basic research skills, including the ability to (a) critically evaluate the research of others [1, 2, 3, 4] and (b) effectively design and carry out a research project on one's own [5];

6. Acquire knowledge and skills sufficient to allow one to pursue advanced study in geography or find employment in a geography-related field [1, 2, 3, 4, 5].

(CSUS Baccalaureate Learning Goals: [1] Competence in the Disciplines; [2] Knowledge of Human Cultures and the Physical and Natural Worlds; [3] Intellectual and Practical Skills; [4] Personal and Social Responsibility; [5] Integrative Learning.)

Learning Outcomes: Various learning outcomes are identified to help the student achieve the above goals. The outcomes reflect the different levels of learning set forth in Bloom’s taxonomy, including basic knowledge and comprehension, application, analysis and evaluation, and synthesis. Key outcomes, along with the means for their assessment, are found in the accompanying table. Although the learning outcomes are addressed in required courses throughout the major, there are nonetheless key courses that play a central role in helping students achieve these outcomes. These are also identified in the table below.

Learning Outcome	Relevant Course(s)	Means of Assessment
<p>One</p> <p>Identify and describe basic concepts and patterns in physical and human geography.</p>	<p>GEOG 1, GEOG 2, GEOG 11, GEOG 118 and upper-division breadth requirements</p>	<p>Baseline knowledge quiz</p>
<p>Two</p> <p>Display knowledge of the history of Geography as an academic discipline and a familiarity with its contemporary models, approaches, and theories.</p>	<p>GEOG 102, GEOG 190</p>	<p>Baseline knowledge quiz</p>
<p>Three</p> <p>Demonstrate competency in one or more of the basic geographic tools/techniques for data collection, display, and analysis.</p>	<p>GEOG 3 and the upper-division techniques courses, including the field courses</p>	<p>GEOG 190 senior project; senior seminar reflective evaluation</p>
<p>Four</p> <p>Demonstrate graphic literacy in the use and analysis of maps, graphs, and spatial data sets.</p>	<p>GEOG 3, GEOG 105, GEOG 107, GEOG 109, GEOG 110, GEOG 163</p>	<p>Baseline knowledge quiz; GEOG 190 senior project; senior seminar reflective evaluation</p>

Five		
Show written competency in the description and analysis of geographic subject matter.	GEOG 102, GEOG 190	GEOG 190 senior project; senior seminar reflective evaluation
Six		
Analyze and evaluate scholarly writing within the discipline.	GEOG 102, GEOG 190	GEOG 102, GEOG 190 senior project; senior seminar reflective evaluation
Seven		
Synthesize geographic models, data, and methodologies in research design.	GEOG 190	GEOG 190 senior project; senior seminar reflective evaluation
Eight		
Acquire the overall competencies necessary to success in graduate school and post-graduation careers.	The major as a whole	Graduating senior interview; NSM senior survey; periodic alumni survey

Methods of Assessment

The Geography Department’s assessment process is designed (1) to evaluate the degree to which students in the Geography B.A. program achieve the goals and outcomes above and (2) to identify potential areas for improvement. While course-level assessment of student performance takes place within the courses themselves, assessment of student performance at the programmatic level employs an additional set of assessment measures. Central to the Department’s assessment process are two courses: GEOG 102 (Ideas & Skills in Geography), a gateway course taken by all students during their first fall semester in the major, and GEOG 190 (Senior Research Seminar in Geography) a capstone course, which requires the student to synthesize much of what he or she has learned as a major through design of an individualized research project. The latter course is taken during the student’s final semester before graduation. Based on recommendations from the Department’s last program review, these two classes have become central to the Geography assessment process.

In all, the Department employs the following six assessment measures:

1. **Baseline Quiz:** This instrument assesses student knowledge of basic geographic concepts and facts. It consists of 54 objective questions and is brief, taking only about 20 minutes to administer. It is now given electronically to students in both the gateway course (GEOG 102) and the senior seminar (GEOG 190). Its purpose is twofold: to identify the student’s level of basic geographic knowledge at both the time of entering

the program and at the end of his or her time in the major (thus measuring “value added”), and to identify those areas in which student knowledge is deemed deficient and corrective measures may be called for. There are 19 questions in physical geography, 20 in human geography, and 15 in graphic literacy (maps and graphs).
Faculty responsible: Prof. Krabacher

2. Senior Research Project: The central focus of the capstone course, GEOG 190 (Senior Research Seminar in Geography), is design and execution of a research project. In doing so students have to complete the various phases of the research process (articulating the research question/hypothesis, literature review, selection of methodologies, data collection and analysis, graphical presentation, discussion of findings), and report their findings in a paper and a poster. The exercise is one of synthesis, requiring the student to draw upon the broad range of skills and knowledge acquired in the major. A standardized grading rubric based on a model proposed by the Center for Teaching and Learning was employed in the evaluation for the first time in Spring 2008. *Faculty responsible:* Profs. Datel, Krabacher, and Wanket

3. Senior Seminar Reflective Evaluation: Students in the GEOG 190 senior seminar are asked to complete a questionnaire as part of the end-of-semester course evaluation. While most questions relate to the student’s GEOG 190 experience, some are broader in scope, addressing such topics as: subject matter in which students felt it would have been desirable to have had greater experience prior to taking the seminar, prior courses that were most useful to them in completing the seminar research project, etc. These responses are useful in identifying student perceptions of curriculum strengths and weaknesses. *Faculty responsible:* Profs. Datel, Krabacher, and Wanket

4. Graduating Senior Exit Interview: At the end of each semester, the department chair invites graduating seniors to participate in an unstructured conversation about their experiences in the major. This ordinarily takes place in a relaxed setting, usually over pizza and beverages in the University Union. The purpose is to assess the level of student satisfaction with the major and identify what students perceive as strengths, weaknesses, and desirable changes. *Faculty responsible:* Department Chair

5. NSM Graduating Senior Survey: The NSM Dean has instituted a college-wide survey of all graduating seniors. The questionnaire requests information on undergraduate internships and work experiences as well as each student’s current employment situation and plans for the future, whether academic or otherwise.

6. Periodic Alumni Survey: The Office of Institutional Research conducts a survey of each program’s alumni on a regular basis. These surveys assess alumni perceptions of (1) the

usefulness of the major in realizing post-graduation academic and/or career goals and (2) the strengths and weaknesses of the Geography curriculum, given the perspective lent by time. Because these OIR surveys occur only every six years, the department has experimented with conducting its own e-mail based surveys of recent graduates.

Faculty responsible: Department Chair

Assessment Cycle

The Geography program's annual assessment activities occur over a 12-month cycle, beginning in the fall semester of a given academic year and culminating at the annual Geography Department faculty retreat in August just prior the opening of the fall semester of the following academic year. Thus:

- **Fall Semester** – Baseline quiz administered in gateway course (GEOG 102); graduating seniors interviewed; NSM survey administered.
- **Spring Semester** – Baseline quiz administered in capstone course (GEOG 190); senior projects graded using standard rubric (GEOG 190); reflective evaluations completed (GEOG 190) ; graduating seniors interviewed; NSM survey administered; informal e-mail surveys sent to recent alumni if need is felt.
- **Summer** – Department chair processes data and uses it to inform the annual assessment report, usually due to the dean on July 1.
- **August** – Geography faculty retreat: discussion/analysis of assessment data and possible program changes identified in response; possible modifications to assessment process proposed.

**Rubric for Evaluating Projects in Senior Research Seminar in Geography
(GEOG 190)**

Elements of the Paper	Scoring Scale (5-4-3)
Statement of Research Questions or Hypotheses	<p>5 Clearly stated and clearly geographical; suitable for senior project (given constraints)</p> <p>4 Present, but somewhat unclear; geographical aspects not explicit; possibly unsuitable</p> <p>3 Not present or quite unclear; not geographical; clearly not suitable</p>
Literature Review	<p>5 Relevant, thorough, well-organized</p> <p>4 Generally relevant; some extraneous material and/or key sources missed; organization needs tightening</p> <p>3 Merely lists studies; little or no logic to selection of sources; poorly organized</p>
Methodology Choice and Description	<p>5 Highly appropriate methods selected; detailed description of methods; logically connected to research questions</p> <p>4 Weak methods or insufficient description of methods</p> <p>3 Inappropriate methods selected</p>
Presentation of Results (Data and Analysis)	<p>5 Data are complete, properly reported, and correctly analyzed</p> <p>4 Data are appropriate but some mistakes in reporting and/or analysis are evident; may be less than complete</p> <p>3 Data are seriously incomplete or improperly reported; major gaps and/or mistakes appear in the analysis</p>
Graphics	<p>5 Maps, charts, graphs, photos, and other images have a high degree of relevance, completeness, and quality</p> <p>4 Graphics are generally relevant, fairly complete, and of acceptable quality</p> <p>3 Graphics are inappropriate, missing, and/or of poor quality</p>

Discussion of Findings	<p>5 Discussion is insightful, thorough, well-organized, and clearly ties the work into a larger geographical research tradition</p> <p>4 Discussion is mechanical; some gaps in analysis; organization may be weak; ties to a larger geographical research tradition somewhat unclear</p> <p>3 Discussion fails to interpret data (merely repeats results) and fails to place work in a larger geographical research tradition</p>
Overall Written Expression	<p>5 Few if any mechanical writing or formatting errors; writing is clear and well-organized; logic of arguments presented is unassailable</p> <p>4 Minor mechanical writing or formatting errors; writing is competent but has some problems with clarity and organization; logic has some minor weaknesses</p> <p>3 Serious mechanical writing or formatting errors; writing is unclear and poorly organized; logic has serious flaws</p>

Total points possible = 35.