



College of Arts and Sciences
BA/BS Geography
Assessment Report Form 2017-2018

Date of Report: 8/13/2018

Name of Person Submitting Report: Donald E Colley III

A. Program Information:

Assessment Coordinator's Name: Donald E Colley III

Assessment Coordinator's Email Address: don.colley@okstate.edu

Number of students enrolled in the program 2017-2018: 36 (29 BS, 7 BA)

Number of students graduated in 2017-2018: 7 (5 BS, 2 BA)

B. Program Mission Statement

In the box below, provide the mission statement for the program.

The mission statement, educational objectives, and goals for program should guide the assessment process. The mission statement should align with department, college, and institutional mission statements.

The Department of Geography advances geography instruction, research and extension to promote and maintain a growing statewide workforce skilled in geographic research and applications. The Department of Geography will achieve national and international stature in scholarly and creative activities to enhance the visibility and desirability of the geography program at Oklahoma State University, and capitalize on new opportunities and respond to the changing needs of Oklahomans and society to provide Oklahoma schools, universities, industries and businesses, and those in the surrounding region, with the highest caliber professionals in the field of geography.

Departmental instructional goals are: to advance geographic education and cultivate in students an appreciation of the diversity and complexity of cultural and natural landscapes, to help students acquire substantive knowledge in geography, to become skilled in the use and application of geotechniques, and to develop sound critical thinking abilities and strong communication skills. Our program will prepare students to continue their studies at the graduate level, or to pursue careers in business, government, and education.

C. University Assessment Funds

Were university assessment funds used by the department/program for assessment activities? Yes No

If university assessment funds were used by the department or program, describe how university assessment funds were used and the contribution the funds had on the assessment process. Funding requests for the next academic year have a separate process and should not be included here.

If yes, click here to enter information about how university assessment funds were used.

D. Student Learning Outcomes

On the pages that follow, list the Student Learning Outcomes associated with the program identified in this assessment form.

D1) Student Learning Outcome #1: Students will be able to think geographically. More specifically, program graduates will demonstrate an ability to identify, interpret, and reason analytically about spatial patterns and their possible causes and consequences.

Identify opportunities for students to learn this outcome during the 2017-2018 academic year:

For example, include a curriculum map that lists the courses or other learning experiences in which the student learning outcome is taught. Another example is a written narrative that describes how the learning outcome is integrated into the program.

Specific to learning (quantitative) analytical reasoning and pattern recognition skills, the department will assess this learning outcome with a rubric designed for a required course, GEOG 3333 (Spatial Analysis). Students will be assessed by the faculty member teaching this course with a rubric specific to the course, subject to revision. The rubric for this outcome is included in the summary of outcome results section.

How many students were included in the assessment of this outcome?

There are 15 students included in the assessment of this outcome.

How were students selected to participate in the assessment of this outcome?

The geography students who were enrolled in required course GEOG 3333 were assessed for this outcome.

Assessment Methods

Identify the method(s) used to assess this learning outcome. Check all that apply.

- | | | |
|--|---|---|
| <input type="checkbox"/> Survey | <input type="checkbox"/> Satisfaction Survey | <input type="checkbox"/> Internship |
| <input checked="" type="checkbox"/> Rating of skills (e.g., rubrics) | <input type="checkbox"/> Benchmarking | <input type="checkbox"/> Interviews |
| <input type="checkbox"/> Analysis of written artifacts | <input type="checkbox"/> Measuring effectiveness relative to professional standards | <input type="checkbox"/> Performance or jury |
| <input type="checkbox"/> Comprehensive, certification, or professional exam(s) | <input type="checkbox"/> Review of thesis/dissertation/ creative component | <input type="checkbox"/> Visual collection (photos, videos, etc.) |
| <input type="checkbox"/> Oral presentation | <input type="checkbox"/> Capstone project | <input type="checkbox"/> Review of student research |
| <input type="checkbox"/> Course project | | <input type="checkbox"/> Other (please specify): |
| | | Click here to specify. |

Describe the how the assessment method was implemented, administered, and/or conducted.

GEOG 3333 is taught once per year (currently in the fall) and the instructor will assess all GEOG majors enrolled in the course. No student action or active participation is necessary. There were 9 students enrolled in GEOG 3333 in Fall 2017. Table 1 below shows the averages for all 15 students enrolled in GEOG 3333 in Fall 2017 for all learning outcomes.

Did your department/program faculty have a goal set for this learning outcome? Yes No

For example, "80% of students included in the assessment will receive a 4 on the rubric" or "80% of students included in the assessment will achieve a passing score on the certification exam." If yes, please describe the goal below.

Provide a summary of the results from the assessment of Learning Outcome 1.

Report student's scores for this assessment, as well as students' strengths and weaknesses relative to this learning outcome.

GEOG 3333 is a core course in the department that has been assessed for several years. Table 2 below includes the rubric averages for the learning outcomes for GEOG 3333 for the past 6 years. Based on the results of Table

2, it appears that students have continued to maintain their performance in learning outcomes for GEOG 3333 as the average continues to rise.

GEOG 3333	2017-2018		2016-2017		2015-2016		2014-2015		2013-2014		2012-2013	
	N	Rubric										
	15	3.16	9	3.16	13	2.89	13	2.67	10	2.48	11	2.18

What do the results suggest about student achievement of this learning outcome?

Table 1 above shows the averages for all 15 students enrolled in GEOG 3333 in Fall 2017 for all learning outcomes. Most of the learning outcomes demonstrate that students on average are above proficient in the skills required for an understanding of quantitative methods in geography

Timeline for the Assessment

Indicate the timeline for the assessment of this learning outcome. While outcomes assessment must be conducted every year, not all student learning outcomes for a given program must be assessed every year. If the assessment of a particular learning outcome occurs on cycle or rotation, please describe and provide the rationale for the cycle/rotation below.

Each Semester

Yearly

Every other year

Other (please specify): If the assessment of Learning Outcome 1 occurs on a cycle or rotation, click here to describe and provide the rationale.

D2) Student Learning Outcome #2: Students will demonstrate the ability to set up and conduct a field-based research project.

Identify opportunities for students to learn this outcome during the 2017-2018 academic year:

For example, include a curriculum map that lists the courses or other learning experiences in which the student learning outcome is taught. Another example is a written narrative that describes how the learning outcome is integrated into the program.

Specific to field research skills, the department will assess this learning outcome with a rubric designed for a required course, GEOG 4313 (Field Techniques and Geodata Collection) which currently acts as the capstone course for Geography undergraduate majors. Students will be assessed by the faculty member teaching this course with a rubric specific to the course, subject to revision. The rubric for this year's assessment is included in the summary of outcome results.

A significant component of this course is to work on a field research project where students must (a) develop a project topic/issue to examine, (b) collect appropriate data, (c) research past efforts or examinations of the issue, (d) analyze the information gathered, (e) propose a solution (including timeline, cost-benefit analysis, impacts assessment, etc.), and (f) write a final report (or prepare a poster) and give a final class presentation on the project. This project constitutes a significant portion of each student's grade as it requires the successful application of many research tools and skills, and integration of geographic concepts, theories, and models, the purpose of this outcome (and the degree).

How many students were included in the assessment of this outcome?

There were 13 students included in the assessment of this outcome.

How were students selected to participate in the assessment of this outcome?

All GEOG majors are required to take GEOG 4313 as it is the acting capstone course for the BA/BS programs. Therefore, all GEOG majors enrolled in GEOG 4313 will be assessed.

Assessment Methods

Identify the method(s) used to assess this learning outcome. Check all that apply.

- | | | |
|--|---|---|
| <input type="checkbox"/> Survey | <input type="checkbox"/> Satisfaction Survey | <input type="checkbox"/> Internship |
| <input checked="" type="checkbox"/> Rating of skills (e.g., rubrics) | <input type="checkbox"/> Benchmarking | <input type="checkbox"/> Interviews |
| <input type="checkbox"/> Analysis of written artifacts | <input type="checkbox"/> Measuring effectiveness relative to professional standards | <input type="checkbox"/> Performance or jury |
| <input type="checkbox"/> Comprehensive, certification, or professional exam(s) | <input type="checkbox"/> Review of thesis/dissertation/ creative component | <input type="checkbox"/> Visual collection (photos, videos, etc.) |
| <input type="checkbox"/> Oral presentation | <input type="checkbox"/> Capstone project | <input type="checkbox"/> Review of student research |
| <input type="checkbox"/> Course project | | <input type="checkbox"/> Other (please specify): |
- [Click here to specify.](#)

Describe the how the assessment method was implemented, administered, and/or conducted.

GEOG 4313 is taught once per year (currently in the fall) and the instructor will assess all GEOG majors enrolled in the course.

Did your department/program faculty have a goal set for this learning outcome? Yes No

For example, “80% of students included in the assessment will receive a 4 on the rubric” or “80% of students included in the assessment will achieve a passing score on the certification exam.” If yes, please describe the goal below.

If yes, click here to describe the goal set for this learning outcome.

Provide a summary of the results from the assessment of Learning Outcome 2.

Report student’s scores for this assessment, as well as students’ strengths and weaknesses relative to this learning outcome.

What do the results suggest about student achievement of this learning outcome?

	2017-2018		2015-2016		2014-2015		2013-2014		2012-2013	
GEOG	N	Rubric								
4313	13	3.52	9	3.51	13	3.12	11	3.34	12	3.13

It appears students performed between proficient and advanced in all outcomes especially in Outcome 4 – collection and presentation. Overall, students’ performance was above average or excellent. This is consistent with data from previous years.

Timeline for the Assessment

Indicate the timeline for the assessment of this learning outcome. While outcomes assessment must be conducted every year, not all student learning outcomes for a given program must be assessed every year. If the assessment of a particular learning outcome occurs on cycle or rotation, please describe and provide the rationale for the cycle/rotation below.

Each Semester

Yearly

Every other year

Other (please specify): If the assessment of Learning Outcome 2 occurs on a cycle or rotation, click here to describe and provide the rationale.

D3) Student Learning Outcome #3: Students will understand and apply the principles of (a) geographic information system design and management and (b) effective map design and interpretation.

Identify opportunities for students to learn this outcome during the 2017-2018 academic year:

For example, include a curriculum map that lists the courses or other learning experiences in which the student learning outcome is taught. Another example is a written narrative that describes how the learning outcome is integrated into the program.

The department will assess this learning outcome with rubrics designed for required courses that touch on the skills outlined above. Students in GEOG 4203, 4343, and 4353 (GIS courses), GEOG 4333 (Remote Sensing) and GEOG 4323 (Computer Cartography) will be assessed by the faculty members teaching these courses with rubrics specific to the courses, subject to revision. Rubrics for each specific course are included in the Outcome summary of results.

How many students were included in the assessment of this outcome?

This includes all geography majors who were enrolled in GEOG 4203, GEOG 4323, GEOG 4343, GEOG 4353, and GEOG 4333 during the 2017-2018 academic year. This includes 18 unique students. Course averages will vary and are not included in this report.

How were students selected to participate in the assessment of this outcome?

All GEOG majors are required to take GEOG 4203 (Principles of GIS) and GEOG 4323 (Computer Cartography). The students enrolled in the BS degree also have to choose between taking GEOG 4343, 4353, or 4333. Therefore, all GEOG majors currently taking any of these courses in a given year will be assessed.

Assessment Methods

Identify the method(s) used to assess this learning outcome. Check all that apply.

- | | | |
|--|---|---|
| <input type="checkbox"/> Survey | <input type="checkbox"/> Satisfaction Survey | <input type="checkbox"/> Internship |
| <input checked="" type="checkbox"/> Rating of skills (e.g., rubrics) | <input type="checkbox"/> Benchmarking | <input type="checkbox"/> Interviews |
| <input type="checkbox"/> Analysis of written artifacts | <input type="checkbox"/> Measuring effectiveness relative to professional standards | <input type="checkbox"/> Performance or jury |
| <input type="checkbox"/> Comprehensive, certification, or professional exam(s) | <input type="checkbox"/> Review of thesis/dissertation/ creative component | <input type="checkbox"/> Visual collection (photos, videos, etc.) |
| <input type="checkbox"/> Oral presentation | <input type="checkbox"/> Capstone project | <input type="checkbox"/> Review of student research |
| <input type="checkbox"/> Course project | | <input type="checkbox"/> Other (please specify): |
| | | Click here to specify. |

Describe the how the assessment method was implemented, administered, and/or conducted.

Most courses are taught once per year, though GEOG 4203 (Introduction to GIS) is currently taught every fall and spring semester, and the instructors will assess all GEOG majors enrolled in the courses.

GEOG 4203						
Learning Outcomes	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6
Average Score	2.83	2.58	2.75	2.5	N/A	N/A
GEOG 4323						
Learning Outcomes	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6
Average Score	2.9	3	3.2	3.2	2.9	3.1
GEOG 4333						
Learning Outcomes	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6
Average Score	2.5	2.5	3	N/A	N/A	N/A
GEOG 4343						
Learning Outcomes	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6
Average Score	3	2.33	3	N/A	N/A	N/A
GEOG 4353						
Learning Outcomes	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Outcome 6
Average Score	3.33	3.67	N/A	N/A	N/A	N/A

Evaluation rubrics are distributed to each instructor of a required (core) course near the end of each semester, with the students' names and each course's stated student learning outcomes listed. Instructors rate each student on a 0-4 scale for each outcome (0 for minimal to no mastery of the outcome, 4 for maximal mastery), as described in the department Undergraduate Assessment Plan and as assessed by the instructors of each core course. Average scores for each course and learning outcome are determined each year. Rubric items are assessed independently on the 0-4 scale separately from specific grades earned in the class. Instructors primarily base their evaluations on individual assignments and term projects in the pertinent courses, identifying specific assignments or components that meet the major course learning goals, and they are encouraged to rate students on the individual learning outcomes prior to determining final course grades.

Did your department/program faculty have a goal set for this learning outcome? Yes No

For example, "80% of students included in the assessment will receive a 4 on the rubric" or "80% of students included in the assessment will achieve a passing score on the certification exam." If yes, please describe the goal below.

If yes, click here to describe the goal set for this learning outcome.

Provide a summary of the results from the assessment of Learning Outcome 3.

Report student's scores for this assessment, as well as students' strengths and weaknesses relative to this learning outcome.

Table 1 below includes the rubric averages for the learning outcomes for GEOG 4203, GEOG 4323, GEOG 4333, GEOG 4343, and GEOG 4353. Table 2 shows average rubric score and the number of students included in the assessment for the past 5 years in these courses to gain a stronger sense of whether or not students are meeting learning outcomes in each of these core geography courses.

Year	2017-2018		2016-2017		2015-2016		2014-2015		2013-2014		2012-2013	
	N	Rubric										
4203	11	2.67	10	2.35	9	2.34	5	2.45	10	3.09	13	2.12
4323	12	3.05	9	3	6	3.39	9	2.98	3	3.33	14	2.72
4333	2	2.67	4	3.167	4	2.83	3	3.58	2	3	1	1.33
4343	3	2.78	3	3.222	3	2.78	6	2.94	4	2.58	8	2.65
4353	3	3.5	2	3.25	3	2.83	6	2.75	5	2.5	NA	-

What do the results suggest about student achievement of this learning outcome?

The small numbers in recent years of 4333, 4343, and 4353 make the data insignificant as a single students score can bring the average up or down. Despite this, individual learning outcomes remained consistent over previous years. However, 4203 has experienced good rebound from low scores three years running, and 4323 continues to be consistent although with a greater number of majors this past year. In general, students' scores in individual learning outcomes are consistent with previous years assuming minor fluctuation from one year to the next.

Timeline for the Assessment

Indicate the timeline for the assessment of this learning outcome. While outcomes assessment must be conducted every year, not all student learning outcomes for a given program must be assessed every year. If the assessment of a particular learning outcome occurs on cycle or rotation, please describe and provide the rationale for the cycle/rotation below.

Each Semester

Yearly

Every other year

Other (please specify): If the assessment of Learning Outcome 3 occurs on a cycle or rotation, click here to describe and provide the rationale.

E. Summary of Assessment Results

Describe the overall results of the program assessment and program faculty members' interpretation of the assessment results.

What did the assessment reveal? What do faculty interpret the results to mean? What do the results suggest about the curriculum, teaching practices, and/or student achievement of the program learning outcomes?

The geography program continues to maintain high standards across all learning outcomes in Major courses with either Proficient or Advanced scores for most students. This is especially true of GEOG 3333 which has seen continual year over year improvement and 4313 in which students have maintained their standard of achievement. Achievement in 4333, 4343, and 4353 have fluctuated year to year but once again are products of small sample sizes; however, learning outcomes show that students are maintaining a general standard of achievement between Essential and Proficient. Two areas of concern that should be addressed in the future are the continuously low rubric scores for GEOG 4203 (despite the rebound) as well as the general sentiment among students that they are not being fully prepared for exploring career options post-graduation.

F. Dissemination of Results

Describe the individual(s) or committee (e.g., a curriculum committee) responsible for reviewing and interpreting assessment data.

The Undergraduate Coordinator serves a dual role as Undergraduate Outcomes Assessment Coordinator and disseminates and gathers the rubrics from the core courses and disseminates undergraduate exit surveys. He then collects, inputs, and preliminarily evaluates the data and computes summary statistics.

Describe the process for sharing and discussing assessment results with program faculty.

The Assessment Coordinator writes and circulates (via e-mail) a draft report for review and comment by all faculty in the department. This is done in advance of an all-day planning conference held by the department the week before the fall semester begins, and discussion about the results, what they mean, and what to do with them subsequently occurs and is incorporated into a final draft of this report. This final draft is sent around a second time for final review before submission.

G. Program Improvements Based on Assessment

Based on the findings of this assessment, what changes are being considered or planned for the program?

Describe the actions that will be taken as a result of the discussion of the assessment evidence.

The biggest planned change to the program was altering the BA from a statistics heavy track to a more skill oriented track by changing GEOG 3333 as a requirement and making one of our new courses GEOG 2344 a substitute. This planned change will take place on the 2019-2020 degree sheets. This was done to help students who are not interested in spatial analysis to successfully pursue a Geography degree and to also help them build skills towards employment since they are not required to take GEOG 4333/4343/4353. We hope this alleviates a burden for students and also improves the scores for GEOG 3333 in assessment reports in the future.

Other changes for the future are reducing the hours of our GIS Certificate to make it easier to achieve with the BS/BA degrees so that students feel better equipped with the skills necessary for jobs on the GIS market which is currently where most Geography majors gain employment.

Based on the findings of this assessment, what (if any) changes are planned for the assessment process?

For example, are there additional assessment data that may need to be collected? Are changes to the program assessment plan warranted?

The BA in Global Studies will now need to be independently assessed separately from these measures and will be filed next year for 2018-2019 now that students are taking core classes in that Major. Rubrics will be made accordingly.

Additionally, we will return to the exit survey that was used in the 2016-2017 assessment process. The new assessment coordinator was not aware that this was part of the process and students were not asked with an adequate amount of time to respond for this report.

As faculty continue to change over the next year, the assessment process will have to be re-evaluated to work with new faculty on appropriately judging learning outcomes. The instructor of GEOG 4313 will not be present for the 2018-2019 academic year, and the instructors for GEOG 4203, 4333 and 4343 all left during this academic year so assessment will be conducted on a rolling schedule with Visiting Assistant Professors and Adjunct Faculty throughout the school year to insure consistent results.

Describe the process for implementing these changes/planned program improvements.

Reports will be gathered semesterly from new faculty in charge of major courses and rubrics will be distributed ahead of time so that faculty are aware of the needs of the course learning outcomes.

H. Assessment Tools

Please provide a copy of any assessment tools (questionnaire, scale, interview questions, etc.) here.

An individual rubric for each core course has been created by the department of geography that outlines the learning goals for each of the core courses (included in Outcomes 1, 2, and 3). See above.