Date of Report: 8/15/2017
Name of Person Submitting Report: Jon Comer

A. Program Information:
Assessment Coordinator’s Name: Emily Fekete
Assessment Coordinator’s Email Address: Emily.fekete@okstate.edu
Number of students enrolled in the program 2016-2017: 37 BS majors (34 first majors, 3 second majors), 9 BA majors (5 first majors, 4 second majors)
Number of students graduated in 2016-2017: 7 (6 BS, 1 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 2016-2017 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 9 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.*

- [ ] Survey
- [x] Rating of skills (e.g., rubrics)
- [ ] Analysis of written artifacts
- [ ] Comprehensive, certification, or professional exam(s)
- [ ] Oral presentation
- [ ] Course project
- [ ] Satisfaction Survey
- [ ] Benchmarking
- [ ] Measuring effectiveness relative to professional standards
- [ ] Review of thesis/dissertation/creative component
- [ ] Capstone project
- [ ] Internship
- [ ] Interviews
- [ ] Performance or jury
- [ ] Visual collection (photos, videos, etc.)
- [ ] Review of student research
- [ ] 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 2016.

**Did your department/program faculty have a goal set for this learning outcome?**

[ ] Yes    [x] 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 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 1 below includes the rubric averages for the learning outcomes for GEOG 3333 for the past 5 years. Based on the results of Table 1, it appears that students have continued to increase their performance in learning outcomes for GEOG 3333 as the average continues to rise.
Table 2 below shows the averages for all 9 students enrolled in GEOG 3333 in Fall 2016 for each learning outcome. 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. The only outcome where students scored below proficient was in outcome 2, appreciate role of statistics and quantitative methods in geography as demonstrated by their homework averages. For this outcome students achieved essential knowledge, with only 0.2 difference from achieving proficiency.

<table>
<thead>
<tr>
<th>GEOG 3333 Learning Outcomes</th>
<th>Outcome 1</th>
<th>Outcome 2</th>
<th>Outcome 3</th>
<th>Outcome 4</th>
<th>Outcome 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Score</td>
<td>3.2</td>
<td>2.8</td>
<td>3.4</td>
<td>3</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Course Outcomes:

1. Familiarity with basic concepts and methods of spatial analysis.
   
   **Tools:** Final Exam

   
   **Tools:** HW average

3. Understand the characteristics of geographic data.
   
   **Tools:** HW 2-3

4. Be able to apply and interpret statistics to geographic problems.
   
   **Tools:** HW 6-11

5. Understand and apply pattern analysis techniques.
   
   **Tools:** HW 10

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

The results of this learning outcome suggest that the department is doing a better job in preparing students for achieving this learning outcome. Students are continuously performing better in this course over the 5 year period that has been assessed. Students have familiarity with concepts and methods of spatial analysis and how these quantitative techniques apply to geographic data and problems. These are often necessary skills for geography majors to have on the job market (see Student Learning Outcome #4). The results of this learning outcome suggests that overall the department is meeting the goal of fostering an ability among students to
identify, interpret, and reason analytically about spatial patterns and their possible causes and consequences. The only area for improvement is in the homework averages for the course as outlined above.

**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 2016-2017 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 are 6 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.

☐ Survey ☒ Rating of skills (e.g., rubrics)
☐ Analysis of written artifacts ☐ Comprehensive, certification, or professional exam(s)
☐ Oral presentation ☑ Course project

☐ Satisfaction Survey ☐ Benchmarking
☐ Measuring effectiveness relative to professional standards
☐ Review of thesis/dissertation/ creative component
☐ Capstone project

☐ Internship ☐ Interviews
☐ Performance or jury ☐ Visual collection (photos, videos, etc.)
☐ Review of student research
☐ 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.

GEOG 4313 is a core course in the department that has been assessed for several years. Table 3 below includes the rubric averages for the learning outcomes for GEOG 4313 for the past 5 years. Based on the results of this table, it appears that students have continued to increase their performance in learning outcomes for GEOG 4313 as the average continues to rise.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>3.67</td>
<td>9.5</td>
<td>3.5</td>
<td>13.12</td>
<td>11.34</td>
</tr>
<tr>
<td>12</td>
<td>3.13</td>
<td>12.34</td>
<td>12.34</td>
<td>12.34</td>
<td>12.34</td>
</tr>
</tbody>
</table>

Table 4 below shows the averages for all 6 students enrolled in GEOG 3333 in Fall 2016 for each learning outcome. Most of the learning outcomes demonstrate that students on average are above proficient in the skills required for an understanding of field methods in geography.

<table>
<thead>
<tr>
<th>GEOG 4313 Learning Outcomes</th>
<th>Outcome 1</th>
<th>Outcome 2</th>
<th>Outcome 3</th>
<th>Outcome 4</th>
<th>Outcome 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Score</td>
<td>3.83</td>
<td>3.83</td>
<td>3.5</td>
<td>3.67</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**Course Outcomes:**

1. Learn mapping techniques, mapping objects, and recording of visible attributes.

**Tools:** Trimble GPS exercises (basic theory and use, data dictionary creation, collecting points, lines, and polygons, geo-correction, importing & exporting, basic map creation in ArcGIS), pacing techniques, and sketch mapping exercise

2. Be able to record changing geographies.

**Tools:** Labs in repeat Photography, participant observation, mental maps, overall synthesis in field journal writing

3. Collect various types of attribute data (specialized techniques).

**Tools:** Labs in survey design, interviewing techniques (open, semi-structured, key-informant), archival research

4. Satisfy end user data requirements.

**Tools:** Survey Collection, Data coding, Excel database creation, Basic statistics, and Data/Results Display, Table creation and overall synthesis

5. Design and complete independent field research

**Tools:** Final Field Research Project and Proposal

With an average assessment rating of 3.67/4 students in GEOG4313 significantly outperformed in comparison to the previous last 5 years. This is further substantiated by the high class average GPA of 3.83. This group showed exceptional strength in statistics and GIS skills in particular. The significantly higher average assessment scores may be in part due to the fact that 2 of the 6 students were from the honor's college. Regardless, geography student achievement appeared particularly strong in 2016. Our ability to continue to recruit honor’s students (in the last 5 years) into the major reflects well on the degree problem overall.
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 2016-2017 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 2016-2017 academic year. There were 18 individual students 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 (Fundamentals 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.*

- ☐ Survey
- ☒ Rating of skills (e.g., rubrics)
- ☐ Analysis of written artifacts
- ☐ Comprehensive, certification, or professional exam(s)
- ☐ Oral presentation
- ☐ Course project
- ☐ Satisfaction Survey
- ☐ Benchmarking
- ☐ Measuring effectiveness relative to professional standards
- ☐ Review of thesis/dissertation/ creative component
- ☐ Capstone project
- ☐ Internship
- ☐ Interviews
- ☐ Performance or jury
- ☐ Visual collection (photos, videos, etc.)
- ☐ Review of student research
- ☐ Other (please 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.

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.

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</thead>
<tbody>
<tr>
<td>GEOG 4203</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>2.5</td>
<td>2.3</td>
<td>2.1</td>
<td>2.5</td>
<td>N/A</td>
</tr>
<tr>
<td>GEOG 4323</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
<td>2.889</td>
<td>3.111</td>
<td>3.111</td>
<td>3.111</td>
</tr>
<tr>
<td>GEOG 4333</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>3.25</td>
<td>3.25</td>
<td>3</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GEOG 4343</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
<td>3.333</td>
<td>3.333</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>GEOG 4353</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
<td>3.5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

GEOG 4203 Course Outcomes:

1. Learn GIS Vocabulary.

   Tools: Lab report & Exam

2. Understand basic concepts of databases.
<table>
<thead>
<tr>
<th>Tools: Lab report</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Understand role of spatial analysis.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tools: Homework &amp; Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master a GIS software package to advanced beginner level.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tools: Lab exercise &amp; Homework</th>
</tr>
</thead>
</table>

**GEOG 4323 Course Outcomes:**

1. Familiarity with use of computers in the design and generation of cartographic products.
   *Tools:* class discussion, labs, exams and final project

2. Understand map projections.
   *Tools:* class discussion, labs, homeworks, exams

3. Able to represent different features on maps.
   *Tools:* class discussion, labs, exams and final project

4. Learn elements of map design and generalization.
   *Tools:* class discussion, labs, exams and final project

5. Understand and input spatial data.
   *Tools:* class discussion, labs, exams and final project

6. Able to interpret and critique other cartographic work.
   *Tools:* class discussion and homeworks

**GEOG 4333 Course Outcomes:**

*Tools:* labs, class discussion, exams, quiz
1. Understand the principles of electro-magnetic radiation and systems for capturing digital data

*Tools:* labs, class discussion, exams, quiz
2. Understand usefulness and limitations of aerial photographs, multi-spectral scanners, and microwave systems.

*Tools:* labs, class discussion, home work
3. Learn image interpretation and digital image processing techniques.
**GEOG 4343 Course Outcomes:**

<table>
<thead>
<tr>
<th>Tools:</th>
<th>labs, exams, class discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have a theoretical and practical understanding of GIS and its applications in natural resource management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tools:</th>
<th>exams class discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Familiarity with specific conditions, requirements and processing considerations that allow spatial and attribute data to be manipulated for problem solving.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tools:</th>
<th>labs, homeworks</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Acquisition of hands-on experience using some of the popular GIS software packages.</td>
</tr>
</tbody>
</table>

**GEOG 4353 Course Outcomes:**

<table>
<thead>
<tr>
<th>1</th>
<th>Have a theoretical and practical understanding of GIS and its applications in economic, urban, transportation, and other human problems.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools:</td>
<td>Tests and assignments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>Have a basic knowledge and understanding into how GIS technologies can be applied in these areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools:</td>
<td>Tests, assignments, and classroom discussions</td>
</tr>
</tbody>
</table>

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

The results indicate that as a whole GEOG students are proficient in understanding an applying geographic information systems techniques as well as in spatial analysis and cartographic design. The department has made improvements in students meeting learning outcome objectives for intermediate GIS courses over the past 5 years while remaining relatively the same in cartography, remote sensing and introductory GIS courses during that same time frame. Comments on individual courses will be made below.

GEOG 4203 (Fundamentals of GIS) is taught every semester. Currently three sections of this course are offered and are taught by 3 different faculty members. The rubric averages for this course are a composite number of all three instructors and all of the GEOG majors in each section. Students are assessed in this course based on homework, exam, and lab performance. There were 10 individual GEOG students enrolled in GEOG 4203 across the three sections of the course during the 2016-2017 assessment period. The averages for each outcome were all between 2 (essential) and 3 (proficient) with a rubric average closer to essential at 2.35. As this course is important for many student career paths and for additional GIS training, the department should consider ways to better help students to meet learning outcomes. However, because of the diversity of GEOG student career goals, the lower numbers likely also reflect those students who are not interested in pursuing a technical career, but are required to take the course. Despite a potential lack of interest among some GEOG students, skills learned in this course are important for interpreting geographic data.

All GEOG students must take GEOG 4323 (Computer Cartography), which is offered every Spring semester. During Spring 2017 there were 9 GEOG majors enrolled in the course and assessed. The outcomes averages show that in this course students are proficient in all learning objectives, obtaining an average score of 3
(proficient). This is a similar score to assessments in previous years, demonstrating that this course is meeting the needs of the department in terms of providing students with adequate knowledge of and skills in cartographic reasoning and design.

GEOG 4333 (Remote Sensing) is taught annually in the spring. This course utilizes labs, exams, quizzes, and class discussion to determine student learning outcomes. In the Spring 2017 semester, 4 GEOG students were enrolled in the course. Outcome averages were between 3 and 3.25 for the three learning outcomes, indicating that students performed at a proficient level. The performance average of 3.167 for the entire rubric for GEOG 4333 demonstrates that students are obtaining proficiency in the skills assessed in this course such as understanding and utilizing digital imagery in geographic problem solving.

GEOG 4343 (GIS: Resource Management Applications) is one of two advanced GIS courses offered at the undergraduate level and is taken after students complete GEOG 4203. It is taught annually in the fall semester. In Fall 2016, 3 students were enrolled in the course and had average learning outcome scores of between 3 and 3.333 for the three learning outcomes assessed. The rubric average of 3.222 continues the 5 year trend of increasing student learning outcome average scores, demonstrating that students are continuing to receive better knowledge and skill sets in advanced GIS courses taught by faculty in the department of geography. The faculty member responsible for teaching this course, Dr. Frazier, should be commended on improving student learning in this course since her arrival in August 2013.

The second advanced GIS course students may take after completing GEOG 4203 that is offered by the department of geography for undergraduate students is GEOG 4353 (GIS: Socioeconomic Applications). This course is taught annually in the fall and rubric scores are calculated using exams, assignments, and classroom discussions. In Fall 2016 there were two GEOG majors enrolled in GEOG 4353. For the two learning outcomes students obtained scores of 3 (proficient) and 3.5 (highly proficient) and an overall rubric average of 3.25 (proficient) in this course. GEOG 4353 is similar to GEOG 4343 in that the average rubric scores have also been increasing yearly over the 5 year assessment trend (though GEOG 4353 was not assessed in 2012-2013 because it was not offered). The trend of increasing rubric scores in GEOG 4353 further demonstrates the fact that students are being better prepared for success in advanced GIS courses at the undergraduate level.

As a whole, students are meeting this learning outcome. They are receiving essential or proficient knowledge in geographic information systems and cartographic techniques and applications. As the basis for many career paths in geography, knowledges in these skill sets are incredibly important for GEOG majors after graduation from OSU. Most impressive is that learning outcomes scores have increased the most over the past 5 years in advanced GIS courses. This trend indicates to the geography department that students are obtaining the necessary knowledge and training in GIS and cartography to be successful upon graduation.

**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.*

- [x] 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.
D4) Student Learning Outcome #4: Express positive feedback on their experience as a Geography undergraduate major and their preparedness for post-graduate employment.

Identify opportunities for students to learn this outcome during the 2016-2017 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.

Method 4A: An Exit Survey administered online to all graduating seniors will be used. This survey (attached in Appendix I) can be a very effective, if indirect, method of gauging student satisfaction and can identify structural, procedural, and facilities problems in the department (lab access, club participation, course offerings) that are difficult to learn about elsewhere.

Method 4B: Every other year, the Office of University Assessment and Testing conducts a telephone or e-mail survey of undergraduate alumni 1 and 5 years after graduation. This survey consists of both university-wide items and department-specific questions (attached in Appendix I).

How many students were included in the assessment of this outcome?
There were 5 students who graduated with a GEOG degree in Fall 2016 and 2 students who graduated in Spring 2017. The Senior Exit Survey was emailed to all 7 students at the end of their respective graduation semesters. Of the 7 students who graduated during the 2016-2017 academic year, 6 of these responded to the exit survey. Therefore the results are a tabulation of 6 students, or 86% of the 2016-2017 GEOG graduates.

How were students selected to participate in the assessment of this outcome?
For Method 4A, GEOG students will be emailed an exit survey during their last semester of the degree program and encouraged to fill out the survey. For Method 4B, results of alumni surveys will be obtained every other year from the Office of University Assessment and Testing.

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

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

Describe the how the assessment method was implemented, administered, and/or conducted.
Timeline 4A: Exit Surveys will be administered approximately one month before students graduate each term (Fall, Spring, and Summer) and results will be aggregated. There are items that can be rated on a 0-4 scale and averaged, as well as open-ended items that cover a variety of topics of interest to the faculty.
Timeline 4B: The Survey of Alumni from Undergraduate Programs is administered in the spring of each even-numbered year, and results will thus be incorporated into the annual assessment report every other year as available.

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 4.

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

Table 5 below gives the average responses for the first 16 questions on the undergraduate exit survey sent to those who graduated in the 2016-2017 school year.

| Overall rating of your degree program | 3.17 |
| Effectiveness of preparation for employment or graduate school | 2.67 |
| Up-to-date proficiency in technical skills | 3.67 |
| Marketability of skills for the workplace | 2.83 |
| Quality of instruction | 3.83 |
| Quality of advising | 3.50 |
| Quality of departmental facilities (primarily labs) | 3.50 |
| Quality and relevance of texts and instructional materials (lab manuals) | 3.00 |
| Quality of graduate teaching associates (courses or labs) | 3.50 |
| Departmental responses to student concerns | 3.17 |
| Availability of faculty to students | 3.67 |
| Availability of departmental resources to students (primarily labs) | 3.33 |
| Usefulness of degree requirements and electives | 2.83 |
| Flexibility of degree programs | 2.83 |
| Academic standards of the department | 3.83 |
| Availability/access to clubs and other extracurricular activities | 3.50 |

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

Based on the averages in Table 5, overall the geography department continues to provide high quality instruction and access to resources on campus to its graduates. Most questions had an average response rate higher than 3 (on a 0-4 scale). Of those categories that had results lower than an average of 3, two of these (Marketability of skills for the workplace and Usefulness of degree requirements and electives) were a result of one student giving a response of 0, Very Dissatisfied, while the remaining 5 ranked these as either 3, Satisfied, or 4, Very Satisfied.

Two categories that the department appears to need to continue to work on are Effectiveness of preparation for employment or graduate school and Flexibility of degree programs. Both of these categories had an average response rate between 2.67 and 2.83. Departmental preparedness for careers was a topic identified on the 2015-2016 Assessment as a potential area for improvement. Currently the department has been working to improve career connections for students by building an annual list of internship providers as well as increasing the
effectiveness of alumni networks. Careers was something that was touched on in two of the open ended follow up questions on the survey as well. One student provided the answer “Advise them on job opportunities and provide connections to real geography and GIS Jobs available” to the question What could be done to improve students’ experiences in the Geography Department (departmental labs and otherwise)? Another response to the question Do you have any other suggestions or concerns that are not addressed on this survey? reads: “Career opportunities and knowledge of future openings for real jobs.” Putting more energy into career development at the undergraduate level is something that the department should continue to work on in the future.

In terms of Flexibility of degree programs, the only qualitative comment that illuminated the low average for this category came from the question What did you most like about geography at OSU? Least like? One student included in their response, “I wish the department could continue to grow so courses would be limited to fall and spring slots only. This made things challenging for someone adding a major well into their academic career.” Geography encompasses a variety of subjects which makes it difficult to teach intro level courses every semester in addition to including core courses and specialty courses at the upper division level on a semesterly basis. The department has been adjusting course rotations the past two years to try to better accommodate students’ degree programs and time to degree. In previous years students have appreciated the degree flexibility geography offers so this could also be an abnormal year for this category.

Something the department has improved on is in the categories of Quality of departmental facilities (primarily labs) and Availability of departmental resources to students (primarily labs). These categories scored well below an average of 3 in previous years, however scored higher than an average of 3 this year. The department has been working to make lab resources more accessible on campus and to better communicate to students where they can find GIS software outside of Murray Hall. Despite this marked improvement, three students did respond to the question What could be done to improve students’ experiences in the Geography Department (departmental labs and otherwise)? with suggestions on having longer lab hours for students who work full time or have busy schedules. The department will continue its’ much improved effort of providing better access to these resources.

Overall the department continues to do well in its quality of instruction and students are very happy with the attention they receive from faculty and the community feel of the department. Students appreciate the emphasis on fieldwork and hands-on techniques used in geography courses. They also expressed that the relationships with professors and students in the department was inclusive, inviting, knowledgeable, and a main reason why they enjoyed their time at OSU. Three students completed independent studies or research with faculty in the department and all three felt that this was an incredibly valuable experience that taught skills they would not have learned otherwise and prepared them for careers and graduate school. A recurring comment on the qualitative questions was that students wished they had found the geography department sooner. Respondents suggested more PR or advertising for the department and attempts to bring students in to the department at the freshman level. Most students do declare geography as a major at the end of their sophomore or beginning of their junior year. This past year the department has been working to increase its visibility on campus by hosting events during Welcome Week, being at the Major’s Fair, advertising degree programs using A-Frame signs, and creating more online connections with social media engagement through department sites and sites belonging to the College of Arts and Sciences. These efforts should be continued and expanded in the future.

Several of the students said that they decided to become a geography major after taking a geography course at OSU. Courses mentioned were Intro to Cultural Geography and Intro to Physical Geography. As these are large lecture courses that many students at OSU take earlier in their academic careers, the department should consider efforts to recruit potential geography majors from these courses as this is where our current majors stated they learned about the discipline.
In terms of employment, most graduates were open to the idea of looking for jobs outside of Oklahoma; only one respondent stated that they had no intention of moving out of the area. Four of the six students listed specific post-graduation plans including continuing on into the MS in Geography program at OSU; completing a Fulbright in Estonia using skills from Field Techniques and GIS courses; working as an Operations and Service Trainee for Fidelity Investments in Westlake, Texas where they would be using GIS, remote sensing, field techniques, spatial analysis and cartography skills; and acting as a Whitewater Raft Guide and Office Coordinator for Wile River Adventures in West Glacier, Montana where they would be educating others on conservation, preservation, sustainability, the environment, wilderness safety, and ecology. The other two respondents had less than specific plans including going home to a family business and pursuing a teaching certificate in Sand Springs, OK, and looking into GIS work in Dallas, TX. The results from the alumni survey conducted by the university on even years are more helpful in gaining perspective on where our graduates are employed as students often do not start looking for jobs until after they have graduated.

Alumni are surveyed by the University Undergraduate Programs every even year. Because this report is assessing the Fall of 2016 and Spring of 2017, alumni surveys were not completed during this timeframe. Please see the 2015-2016 Geography Undergraduate Assessment report for the most recent alumni survey information. This report can be found in Assessment Report archives here: https://uat.okstate.edu/assessOSRHE

**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 4 occurs on a cycle or rotation, click here to describe and provide the rationale.
D5) Student Learning Outcome #5: Students will demonstrate effective written and oral presentation skills.

Identify opportunities for students to learn this outcome during the 2016-2017 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 student papers and presentations in GEOG 4313 (the acting geography capstone course) will be assessed by departmental faculty to gauge student achievement of effective communication of their results. A representative written assignment from GEOG 4313 will be chosen by the instructor of the course and given to the Assessment committee (Undergraduate Committee Chair and Departmental Assessment Coordinator) for assessment. Written assignment assessment will be based on the rubric provided in Appendix II which has been adapted from the University general education assessment of writing rubric. Oral presentations will occur at the conclusion of GEOG 4313 and will be assessed by the instructor of the course using the rubric in Appendix II developed by OSU. The oral presentation assessments will be provided by the instructor to the Chair of the Undergraduate Committee to include in the assessment report.

How many students were included in the assessment of this outcome?
The BS/BA Geography Undergraduate Assessment Plan was rewritten and submitted to University Assessment on December 2, 2016. Because this outcome is reliant on student work completed in a Fall capstone course, this new outcome was unable to be assessed for the 2016-2017 assessment period. Therefore, no students were included in the assessment of this outcome for this report.

How were students selected to participate in the assessment of this outcome?
All GEOG majors must take GEOG 4313. Therefore the students enrolled in the course will be assessed based on a representative written assignment from the course as well as their final oral presentations for the course.

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

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

Describe the how the assessment method was implemented, administered, and/or conducted.
The assessment will be based on a representative written assignment and an oral presentation from GEOG 4313 (the acting Geography capstone course). The course will be taught once per year in the fall, as noted in Timeline 2A. The representative written assignment will be given to the Assessment committee for evaluation. The oral presentation will be assessed by the 4313 instructor. The evaluators will be responsible for assessing the projects based on university rubrics (Appendix II)

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 5.
Report student’s scores for this assessment, as well as students’ strengths and weaknesses relative to this learning outcome.
The BS/BA Geography Undergraduate Assessment Plan was rewritten and submitted to University Assessment on December 2, 2016. Because this outcome is reliant on student work completed in a Fall capstone course, this new outcome was unable to be assessed for the 2016-2017 assessment period. Therefore, no students were included in the assessment of this outcome for this report.

What do the results suggest about student achievement of this learning outcome?
The BS/BA Geography Undergraduate Assessment Plan was rewritten and submitted to University Assessment on December 2, 2016. Because this outcome is reliant on student work completed in a Fall capstone course, this new outcome was unable to be assessed for the 2016-2017 assessment period. Therefore, no students were included in the assessment of this outcome for this report.

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 4 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?

Overall the geography program has seen improvements in the past year with regards to several of the learning outcomes in this report. Marked increases are being seen in rubric scores for learning outcomes for GEOG 3333, GEOG 4343, and GEOG 4353 over the past 5 years. The department has also taken student concerns on exit and alumni surveys seriously and have largely resolved the major issues that students had regarding access to labs and lab times. While the lab access and times was still brought up on the exit survey, the frequency of these comments dropped significantly as compared to previous years. The department should continue their efforts to remind students about additional areas on campus where they have access to necessary software. Two areas of concern that should be addressed in the future are the continuously low rubric scores for GEOG 4203 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. She 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 July 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.

Over the past year the department has been working on the implementation of a new degree program in Global Studies because of the desire to build upon departmental specialties in regional, cultural, and political geographies. This new interdisciplinary degree will not only enhance the geography program, but will foster connections with other programs on campus. We foresee the creation of this new BA degree (approved in March 2016) as a supplement to the geography degree program currently in place. The department anticipates that the program will continue to build on our reputation among students as being a department with strong faculty, teaching, and mentoring abilities. It is likely that enrollment in these core courses will continue to grow as a result of the establishment of the new degree program.
The 2016-2017 Assessment Plan is also new. The new plan was sent to University Assessment in December 2016 and this is the first assessment period in which it is being used. Therefore, some of the outcomes are incomplete. The department will take strides to ensure that each outcome be completed during the upcoming 2017-2018 assessment period as outlined under the new assessment plan.

Based on what has been completed here, the department continues to provide quality geographic education to its students while also creating an environment that students appreciate and look upon favorably at graduation. Overall, students feel the department faculty are the strongest aspect of the program and they appreciate the comradery, knowledge, and experiences that the faculty bring to the program. Students express that they wished they had started in the geography department sooner and that more be done to promote the program to students earlier in their careers. The department is taking these comments seriously and has taken steps to publicize the program across campus such as utilizing the Majors Fair; Welcome Week; A-Frame advertising; Facebook, Twitter, and Instagram accounts; and active recruitment in undergraduate introductory courses. Continuing our presence on campus will likely bring in more students, hopefully earlier in their academic careers. Negative comments from students largely centered on a desire to have more career preparation. This is something that the department has looked into, but has yet to fully develop. Some options that have been considered include: creating a database or map of alumni careers, hosting a resume night with Arts and Sciences Career Services, and holding an alumni panel for students to hear from former students about their career paths.

In terms of preparing students through instruction, the department continues to provide adequate education for students to meet learning objectives. Students have shown marked improvements in several advanced GIS courses as well as statistics. These are skills that will be used by students in their future careers, as evidenced by student exit surveys. One area of improvement for instruction is in GEOG 4203, Fundamentals of GIS. This course continues to have fairly low averages on each rubric learning outcome. In discussions with undergraduates, many are afraid to take the course until their Junior year because they feel they do not have enough preparation for it. The learning outcomes suggest that this might be true. In the past, this course was a 2000 level course, but was changed to 4000 level so as to include graduate students interested in obtaining GIS skills. While this makes sense to some extent, it may be harming the undergraduate population who need to gain basic skills in the introductory GIS course in order to perform well in advanced GIS courses. The department should consider how to better serve students in GEOG 4203 in the future.

**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?*

A new assessment plan for the BA/BS GEOG program was submitted to University Assessment in December 2016. The current assessment report for 2016-2017 is based on this new assessment plan. Learning Outcome D5 was unable to be conducted during the 2016-2017 assessment period because it is based on skills obtained through the course GEOG 4313, a course only offered in the fall. During the upcoming Fall 2017 semester, the Assessment Committee will assess the chosen writing sample from GEOG students enrolled in GEOG 4313, a task that was unable to be completed in Fall 2016 because of the nature of the timeline to implement changes in the assessment procedure. Similarly, the instructor for GEOG 4313 will also assess oral presentations during the Fall 2017 semester, which was also unable to be conducted in Fall 2016 because of the timeline involved in implementing new assessment plans. The department feels that these changes to the assessment plan will provide a much needed way to assess students’ oral and written communication skills, two increasingly
important skill sets that were not being assessed under the previous BA/BS GEOG assessment plan written in 2012.

**Describe the process for implementing these changes/planned program improvements.**
The process to implement these changes is described above, but will be reiterated here: During the upcoming Fall 2017 semester, the Assessment Committee will assess the chosen writing sample from GEOG students enrolled in GEOG 4313, a task that was unable to be completed in Fall 2016 because of the nature of the timeline to implement changes in the assessment procedure. Similarly, the instructor for GEOG 4313 will also assess oral presentations during the Fall 2017 semester, which was also unable to be conducted in Fall 2016 because of the timeline involved in implementing new assessment plans.

Other changes to the BA/BS GEOG assessment plan have already been incorporated in this 2016-2017 assessment report.

**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). An exit survey created by the department of geography includes a variety of questions related to the overall experience in the department as an undergraduate student. Alumni surveys are also administered by the College of Arts and Sciences. Surveys are included in Appendix I. Other information is taken from student records (degree sheets, transcripts, etc.). For assessing oral and written communication skills in Outcome 5, the rubric used is included in Appendix 2.
Appendix I – Departmental Surveys

2010 OSU Alumni Survey Undergraduate Programs

College: CAS Department: Geography
Number of Questions: 14 items Question Code: GEOG

Which of the following kinds of geographic technologies or techniques do you use in your current position?
1 = do not use them
2 = use them occasionally
3 = use them regularly

GEOG1. Geographic Information Systems (GIS) and Database Management

GEOG2. Global Positioning Systems (GPS)

GEOG3. Remote Sensing

GEOG4. Computer Mapping (separate from GIS)

GEOG5. Qualitative Methods of Analysis

GEOG6. Quantitative and/or Statistical Analysis

GEOG7. Conducting Surveys and/or Field Work

Given your current responsibilities, how important have you found the following skills that you gained while studying at OSU? Would you say they were:
1 = not important at all
2 = not very important
3 = somewhat important
4 = very important
5 = did not obtain this skill at OSU

GEOG8. Writing skills

GEOG9. Analysis and critical thinking skills

GEOG10. Communication and/or discussion skills
GEOG11. Computer skills

GEOG12. Given your current responsibilities, what additional skills/subjects would have been helpful to you in your undergraduate program? (open ended)

GEOG13. What would you say were the primary weaknesses of your OSU degree program? (open ended)

GEOG14. What would you say were the primary strengths of your OSU degree program? (open ended)
Email to students for completion of exit survey:

Hello Geographers!

You are receiving this message because you either graduated in December 2016 or you will be graduating in a few weeks in May 2017. Congratulations on your achievements! Every year the Department of Geography conducts a survey of recent graduates to help us better serve future geographers in our department. The survey results are very helpful to us in determining how we can do better as a program at Oklahoma State. The results are also important because they are sent to the college and university to see how Geography compares to other departments across campus. I would ask that you please take a few minutes out of your day to fill out the survey. You can take the survey at the following link: https://www.surveymonkey.com/r/6BB35H7 . If you would prefer to take the survey on paper, please let me know and I will be happy to provide a paper copy for you.

Your candid responses are greatly appreciated so that we can continue to do our best to provide an excellent education experience!

Thank you for your help. Please do not hesitate to contact me with any questions or concerns.

-Dr. Fekete

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**EXIT SURVEY**

**DEPARTMENT OF GEOGRAPHY**

**OKLAHOMA STATE UNIVERSITY**

A. Student Survey of Satisfaction

Please rate your satisfaction level for the following items with this scale:

<table>
<thead>
<tr>
<th>Very Satisfied: 4</th>
<th>Satisfied: 3</th>
<th>Neutral: 2</th>
<th>Dissatisfied: 1</th>
<th>Very Dissatisfied: 0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
<td><strong>Aspect of your educational experience</strong></td>
<td><strong>Rating</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Overall rating of your degree program</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Effectiveness of preparation for employment or graduate school</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Up-to-date proficiency in technical skills</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Marketability of skills for the workplace</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Quality of instruction</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Quality of advising</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Quality of departmental facilities (primarily labs)</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Quality and relevance of texts and instructional materials (lab manuals)</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Quality of graduate teaching associates (courses or labs)</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Departmental responses to student concerns</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Availability of faculty to students</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Availability of departmental resources to students (primarily labs)</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Usefulness of degree requirements and electives</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Flexibility of degree programs</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Academic standards of the department</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Availability/access to clubs and other extracurricular activities</td>
<td>4 3 2 1 0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. Student Feedback and Suggestions

1. How did you decide to become a geography major at OSU?

2. What did you most like about geography at OSU? Least like?

3. What could be done to improve students' experiences in the Geography Department (departmental labs and otherwise)?

4. Are you completing the GIS Certificate with your degree? Yes / No If yes, do you have any comments about the Certificate?

5. Have you been involved in an internship, research assistantship, or independent study with a faculty member? Yes / No

   If yes, how would you rate your experience on the 0-4 scale from Part A, and what impact has this experience had on your degree program and post-graduation plans?

6. Do you have any other suggestions or concerns that are not addressed on this survey?

7. What areas of the country are you willing to move to for employment?

C. Student Information and Contacts:

1. What are your immediate plans?
   a. Company, agency, or school:
   b. Job title and/or duties:
   c. Location (city/state):
   d. Geographic skills to be used:

2. Contact information (please provide permanent, long-term information if possible):
   a. Name:
   b. Street: ________________________________
   c. City/State/Zip: __________________________
   d. Phone: ________________________________
   e. Off-campus e-mail:

Thank you for your time and thoughtful responses. If you have any questions about this interview, please feel free to contact the department with your concerns.
Appendix II – Rubrics for Writing and Oral Presentations

Existing university general education rubrics for evaluating written and oral communication will be used to assess student performance on their final presentations in GEOG 4313. These are provided on the following pages for reference.
# Written Communication VALUE Rubric

**Definition**

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

<table>
<thead>
<tr>
<th>Context of and Purpose for Writing</th>
<th>Capstone 4</th>
<th>Milestones 3</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).</td>
<td>Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.</td>
<td>Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).</td>
<td>Demonstrates minimal attention to context, audience, purpose, and to the assigned task(s) (e.g., begins to show awareness of audience’s perceptions and assumptions).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Content Development</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer’s understanding, and shaping the whole work.</td>
<td>Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.</td>
<td>Uses appropriate and relevant content to develop and explore ideas through most of the work.</td>
<td>Uses appropriate and relevant content to develop simple ideas in some parts of the work.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Genre and Disciplinary Conventions</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Form and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).</td>
<td>Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task(s) including organization, content, presentation, formatting, and stylistic choices.</td>
<td>Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices.</td>
<td>Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation. Attempts to use a consistent system for basic organization and presentation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sources and Evidence</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing.</td>
<td>Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.</td>
<td>Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.</td>
<td>Demonstrates an attempt to use sources to support ideas in the writing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control of Syntax and Mechanics</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.</td>
<td>Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.</td>
<td>Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.</td>
<td>Uses language that sometimes impedes meaning because of errors in usage.</td>
</tr>
</tbody>
</table>
# OSU General Education Oral Communication Rubric

<table>
<thead>
<tr>
<th>SKILL</th>
<th>LEVEL OF ACHIEVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>A</strong> Content/language</td>
<td>Content generally does not address the topic or is not appropriate for the audience.</td>
</tr>
<tr>
<td></td>
<td>Major ideas not developed.</td>
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<tr>
<td></td>
<td>Vague language, inappropriate use of colloquialisms.</td>
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<tr>
<td></td>
<td>Inconsistencies in point of view and tone.</td>
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<tr>
<td></td>
<td>Information is inadequately documented.</td>
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<tr>
<td></td>
<td>Minimally accomplishes the goals of the assignment.</td>
</tr>
<tr>
<td><strong>B</strong> Organization</td>
<td>Topic is unclear or poorly identified to the audience.</td>
</tr>
<tr>
<td></td>
<td>Little evidence of sequence or sequence markers.</td>
</tr>
<tr>
<td><strong>C</strong> Presentation skills</td>
<td>Much of the presentation is hard to hear.</td>
</tr>
<tr>
<td></td>
<td>Much excess verbiage (&quot;you know,&quot; &quot;um&quot;).</td>
</tr>
<tr>
<td></td>
<td>Lack of appropriate eye contact.</td>
</tr>
<tr>
<td></td>
<td>Makes little effort to establish rapport with audience.</td>
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<tr>
<td></td>
<td>Inappropriate dress or physical movements.</td>
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<tr>
<td></td>
<td>Incorporation of visual aids detracts from rather than adds to the presentation.</td>
</tr>
<tr>
<td></td>
<td>Exhibits most characteristics of &quot;C&quot; and some characteristics of &quot;B&quot;.</td>
</tr>
</tbody>
</table>