Please enter the appropriate information concerning your student learning assessment activities for this year.

Academic Year of Report: 2013/2014  College: College of the Sciences
Department: Geography  Program: ______________________

1. **What student learning outcomes were assessed this year, and why?**

In answering this question, please identify the specific student learning outcomes you assessed this year, reasons for assessing these outcomes, with the outcomes written in clear, measurable terms, and note how the outcomes are linked to department, college and university mission and goals.

We assessed four learning outcomes that are related to department and college goals and the themes of the university’s mission as indicated by the table below.

<table>
<thead>
<tr>
<th>Student Learning Outcomes (performance, knowledge, attitudes)</th>
<th>Related Program/Departmental Goals</th>
<th>Related College Goals</th>
<th>Related University Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Knowledge and Awareness: Students will be thoroughly familiar with the discipline’s vocabulary, concepts and themes, and the complexity of physical, human, and cultural systems and issues.</td>
<td>I - Program promotes the integrative, synthesizing view of geography  II – A diverse community caring deeply about the Earth, sharing ideas and responsibility</td>
<td>I - Provide for outstanding academic life in College of the Sciences.  V - Build partnerships  VI - Strengthen COTS contributions to education</td>
<td>I – Provide outstanding academic life at Ellensburg campus  IV - Build beneficial community partnerships  V - Achieve prominence  VI - inclusive and diverse campus communities</td>
</tr>
<tr>
<td>2. Patterns and Processes: Students will be able to identify the patterns created through the interactions of human systems and physical systems, the networks of intra-and international interdependence, and the manner in which human and physical systems modify each other and control the Earth’s surface and resources.</td>
<td>I - Program promotes the integrative, synthesizing view of geography  II – A diverse community caring deeply about the Earth, sharing ideas and responsibility  III - Observe the world in terms of its landscapes &amp; understand the concept of place at scales local to global</td>
<td>I - Provide for outstanding academic life in College of the Sciences.  VI - Strengthen COTS contributions to education</td>
<td>I – Provide outstanding academic life at Ellensburg campus  V - Achieve regional and national prominence</td>
</tr>
<tr>
<td>3. Communication Skills: Students will be able to communicate effectively in oral, written and a variety of graphical forms.</td>
<td>I - Program promotes the integrative, synthesizing view of geography  II – A diverse community caring deeply, sharing ideas and responsibility  IV – Faculty and student research/civic engagement</td>
<td>I - Provide for outstanding academic life in College of the Sciences.  V - Build partnerships  VII-Provide productive, civil and pleasant learning environment</td>
<td>I – Provide outstanding academic life at Ellensburg campus  IV - Build beneficial community partnerships  V - Achieve prominence  VI - inclusive and diverse campus communities</td>
</tr>
</tbody>
</table>
2. How were they assessed?
In answering these questions, please concisely describe the specific methods used in assessing student learning. Please also specify the population assessed, when the assessment took place, and the standard of mastery (criterion) against which you will compare your assessment results. If appropriate, please list survey or questionnaire response rate from total population.

A) What methods were used?

We mainly used our Capstone course, Geography 489, to assess these learning outcomes. All majors must take Geography 489 either in Fall or in Spring and usually do so in one of their final quarters on campus. As taught in AY13/14, the course included several elements well-suited for program assessment including:

Element 1. COMPREHENSIVE EXAM
At the end of the quarter, every student took an objective-type exam evaluating mastery of the core material in the five categories of introductory geography, as presented in the five foundation courses (GEOG 101 – World Regional Geography, 107 – Introduction to Physical Geography, 108 – Introduction to Human Geography, 203 – Maps & Cartography, and 250 – Natural Resource Conservation). The exam also covered the material presented in Geography 489.

Element 2. SELF ASSESSMENT ESSAY
A six-page assessment of the student’s individual program of study and what he or she did or did not get out of it. The first five pages corresponded more or less to each of the five required subfields of the major, and titled as such: Regional Geography; Physical Geography; Human Geography; Resource Geography; and Techniques in Geography. The last page provided the student’s overall assessment of the major.

Element 3. FIELD TRIP
The course included a field trip during which the students gave brief oral presentations with posters highlighting elements of the human, physical, and resource geography of Central Washington. The students selected the destinations so that they would complement one another and then did research in advance of presenting each site’s features and significance. In Spring 2014, the students had another option to satisfy this requirement: they could attend the annual conference of the Association of Washington Geographers in Tacoma and either a) present research of their own or b) write a synthesis and critique of presentations they observed and relate the presentations to what they learned in their Geography courses.

Element 4. EXIT INTERVIEW
Each student met with the Capstone instructor for an exit interview. The 15-20 minute exit interview had two main parts: first, a mock interview for a job or graduate school to which the student could reasonably apply and second, a discussion of the student’s experiences in the program. Each student brought to the meeting a hard copy printout of an actual job advertisement of graduate program description, along with a letter of application, and his or her résumé.

B) Who was assessed?

A total of 20 students took 489 Capstone in AY13/14.

C) When was it assessed?

Geography 489 is a required course for all Geography majors and is taught twice a year. In Fall 2013, five students completed the course; and in Spring, fifteen students completed the course.

3. What was learned?

In answering this question, please report results in specific qualitative or quantitative terms, with the results linked to the outcomes you assessed, and compared to the standard of mastery (criterion) you noted above. Please also include a concise interpretation or analysis of the results.

The standard of mastery and results for each of the four learning outcomes are provided in the table below. The results are interpreted in the narrative following the table.

<table>
<thead>
<tr>
<th>Student Learning Outcomes (performance, knowledge, attitudes)</th>
<th>Standard of Mastery</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Knowledge and Awareness: Students will be thoroughly familiar with the discipline’s vocabulary, concepts and themes, and the complexity of physical, human, and cultural systems and issues.</td>
<td>At least 70 percent (C-) score on 45 selected questions in Element 1 – COMPREHENSIVE EXAM</td>
<td>Of the 20 students who completed the course, 11 (55%) met or exceeded the standard of mastery. The median score was 75%.</td>
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<tr>
<td>2. Patterns and Processes: Students will be able to identify the patterns created through the interactions of human systems and physical systems, the networks of intra-and inter-national interdependence, and the manner in which human and physical systems modify each other and control the Earth’s surface and resources.</td>
<td>At least 70 percent (C-) score on 35 selected questions in Element 1 – COMPREHENSIVE EXAM</td>
<td>Of the 20 students who completed the course, 7 (35%) met or exceeded the standard of mastery. The median score was 66%.</td>
</tr>
<tr>
<td>3. Communication Skills: Students will be able to communicate effectively in oral, written and a variety of graphical forms.</td>
<td>At least 70 percent (C-) aggregate score on Element 2 – SELF ASSESSMENT ESSAY Element 3 – FIELD TRIP, and Element 4 – EXIT INTERVIEW</td>
<td>All of the students in the class met the standard of mastery.</td>
</tr>
<tr>
<td>4. Critical Thinking and Application: Students will demonstrate the ability to analyze and describe physical, human, and cultural systems and/or issues, using sound geographic principals.</td>
<td>At least 70 percent (C-) aggregate score on Element 3 – FIELD TRIP.</td>
<td>Of the 20 students who completed the course, 18 (90%) met or exceeded the standard of mastery. The median score was 80%.</td>
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</tbody>
</table>
The results of the assessments conducted in Geography 489 in AY13/14 were similar to those of the preceding year. Generally, students displayed good communication (verbal and written) and critical thinking skills, but fared much less well in demonstrating mastery of the material presented in core Geography courses. The Geography Comprehensive Exam was prepared in Spring 2013 by synthesizing questions submitted by faculty across the department and reflects our consensus view of what students should know upon graduation. However, the consistently poor performance of students over three several quarters of use suggests that either the exam is overly difficult or that students do not take it seriously enough.

The Field Trip assignment showed that students generally have a good ability to prepare concise, well-designed posters and to present the results of their research in the field. Stops in the Fall 2013 Capstone Field Trip included the Northern Pacific rail depot, the edge of the burn zone from the 2012 Table Mountain fire, the Thorp mill, the Iron Horse brewery, and the Reecer Creek Restoration Project. Stops in the Spring 2014 Capstone Field Trip included a horse farm near Ellensburg, the Flying M cattle ranch, the Minna mounds, the John Wayne Trail, the Taylor Bridge fire site, downtown Ellensburg, and Anderson Hay. The presentations at these sites were good but a common weakness was the failure by students to adequately integrate both the human and physical geography of a site; instead students tended to focus strongly on either one dimension or the other.

4. What will the department or program do as a result of that information?
In answering this question, please note specific changes to your program as they affect student learning, and as they are related to results from the assessment process. If no changes are planned, please describe why no changes are needed. In addition, how will the department report the results and changes to internal and external constituents (e.g., advisory groups, newsletters, forums, etc.).

The results of the Comprehensive Exam, including the question-by-question performance figures, have been shared with all faculty members in the department so that those who teach in the relevant areas can adjust their instruction as appropriate to ensure that important material is well-covered.

Given the consistently poor performance on the exam (even by students who otherwise do very well in the Geography program), the content of the exam will be reviewed this year to determine whether some questions should be replaced. Also we will revisit the Capstone syllabus whether it should count as a higher proportion of the total grade in Geography 489 Capstone so that students will attach greater importance to doing well on the exam.

5. What did the department or program do in response to last year’s assessment information?
In answering this question, please describe any changes that have been made to improve student learning based on previous assessment results. Please also discuss any changes you have made to your assessment plan or assessment methods.

The structure of the Capstone course was modified slightly to better assess students. In particular, the Field Trip assignment described above, which formerly was a group assignment, was altered to make it a more effective gauge of individual student learning.

The one area in which we received a below-target score for last year’s assessment feedback report was in Reporting of Planned Program Improvements. I would like to note that in AY13/14 we made a more concerted effort to report and act on assessment information. For instance, at the department’s annual
retreat in September, we discussed the results of the previous year’s Capstone Comprehensive Geography Exam.

In terms of longer-term changes, in Fall 2013, we submitted a proposal to create a new Bachelor of Science in Geography. As part of that curriculum reform, we developed a new assessment plan that takes the measure of our program’s performance at more points along the way of a student’s career here on campus and beyond. As the preceding sections of this report indicate, our current assessment efforts heavily focus on the Capstone course that students typically take immediately before graduation.

The new degree and associated assessment reform received final approval in Spring 2014 and so in the current academic year, we are beginning to implement the new assessment plan. As an example of the changes we have adopted, below is the new student learning outcomes (minus several columns of the standard form for the sake of readability and space) for the BS in Geography, Geographic Information Science specialization.

**DRAFT – NOT YET APPROVED**

**CWU Student Learning Outcome Assessment Plan Preparation Form**

**Department:** Geography  
**Program:** B.S. (GIScience Specialization)

<table>
<thead>
<tr>
<th>Student Learning Outcomes (performance, knowledge, attitudes)</th>
<th>Related Program/Departmental Goals</th>
<th>Method(s) of Assessment (What is the assessment?)</th>
<th>Who Assessed (Students from what courses – population)**</th>
<th>When Assessed (term, dates)***</th>
<th>Standard of Mastery/Criterion of Achievement (How good does performance have to be?)</th>
</tr>
</thead>
</table>
| 1. Students will demonstrate improved familiarity with the basic geography of the Earth, especially the distribution of countries, major cities, and key physical features. | 1. Improve the ability of our students to observe and interpret the world around them in terms of its physical and cultural landscapes, and to articulate the powerful concept of place that is operative at many scales, from the local to the global. | Geography Comprehensive Exam Part A – a 40 question exam prepared by Geography Department faculty which tests place knowledge students should have gained in introductory core courses and which should have been reinforced in more advanced upper-level offerings. | Entrance: All students declaring the major.  
Exit: Students enrolled in Geography 489: Geography Capstone | Entrance: At the time major is declared, an arrangement will be made for each student to complete the Geography Comprehensive Exam.  
Exit: Fall and Spring quarters | Entrance: No standard of mastery for performance – testing at major entrance used to establish baseline for later assessment.  
Exit: Average student performance on the mapping section of the exam will be a score of 70% and at least 25 percentage points higher than the average score of students at admission to the major. |
<p>| 2. Students will demonstrate improved familiarity | 1. Improve the ability of our students to observe | Geography Comprehensive Exam Part B – an 80 question exam prepared by Geography Department faculty which tests place knowledge students should have gained in introductory core courses and which should have been reinforced in more advanced upper-level offerings. | Entrance: All students declaring the major. | Entrance: At the time major is declared, an | Entrance: No standard of mastery for performance – |</p>
<table>
<thead>
<tr>
<th>3. Students will demonstrate improved critical thinking ability with respect to the interactions of human systems and physical systems, the networks of intra-and international interdependence, and the manner in which human and physical systems modify each other and control the Earth’s surface and resources.</th>
<th>2. Improve the ability of students to think critically about spatial patterns</th>
<th>Critical thinking essay assigned in Geography 250: Natural Resource Conservation</th>
<th>Critical thinking essay assigned in Geography 489: Geography Capstone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mid-career: All majors must take 250, typically midway between admission to the major and graduation.</td>
<td>Exit: Students enrolled in Geography 489: Geography Capstone</td>
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<tr>
<td></td>
<td></td>
<td>Exit: Fall, Winter, and Spring quarters</td>
<td>Mid-career: Fall, Winter, and Spring quarters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exit: Fall and Spring quarters</td>
<td>Mid-career: No standard of mastery for performance – evaluation at major entrance used to establish baseline for later assessment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exit: Using the same rubric and with the same general parameters (e.g., page length), the average score will be at least 25 percentage points higher than the average score of students at mid-career.</td>
<td>Exit: At least 80 percent of students in Capstone will produce resumes that highlight at least 3 specific ways (specific courses, internships, significant assignments, skills learned during Geography coursework) in which their</td>
</tr>
<tr>
<td>4. Students will be effectively prepared by the Department of Geography for future careers.</td>
<td>3. Provide students with the knowledge, skills, and attitudes to be successful in their chosen fields.</td>
<td>Evidence from resume produced for and exit interview conducted during Capstone class</td>
<td>Exit: Students in Capstone course</td>
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<tr>
<td></td>
<td></td>
<td>Exit: Fall and Spring quarters</td>
<td>Exit: Fall and Spring quarters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exit: Fall and Spring quarters</td>
<td>Exit: Average student performance on the multiple choice conceptual section of the exam will be a score of 70% and at least 25 percentage points higher than the average score of students at admission to the major.</td>
</tr>
<tr>
<td>5. Students will be effectively prepared by the Department of Geography for future careers.</td>
<td>3. Provide students with the knowledge, skills, and attitudes to be successful in their chosen fields.</td>
<td>In conjunction with periodic program review, alumni will be surveyed concerning their experiences in the department and after graduation</td>
<td>Post-program: Alumni</td>
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<tr>
<td>6. Students will be able to communicate effectively in oral, written and a variety of graphical forms</td>
<td>3. Provide students with the knowledge, skills, and attitudes to be successful in their chosen fields.</td>
<td>Portfolios prepared by majors for Geography 489: Geography Capstone</td>
<td>Exit: Students enrolled in Geography 489: Geography Capstone</td>
</tr>
</tbody>
</table>
7. Students will be able to effectively integrate ideas and information from human geography, physical geography, resource geography, regional geography, and techniques courses.

4. Maintain a teaching-learning facility and major program of study that expresses the integrative, synthesizing character of geography as a discipline.

Field trip/poster assignment in Geography 489: Geography Capstone

Exit: Students enrolled in Geography 489: Geography Capstone

Exit: Fall and Spring quarters annually

Exit: At least 80 percent of students will receive a score of 70% or better on the field trip/poster assignment.

8. Students will demonstrate a high level of knowledge concerning the application and interpretation of geotechniques including Geographic Information Systems (GIS), remote sensing systems, and/or quantitative methods.

5. Augment regional expertise in scientific approaches to the development and application of geographic information systems, remote sensing, and other geotechniques

Performance in 300- and 400-level courses most associated with the specialization (Geography 303, 309, 330, and 430)

Principal project or assignment for students completing the culminating experience course for the GIScience Specialization (Geography 417)

Mid-career: Students pursuing the specialization and registered for the relevant courses

Exit: Students completing a culminating experience course for the GIScience Specialization (Geography 417)

Mid-career: Fall, Winter, and Spring quarters

Exit: Mainly Spring quarter annually

Mid-career: At least 80 percent of students pursuing the specialization receive a grade of B or better in each specialization core course

Exit: At least 80 percent of students will receive a grade of B or better for the culminating experience project/assignment.

6. Questions or suggestions concerning Assessment of Student Learning at Central Washington University:

None.