

CWU Student Learning Outcome Assessment Plan  
 Department: **Geological Sciences**  
 Programs: **B.S. Geology, BA Geology**

Student Learning Outcomes (performance, knowledge, attitudes)	Related Program/ Departmental Goals	Related College Goals	Related University Goals	Method(s) of Assessment (What is the assessment?)*	Who Assessed (Students from what courses – population)**	When Assessed (term, dates) ***	Standard of Mastery/ Criterion of Achievement (How good does performance have to be?)
1) Present an analysis of data and interpretations orally and in a professionally written report	<p>1. Students will demonstrate the knowledge, skills, and attitudes to be successful in their chosen field of geological sciences, including fundamental understanding of a variety of Earth processes and their relevance to humans.</p> <p>4. Faculty, scientific staff and students will make relevant scientific contributions to the geological sciences through scientific inquiry, acquisition of external funding, local, regional and national presentations, and through a variety of types of publications and reports.</p>	I: Provide for an outstanding academic and student experience in COTS	One: Maintain and strengthen an outstanding academic and student life on the Ellensburg campus.	<p>Instructor evaluation of literature-based and original research papers, laboratory and field based research projects, oral presentations in class, laboratory, disciplinary and other meetings and in 300/400-level classes</p> <p>Faculty mentor evaluation of independent scholarship project</p>	<p>Undergraduates enrolled in upper division classes</p> <p>Undergraduates enrolled in GEOL 495</p>	<p>Fall, winter, spring quarters</p> <p>Fall, winter, spring quarters</p>	<p>85% of students get rubric grade of 2 or better on such assignments</p> <p>90% of students enrolled receive passing grade</p>
2) Critically interpret published scientific literature; differentiate data from interpretation	1	I	One	<p>Instructor evaluation of literature-based and original research papers, directed reading assignments</p> <p>Faculty mentor evaluation of independent scholarship project</p>	<p>Undergraduates enrolled in upper division classes</p> <p>Undergraduates enrolled in GEOL 495</p>	<p>Fall, winter, spring quarters</p> <p>Fall, winter, spring quarters</p>	<p>85% of students get rubric grade of 2 or better on such assignments</p> <p>90% of students enrolled receive passing grade</p>

3) Interpret representations of data, including graphs, maps, cross-sections	1	I	One	Instructor evaluation of laboratory exercises, exams.	Undergraduates enrolled in 200, 300 and 400-level classes	Fall, winter, spring quarters	85% of students get rubric grade of 2 or better on such assignments
4) Demonstrate working knowledge of standard geologic reference tools and resources, e.g. library, web, computer databases	1	I	One	Instructor evaluation of literature-based and original research papers, laboratory assignments.	Undergraduates enrolled in 200, 300 and 400-level classes	Fall, winter, spring quarters	85% of students get rubric grade of 2 or better on such assignments
5) Calculate quantitative problems in the discipline	1	I	One	Instructor evaluation of homework assignments, laboratory exercises, exams.	Undergraduates enrolled in 200, 300 and 400-level classes	Fall, winter, spring quarters	85% of students get rubric grade of 2 or better on such assignments
6) Demonstrate knowledge of core areas of geology	1	I	One	Competency test in capstone class (GEOL 487)	Undergraduates enrolled in capstone class (GEOL 487)	Winter quarter, senior year	70% of students must achieve a numerical score of 75% or higher on competency test on first try.

\*Method(s) of assessment should include those that are both direct (tests, essays, presentations, projects) and indirect (surveys, interviews) in nature

\*\*Data needs to be collected and differentiated by location (Ellensburg campus vs. University Centers – see NWCCU standard 2.B.2) Geological Sciences programs are all delivered at the Ellensburg campus.

\*\*\*Timing of assessment should be identified at different transition points of program (i.e., admission, mid-point, end-of-program, post-program)