



Student Learning Outcome Assessment Plan

Department: Geological Sciences
 Degree Program: BS-Geology, BA-Geology

| Student Learning Outcome (performance, knowledge, attitudes) | Related CWU Strategic Outcome(s) http://www.cwu.edu/strategic-planning/ | 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 | 1.1.1 Students will achieve programmatic learning outcomes. | 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 Faculty mentor evaluation of independent scholarship project | Undergraduates enrolled in upper division classes Undergraduates enrolled in GEOL 495 | Fall, winter, spring quarters Fall, winter, spring quarters | 85% of students get rubric grade of 2 or better on such assignments 90% of students enrolled receive passing grade |
| 2) Critically interpret published scientific literature; differentiate data from interpretation | 1.1.1 Students will achieve programmatic learning outcomes. | Instructor evaluation of literature-based and original research papers, directed reading assignments Faculty mentor evaluation of independent scholarship project | Undergraduates enrolled in upper division classes Undergraduates enrolled in GEOL 495 | Fall, winter, spring quarters Fall, winter, spring quarters | 85% of students get rubric grade of 2 or better on such assignments 90% of students enrolled receive passing grade |
| 3) Interpret representations of data, including graphs, maps, cross-sections | 1.1.1 Students will achieve programmatic learning outcomes. | 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 |

| Student Learning Outcome (performance, knowledge, attitudes) | Related CWU Strategic Outcome(s) http://www.cwu.edu/strategic-planning/ | 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?) |
|--|--|---|---|---------------------------------------|--|
| 4) Demonstrate working knowledge of standard geologic reference tools and resources, e.g. library, web, computer databases | 1.1.1 Students will achieve programmatic learning outcomes. | 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 | 1.1.1 Students will achieve programmatic learning outcomes. | 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 | 1.1.1 Students will achieve programmatic learning outcomes. | 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) and modality (face-to-face, online)

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

Assessment Cycle

Analysis and Interpretation: December
Improvement Actions: Completed by June
Dissemination: Completed by June

| Year SLOs | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
|-----------|-------|-------|-------|-------|-------|-------|
| 1 | | | x | x | | x |
| 2 | | | x | x | | x |
| 3 | x | x | | | x | |
| 4 | | | x | x | x | |
| 5 | x | x | | | x | |
| 6 | x | x | | | | x |

Assessment Oversight

| Name | Department Affiliation | Email Address | Phone Number |
|----------------|------------------------|------------------------|--------------|
| Keegan Fengler | Senior Lecturer | keegan@geology.cwu.edu | 509-963-2706 |
| Carey Gazis | Chair | cgazis@geology.cwu.edu | 509-963-2820 |