

UNIVERSITY OF ALASKA FAIRBANKS
Geology and Geophysics, Undergraduate Program in Geology (B.S.)
Academic Outcomes Assessment Plan

Mission Statement: UAF and the Department of Geology and Geophysics are committed to providing quality undergraduate education through small classes, close student-faculty relationships and research and scholarly endeavor. Continuous self-examination, flexibility and openness to innovation enhance the quality of education available to students.

Goal Statement: The B. S. program in Geology strives to produce graduates who: (i) are knowledgeable about basic geoscience concepts; (ii) can compete in the job market; (iii) are able to communicate through effective writing and speaking; and (iv) can think critically about the important scientific issues of the day.

Intended outcomes/objectives	Assessment criteria and procedures	Implementation
1) Students completing the Geology B.S. degree will compare favorably in skills and knowledge with students completing similar courses of study at other "top-ranked" geoscience programs.	In the geosciences, a summer field camp is a required course usually taken after the junior year. This course requires that the students synthesize their geologic knowledge and is a good mechanism for judging student preparedness for real geologic situations.	GEOS 351 is already in place. Student and faculty questionnaires assessing student preparedness will be prepared and completed before the student can earn credit. UAF students completing other field camps and the faculty from those camps will be requested to complete surveys.
2) Students will be competitive in post-baccalaureate careers in graduate school, industry and government.	The percentage of students in geoscience careers should exceed 80% two years after graduation.	The department will monitor the percentage placement of graduates into various career tracks through alumni questionnaires.
3) Students should receive the depth and breadth of curriculum to reflect the current directions in the ever-changing world of geoscience.	80% of all graduates will agree with the statement: "My geoscience curriculum has prepared me for my current position."	Through surveys of graduating students and recent alumni, the most and least applicable classes will be identified. The faculty will meet on an annual basis to assess the curriculum and implement changes as needed. The major employers and other geoscience professionals will be surveyed to get other opinions on the direction of geoscience. This will be done on an informal basis and through an advisory board.
4) Graduates should be proficient in communicating their knowledge in oral and written format to scientists and the general public.	Students will be encouraged to research a topic, write a scientific report on that topic and present it to a general audience. Portfolios of student work will be assembled for a sample of the student majors.	GEOS 475/675 <i>Communication Skills in the Geosciences</i> is a course that currently requires students to write. We will strive to make other "content" geoscience courses "W" or "O" intensive to provide further geoscience options for improving writing techniques. Undergraduate research and thesis will be encouraged.
5) Students should be aware of the current state of research and "real life" applications of geology and geophysics.	Students will attend lectures and other seminars in which current topics are addressed and/or be exposed to current topics in "capstone" classes.	GEOS 482, the department seminar, provides a forum for current topics to be presented. The department will develop more capstone 400-level classes and encourage the faculty to include assessments of current directions in the geosciences in these courses.