

# Assessment Plan Summary – B.S. in Geology

## I. Student Learning Outcomes

The MSU geology faculty has identified thirteen Student Learning Outcomes for the B.S. program in Geology. These are listed in the first column of Appendix A and summarized below:

### I. Public Affairs Learning

- 1) Acquire an understanding of and appreciation for the relationship between geology and cultural competence, the role of geology in community engagement, and the ethical leadership qualities necessary for success in the field.
  - a. Direct Assessment Measures: Review of the answers of our majors to the University Exit Survey Public Affairs Essay Questions

### II. Cognitive Disciplinary Learning

- 4) Acquire a solid base of knowledge in the science of geology as a whole, including Earth Materials, Earth History, Sedimentation and Stratigraphy, Deformational Processes and Structural Features, and Geomorphic Processes and Landforms
  - a. Direct Assessment Measures: Passing grades in GLG 314, 332, 333, 334, 340, 350, and 570
  - b. Direct Assessment Measure: Evaluation of student scores on the ACAT in Geology examination.

### III. Behavioral Disciplinary Learning

- 10) Develop proficiency in the higher-order skill of conveying complex geologic concepts in clear, technically correct writing.
  - a. Direct Assessment Measures: Demonstrated in assignments, including capstone project, in GLG 358
- 11) Develop proficiency in the use of analytical tools used in the practice of geology.
  - a. Direct Assessment Measures: passing grades in directed research, GLG 413, and 500-level geology courses

### IV. Affective Disciplinary Learning

- 13) Develop the aptitudes and dispositions necessary to help democratize society by obtaining and maintaining employment as a professional geologist
  - a. Indirect Assessment Measures: track internships, graduate school matriculation, employment, and registration / licensure as a professional geologists.
  - b. Direct Assessment Measure: Evaluation of student scores on the ACAT in Geology examination.

## B. Geology Alumni Survey

Every five years we mail a survey to all alumni of our B.S. program in Geology. The most recent survey was conducted in Spring 2015.

A list of current employers and job titles for our Geology alumni, obtained from the survey responses are compiled after each survey. Those job titles that fit the description “leadership positions in industry, government, and professional organizations” as described in the assessment measure for Public Affairs Learning Outcome #3 are identified from the compiled list.