

STUDENT LEARNING OUTCOMES	DIRECT ASSESSMENT MEASURES	INDIRECT ASSESSMENT MEASURES
PUBLIC AFFAIRS LEARNING OUTCOME #1. Acquire an understanding of and appreciation for the relationship between geology and cultural competence .	1. Questions on assessment post-test for GLG 110 pertaining to the influence of geology on human culture. 2. Journal for GLG 360 field trips.	
PUBLIC AFFAIRS LEARNING OUTCOME #2. Acquire an understanding of and appreciation for the role that geology can play in community engagement .	1. Average grade for students' essay in GLG 358 on the effects of geologic processes on the health of human communities 2. Final report for GLG 330, GLG 399, and/or SCI 493/494.	
PUBLIC AFFAIRS LEARNING OUTCOME #3. Develop the ethical aptitudes and dispositions necessary to acquire and hold leadership positions in industry, government, and professional organizations.	Percentage of respondents to Geology Alumni Survey who hold leadership positions in industry, government, and professional organizations.	
COGNITIVE DISCIPLINARY LEARNING OUTCOME #1. Acquire a solid base of knowledge in the science of geology as a whole.	Average Overall Score for MSU Geology majors on the nationally normed ACAT exam in Geology.	Percentage of respondents to Geology Alumni Survey who are employed as professional geologists or in related professional or technical fields.
COGNITIVE DISCIPLINARY LEARNING OUTCOME #2. Acquire a solid base of knowledge in the area of Earth Materials.	Average Score for MSU Geology majors on the ACAT subsections for Mineralogy and Petrology.	
COGNITIVE DISCIPLINARY LEARNING OUTCOMES #3. Acquire a solid base of knowledge in the area of Earth History	Average Score for MSU Geology majors on the ACAT subsections for Historical Geology and Paleontology.	
COGNITIVE DISCIPLINARY LEARNING OUTCOME #4. Acquire a solid base of knowledge in the area of Sedimentation and Stratigraphy.	Average Score for MSU Geology majors on the ACAT subsections for Oceanography and Stratigraphy.	
COGNITIVE DISCIPLINARY LEARNING OUTCOME #5. Acquire a solid base of knowledge in the area of Deformational Processes and Structural Features	Average Score for MSU Geology majors on the ACAT subsection for Structural Geology.	
COGNITIVE DISCIPLINARY LEARNING OUTCOME #6. Acquire a solid base of knowledge in the area of Geomorphic Processes and Landforms	Average Score for MSU Geology majors on the ACAT subsections for Physical Geology and Geomorphology.	
BEHAVIORAL DISCIPLINARY LEARNING OUTCOME #1. Develop proficiency in the higher-order skill of conveying complex geologic concepts in clear, technically correct writing.	Average improvement in students' grades from first writing assignment to final writing assignment in GLG 358.	
BEHAVIORAL DISCIPLINARY LEARNING OUTCOME #2. Develop proficiency in the higher-order skill of orally expressing complex geologic concepts.	Average improvement in students' grades from first oral presentation to final oral presentation in GLG 358.	
BEHAVIORAL DISCIPLINARY LEARNING OUTCOME #3 (for COMPREHENSIVE majors only). Develop proficiency in the use of analytical tools used in the practice of geology	Average percentage of comprehensive geology majors who successfully complete (defined as a grade of C or better) either GLG572 (Geohydrology), GLG573 (Engineering Geology), or GLG590 (Geophysics) – all of which use Calculus-based analytical methods.	
AFFECTIVE DISCIPLINARY LEARNING OUTCOME #1. Develop the aptitudes and dispositions necessary to help democratize society by obtaining and maintaining employment as a professional geologist.	Percentage of respondents to Geology Alumni Survey who are employed as professional geologists or in related professional or technical fields.	