

College of Science (CSCI)  
North Science 135

### **C. Summary of Assessment Process**

We evaluated student work from selected courses in the Geology MS Program 2014-2015 to assess how well Program Student Learning Outcomes were met. The assessments presented here were derived from homework, written assignments, and oral presentations. A homework assignment from GEOL 6040 was evaluated using the department's Lab Project rubric to assess

at the mastery level in all areas. None displayed an exemplary level in more than one area of quantitative literacy. A thorough mastery of advanced algebra and graphing is an expected prerequisite for the course, but some students lack the basic preparation and others have the necessary preparation but their quantitative skills are quite rusty. Possible ways to improve learning outcomes for this assignment are: 1) a pre-assignment that gives students practice with advanced algebra skills, 2) recommendations for math tutoring at SCAA for students who do not perform well on a math skills pre-test given on the first day of class, 3) an additional, optional, session where students work on problems with the instructor present. In the future, similar assessment material will be assigned since calculating the age of geologic materials using isotopic data is a key student learning outcome for this course.

### **GEO6340 Tectonic Geomorphology - Spring 2015: Written Communication**

Final Précis of a Journal Article This class focused on text readings and lectures initially and

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Geology M.S. Program ILO Alignment Matrix

The table below shows which Institutional Learning Outcomes (ILOs) are addressed by each of the Program Learning Outcomes (PLOs) listed above.

	MS PLO 1 Geologic Materials	MS PLO 2 Data Analysis	MS PLO 3 Communication	MS PLO 4 Research	MS PLO 5 Geologic Time
ILO 1: Thinking & Reasoning	X	X	X	X	X
ILO 2: Communication			X	X	
ILO 3: Diversity			X		X
ILO 4: Collaboration		X	X	X	
ILO 5: Sustainability			X		X
ILO 6: Specialized Education	X	X	X	X	X

CurriculumMap for ProgramStudentLearningOutcomes  
 CSUEastBay, Dept. of Earth & Environmental Sciences  
 DegreeProgram: M.S. in Geology

Field	Course	Title	Program Learning Outcomes				
			1. Geologic Materials	2. Data Analysis	3. Communication	4. Research	5. Geol. Time
GEOL	6020	Seismic Exploration	P	M			
GEOL	6040	Near Surface Geophysics	P	M			
GEOL	6310	Isotope Geochemistry	I	P	P		M
GEOL	6320	Groundwater	I	M	P		P
GEOL	6411	Engineering Geology	M	M			
GEOL	6414	Earthquake Geology	P		M		M
GEOL	6430	Tectonic Geomorphology	I		P		M
GEOL	6811	Graduate Seminar			M		
GEOL	6899	Project		P	P	M	
GEOL	6910	University Thesis		M	M	M	

Proficiency Levels: I = Introduced; P = Practiced; M = Mastered