2010-11 Program Assessment Update

Department & Program: Department of Geology/ Earth and Space Science Program

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Geology 390 was chosen to assess the student learning objectives addressed below, since this class is entirely made of secondary science education majors who are towards the end of their program. The other classes in the program are taken by students from various programs and majors. In addition, often a number of key classes are taken before declaring their major. It is therefore very difficult to assess a small number of students within these other classes.

1. Student Learning Outcome	2. Strategy or method of measurement	3. Observations gathered from data	4. Actions recommended based on observations	5. Plan and timetable for taking action	6. Overall evaluation of progress on objective
Understand the communication skills necessary to teach earth and space science safely to middle school and high school students.	Assignment involving presentation of an earth /space science inquiry lesson they created as part of Geol 390.	A 4-point rubric was used to assess components of their lesson presentation. From the 5 students in the class 100% met or exceeded expectations on all aspects of their presentation.	No change required. Continue to assess their communication skills necessary to perform this learning outcome.	N/A	This SLO is still central to program mission.
Learn the principles and concepts of earth science in order to be able to teach earth and space science to middle school and high school students.	1) Pre-test of earth and space science content specific to common misconceptions in the subject. Taken during Geol 390 towards end of program. 2) Student creation of a probe to be used in their classes to assess prior knowledge of an earth/space science concept, specifically to reveal misconceptions	1) 100 % of students met objective by passing pre-test. Average score of 85.6%. 2) Rubric used to assess components of probe. 100 % of students met objective. Average score of 90%.	1) Continue to try to overthrow common earth science misconceptions using inquiry lessons that require the student to construct the correct scientific principle. 2) Creation of a probe requires a deep level of understanding in the earth or space science concept and should be continued as a requirement for the class.	Starting fall 2011	Met objective