

**Minnesota State University Moorhead  
2006-2007 Assessment Plan Cover Sheet**

(An electronic version of this form can be accessed at <http://www.mnstate.edu/assess>)

*Note: All programs will complete this form.*

**Degree Program: Geosciences**

**Department: Anthropology and Earth Sciences**

**College: Social and Natural Sciences**

**Date: 5/2006**

Is this assessment plan your existing plan, a new assessment plan or a revision of an existing plan?

Existing                       New                       Revision

**1. Name(s) of Department Assessment Coordinator and/or Assessment Committee Members**

Mike Michlovic, Russ Colson

**2. List of All Student Learning Outcomes.** (List and number all outcomes, placing an asterisk (\*) by the outcomes you are assessing this year.)

1. Ability to apply concepts and principles of geosciences in understanding Earth processes or relationships of people to the Earth.
2. Competency in laboratory and field skills
3. Ability to conduct a scientific investigation or interpret the results of a geoscience investigation including either science or social science research.
4. Ability to reason scientifically and to organize ideas, evidence, information and arguments.
5. Ability to use library and/or research data to support points of view.
6. Ability to communicate orally and/or in writing concerning geosciences problems or issues.

**3. Explain how the student learning outcomes are appropriate to department or program goals, as identified in your most recent Quality Improvement Plan. Please note if the program is accredited by an external agency.**

**4. Signatures**

\_\_\_\_\_

Department Chair or Program Director

\_\_\_\_\_

Dean or Director

Required Attachments:

1. Assessment Planning Forms
2. Records of department meetings when Assessment Plan was discussed and approved.

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**Academic Program:** Geosciences

**1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):**

1. Ability to apply concepts and principles of geosciences in understanding Earth processes or relationships of people to the Earth.

**2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)**

<input checked="" type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input checked="" type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
<input type="checkbox"/> Talents	<input type="checkbox"/> Service
<input checked="" type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

**3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.**

This outcome is achieved through information learned in lower level classes that include limited laboratory experience combined with more intensive discussions and laboratory experiences in upper division courses.

**4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)**

Assessment of the geoscience program is based on a combination of 1) student testing in the capstone Senior Seminar, 2) faculty evaluation of student accomplishment in key outcome areas as evaluated in the Senior Seminar, and 3) formal discussion among the geoscience faculty examining student progress and abilities as reflected in coursework, research, and other professional activities by the students. The Geoscience major is new, and the first graduates from the program completed less than one year ago. The Senior Seminar has only been taught twice, in the fall of 2004 and 2005. Geoscience faculty met for the first time in the fall of 2005 to examine student progress and complete assessment of the program based on the first graduating majors. At that time, several weaknesses in the program curriculum were identified, including the need for more lab time in upper division courses, the need for a structural geology course, and the need to provide separate courses for Mineralogy and Petrology (formerly taught as a single course). This was based on weak scores in standardized geology tests in several key areas

of the discipline, on student feedback concerning weak areas identified during their summer field course, and overall observations by faculty that students needed persistent remedial work in several upper division courses.

**5. Who is assessed? When are they assessed?**

Seniors as part of the senior seminar course.

**6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?**

Senior seminar instructor. All faculty discuss assessment results.

**7. What is level of student performance is expected for this outcome?**

Not stated.

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2. Competency in laboratory and field skills.

**2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)**

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<input checked="" type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
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4. Ability to reason scientifically and to organize ideas, evidence, information and arguments.

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