

**Minnesota State University Moorhead  
2007-2008 Assessment Plan Cover Sheet**

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

*Note: Complete this form only if you are changing your student learning outcomes and/or methods of assessment.*

**Degree Program: Geoscience**

**Department: Anthropology and Earth Science**

**College: Social and Natural Sciences**

**Date: Nov 2007**

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**

Russ Colson, Rinita Dalan, Karl Leonard, Paul Sando

**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 and ability to conduct a scientific investigation.
- 3. Ability to use and respond to literature and research in geosciences, including: use of library and research data, ability to interpret results of an investigation in science or social science research, comprehension of key ideas and evidence, understanding of arguments, and ability to communicate arguments and ideas in written and oral forms.

**3. Signatures**

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Department Chair or Program Director

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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:** Geoscience

**1. Identify Student Learning Outcome in the space 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/statistics	<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.**

Both lower and upper level courses address this outcome.

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

- 1) Students will be tested with standardized instruments in their senior year (in Senior Seminar)
- 2) Faculty will meet to discuss how well students are understanding key concepts and principles in upper level courses

Geology instrument: Geology GRE (formerly offered by GRE for graduate-school bound geology students, but discontinued)

Geographical Sciences instrument: combination of questions from Praxis II tests and other sources

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

All majors are assessed in the fall of their senior year in Senior Seminar.

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

Instructor of the Senior Seminar will compile test results. Faculty will meet to discuss performance in upper level courses in the fall term as prompted by the need to complete the assessment report.

**7. What is satisfactory student performance on this outcome?**

Students will be compared with average graduate-school bound students (both according to standardized tests and according to faculty judgements) with the expectation that our average graduates, only some of whom will continue to graduate school, should rank in the top three quarters of graduate-school bound students.

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**Academic Program:** Geosciences

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

2. Competency in laboratory and field skills and ability to conduct a scientific investigation.

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

<input type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input checked="" type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
<input checked="" 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 checked="" type="checkbox"/> Mathematics/statistics	<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.**

students participate in lab courses, field courses, field camp, and individual research.

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

Faculty will meet to evaluate what percentage of students are meeting the following thresholds of achievement:

- 1) Field and research in formal course setting (laboratory or field work)
- 2) Informal involvement with faculty professional activities or outside internships
- 3) Individual research reported at the Student Academic Conference
- 4) Individual research reported at a professional meetings

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

All majors' participation is assessed in their final year of college or subsequent to graduation.

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

Instructor of the geology field camp will evaluate quality of performance in formal field study in Wyoming each time Geos 350 is offered (in odd numbered summers). Faculty will meet to discuss participation in independent research and field work in the fall term as prompted by the need to complete the assessment report. Percentage participation will be determined.

**7. What is satisfactory student performance on this outcome?**

Satisfactory participation is 100% at level 1, 80% at level 2, 50% at level 3, and 10% at level 4.

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**Academic Program:** Geosciences

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

3. Ability to use and respond to literature and research in geosciences, including: use of library and research data, ability to interpret results of an investigation in science or social science research, comprehension of key ideas and evidence, understanding of arguments, and ability to communicate arguments and ideas in written and oral forms.

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

<input checked="" type="checkbox"/> Knowledge/content	<input checked="" type="checkbox"/> Information literacy
<input checked="" type="checkbox"/> Intellectual development	<input checked="" type="checkbox"/> Lifelong learning
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<input checked="" type="checkbox"/> Written communication	<input checked="" type="checkbox"/> Global understanding
<input checked="" type="checkbox"/> Mathematics/statistics	<input type="checkbox"/> Other:
<input checked="" 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.**

Students will engage in interpretation of literature, speaking, writing, etc. throughout the curriculum, but in specific will address these outcomes in the capstone Senior Seminar.

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

1. Instructor for Geos 480 Senior Seminar will assess capability of students in the course according to the following rubric:

- 1) Uses resources effectively Very much so (1) (2) average (3) (4) Only poorly (5)
- 2) Comprehends literature/body of research Very much so (1) (2) average (3) (4) Only poorly (5)
- 3) Presents clear and reasonable arguments about literature or body of research  
Very much so (1) (2) average (3) (4) Only poorly (5)

2. Faculty will meet to discuss how upper level students are performing in assignments that require higher level processing of technical information, such as discussions, written or oral reports, and exams.

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

All majors are assessed when they take Senior Seminar

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

Instructor for Senior Seminar. Results discussed when Geoscience faculty meet to prepare for assessment report.

**7. What is satisfactory student performance on this outcome?**

Students should be average or better.