

**Revised Template
Degree Program
Assessment of Student Learning Plan
Kansas State University**

FEB 28 2005

received

Check the box if your program's student learning outcomes have been modified since November 2003. If so, please email (apr@ksu.edu) or attach a hard copy to this document.

A. College, Department, and Date

College: *Arts and Sciences*
 Department: *Geology*
 Date: *10/21/04*

B. Contact Person(s) for the Assessment Plans

Mary Hubbard and Jack Oviatt

C. Degree Program

M.S. in Geology

D. Assessment of Student Learning Three-Year Plan

1. Student Learning Outcome(s)

4. The ability to work and think independently, crucial to a career in the geological sciences, as demonstrated by either (1) advanced work in advanced courses in the geosciences, sufficient to satisfy the non-thesis degree requirements, or (2) the satisfactory design, completion and defense of a research thesis in the geological sciences.

5. The ability to communicate facts and ideas, in a professional and convincing manner, orally, visually, and in writing, to English-speaking audiences.

10. An appreciation for the advantages of networking with others, including membership in professional societies and participation in their activities.

Special rationale for selecting these learning outcomes (optional):

The chosen three learning outcomes represent three of our four groupings for learner outcomes.

Relationship to K-State Student Learning Outcomes (insert the program SLOs and check all that apply):

| Program SLOs | University-wide SLOs (Undergraduate Programs) | | | | | Program SLO is conceptually different from university SLOs |
|--------------|---|-------------------|---------------|-----------|-----------------------------------|--|
| | Knowledge | Critical Thinking | Communication | Diversity | Academic / Professional Integrity | |
| 1. | | | | | | |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |

| Program SLOs | University-wide SLOs (Graduate Programs) | | | Program SLO is conceptually different from university SLOs |
|----------------------------|--|--------|------------------------------------|--|
| | Knowledge | Skills | Attitudes and Professional Conduct | |
| 1. 4. Independent Thinking | X | | | |
| 2. 5. Communication | | X | | |
| 3. 10. Networking | | | X | |
| 4. | | | | |
| 5. | | | | |

2. How will the learning outcomes be assessed? What groups will be included in the assessment?

4. This learning outcome, which focuses on independent thinking, will be assessed twice for each graduate student. The first assessment will come when the student prepares their thesis proposal. A student's proposal is a written document that states the scientific problem that the student will address in their thesis and it provides a summary of background information, the importance of the project, and the methods that will be used in the study. The proposal is presented orally as well. For each graduate student there is a committee of three to four faculty who will evaluate the proposal. If the student is unable to demonstrate independent thinking they will not pass the presentation and will have to make revisions or will be removed from the program. The final thesis and its oral defense are also evaluated by the graduate committee and again the student must demonstrate independent thinking in order to receive a degree.

5. Our communication learning outcome will be assessed through the thesis proposal and the final thesis together with the oral presentations for each. The written document will be assessed with the attached writing rubric. This rubric will be completed by the graduate committee for the student, but will be discussed by the entire faculty. Both the final thesis and the thesis proposal presentations will be assessed with the attached presentation rubric. All of our thesis option graduate students will go through this assessment. Only very rarely do we have a non-thesis option graduate student so those students will be assessed with the same rubrics on course term papers and presentations.

10. In order to assess how well our graduate students are networking with other professionals we plan to give students an exit survey in which we ask which professional organizations they have joined, what professional meetings they have attended, and in what ways have they utilized our alumni and/or our Geology Advisory Council for professional information.

3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?

4. We will assess the independent thinking ability of our graduate students when they write and defend their thesis proposal during their second semester in our program. We will again assess this outcome when they defend their completed thesis during their fourth semester in our

program. Because passing the defenses is dependent on the independent thinking criteria the thesis committee for each student will be responsible for this assessment. The assessment will be made on the day of the defense.

5. Communication will be assessed when the thesis committee reads the written thesis and listens to the oral defense. The writing and presentation rubrics will be completed by each committee member and then discussed by the entire faculty in May of each year.

10. In May and December of each year graduating Master's students will be given a survey regarding their networking experiences as a student. This data will be compiled by the graduate program director and reviewed by the entire faculty in May of each year.

4. What is the unit's process for using assessment results to improve student learning?

When the faculty meet to discuss the rubrics and surveys in May they will decide whether or not student learning is satisfactory and whether or not our assessment tools are providing appropriate information about student learning. At that time decisions will be made regarding a need to adjust the curriculum or course content to address any trends toward inadequate learning. Modifications to the assessment plan will also be made as needed.