Program outcomes assessment – M.S. in Geology

Graduates should understand:

1. How to conduct independent research.
   - SWBAT develop and write a research proposal (Geol 595 and in consultation with advisor).
   - SWBAT write a proposal for external funding if appropriate (595 and advisor).
   - SWBAT design a data collection plan (595 and advisor).
   - SWBAT analyze data and develop testable hypotheses (Geol 690 and thesis committee).
   - SWBAT write a thesis or professional manuscript (690 and thesis committee).

2. Advanced disciplinary content.
   - SWBAT successfully complete graduate-level course work (various courses depending on disciplinary focus).
   - SWBAT interpret regional geology (595 and field trips in graduate courses).

3. Professional collegiality, collaboration, and communication.
   - SWBAT work effectively with a committee and research group.
   - SWBAT present a research proposal and defense to the department (595 and thesis defense).
   - SWBAT participate in a professional organization.

4. Ethics and responsible research conduct.
   - SWBAT understand and follow research standards and ethics.
   - SWBAT follow established laboratory and field safety protocol.
   - SWBAT understand and adhere to applicable area-specific rules and regulations (Wilderness Area, etc) for their off-campus research.

In addition to assessing the benchmarks, we will track external grants and awards received by graduate students, presentations at professional conferences, time to degree, and their employment or further graduate work.

SWBAT = students will be able to

<table>
<thead>
<tr>
<th>Assessment instrument</th>
<th>Geol 595</th>
<th>500 level classes</th>
<th>Thesis</th>
<th>Thesis defence</th>
<th>External funding</th>
<th>Other</th>
<th>HOW ASSESSED</th>
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<tbody>
<tr>
<td>Geology M.S.</td>
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<tr>
<td>1. Graduates should understand how to conduct independent research.</td>
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<td>Complete a research proposal in Geol 595. Complete a thesis. Apply for external funding.</td>
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<td>2. Understand advanced disciplinary content.</td>
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<td>Track grades in 500 level classes.</td>
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<td>3. Understand professional collegiality, collaboration, and communication.</td>
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<td>Successful public defence of thesis. Track presentations at professional conferences and participation in professional organizations.</td>
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<td>4. Understand ethics and responsible research conduct.</td>
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<td>Graduate displays an understanding of ethics and responsible research conduct.</td>
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