SOUTH DAKOTA BOARD OF REGENTS

Committee on Academic and Student Affairs

AGENDA ITEM: II – C (3)

DATE: April 2-3, 2014

SUBJECT: Program Modifications – SDSM&T

South Dakota School of Mines and Technology has submitted the following program modification proposals. These requests have been reviewed by the system Vice President for Academic Affairs and the Executive Director recommends approval.

Existing Program-Substantive Program Modifications

- Geology and Geological Engineering (MS) – create accelerated master’s program
- Paleontology, Accelerated (MS) – create accelerated master’s program
- Paleontology (MS) – change in total credits of elective course work and change in the total credits required for the program

RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR

Approve SDSM&T’s program modification requests for its M.S. in Geology and Geological Engineering, M.S in Paleontology, Accelerated, and M.S in Paleontology.
South Dakota Board of Regents

EXISTING PROGRAM: SUBSTANTIVE PROGRAM MODIFICATION
This form is used to request substantive changes in already existing programs (majors, minors, specializations).

1. INSTITUTION: SDSM&T

2. CURRENT PROGRAM NAME: M.S. in Geology and Geological Engineering

3. THIS PROPOSAL DEALS WITH A CHANGE IN:
   Distribution of Credits
   - total credits required within the discipline
   - total credits of supportive course work
   - total credits of elective course work
   - total credits required for program
   - Program name
   - Existing specialization
   - Addition of specialization
   - Other (explain)

4. LEVEL:
   - Certificate
   - Associate Degree
   - Bachelor’s Degree
   - Master’s Degree
   - Doctoral Degree

5. CATEGORY:
   - Minor
   - Major
   - Specialization

6. EFFECTIVE DATE OF CHANGE: Fall 2014

7. IF A NAME CHANGE IS PROPOSED, THIS WILL OCCUR:
   - on the effective date for all students
   - on the effective date for students new to the program
     (enrolled students will graduate from existing program)
8. PRIMARY ASPECTS OF THE MODIFICATION:

<table>
<thead>
<tr>
<th>Current Program Name:</th>
<th>Proposed Program Name:</th>
</tr>
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<tbody>
<tr>
<td>No accelerated program currently exists for Geology &amp; Geological Engineering</td>
<td>Program requirements for Accelerated MS</td>
</tr>
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The accelerated BS/MS program is designed to permit qualified students to shorten the expected time to an MS degree by counting approved courses towards both the BS and MS degrees. Students entering the accelerated MS program must satisfy all requirements expected of traditional MS students, including writing and defending a thesis. The accelerated BS/MS program is governed by campus-wide policies as stated in the Graduate section of the catalog. The following additional guidelines and policies pertain to the accelerated programs within the Department of Geology and Geological Engineering.

1. Up to nine credits of approved courses may be double-counted. To be double-counted, the courses must be GEOL or GEOE courses taken at the graduate level, which includes 400/500-level courses taken at the 500-level, or 600-level courses.

2. The student must maintain a 3.0 cumulative GPA on the undergraduate and graduate transcripts to remain eligible for the accelerated program. If the final cumulative GPA for the BS degree and the cumulative graduate GPA both fall below 3.0 at the time of completion of the BS degree, the department reserves the right to drop the student from the accelerated BS/MS program. In this case, the student may make a new application to be admitted to the regular MS program, but no double-counted courses will be permitted.

| Total number of hours required for major, minor, or specialization | 30 |
| Total number of hours required for degree | 30 |

9. EXPLANATION OF THE CHANGE:
The Dept of Geology and Geological Engineering is proposing to participate in the Accelerated BS/MS program.

Dr. Heather Wilson  
Institutional Authorization (President or Designee)  
09/30/2013  
Date Submitted
South Dakota Board of Regents

EXISTING PROGRAM: SUBSTANTIVE PROGRAM MODIFICATION
This form is used to request substantive changes in already existing programs (majors, minors, specializations).

1. INSTITUTION:  SDSM&T

2. CURRENT PROGRAM NAME:  M.S. in Paleontology

3. THIS PROPOSAL DEALS WITH A CHANGE IN:
   Distribution of Credits
   _____ total credits required within the discipline  _____ Program name
   _____ total credits of supportive course work  _____ Existing specialization
   _____ total credits of elective course work  _____ Addition of specialization
   _____ total credits required for program  Other (explain)

4. LEVEL:
   _____ Certificate
   _____ Associate Degree  _____ Minor
   _____ Bachelor’s Degree  _____ Major
   _____ Master’s Degree  _____ Specialization
   x _____ Doctoral Degree

5. CATEGORY:
   _____ Minor
   x _____ Major
   _____ Specialization

6. EFFECTIVE DATE OF CHANGE:  Fall 2014

7. IF A NAME CHANGE IS PROPOSED, THIS WILL OCCUR:
   _____ on the effective date for all students
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<table>
<thead>
<tr>
<th>Total number of hours required for major, minor, or specialization</th>
<th>30*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of hours required for degree</td>
<td>30*</td>
</tr>
</tbody>
</table>

9. EXPLANATION OF THE CHANGE: The Dept of Geology and Geological Engineering is proposing to participate in the Accelerated BS/MS program.

- The Paleo MS currently requires 32 credits; however, a program modification is simultaneously being submitted that will reduce it to 30 cr hours. The accelerated BS/MS being proposed in this form does not alter the total number of credits in the program, but will passively apply to whatever the program credits requirements are.
Dr. Heather Wilson
Institutional Authorization (President or Designee) 09/30/2013

Date Submitted
South Dakota Board of Regents

EXISTING PROGRAM: SUBSTANTIVE PROGRAM MODIFICATION
This form is used to request substantive changes in already existing programs (majors, minors, specializations).

1. INSTITUTION: SDSM&T

2. CURRENT PROGRAM NAME: M.S. in Paleontology

3. THIS PROPOSAL DEALS WITH A CHANGE IN:
   Distribution of Credits
   ____ total credits required within the discipline
   ____ total credits of supportive course work
   x  total credits of elective course work
   x  total credits required for program
   ____ Program name
   ____ Existing specialization
   ____ Addition of specialization
   ____ Other (explain)

4. LEVEL:
   ____ Certificate
   ____ Associate Degree
   ____ Bachelor’s Degree
   x  Master’s Degree
   ____ Doctoral Degree

5. CATEGORY:
   ____ Minor
   x  Major
   ____ Specialization

6. EFFECTIVE DATE OF CHANGE: Fall 2014

7. IF A NAME CHANGE IS PROPOSED, THIS WILL OCCUR:
   ____ on the effective date for all students
   ____ on the effective date for students new to the program
   (enrolled students will graduate from existing program)

8. PRIMARY ASPECTS OF THE MODIFICATION:
### Existing Curriculum

**Current Program Name:** MS Paleontology

<table>
<thead>
<tr>
<th>Pre</th>
<th>Num</th>
<th>Title</th>
<th>Cr Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL</td>
<td>700</td>
<td>Research Methods</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>Electives including:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GEOL 771: Paleobiology</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>Field course</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>GEOL 771L: Paleobiology Lab</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>Computational course</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GEOL 571: Field Paleontology</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td>GEOL 604: Adv. Field Geol.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taxonomic course</td>
<td>24-26</td>
</tr>
<tr>
<td>GEOL</td>
<td>798</td>
<td>Research</td>
<td>6-8</td>
</tr>
</tbody>
</table>

**Total number of hours required for major, minor, or specialization:** 32

**Total number of hours required for degree:** 32

### Proposed Curriculum (Highlight Changes)

**Proposed Program Name:**

<table>
<thead>
<tr>
<th>Pre</th>
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<tr>
<td>GEOL</td>
<td>700</td>
<td>Research Methods</td>
<td>1</td>
</tr>
<tr>
<td>GEOL</td>
<td>771</td>
<td>Paleobiology</td>
<td>3</td>
</tr>
<tr>
<td>GEOL</td>
<td>771L</td>
<td>Paleobiology Lab</td>
<td>1</td>
</tr>
<tr>
<td>GEOL</td>
<td>571</td>
<td>Field Paleontology</td>
<td>2</td>
</tr>
<tr>
<td>GEOL</td>
<td>604</td>
<td>Adv. Field Geol.</td>
<td>3</td>
</tr>
<tr>
<td>GEOL</td>
<td>798</td>
<td>Research</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total number of hours required for major, minor, or specialization:**

**Total number of hours required for degree:** 30

9. **EXPLANATION OF THE CHANGE:**

The MS in Paleontology curriculum is being changed to replace courses emphasizing description and memorization with those emphasizing concept and hypothesis development, analytical and quantitative techniques and a broader scope than vertebrate paleontology. The program is also designed to more effectively utilize the varied expertise of the current paleontology faculty. Cumulative credits are being lowered to 30 to be consistent with Graduate School standard requirements.

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Dr. Heather Wilson

Institutional Authorization (President or Designee) 09/30/2013

Date Submitted