BACHELOR OF SCIENCE DEGREE
BIOLOGICAL SCIENCE-INTERDEPARTMENTAL
COORDINATE MAJOR
(RECOMMENDED FOR SECONDARY EDUCATION ONLY)
FOR ADDITIONAL INFORMATION, PLEASE CONTACT THE COLLEGE OF NATURAL SCIENCE

(1) UNIVERSITY REQUIREMENTS:

Writing Requirement
Tier I: LB 133 4
Tier II: Satisfied by completing the Lyman Briggs College History, Philosophy and Sociology of Science and Senior requirements listed below.

Integrative Studies in Arts & Humanities (IAH)
IAH 201-210* 4
IAH 211-241* † 4

Integrative Studies in Social, Behavioral & Economic Sciences (ISS)
ISS 200-level course* 4
ISS 300-level course* ‡ 4

*National, International, & Multicultural Diversity
Students must include at least one “N” course and one “I” course in their Integrative Studies programs. A “D” course may meet either an “N” or an “I” requirement, but not both.

†Beginning Summer 2013, LB 331, 333, and 336 will fulfill the IAH "B" university requirement (IAH 211 or higher). Please consult your LBC advisor for specific details for your program.

‡Beginning Summer 2013, LB 332, 334, and 335 will fulfill the ISS 300-level university requirement. Please consult your LBC advisor for specific details for your program.

Mathematics, Biological and Physical Sciences
Satisfied by the Lyman Briggs College requirements in Mathematics, Biological and Physical Sciences (see below).

Minimum number of credits required: 120
Minimum cumulative and major grade point average: 2.0

(2) LYMAN BRIGGS COLLEGE REQUIREMENTS:

Biological Sciences (9 cr.)
Complete ONE of the following groups of courses
(1) LB 144 & 145 9
(2) BS 161, 162, 171, 172 10

Chemistry (8-9 cr.)
Complete ONE of the following groups of courses
(1) LB 171, 171L, 172, & 172L 9
(2) CEM 141, 142, 161, & 162 9
(3) CEM 151, 152, & 161 9

Physics (8 cr.)
Complete ONE of the following groups of courses
(1) LB 273, 274 8
(2) PHY 183, 184, 191, & 192 10
(3) PHY 231, 232, 251, & 252 8*

*Students can substitute PHY 191 & 192 for 251 & 252

Mathematics (6-7 cr.)
Complete ONE of the following groups of courses
(1) LB 118 & 119 8
(2) MTH 132 & 133 7
(3) LB 118 & STT 231 7
(4) MTH 132 & STT 231 7

History, Philosophy & Sociology of Science (11-12 cr.)
LB 133 4
LB 330-336, 355, 490E; ENG 473A; HST 425; SOC 368 7-8

Senior Seminar (4 cr.)
LB 492 4
**3. MAJOR REQUIREMENTS**

Complete ALL of the following courses (30 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Chemistry I</td>
<td>CEM 251</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry II</td>
<td>CEM 252</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Organic Chemistry Lab I</td>
<td>CEM 255</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Quantitative Analysis</td>
<td>CEM 262</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Intro Physiology</td>
<td>PSL 250</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Science Laboratories for Secondary Schools</td>
<td>SME 401</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Fundamental Genetics</td>
<td>ZOL 341</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Ecology</td>
<td>ZOL 355</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Ecology Lab</td>
<td>ZOL 355L</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Evolution</td>
<td>ZOL 445</td>
<td>3</td>
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</table>

Complete ONE of the following courses (3 or 4 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Plant Physiology</td>
<td>PLB 301</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Plant Pathology</td>
<td>PLB 405</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Plant Systematics</td>
<td>PLB 418</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Plant Structure and Function</td>
<td>PLB 434</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Complete ONE of the following sets of courses (8 cr.)

**1. Set One**

Complete TWO of the following courses (8 cr.)

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<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Basic Biochemistry</td>
<td>BMB 401</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Histology</td>
<td>ZOL 408</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Cells and Development</td>
<td>ZOL 425</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**2. Set Two**

Complete ALL of the following courses (4 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microbiology</td>
<td>MMG 301</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Lab for General and Allied Health Microbiology</td>
<td>MMG 302</td>
<td>1</td>
<td></td>
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</tbody>
</table>

Complete ONE of the following courses (4 cr.)

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<td>Cells and Development</td>
<td>ZOL 425</td>
<td>4</td>
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</tr>
</tbody>
</table>

**4. ADDITIONAL REQUIREMENTS FOR TEACHER CERTIFICATION**

Complete ALL of the following courses (21 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflections on Learning</td>
<td>TE 150</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Human Diversity, Power, and Opportunity in Social Institutions</td>
<td>TE 250</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Learners and Learning in Context (W)</td>
<td>TE 302</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Teaching of Subject Matter to Diverse Learners (W)</td>
<td>TE 407</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Crafting Teaching Practice (W)</td>
<td>TE 408</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Students wishing to complete requirements for Teacher certification must obtain formal admission into the College of Education.

**IMPORTANT**: These guidelines are presented for planning purposes only. Students MUST consult a department advisor for confirmation of major requirements.