BACHELOR OF SCIENCE DEGREE
PHYSICAL 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
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
(2) BS 161, 162, 171, & 172

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

Physics (8 cr.)
Complete ONE of the following groups of courses
(1) LB 273, 274
(2) PHY 183, 184, 191, & 192

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

History, Philosophy & Sociology of Science (10-11 cr.)
LB 133
LB 330-336, 355, 490E; ENG 473A; HST 425; SOC 368

Senior Seminar (4 cr.)
LB 492

8
(3) MAJOR REQUIREMENTS

Complete ALL of the following courses (38 cr.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEM 251</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CEM 252</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CEM 255</td>
<td>Organic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CEM 262</td>
<td>Quantitative Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CEM 383</td>
<td>Introductory Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>LB 220</td>
<td>Calculus III</td>
<td>4*</td>
</tr>
<tr>
<td>MTH 235</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>PHY 215</td>
<td>Thermodynamics &amp; Modern Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHY 431</td>
<td>Optics I</td>
<td>3</td>
</tr>
<tr>
<td>PHY 440</td>
<td>Electronics</td>
<td>4</td>
</tr>
<tr>
<td>SME 401</td>
<td>Science Laboratories for Secondary Schools</td>
<td>4</td>
</tr>
<tr>
<td>PHY/###</td>
<td>Additional elective in PHY or CEM as Approved by science education advisor</td>
<td>3</td>
</tr>
<tr>
<td>CEM</td>
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<td></td>
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</tbody>
</table>

* MTH 234 can be substituted for LB 220

(4) ADDITIONAL REQUIREMENTS FOR TEACHER CERTIFICATION

Complete ALL of the following courses (21 cr.)

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