# Bachelor of Science Degree

## Environmental Biology/Zoology Coordinate Major

For additional information, please contact the [Department of Zoology](#).

## 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*
- IAH 211-241* †

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

*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 (9 cr.)
Complete ONE of the following groups of courses
- (1) LB 171 & 171L*
- (2) CEM 141 & 161*

### Physics (8-10 cr.)
Complete ONE of the following groups of courses
- (1) LB 273, 274*
- (2) PHY 231, 232, 251, & 252*

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

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

### Senior Seminar (4 cr.)
- LB 492

*Chemistry, Physics and Mathematics courses also satisfy graduation requirements for the major

†LB Chemistry requirement met with completion of CEM 251
MAJOR REQUIREMENTS

Complete ALL of the following courses (24 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>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>CSS 210</td>
<td>Fundamentals of Soil Science</td>
<td>3</td>
</tr>
<tr>
<td>PLB 441</td>
<td>Plant Ecology</td>
<td>3</td>
</tr>
<tr>
<td>IBIO 306</td>
<td>Invertebrate Biology</td>
<td>4</td>
</tr>
<tr>
<td>IBIO 341</td>
<td>Fundamental Genetics</td>
<td>4</td>
</tr>
<tr>
<td>IBIO 355</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>IBIO 355L</td>
<td>Ecology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>IBIO 445</td>
<td>Evolution</td>
<td>3</td>
</tr>
<tr>
<td>IBIO 483</td>
<td>Environmental Physiology</td>
<td>4</td>
</tr>
</tbody>
</table>

ENT 404 may be substituted for IBIO 306; FOR 404 may be substituted for PLB 441.

Complete ONE of the following courses (4 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>FW 471</td>
<td>Ichthyology</td>
<td>4</td>
</tr>
<tr>
<td>IBIO 360</td>
<td>Biology of Birds</td>
<td>4</td>
</tr>
<tr>
<td>IBIO 365</td>
<td>Biology of Mammals</td>
<td>4</td>
</tr>
<tr>
<td>IBIO 384</td>
<td>Biology of Amphibians &amp; Reptiles</td>
<td>4</td>
</tr>
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</table>

Complete ONE course from each of the following groups (9-11 cr.)

1. PLB 218 Plants of Michigan 3
   PLB 418 Plant Systematics 3
2. FW 420 Stream Ecology 3
   PLB 424 Algal Biology 4
   IBIO 353 Marine Biology 4
   IBIO 485 Tropical Biology 3
3. FW 416 Marine Ecosystem Management 3
   FW 472 Limnology 3
   GLG 421 Environmental Geochemistry 4

Students must complete a minimum of 33 credits in Zoology courses. Zoology courses that are not listed above must be approved in writing by the student's academic advisor. Courses offered by other departments may be substituted for Zoology courses with the written approval of the student's academic advisor.

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