Department of Biological Sciences  
Requirements for the Major  
(for freshmen beginning August 2012)

Core Curriculum  
General Requirements  
Credits  
FYS 101 First-Year Seminar  3  
FYS 102 First-Year Seminar  3  
COM 102 Public Speaking (only rqd for transfer students w/o FYS)  2  
Two semesters Global & Historical Studies  6  
(GHS 201-209; If 203 then not 209)  
PWB 101-166 (choose one) Physical Well Being  1  

Distribution Requirements  
Credits  
Text & Ideas: Humanities  3  
Perspectives in the Creative Arts  3  
Social World: Social Sciences  3  
Analytical Reasoning: Math  3  

Other Course Requirements  
Liberal Arts and Sciences  
Credits  
Foreign Language  6-14  
(Two courses at the 200-level or above)

Biology Requirements  
A total of 38 biology credit hours are required\(^1\)\(^2\). All first year students must complete BI 111 – Contemporary Issues in Biology. Subsequently, all majors must complete three Fundamentals courses - BI 201, 202, and 203. A minimum of two Fundamentals courses serve as the prerequisites for all other majors-level biology courses and students must complete BI 111 or have sophomore standing to enroll in the Fundamentals courses. All Fundamentals courses must be completed by the end of a student's second year in the major and BI 202 must be completed before BI 203. All students must also complete BI 299 – Biology Seminar (pass/fail) in the spring semester of their second year in the major. To acquire the remaining credit hours for the major, students must take biology electives at the 300 level or above; at least four of these electives must be lab courses\(^3\). One of the electives taken must be an organism-based course chosen from the following: BI 301, BI 302, BI 311 or BI 438. Students will be allowed to use a maximum of three hours of independent study credit, internship credit, research or honors thesis credit toward the 38-hour minimum required for the biology major. All senior biology majors must complete BI 480 – Senior Biology Capstone.

Required courses:  
BI 111 Contemporary Issues in Biology (3 cr.; first semester majors and exploratory students only; students joining the major in their sophomore year or later are exempt from this course)  
BI 201 Ecology and Evolutionary Biology - Fundamentals (5 cr.)  
BI 202 Cellular and Molecular Biology - Fundamentals (4 cr.)  
BI 203 Genetics – Fundamentals (4 cr.)  
BI 299 Biology Seminar (1 cr. P/F)  
BI 480 Senior Biology Capstone (3 cr.)

Note that ALL BI courses numbered 300 and above require a minimum of TWO Fundamentals courses as prerequisites. Specific Fundamentals prerequisites are listed in parentheses.

BI 301* Principles of Zoology (BI 201)  
BI 302* Principles of Botany (BI 201)  
BI 306 Mammalogy (BI 201)  
BI 307 Vertebrate Biology (BI 201)
BI 308  Tropical Field Biology (BI 201)
BI 309  Local Flora (BI 201)
BI 311*  Biology of Algae and Fungi (BI 201)
BI 320  Animal Behavior (BI 201)
BI 323  Principles of Immunology (BI 105 or BI 202)
BI 339  Philosophy of Biology (two Fundamentals courses or by permission of the instructor)
BI 401-403 Independent Study
BI 405-409 Topics in Biology (two Fundamentals courses or by permission of the instructor)
BI 411  Principles of Physiology (BI 202)
BI 413  Vertebrate Histology and Microtechnique (BI 202)
BI 418  Population and Community Ecology (BI 201)
BI 419  Conservation Biology (BI 201)
BI 421  Landscape Ecology (BI 201)
BI 430  Developmental Biology (BI 203)
BI 431  Plant Development (BI 203)
BI 432  Plant Physiology (BI 202)
BI 435  Molecular Genetics (BI 203)
BI 436  Genomics, Bioinformatics and Gene Evolution (BI 203)
BI 438*  Microbiology (BI 202 and 203)
BI 440  Practical Molecular Biology (BI 202 and 203)
BI 480  Biology Capstone (BI 201, 202, and 203)
BI 490  Internship in Biological Sciences (two Fundamentals courses or by permission of the instructor)
BI 499  Honors Thesis (BI 201, 202, and 203)

*Designates course that satisfies the organism requirement

1 In addition, all biology majors must take general chemistry (CH105/106 or CH107).
2 Students must earn a C- or better in each biology course to count it towards the major.
3 BI 325 cannot be counted toward the 38-hour minimum required for the biology major.

Credits to complete the 38 credit major:

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI 111</td>
<td>3</td>
</tr>
<tr>
<td>BI 201</td>
<td>5</td>
</tr>
<tr>
<td>BI 202</td>
<td>4</td>
</tr>
<tr>
<td>BI 203</td>
<td>4</td>
</tr>
<tr>
<td>BI 299</td>
<td>1</td>
</tr>
<tr>
<td>BI 480</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20 credits</strong></td>
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</tbody>
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<table>
<thead>
<tr>
<th>Electives</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 with lab (4 cr. Each)</td>
<td>16</td>
</tr>
<tr>
<td>Additional electives</td>
<td>2‡</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**TOTAL FOR THE MAJOR: 38 CREDITS**

$Students exempt from BI 111 will need 5 elective hours in this category.

Biology Minor
Beginning Fall 2012

The minor will consist of 21 credit hours.

Students must complete the three Fundamentals courses (BI 201, 202, and 203) and two BI elective courses with lab at the 300 level or above (excluding BI 325).