BIOLOGY, B.A.

The Department offers a full range of courses leading to the B.A. degree. The degree may lead to further study in graduate school, medicine, dentistry, veterinary medicine, medical technology, biotechnology, and environmental biology. See also Preprofessional Programs. Both study and laboratory facilities are available to advanced undergraduates.

Overall Requirements
- 120 credit hours, to include at least 36 credits at or above the 300 course level; note that licensure programs may require hours beyond the minimum listed.
- Students must have a grade point average of at least 2.0 in Biology courses completed at UNC Greensboro.
- A minimum of 30 credits of Biology course above the 100 level.
- A maximum of 4 credits at the 200 level may be counted toward the major.

Degree Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td></td>
<td>University Requirements</td>
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<tr>
<td></td>
<td>College of Arts and Sciences Additional Requirements (CIC)</td>
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<tr>
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<td>General Education Requirements (MAC)</td>
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<tr>
<td></td>
<td>Biology Major with Comprehensive Science High School Teaching Licensure</td>
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</table>

Major Requirements

Program Qualifications
- BIO 111 Principles of Biology I
- BIO 111L Principles of Biology I Laboratory
- BIO 112 Principles of Biology II
- BIO 112L Principles of Biology II Laboratory

Core Courses
- BIO 301 Principles of Ecology
- BIO 355 Cell Biology
- BIO 392 Genetics
- BIO 330 Evolution
- BIO 315 Ecology and Evolution Laboratory
- BIO 375 Cell Biology and Genetics Laboratory

Related Area Requirements
- CHE 111 General Chemistry I
- CHE 112 General Chemistry I Laboratory
- CHE 114 General Chemistry II
- CHE 115 General Chemistry II Laboratory
- MAT 183 Mathematics for the Life Sciences
- MAT 184 Calculus for the Life Sciences

Recommended
The department highly recommends the course listed below in addition to the required courses listed above.

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CHE 351</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHE 352</td>
<td>Organic Chemistry II</td>
<td></td>
</tr>
<tr>
<td>CHE 354</td>
<td>Organic Chemistry Laboratory</td>
<td></td>
</tr>
<tr>
<td>MAT 196</td>
<td>Calculus A</td>
<td></td>
</tr>
<tr>
<td>MAT 296</td>
<td>Calculus B</td>
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<tr>
<td>PHY 211</td>
<td>General Physics I</td>
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<tr>
<td>PHY 212</td>
<td>General Physics II</td>
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</tbody>
</table>

Optional Concentration
The optional concentration as detailed following the major requirements may be added, but is not required.

- Biology Major with Comprehensive Science High School Teaching Licensure

Electives
Electives sufficient to complete the 120 credit hours required for the degree.

Biology Major with Comprehensive Science High School Teaching Licensure Concentration Requirements
The Comprehensive Science High School Licensure (BIOL) program provides a strong background in biology as well as licensure for high school biology teaching. In addition, successful completion of this program qualifies candidates to teach other high school science subjects as well.

The Department offers a full range of courses leading to the B.A. degree. The degree may lead to further study in graduate school, medicine, dentistry, veterinary medicine, medical technology, biotechnology, and environmental biology. See also Preprofessional Programs. Both study and laboratory facilities are available to advanced undergraduates.

Students seeking admission to the UNC Greensboro Teacher Education Program with a major in Biology must meet the following minimum requirements of the Department of Biology.

1. Completion of a minimum of 9 credit hours in biology courses, with at least six of those hours from courses taken at UNC Greensboro

2. A grade point average of at least 2.50 for biology courses completed at UNC Greensboro
Students already admitted to the UNC Greensboro Teacher Education Program with a major in Biology who are seeking admission to Student Teaching must meet the following requirements of the Department of Biology:

1. Completion of a minimum of 18 credits of biology courses, with at least 15 of those credits from courses taken at UNC Greensboro

2. A grade point average of at least 2.50 for biology courses completed at UNC Greensboro

<table>
<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>GES 103</td>
<td>Introduction to Earth Science</td>
<td></td>
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<tr>
<td>GES 111</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td>GES 205</td>
<td>Environmental Change: Its Nature and Impact</td>
<td></td>
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<tr>
<td>GES 319</td>
<td>Weather and Climate</td>
<td></td>
</tr>
<tr>
<td>GES 314</td>
<td>Physical Geography: Landscape Processes</td>
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</tbody>
</table>

*The following courses must be taken in a specified sequence terminating in student teaching in the spring semester of the senior year. See the online Secondary Education Handbook for more information.*

- TED 435 Literacy in the Content Area
- ERM 401 Assessment I: Accountability in Our Nation’s Schools
- ERM 402 Assessment II: Standardized Tests
- ERM 403 Assessment III: Classroom Assessment
- TED 401 Child and Adolescent Development and Learning
- SES 401 Understanding and Teaching Students with Disabilities in Inclusive Settings
- TED 403 Teaching English Learners with Diverse Abilities
- TED 445 Human Diversity, Teaching, and Learning
- TED 459 Teaching Practices and Curriculum in Science
- TED 465 Student Teaching: Secondary School
- TED 466 Student Teaching Seminar
- LIS 120 Introduction to Instructional Technology for Educational Settings (strongly recommended)

*Only 6 credits may be counted toward the 30 credit minimum in the Biology major

**Disciplinary Honors in Biology**

**Requirements**

* A minimum of 18 credit hours as defined below.
* UNC Greensboro cumulative GPA of 3.30 or better or, for transfer students, cumulative GPA of 3.30 or better from all prior institutions.
* A grade of B or higher in all course work used to satisfy the Honors requirements in Biology.

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>HSS 490</td>
<td>Senior Honors Project</td>
<td>6-9</td>
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