ENVIRONMENT AND SUSTAINABILITY, B.A.

Overall Requirements

- 120 credit hours, to include at least 36 credits at or above the 300 course level
- A minimum of 65 credits toward the major, comprised of core courses (37 credits) and concentration-specific options (28 credits).
- Only grades of C- or higher will count toward completion of the required core courses in the major as well as BIO 105/105L, BIO 111/111L, and BIO 112/112L used toward completion of the concentration requirements.

Degree Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>University Requirements (<a href="https://catalog.uncg.edu/academic-regulations-policies/undergraduate-policies/">https://catalog.uncg.edu/academic-regulations-policies/undergraduate-policies/</a></td>
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<td>General Education Requirements (MAC) (<a href="https://catalog.uncg.edu/academic-regulations-policies/undergraduate-policies/general-education-program/#generaleducationcorerequirementstext">https://catalog.uncg.edu/academic-regulations-policies/undergraduate-policies/general-education-program/#generaleducationcorerequirementstext</a>)</td>
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<td>College of Arts and Sciences Additional Requirements (CIC) (<a href="https://catalog.uncg.edu/arts-sciences/#additionalundergraduaterequirementstext">https://catalog.uncg.edu/arts-sciences/#additionalundergraduaterequirementstext</a>)</td>
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</tbody>
</table>

Major Requirements

**Core Courses**

- **Geography, Environment, and Sustainability**
  - GES 103 & 103L Introduction to Earth Science and Earth Science Laboratory
  - GES 162 Introduction to Sustainability
  - GES 164 Introduction to Environment
  - GES 325 Introduction to Spatial Analysis
  - GES 270 Environment and Experience
  - GES 482 Topics in Ethics and Aesthetics
  - GES 484 Topics in Development and Economics
  - GES 486 Topics in Equity and Society
  - GES 488 Topics in Environmental Sciences
  - **Chemistry**
    - CHE 252 Chemistry and the Human Environment
  - **Philosophy**
    - PHI 363 Environmental Ethics
  - **Select 3 credits from the following GES courses**
    - GES 260 Sustainable Campus Operations
    - GES 367 Research in Environment & Sustainability
    - GES 462 Sustainability
    - GES 464 Environment

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credit Hours</th>
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<tr>
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<td>Environmental Science</td>
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<td>Select 13 credits from the following:</td>
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<tr>
<td></td>
<td>BIO 301 Principles of Ecology</td>
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<td></td>
<td>BIO 315 Ecology and Evolution Laboratory</td>
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<tr>
<td></td>
<td>BIO 361 Biology and Conservation of Sea Turtles</td>
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<td></td>
<td>BIO 420 Marine Biology</td>
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<td></td>
<td>BIO 422 Plant Diversity</td>
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<td></td>
<td>BIO 423 Landscape Ecology Laboratory</td>
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<td></td>
<td>BIO 426 Conservation Biology</td>
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<td></td>
<td>BIO 427 Landscape Ecology</td>
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<td>BIO 429 Aquatic Ecology</td>
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<td>BIO 431 The Biosphere</td>
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<td>BIO 432 Aquatic Ecology Lab</td>
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<td>BIO 438 Animal Behavior</td>
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<td></td>
<td>BIO 441 Invertebrate Zoology</td>
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<td></td>
<td>BIO 444 Entomology</td>
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<td></td>
<td>BIO 451 Vascular Plant Systematics</td>
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<td></td>
<td>BIO 470 Vertebrate Zoology</td>
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<td>BIO 488 Essentials of Toxicology</td>
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<td></td>
<td>CHE 205 Introductory Organic Chemistry</td>
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<td>CHE 331 Quantitative Analysis</td>
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<td></td>
<td>CHE 351 Organic Chemistry I</td>
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<td>CHE 352 Organic Chemistry II</td>
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<td></td>
<td>GES 305 Environmental Hazards Assessment</td>
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<td></td>
<td>GES 319 Weather and Climate &amp; 319L and Climatology Laboratory</td>
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<td></td>
<td>GES 312 Geomorphology of North America</td>
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<td></td>
<td>GES 313 Natural Resource Regions of North America</td>
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<td></td>
<td>GES 314 Physical Geography: Landscape Processes</td>
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<td>GES 314L Physical Geography Laboratory</td>
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<td>GES 328 The Water Planet</td>
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<td>GES 330 Elements of Hydrology</td>
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<td></td>
<td>GES 358 Geographic Information Systems</td>
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</tbody>
</table>

Concentrations

Students must select one of the concentrations as detailed following the major requirements.

- Natural Sciences
- Equity, Development, and Ethics

Electives

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

**Natural Sciences Concentration Requirements**

In addition to the required 28 credits of Options and Electives specified below, all students in the Natural Sciences concentration are required to have a minor in Biology. All courses in the Biology minor already on the Environmental Science Options and Elective lists below will count toward the requirements for the Natural Sciences concentration.

A grade of C- or higher is required in BIO 105/105L, BIO 111/111L and BIO 112/112L.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>GES 359</td>
<td>Remote Sensing of Environment</td>
</tr>
<tr>
<td>GES 418</td>
<td>Biogeography</td>
</tr>
<tr>
<td>GES 419</td>
<td>Advanced Weather and Climate-Synoptic Climatology</td>
</tr>
<tr>
<td>ATY 362</td>
<td>Methods in Cultural Anthropology</td>
</tr>
<tr>
<td>ATY 377</td>
<td>Disaster, Self, and Society</td>
</tr>
<tr>
<td>ATY 420</td>
<td>Economic Anthropology</td>
</tr>
<tr>
<td>ATY 426</td>
<td>Food and Culture in a Global Context</td>
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<tr>
<td>ATY 450</td>
<td>Environmental Anthropology</td>
</tr>
<tr>
<td>ATY 459</td>
<td>Anthropology of Global Water, Sanitation and Hygiene (WASH)</td>
</tr>
<tr>
<td>ATY 465</td>
<td>Medical Anthropology</td>
</tr>
<tr>
<td>CTR 444</td>
<td>Recreation, Parks, and Health</td>
</tr>
<tr>
<td>GES 302</td>
<td>Urban Geography: Sustainable Land Use</td>
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<tr>
<td>GES 303</td>
<td>World Population Problems</td>
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<tr>
<td>GES 304</td>
<td>Sustainable Transport and Mobility</td>
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<tr>
<td>GES 322</td>
<td>Research Methods in Spatial Science</td>
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<tr>
<td>GES 331</td>
<td>Sustainable Tourism and Transportation</td>
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<tr>
<td>GES 402</td>
<td>Sustainable Urban Planning in an Entrepreneurial Environment</td>
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<tr>
<td>GES 405</td>
<td>Sustainable Regional Planning</td>
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<tr>
<td>GES 415</td>
<td>National Parks and Protected Areas</td>
</tr>
<tr>
<td>GES 432</td>
<td>Geography of Livable Cities</td>
</tr>
<tr>
<td>HEA 307</td>
<td>Global Health</td>
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<tr>
<td>HEA 315</td>
<td>Epidemiology</td>
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<td>HEA 316</td>
<td>Environmental Health</td>
</tr>
<tr>
<td>HIS 323</td>
<td>American Indians and Nature</td>
</tr>
<tr>
<td>HIS 334</td>
<td>United States Environmental History</td>
</tr>
<tr>
<td>PCS 406</td>
<td>Environmental Justice</td>
</tr>
<tr>
<td>PSC 312</td>
<td>Environmental Law and Policy</td>
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<tr>
<td>PSC 313</td>
<td>Natural Resources Law and Policy</td>
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<tr>
<td>SOC 328</td>
<td>Social Movements</td>
</tr>
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<td>SOC 330</td>
<td>Urban Society</td>
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<tr>
<td>SOC 346</td>
<td>Population Problems</td>
</tr>
<tr>
<td>SOC 370</td>
<td>Environmental Sociology</td>
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<tr>
<td>SOC 373</td>
<td>Green Criminology</td>
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<tr>
<td>SOC 377</td>
<td>Disaster, Self, and Society</td>
</tr>
<tr>
<td>SOC 421</td>
<td>Sem in Populat / Urbn Studies</td>
</tr>
<tr>
<td>BUS 130</td>
<td>Entrepreneurship in a Sustainable Global Environment</td>
</tr>
<tr>
<td>BUS 340</td>
<td>Social Entrepreneurship</td>
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<tr>
<td>ENT 440</td>
<td>Experiences in Sustainable Entrepreneurship</td>
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<tr>
<td>ECO 100</td>
<td>Economics of a Global Sustainable Society</td>
</tr>
<tr>
<td>STH 200</td>
<td>Introduction to Sustainable Development</td>
</tr>
<tr>
<td>STH 311</td>
<td>Sustainable Food and Craft Beverage</td>
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<td>STH 312</td>
<td>Hospitality Facilities Management</td>
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<td>STH 331</td>
<td>Sustainable Tourism and Transportation</td>
</tr>
<tr>
<td>STH 332</td>
<td>Sustainable Destination and Experience Management</td>
</tr>
</tbody>
</table>

**Ethics and Aesthetics**

Select 3 credits from the following:

- ARE 260  Art, Education, and Social Practice
- CST 420  Environmental Communication
- ENG 380  Literature and the Environment
- IAR 124  Introduction to Sustainable Design
- LLC 130  Global Green: Cultures of Production and/or Consumption
- MUS 326  Music and Environment
- PHI 338  Ethics and International Affairs
- PHI 361  Ethical Issues in Business
- PHI 322  Philosophy of the Arts
- REL 250  Religious Traditions and Care of the Earth
- VPA 324  The Arts as Social Change: Theory and Practice
- WGS 374  Ecofeminism
- WGS 375  Topics in Native American and Indigenous Studies

**Free Electives**

Select 6 credits from the following:

- ATY 113  Introduction to Cultural Anthropology
- ATY 153  Introduction to Biological Anthropology & 153L
d and Introduction to Biological Anthropology Laboratory
- BIO 111  Principles of Biology I & 111L and Principles of Biology I Laboratory *
- BIO 112  Principles of Biology II & 112L and Principles of Biology II Laboratory *
- BIO 497  Internship in Biology
- ECO 201  Principles of Microeconomics
- ECO 202  Principles of Macroeconomics
- ECO 300  The International Economy
- ELC 375  Philosophy of Education
- ENG 307  Public Advocacy and Argument
- ENG 327  Writing for Professionals and Entrepreneurs
- ENT 206  Start Something Globally Sustainable!
- GES 163  North Carolina Environments
- GES 205  Environmental Change: Its Nature and Impact
- GES 366  Internship in Environment & Sustainability
- GES 368  Individual Study in Environment & Sustainability
- GES 450  Applied Physical Geography
- GES 451  Seminar in Regional Geography
- GES 493  Honors Work
- IAR 221  History and Theory of Design I
- IAR 222  History and Theory of Design II
- NTR 103  Introduction to Food Science
- PHY 205  Conceptual Physics
- PHY 205L  Conceptual Physics Laboratory
- PSC 210  Introduction to Health Policies
- SOC 202  Social Problems in Global Context
- STH 201  Corporate Social Responsibility and Change Management

* A grade of C- or higher is required in BIO 111/BIO 111L and BIO 112/BIO 112L.
### Equity, Development, & Ethics Concentration Requirements

A grade of C- or higher is required in BIO 105/105L, BIO 111/111L and BIO 112/112L.

<table>
<thead>
<tr>
<th>Code</th>
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<tr>
<td>Select 4 credits of the following, with a minimum grade of C- in both lecture and lab:</td>
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<tr>
<td>BIO 105 &amp; 105L</td>
<td>Major Concepts of Biology and Major Concepts of Biology Laboratory *</td>
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</tr>
<tr>
<td>BIO 112 &amp; 112L</td>
<td>Principles of Biology II and Principles of Biology II Laboratory *</td>
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</tr>
</tbody>
</table>

### Environmental Science

Select 3 credits from the following:

- BIO 301 Principles of Ecology
- BIO 315 Ecology and Evolution Laboratory
- BIO 361 Biology and Conservation of Sea Turtles
- BIO 420 Marine Biology
- BIO 422 Plant Diversity
- BIO 426 Conservation Biology
- BIO 427 Landscape Ecology & BIO 423 and Landscape Ecology Laboratory
- BIO 429 Aquatic Ecology
- BIO 431 The Biosphere
- BIO 432 Aquatic Ecology Lab
- BIO 438 Animal Behavior
- BIO 441 Invertebrate Zoology
- BIO 444 Entomology
- BIO 451 Vascular Plant Systematics
- BIO 470 Vertebrate Zoology
- BIO 488 Essentials of Toxicology
- CHE 205 Introductory Organic Chemistry
- CHE 331 Quantitative Analysis
- CHE 351 Organic Chemistry I
- CHE 352 Organic Chemistry II
- GES 305 Environmental Hazards Assessment
- GES 319 Weather and Climate & 319L and Climatology Laboratory
- GES 312 Geomorphology of North America
- GES 313 Natural Resource Regions of North America
- GES 314 Physical Geography: Landscape Processes & 314L and Physical Geography Laboratory
- GES 328 The Water Planet
- GES 330 Elements of Hydrology
- GES 358 Geographic Information Systems
- GES 359 Remote Sensing of Environment
- GES 418 Biogeography
- GES 419 Advanced Weather and Climate-Synoptic Climatology

### Equity and Society

Select 6 credits from the following:

- ATY 362 Methods in Cultural Anthropology
- ATY 377 Disaster, Self, and Society

ATY 420 Economic Anthropology
ATY 426 Food and Culture in a Global Context
ATY 450 Environmental Anthropology
ATY 459 Anthropology of Global Water, Sanitation and Hygiene (WASH)
ATY 465 Medical Anthropology
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GES 303 World Population Problems
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SOC 328 Social Movements
SOC 330 Urban Society
SOC 346 Population Problems
SOC 370 Environmental Sociology
SOC 373 Green Criminology
SOC 377 Disaster, Self, and Society
SOC 421 Sem in Populatn / Urbn Studies

### Development and Economics

Select 6 credits from the following:

- BUS 130 Entrepreneurship in a Sustainable Global Environment
- BUS 340 Social Entrepreneurship
- ENT 440 Experiences in Sustainable Entrepreneurship
- ECO 100 Economics of a Global Sustainable Society
- STH 200 Introduction to Sustainable Development
- STH 311 Sustainable Food and Craft Beverage
- STH 312 Hospitality Facilities Management
- STH 331 Sustainable Tourism and Transportation
- STH 332 Sustainable Destination and Experience Management

### Ethics and Aesthetics

Select 6 credits from the following:

- ARE 260 Art, Education, and Social Practice
- CST 420 Environmental Communication
- ENG 380 Literature and the Environment
- IAR 124 Introduction to Sustainable Design
- LLC 130 Global Green: Cultures of Production and/or Consumption
MUS 326  Music and Environment
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Select 3 credits from the following:

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* A grade of C or higher is required in BIO 105/BIO 105L, BIO 111/BIO 111L and BIO 112/BIO 112L.

**Disciplinary Honors in Environment and Sustainability Requirements**

- A minimum of 12 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.

**Recognition**
Receive a Certificate of Disciplinary Honors in Environment and Sustainability Studies; have that accomplishment, along with the title of the Senior Honors Project, noted on the official transcript; and be recognized at a banquet held at the end of the spring semester.

**Honors Advisor**
Contact Aaron Allen at asallen@uncg.edu for further information and guidance about Honors in Environment and Sustainability Studies. To apply: [http://honorscollege.uncg.edu/forms/disc-application.pdf](http://honorscollege.uncg.edu/forms/disc-application.pdf)