

# ENVIRONMENT AND SUSTAINABILITY, B.A.

Students in the undergraduate B.A. in Environment and Sustainability work with diverse faculty and staff from across the campus and community in addition to their time in Departmental classes. The aims of this interdisciplinary program are (1) to learn how to gather and integrate information about environmental and sustainability problems from multiple disciplines, (2) to think critically about the causes of environmental and sustainability problems, (3) to propose effective and equitable solutions and evaluate their strengths and weaknesses, and (4) to communicate ideas clearly.

Students in the Program come from a variety of backgrounds, both culturally and disciplinarily, and participate regularly in internships and study abroad through Departmental and extramural offerings. Our classes require students to engage in field work as well as experiential learning. Every major receives the benefit of in-depth personalized advising every semester from permanent faculty who have received honors for their work in mentoring students.

Graduates will be well prepared for roles as educated citizens who are especially well informed about the environment and for numerous career paths that require a broad range of knowledge about environmental and sustainability issues. In addition to interdisciplinary core courses, the curriculum requires courses in biology, chemistry, geography, and philosophy, and students may elect to take courses in other disciplines, ranging from political science, history and sociology, to art, design and English, and to the natural and physical sciences. Graduates of environmental and sustainability programs go on to careers in non-profits, government, and the private sector, as well as to graduate studies in a variety of disciplines.

## Overall Requirements

- 120 credit hours, to include at least 36 credits at or above the 300 course level.
- A minimum of 53 credits toward the major and concentration, comprised of core courses in the major (43 credits) and concentration-specific requirements (10-20 credits).
  - Students must select a concentration, either in Natural Sciences or in Equity, Development, and Ethics.
    - Students in either concentration must select a minor, chosen from a list that is dependent on concentration.
- Only grades of C- or higher will count toward completion of the required courses in the major and in the concentration.

## Degree Program Requirements

Code	Title	Credit Hours
University Requirements ( <a href="https://catalog.uncg.edu/academic-regulations-policies/undergraduate-requirements/undergraduate-degrees-and-degree-requirements/">https://catalog.uncg.edu/academic-regulations-policies/undergraduate-requirements/undergraduate-degrees-and-degree-requirements/</a> )		
General Education Requirements (MAC) ( <a href="https://catalog.uncg.edu/academic-regulations-policies/undergraduate-requirements/general-education-program/#generaleducationcorerequirementstext">https://catalog.uncg.edu/academic-regulations-policies/undergraduate-requirements/general-education-program/#generaleducationcorerequirementstext</a> )		
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> )		

## Major Requirements

- Only grades of C- or higher will count toward completion of the required courses in the major and in the concentration.

Code	Title	Credit Hours
<b>Core Courses</b>		<b>19</b>
<i>Geography, Environment, and Sustainability</i>		
GES 103 & 103L	Introduction to Earth Science and Earth Science Laboratory	
GES 162	Introduction to Environment & Sustainability	
GES 270	Environment and Experience	
<i>Chemistry</i>		
CHE 252	Chemistry and the Human Environment	
<i>Philosophy</i>		
PHI 363	Environmental Ethics	
<i>Select 3 credits from the following GES courses: *</i>		
GES 163	North Carolina Environments	
GES 260	Sustainable Campus Operations	
GES 264	Introduction to Environment through Film	
GES 322	Research Methods & Data Analysis	
GES 325	Introduction to Spatial Analysis	
GES 367	Research in Environment & Sustainability	
GES 481	Topics in Sustainability and Environment	
<b>Ethics &amp; Aesthetics</b>		<b>6</b>
GES 482	Topics in Ethics and Aesthetics	
<i>Select 3 credits from the following interdisciplinary Ethics &amp; Aesthetics options: **</i>		
ARH 359	Art and/as Social Justice	
CST 420	Environmental Communication	
ENG 373	American Romanticism	
ENG 380	Literature and the Environment	
MUS 326	Music and Environment	
PHI 322	Philosophy of the Arts	
PHI 325	Introduction to the Philosophy of Science	
VPA 324	The Arts as Social Change: Theory and Practice	
WGS 374	Ecofeminism	
WGS 375	Topics in Native American and Indigenous Studies	
<b>Development &amp; Economics</b>		<b>6</b>
GES 484	Topics in Development and Economics	
<i>Select 3 credits from the following interdisciplinary Development &amp; Economics options: **</i>		
ECO 380	Environmental and Natural Resource Economics	
ENT 300	Ideas to Opportunities: Research Driven Feasibility Analysis	
ENT 340	Social Entrepreneurship	
ENT 440	Experiences in Sustainable Entrepreneurship	
HTM 314	Sustainable Food and Craft Beverage	
HTM 332	Sustainable Destination and Experience Management	
HTM 335	Sustainable Tourism and Transportation	
<b>Equity &amp; Society</b>		<b>6</b>
GES 486	Topics in Equity and Society	

Select 3 credits from the following interdisciplinary Equity & Society options:\*\*

ATY 377	Disaster, Self, and Society
ATY 426	Food and Culture in a Global Context
ATY 450	Environmental Anthropology
ATY 459	Anthropology of Global Water, Sanitation and Hygiene (WASH)
CTR 444	Recreation, Parks, and Health
GES 302	Urban Geography: Sustainable Land Use
GES 303	World Population Problems
GES 304	Sustainable Transport, Mobility, Wellbeing
GES 331	Sustainable Tourism and Transportation
GES 402	Sustainable Urban Planning in an Entrepreneurial Environment
GES 405	Sustainable Regional Planning
GES 415	National Parks and Protected Areas
GES 432	Geography of Livable Cities
HEA 316	Environmental Health
HIS 323	American Indians and Nature
HIS 334	United States Environmental History
PCS 406	Environmental Justice
PSC 312	Environmental Law and Policy
PSC 313	Natural Resources Law and Policy
SOC 370	Environmental Sociology
SOC 373	Green Criminology
SOC 377	Disaster, Self, and Society

#### Environmental Science 6

GES 488 Topics in Environmental Sciences

Select a minimum of 3 credits from the following interdisciplinary Environmental Science options:\*\*

BIO 301	Principles of Ecology
BIO 315	Ecology and Evolution Laboratory
BIO 361	Biology and Conservation of Sea Turtles
BIO 420	Marine Biology
BIO 426	Conservation Biology
BIO 427	Landscape Ecology
BIO 429	Aquatic Ecology
BIO 431	The Biosphere
BIO 445 & 445L	Disease Ecology and Disease Ecology Laboratory
BIO 456	Global Change
BIO 488	Essentials of Toxicology
CHE 331	Quantitative Analysis
CHE 351	Organic Chemistry I
CHE 352	Organic Chemistry II
GES 305	Environmental Hazards Assessment
GES 313	Natural Resource Regions of North America
GES 314	Physical Geography: Landscape Processes
GES 319 & 319L	Weather and Climate and Climatology Laboratory
GES 328	The Water Planet
GES 418	Biogeography

\* With advisor approval, students could instead select one of the following: GES 270, GES 366, GES 368, and either GES 462 or GES 464 (whichever is not required by concentration).

\*\* With advisor approval, students could instead select another interdisciplinary option not listed here.

## 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.

## Recommended MAC Courses

Students in the B.A. in Environment and Sustainability take four\* core classes that will satisfy four MAC competencies (Health and Wellness, Quantitative Reasoning\*, Critical Thinking and Inquiry in the Natural Sciences, and Data Analysis and Interpretation). The following **recommendations** are intended to suggest classes that incorporate interdisciplinary environmental and sustainability approaches and/or that have related skills that complement such studies in selected MAC areas:

- Oral Communication: ENG 123
- Civics & Community: ADS 205, HIS 200, LLC 140
- Critical Thinking & Inquiry in the Humanities and Fine Arts: IAR 124, PHI 121, PHI 261, PHI 262, REL 250
- Critical Thinking & Inquiry in the Social and Behavioral Sciences: ECO 201, GES 105, PCS 112
- Global Engagement and Intercultural Learning: ECO 100, ENT 130, ENT 206, GES 104, HTM 200, LLC 130

Instead of the above, students may choose any other MAC competency course that fulfills the relevant category.

\* STA 271 does not carry a MAC competency. Students taking STA 271 will not fulfill the MAC Quantitative Reasoning competency.

## Natural Sciences Concentration Requirements

- In addition to the required 19-20 credits specified below, all students in the Natural Sciences concentration are required to have a minor (or second major) in one of the listed areas. Any minor (or second major) courses already approved for inclusion in the Core of the major in Environment & Sustainability will count toward the requirements for both the major and the minor (or second major).
- Only grades of C- or higher will count toward completion of the required courses in the major and in the concentration.

Code	Title	Credit Hours
<b>Biology</b>		
BIO 111 & 111L	Principles of Biology I and Principles of Biology I Laboratory	13

BIO 112 & 112L	Principles of Biology II and Principles of Biology II Laboratory	
BIO 301	Principles of Ecology	
BIO 315	Ecology and Evolution Laboratory	

**Geography, Environment, and Sustainability 3**

GES 464 Environment

**Mathematics and Statistics 3-4**

*Select one option from the following:*

MAT 183 & 183L Mathematics for the Life Sciences and Mathematics for Life Sciences Lab  
STA 271 Fundamental Concepts of Statistics

**Minor**

Select one of the following minors: Biology, Chemistry, Computer Science, Mathematics, Statistics, or as approved by the Environment & Sustainability Program. Students pursuing a second major in one of these areas are exempt from the minor requirement.

### Equity, Development, & Ethics Concentration Requirements

- In addition to the required 10-11 credits specified below, all students in the Equity, Development, & Ethics concentration are required to have a minor (or second major) in one of the listed areas. Any minor (or second major) courses already approved for inclusion in the Core of the major in Environment & Sustainability will count toward the requirements for both the major and the minor (or second major).
- Only grades of C- or higher will count toward completion of the required courses in the major and in the concentration.

Code	Title	Credit Hours
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**Biology 4**

*Select 4 credits of the following:*

BIO 105 & 105L Science of Life in our World and Major Concepts of Biology Laboratory  
BIO 112 & 112L Principles of Biology II and Principles of Biology II Laboratory

**Geography, Environment, and Sustainability 3**

GES 462 Sustainability

**Mathematics and Statistics 3-4**

*Select one option from the following:*

CSC 105 Data, Computing, and Quantitative Reasoning  
MAT 183 & 183L Mathematics for the Life Sciences and Mathematics for Life Sciences Lab  
STA 108 Elementary Introduction to Probability and Statistics  
STA 271 Fundamental Concepts of Statistics

**Minor**

Select any minor except those offered by the Department of Geography, Environment, and Sustainability (i.e., except Climate Justice, Digital Earth Technologies, Environment, Geography, or Sustainability). Students pursuing a second major (except those in the Department of Geography, Environment, and Sustainability) are exempt from the minor requirement.

### 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.

Code	Title	Credit Hours
<b>Required 3-6</b>		
HSS 490 or GES 493	Senior Honors Project Honors Work	<b>3-6</b>
<b>6 credits of Honors course work in the major</b>		<b>6</b>
<b>3 credits of Honors course work in the major or another area</b>		<b>3</b>

### 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](mailto:asallen@uncg.edu) for further information and guidance about Honors in Environment and Sustainability Studies.

To apply: <https://honorscollege.uncg.edu/lloyd-international-honors-college/academics/admissions-scholarships/disciplinary-honors-admissions/>.