GEOGRAPHY, ENVIRONMENT, AND SUSTAINABILITY

Mission Statement
The Department of Geography, Environment, and Sustainability is dedicated to bettering our understanding of the locational dimensions of human behavior in their environmental context; to offer a curriculum where geographic concepts and methods are applied to understanding economic, environmental, and social problems at the urban and regional scale; and to promote international understanding through area studies. Thus, the purposes of the program are to contribute an important dimension to the university and economic development, environmental quality, population change, and social well-being in urban, rural, regional, and international contexts.

About
The Department of Geography, Environment, and Sustainability offers a program which has three principal objectives: to promote the understanding of the locational dimensions of human behavior in their environmental context; to offer a curriculum where geographic concepts and methods are applied to understanding economic, environmental, and social problems at the urban and regional scale; and to promote international understanding through area studies. Thus, the purposes of the program are to contribute an important dimension to the university student's liberal education and to provide practical training in important contemporary areas of concern as well as the background appropriate for certain vocations.

Graduating majors of the department have found careers in business and industry, in urban and regional planning agencies, in departments of federal and state governments, and in teaching. Job titles include city or regional planner, cartographer, demographer, resource analyst, land or economic developer, location analyst, and teacher. Many graduates find that an undergraduate degree in geography is an excellent foundation for advanced graduate work or professional training in planning, business or law.

Special facilities of the department include fully equipped laboratories in computer cartography, geographic information systems, remote sensing, and physical geography, plus a 130-acre field camp for both instruction and research.

Graduate Programs
The Department of Geography, Environment, and Sustainability offers the MA in Applied Geography, the PhD in Geography, and Post-Baccalaureate Certificates in Global and Regional Studies Geography, and Urban and Economic Development. The programs focus on the application of theory and methods in geography toward the understanding of problems related to economic development, environmental quality, population change, and social well-being in urban, rural, regional, and international contexts.

Environmental & Sustainability Studies Program
Aaron S. Allen, Director and Honors Program Liaison

Committee Members
Aaron S. Allen, Director and Honors Program Liaison
Susan Andreatta, Department of Anthropology
Bruce Banks, Department of Chemistry and Biochemistry
Erick Byrd, Department of Marketing, Entrepreneurship, and Hospitality & Tourism
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Gwen Hunnicut, Department of Sociology
Karen Kilcup, Department of English
Etsuko Kinefuci, Department of Communication Studies
David McDuffie, Department of Religious Studies
Ann Somers, Department of Biology
Selima Sultana, Department of Geography

Environmental & Sustainability Studies is an interdisciplinary program that fosters understanding of the relationships between human societies and the natural physical and biological setting in which life on Earth exists. The B.A. program provides foundations in the logic of science and interdisciplinary liberal arts thinking, and it integrates study of the environment from the perspectives of the natural sciences, social sciences, and arts and humanities. Students work with a diverse group of faculty from across campus to learn how to gather and integrate information about environmental problems from multiple disciplines, think critically about the causes of environmental problems, propose effective solutions and evaluate their strengths and weaknesses, and communicate their ideas clearly. Graduates will be prepared for roles as educated citizens who are especially well informed about the environment and for occupations that require a broad range of knowledge about environmental and sustainability issues.

Concentrations in the Environmental & Sustainability Studies Program require 66 credit hours, of which 27 credits are core and 39 credits are electives (and many of which fulfill General Education requirements). Students choose a concentration either in Environmental Studies or in Sustainability Studies, each of which requires electives from four related areas: Natural Sciences, Equity and Society, Economics and Development, and Aesthetics and Ethics. The concentrations in the program are open to students in any college or school of the university. The concentrations are extremely flexible and allow students to combine it with another major, and/or with a minor, and/or with study abroad. Accomplished students (with a GPA of 3.30 or greater in the junior year) may choose a self-designed concentration in Environmental & Sustainability Studies.
Requirements

At least 24 credits of related area electives must be at the 300 level or above, and many courses count toward General Education Core requirements. The required courses in all program concentrations guarantee fulfillment of GNS/GLS, GNS/GPS, and SI and WI in major (12-13 credits). In addition, depending on student choices, it is possible to fulfill GMT, GSB, GNS/lab, GPR, GFA, GHP/GMO, SI, WI, GN, GL, and half (3 credits) of GLT. Students must fulfill the following General Education courses outside the Environmental & Sustainability Studies Program requirements: GLT (3 credits), GHP/GPM (3 credits), GRD (6 credits), and GFL (0-12 credits).

Students choose either the Environmental Studies concentration or the Sustainability Studies concentration, both of which emphasize the integration of the natural sciences, social sciences, and arts and humanities. The core requirements for the concentrations are similar; they differ in the Biology core requirement (BIO 112 Principles of Biology II is required for Environmental Studies, while Sustainability Studies requires either BIO 112 Principles of Biology II or BIO 105 Major Concepts of Biology) and in the distribution of related area electives. The Environmental Studies concentration has a greater emphasis on natural science, while the Sustainability Studies concentration has a greater emphasis on social sciences and the humanities.

The distribution of electives in the two concentrations compares as follows:

<table>
<thead>
<tr>
<th>Electives</th>
<th>Environmental Studies</th>
<th>Sustainability Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences</td>
<td>12 credits</td>
<td>6 credits</td>
</tr>
<tr>
<td>Equity &amp; Society</td>
<td>9 credits</td>
<td>12 credits</td>
</tr>
<tr>
<td>Economics &amp; Development</td>
<td>9 credits</td>
<td>9 credits</td>
</tr>
<tr>
<td>Aesthetics &amp; Ethics</td>
<td>3 credits</td>
<td>6 credits</td>
</tr>
<tr>
<td>Free Electives</td>
<td>6 credits</td>
<td>6 credits</td>
</tr>
</tbody>
</table>

Students with a GPA greater than 3.30 in the junior year may choose the self-designed Environmental & Sustainability Studies concentration; this concentration is developed in consultation with the Director and allows the student to propose 39 credits of appropriate electives (with at least one course in each of the four related area electives). Students are required to maintain a 3.30 GPA.

Students in all concentrations should plan carefully with the Director because courses are continually added and removed from the list of area electives and because substitutes may be available. Some courses have prerequisites that do not count for credit in Environmental & Sustainability Studies. No single course may count in more than one of the four related areas, none of the required core courses may count as related area or free electives, and no more than 12 credits from any one course prefix may count toward the concentration. Students can neither major in multiple concentrations in the Environmental & Sustainability Studies Program nor major in one of these Program concentrations and also be either a Sustainability Studies minor or an Environmental Studies minor. Students are welcome and encouraged to choose a second major and/or minor in other fields of study.

Professor
Rick L. Bunch
Keith G Debbage
Paul A Knapp
Jeffrey C Patton

Selima Sultana

Associate Professor
Corey M Johnson
Zhi-Jun Liu
Phillip D Royal
Roy S Stine

Assistant Professor
Wenliang Li
Sarah J Praskievicz

Senior Lecturer
Mary B Hall-Brown
G.Jay Lennartson

Lecturer
Jenny M Berggren
Hyojin Kim
Steven K. Tate

Senior Academic Professional
James A Nelson

G Graduate-level faculty

- Geography, B.A. (https://catalog.uncg.edu/arts-sciences/geography/geography-ba)
- Environmental Studies Undergraduate Minor (https://catalog.uncg.edu/arts-sciences/geography/environmental-studies-minor)
- Geography Undergraduate Minor (https://catalog.uncg.edu/arts-sciences/geography/geography-geography-minor)
- Sustainability Studies Undergraduate Minor (https://catalog.uncg.edu/arts-sciences/geography/sustainability-studies-minor)
- Applied Geography, M.A. (https://catalog.uncg.edu/arts-sciences/geography/applied-geography-ma)
- Geography, Ph.D. (https://catalog.uncg.edu/arts-sciences/geography/geography-phd)

The Environmental and Sustainability Studies Program offers the following concentrations in the Special Programs in Liberal Studies Major:

- Environmental Studies
- Environmental and Sustainability Studies
- Sustainability Studies

See the Special Programs in Liberal Studies Major (https://catalog.uncg.edu/arts-sciences/special-programs-liberal-studies-major) for requirements.