B.S. IN GEOGRAPHY AND SUSTAINABLE DEVELOPMENT

Overview

Students who graduate with a BS in Geography and Sustainable Development are trained in methods of geographic inquiry and geospatial technology, and work to propose solutions that advance sustainable development worldwide.

Curriculum Requirements

Code	Title	Credit Hours
University General Education Requirements		
ENG 105	English Composition I	3
ENG 106	English Composition II	3
Arts and Humanities Cognate		9
People and Society Cognate		9
Language Requirement		3-9
Minor Requirement		15
Math Sequence		6
Writing Requirement [1]		12
Study Abroad (optional)		15
Degree Requirements [2,3]		
GEG 110	Introduction to Human Geography	3
GEG 120	Physical Geography	3
GEG 306	Geographic Research Methods	3
GEG 310	Geographic Information Systems I	3
GEG 321	Remote Sensing of the Environment	3
GEG 331	Sustainable Development	3
GEG 410	Geographic Information Systems II	3
GEG 501	Capstone Research Seminar	3
Elective Courses		9
Additional Electives		**12**
Total Credit Hours		**120**

1 To satisfy the College of Arts and Sciences writing requirement in the discipline, students majoring in Geography must take at least one writing eligible course in Geography. GEG 501 satisfies this requirement for most students.

2 Students must complete at least 33 credit hours in Geography with a grade of C- or higher.

3 The overall GPA in courses counted toward the major must be 2.00 or higher.

Suggested Plan of Study

Year One		
Fall		**Credit Hours**
ENG 105	English Composition I	3
MTH 161	Calculus I	4
UMX 100	The University of Miami Experience	0
GEG 110	Introduction to Human Geography	3
GEG 120	Physical Geography	3
Language Course		3
	Credit Hours	**16**
Spring		
ENG 106	English Composition II	3
MTH 162	Calculus II	4
GEG Elective		3
Language Course		3

Arts and Humanities Cognate Course		3
	Credit Hours	**16**
Year Two		
Fall		
Language Course		3
Arts and Humanities Cognate Course		3
General or GEG Elective Course		3
BIO, CHM, GEL, or PHY Course		3
GEG 331	Sustainable Development	3
	Credit Hours	**15**
Spring		
GEG 306	Geographic Research Methods	3
GEG 241	Health and Medical Geography	3
Arts and Humanities Cognate Course		3
General or GEG Elective Course		3
GEG 310	Geographic Information Systems I	3
	Credit Hours	**15**
Year Three		
Fall		
GEG 321	Remote Sensing of the Environment	3
GEG 410	Geographic Information Systems II	3
General or GEG Elective Course		3
General or GEG Elective Course		3
People and Society Cognate Course		3
	Credit Hours	**15**
Spring		
300 Level GEG Elective		3
People and Society Cognate Course		3
GEG Elective - Advanced Techniques		3
General or GEG Elective Course		3
General or GEG Elective Course		3
	Credit Hours	**15**
Year Four		
Fall		
300 Level GEG Elective		3
People and Society Cognate Course		3
General or GEG Elective Course		3
General or GEG Elective Course		3
General or GEG Elective Course		3
	Credit Hours	**15**
Spring		
GEG 501	Capstone Research Seminar	3
General or GEG Elective Course		3
General or GEG Elective Course		3
General or GEG Elective Course		3
General or GEG Elective Course		3
	Credit Hours	**15**
	Total Credit Hours	**122**

Mission

The mission of the Department of Geography and Sustainable Development (GEG) is to transform lives through education, research and innovation, and service. Through **education**, we transform the lives of our students, helping them to become professionals and global citizens with outstanding

analytical and communication skills, creative abilities, and a sense of civic responsibility needed in an increasingly complex society. Through **research and innovation**, we advance the frontiers of geographic knowledge while pursuing solutions to some of society's most pressing challenges. Finally, through **service**, we support organizations and agencies (from local to global) that adopt principles of sustainable development as a way to ensure long-term human prosperity without undermining the integrity and stability of natural and social systems.

Goals

The BS in Geography and Sustainable Development program aims to graduate students who use methods of geographic inquiry and geospatial technology to propose solutions that advance sustainable development worldwide. We prepare students for positions in government, business, urban and regional planning, geographic information systems (GIS), remote sensing (RS), resource management, environmental analysis, and teaching. We offer courses that provide students with marketable skills for today's job market, such as medical geography, sustainable cities, sustainable development, sustainable food, GIS, digital cartography, satellite remote sensing, land use and land cover analysis, and spatial statistics. During their studies, our students develop global citizenship, which prepares them to examine and find solutions for global problems by using different analytical lenses and methods, as well as develop skills to work effectively in multi-cultural environments and collaborative settings.

Student Learning Outcomes

- **Foundational Knowledge (SLO1):** Students will understand the most fundamental concepts and theories in geography and sustainable development, including the spatial patterns and processes of human and physical phenomena, the interactions between people and nature, and the challenges to conciliate human prosperity and environmental conservation worldwide.

  Scientific Inquiry and Communication Skills (SLO2): Students will apply various theoretical and methodological approaches in geography and be able to develop research questions, critically analyze both qualitative and quantitative data to answer those questions, and effectively communicate their findings in oral and written formats.

  Knowledge Translation Skills (SLO3): Students will be able to synthesize geographic knowledge and develop collaborative solutions to problems in sustainable development within the local community, region, and world by demonstrating strong ethical behavior and high levels of responsibility and integrity.

  Geospatial Technology Skills (SLO4): Students will create individual portfolios of projects that demonstrate their capacity to integrate and apply geospatial technologies (Global Positioning Systems, Remote Sensing, and Geographic Information Systems) to data analysis and problem solving.