# **GEOGRAPHY (GEOG)**

## **Faculty**

Professors: Ben Marsh, Karen M. Morin (Associate Provost), Paul H. Susman

Associate Professors: Duane A. Griffin (Chair), Adrian N. Mulligan

Assistant Professor: Vanessa A. Massaro

Geographers are devoted to thinking spatially about people, environments, and relations among them. Physical geography, a natural science, focuses on the natural processes that interact to create the biophysical environments we depend upon. Human geography, a social science, seeks to understand the cultural, economic, and political processes that create and reproduce the built environments and social worlds in which we live. Environmental geography lies at the intersection of the physical and human worlds, studying topics such as resources, hazards, and human impacts on the environment. What links these disparate foci is an overriding concern with *space* and the various ways in which it matters.

Geography courses promote a fuller understanding of the world in which we live, emphasizing critical thinking, problem-solving, writing, mapping, public speaking, information literacy, and teamwork; and using methods ranging from ethnography and archival research, to field and laboratory work; and using tools such as GIS (advanced computer mapping).

As both a social and a natural science, the Geography major provides a strong background in the discipline and a substantial foundation for a liberal arts education. Geography's inherently interdisciplinary nature complements and integrates material from related fields such as international relations, economics, environmental studies, political science, geology, anthropology, sociology, climatology, women's & gender studies, philosophy, and biology, making it an ideal choice for dual majors or as a minor. The Geography major (or minor) provides strong preparation for careers or graduate study in the environmental and resource fields, international affairs, urban and regional planning, government, business and marketing, journalism, law, health care, public service, teaching, and a host of other fields.

## **Geography Major**

The major in geography consists of a minimum of EIGHT courses which must include:

Two 200-level Human Geography cou	urses (social science credit)	2
Two Physical Geography courses (natural science credit) <sup>1</sup>		2
GEOG 204	Applied G.I.S.	1
Culminating Experience <sup>2</sup>		1
Two Geography electives <sup>3</sup>		2

- Some courses in other departments are accepted toward the major with geography department approval, for example Geology, International Relations, and Environmental Studies.
- Taken senior year (or second semester junior year with adviser's and departmental approval). Courses fulfilling this requirement include 300-level or higher (non-methods/skills) Geography courses or an independent study course designed for this purpose. In these courses, paper and/or project topics for the geography majors will be designed to ensure that the students draw upon their broader geographic education, thus providing them a more coherent appreciation of the discipline.
- May be any 200-level or higher geography courses, but may include up to two 100-level geography courses taken before declaring the major.

## **Geography Minor**

The geography **minor** consists of five geography courses, at least one of which is a geography science course, and no more than one of which may be at the 100-level.

College of Arts & Sciences

Department and Program Learning Objectives

## Majors in Geography will be able to:

Understand human-environment relations and spatial relations as a dynamic involving the interplay of social change and environmental change. (1, 3, 4, 6, 7)

Apprehend their role, both individually and collectively, in changing human-environmental relations and spatial dimensions of society. (1, 3, 4, 5)

Use space and spatial relations to understand society at different scales. (1, 3, 4)

Understand academic geographical study as providing a systematic framework for examining environmental and social problems. (1, 3, 4)

Engage in high-order, independent thinking, integrating spatial and human-environment relations into their analysis of problems at scales ranging from the global to the local. (1, 3, 4, 6, 7)

Synthesize insights in human and physical geography with those from cognate disciplines in social and/or natural sciences. (1, 2, 3)

Numbers in parentheses reflect related Educational Goals.

#### Courses

#### GEOG 101. Globalization, People, and Place. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

Investigates the world from a spatial perspective to understand the complexity of places and the dynamic relationship between peoples and the world they inhabit. Open to first-years and sophomores.

#### GEOG 110. World Environmental Systems. 1 Credit.

#### Offered Occasionally; Lecture hours:3,Lab:3

Survey of physical geography, organized upon an understanding of how natural systems - climate, landscape, evolution, biological community - create the different environments of the world. Laboratory science course.

#### GEOG 113. Human Impact on Environment. 1 Credit.

#### Offered Either Fall or Spring: Lecture hours:3.0ther:3

Causes and effects of major environmental changes induced by humans, challenges to our future well-being, and opportunities for future sustainability. Prerequisite: open to first-year students only. Crosslisted as ENST 113.

#### GEOG 123. Gendering Place: Sex and Power in Global Perspective. 1 Credit.

#### Offered Occasionally; Lecture hours:3

By examining how gender, and ideas of masculinity and femininity, structure spaces and shape mobility, this course will explore how gendered power relations and gendered violence are regulated and maintained in place. Crosslisted as WMST 123.

#### GEOG 175. Landforms of the World. 1 Credit.

## Offered Alternating Fall Semester; Lecture hours:3,Lab:3.5

Understanding the pattern of landforms around the world, the processes that created them, and their influence on humans. Laboratory science course for B.A. students. Prerequisite: juniors and seniors by permission only.

## GEOG 200. Independent Study - Nicaragua. 1 Credit.

#### Offered Occasionally; Lecture hours:3; Repeatable

Supervised independent study, readings, and preparation of a paper in conjunction with the Bucknell in Nicaragua summer program. Prerequisite: permission of the instructor.

## GEOG 201. Special Topics in Geography. 1 Credit.

## Offered Fall, Spring or Summer; Lecture hours:3; Repeatable

Topics related to current events/issues in Geography.

## GEOG 202. Solving Problems With Maps. 1 Credit.

## Offered Either Fall or Spring; Lecture hours:3

Maps are powerful tools for solving social, technical, and individual problems. This examines the principles of map-making and map use.

## GEOG 204. Applied G.I.S.. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

Introduction to the use of Geographical Information Systems to collect, structure, and display large or complex spatial data sets, using examples from human and physical geography. Prerequisite: permission of the instructor.

#### GEOG 206. Mapping History: Nature, Place, and Power. 1 Credit.

## Offered Either Fall or Spring; Lecture hours:3

This course examines maps as markers of environmental history. Focusing on the North Atlantic and North America from the seventeenth century onward, the course will emphasize critical analysis of visual artifacts, the politics of cartography, and maps as records of our changing ideas about and impact on the natural world. Crosslisted as ENST 214 and HIST 215.

### GEOG 209. Economic Geography. 1 Credit.

#### Offered Spring Semester Only; Lecture hours:3

Inquiry into local and global changes in economic activity, location and spatial organization, especially focusing on implications for the well-being of people in particular places.

## GEOG 210. Urban Condition. 1 Credit.

## Offered Fall Semester Only; Lecture hours:3

Geographic and sociological inquiry into pressing urban issues of advanced industrialized societies, including inequality, housing, employment, and how cities fit into the American present and future. Crosslisted as SOCI 210.

#### GEOG 211. Political Geography. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

Considers political processes from a geographical perspective across a range of scales, in particular analyzing the geographical arguments which shape international political relations.

#### GEOG 214. Europe in an Age of Globalization. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

Examines the European Union -a unique project that is neither federation nor intergovernmental organization -amidst increasing discord and disunion. Considers common issues such as nationalism, immigration, democracy and the economy from a geographical perspective; ie. their manifestation in different places, and the role that different places play in their manifestation.

#### GEOG 215. Environmental Planning. 1 Credit.

#### Offered Spring Semester Only; Lecture hours:3

Explores the main approaches to planning theory and their environmental applications. Considers how environmental planning can promote the socio-ecological health and sustainability of democratic communities. Crosslisted as ENST 215.

## GEOG 216. Borders and Politics of Mobility. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

Explores the politics of contemporary nation state borders, issues of territory, sovereignty, mobility, migration, identity, citizenship, statelessness, and focuses on borders at other scales. Crosslisted as IREL 216.

#### GEOG 218. Geographies of Justice. 1 Credit.

#### Offered Occasionally; Lecture hours:3; Repeatable

This course will focus on the role of space for questions of justice and social change. Drawing on scholarship in geography and cognate disciplines, students will examine how social structures that privilege dominant groups embed to produce spatial inequality and marginality across the globe.

#### GEOG 220. Cultural Geography. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

Role of culture in shaping places. How cultures are geographically expressed, and how geography is a basic element in the constitution of cultures.

#### GEOG 228. Media, Space and Place. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

This course will explore the power implications of the connections between media and place. Media is shaped by places and society just as much as it shapes them. In the context of "fake news" and social media echo chambers, this course will query the continued relevance of media's "where".

## GEOG 234. Human Ecology. 1 Credit.

#### Offered Alternating Spring Semester; Lecture hours:3

A general science course in human ecology, to demonstrate the ways humans continue to adapt to their environment through biological, cultural, scientific, symbolic, political, and technical means. Crosslisted as ENST 234.

#### GEOG 235. Marine Environment. 1 Credit.

### Lecture hours:3

Understanding the ecological and physical systems of the ocean, understanding the processes of scientific discovery in the ocean, and exploring the many interactions that humans have with ocean systems. Crosslisted as ENST 235.

## GEOG 236. Third World Development. 1 Credit.

#### Offered Spring Semester Only; Lecture hours:3

Socio-cultural, economic, and environmental problems confronting developing countries. Includes such topics as political-economic change in a global and local context, transnational corporations, gender relations, food production/consumption, urbanization, and sustainable development.

#### GEOG 237. Grassroots Development: Nicaragua. 1 Credit.

## Offered Summer Session Only; Lecture hours:15

This service-learning Bucknell in Nicaragua summer program course focuses on local people's efforts to promote sustainable development. Study involves academic, service, and travel components. Prerequisite: permission of the instructor.

## GEOG 240. Sustainable Resource Management. 1 Credit.

#### Offered Fall Semester Only; Lecture hours:3

Focuses on problem-oriented policy analysis of domestic and international environmental issues including ecosystem management, endangered species, protected areas, and community-based conservation. Crosslisted as ENST 240.

#### GEOG 257. Climate Change. 1 Credit.

## Offered Either Fall or Spring; Lecture hours:3,Lab:3.5

Understanding, the global climate system, how it has changed in the past, how it is changing now in response to human activities, predicted future changes, and our options for mitigating and adapting to them.

## GEOG 258. The Human Planet. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

How humanity became an environmental force dictating the future of life on Earth and implications of that fact for individual and societal choices and actions, and the future prospects for humanity and our fellow species in an Anthropocene world.

#### GEOG 260. Exploring Sustainable Communities. 1 Credit.

#### Offered Summer Session Only; Lecture hours:6,0ther:9

Course explores models for sustainable change used at multiple scales in the pursuit of creating thriving communities. Focus is on challenges and benefits resulting from local and regional initiatives to implement such changes. Through experiential learning and site visits, students explore relevant topics including food, energy, waste, place-making, and design. Crosslisted as UNIV 260.

#### GEOG 265. Geography of Pennsylvania. 1 Credit.

#### Lecture hours:3

Exploring the landscape, industry, culture, and history of Pennsylvania; using this example to understand the broad themes of human geography.

#### GEOG 267. Re-envisioning Waste: Considerations in Sustainability. 1 Credit.

#### Offered Occasionally; Lecture hours: Varies, Other. 56

In a consumer society, trash is one of the largest things produced. Through case studies and field site visits students apply concepts of sustainability to discover ways individuals, communities, and businesses creatively tackle (and eliminate) waste, use waste productively, and re-envision waste as a resource. Crosslisted as UNIV 267.

#### GEOG 292. Service-Learning in Nicaragua. 1 Credit.

#### Offered Spring Semester Only; Lecture hours:3

This course focuses on the connections between Nicaraguan development processes and Brigade-based service-learning. Prerequisite: permission of the instructor. Crosslisted as IREL 292 and LAMS 292.

#### GEOG 301. Topics in Advanced Physical Geography. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3,Lab:4

Specialized topics in physical geography. Prerequisite: permission of the instructor.

#### GEOG 302. Contemporary Africa & Colonial Pasts: Investments and Re-Emergences. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

Globalized investment, oil extraction, Oprah and Bono-endorsed RED products, a rising middle class: This course addresses contemporary political economy, meanings of 'the continent', and colonial legacy in Africa. We draw on human geography, African history, postcolonial and feminist studies, and literature to understand a rapidly changing continent. Crosslisted as AFST 302.

#### GEOG 304. Advanced GIS. 1 Credit.

#### Offered Occasionally; Lecture hours:3

Project-based opportunity to solidify existing skills and learn advanced techniques in GIS and map design. Prerequisite: GEOG 204, or GEOL 230, or HIST 201 or permission of the instructor.

#### GEOG 309. Topics in Advanced Economic Geography. 1 Credit.

## Offered Either Fall or Spring; Lecture hours:3; Repeatable

Specialized topics in economic geography.

#### GEOG 310. Topics in Advanced Social Geography. 1 Credit.

### Offered Either Fall or Spring; Lecture hours:3

Specialized topics in social geography. Prerequisite: permission of the instructor.

## GEOG 311. Topics in Advanced Political Geography. 1 Credit.

## Offered Either Fall or Spring; Lecture hours:3; Repeatable

Specialized topics in political geography. Prerequisite: permission of the instructor.

#### GEOG 312. Geographies of Health. 1 Credit.

### Offered Fall Semester Only; Lecture hours:3

Seminar considers health across places and society and issues such as inequality, ecological and other risks, political economic changes, and organizing health service provision.

#### GEOG 316. Geographies of Nationalism. 1 Credit.

### Lecture hours:3

The course explores nationalism and its increasing popularity by considering it geographically; for example, its dynamic scalar dimensions, its forging of race and gender spatially, and its naturalization in landscape and built form. In so doing, we will critically consider those interests that nationalism serves. Crosslisted as WMST 316.

#### GEOG 319. Undergraduate Research. .5-1 Credits.

#### Offered Both Fall and Spring; Lecture hours: Varies; Repeatable

Supervised research, readings, and/or preparation of a paper on some aspect of geography. Prerequisite: permission of the instructor.

#### GEOG 320. Undergraduate Research. .5-1 Credits.

#### Offered Both Fall and Spring; Lecture hours: Varies; Repeatable

Supervised research, readings, and/or preparation of a paper on some aspect of geography. Prerequisite: permission of the instructor.

#### GEOG 321. Special Topics in Geography. 1 Credit.

#### Offered Both Fall and Spring; Lecture hours:3; Repeatable

Development and growth of geographic thought; investigation, report and/or seminar on currently significant topics in geography. Prerequisite: permission of the instructor.

#### GEOG 322. Special Topics in Geography. 1 Credit.

#### Offered Both Fall and Spring; Lecture hours:3; Repeatable

Development and growth of geographic thought; investigation, report and/or seminar on currently significant topics in geography. Prerequisite: permission of the instructor. Crosslisted as GEOG 622.

#### GEOG 323. Gender and Geography. 1 Credit.

#### Offered Occasionally; Lecture hours:3

This course develops advanced critical context for analyzing relationships between geography (space/place) and gender (women's and men's socially defined roles and relationships.) Prerequisite: permission of the instructor.

#### GEOG 324. Geographies of Identity. 1 Credit.

#### Offered Occasionally; Lecture hours:3

Who are "we"? Seminar considers role of space in constituting society around the world. Explores nationalism, globalization, multiculturalism, citizenship, race, ethnicity, gender, sexuality, age, disability. Prerequisite: first-year students by permission only. Crosslisted as WMST 324.

#### GEOG 325. Nature, Wealth and Power. 1 Credit.

## Offered Either Fall or Spring; Lecture hours:3

A seminar in political ecology that explores the historical, social political and economic dimensions of environmental change in developing regions. First-year students and sophomores by permission only. Crosslisted as ENST 325.

#### GEOG 326. Thinking Space: Critical Reflections on Research. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

With an eye toward research design, proposal and grant writing, students will critically engage the role of the University in imagining, creating and understanding place. Students will think about space, how to study it, and, in turn, how studying space produces it.

#### GEOG 345. Food and the Environment. 1 Credit.

#### Offered Fall Semester Only; Lecture hours: 3,0ther: 3.5

Nothing from the environment is more important than food production, nothing affects the environment more; we'll study both environmental and social circumstances. Laboratory science course. Crosslisted as ENST 345.

## GEOG 350. Classical Marxism. 1 Credit.

#### Offered Fall Semester Only; Lecture hours:3

The goal is to develop an understanding of Marx's analysis of capitalism by reading mainly original texts by Marx and consider its applications both to disciplinary thinking and contemporary events. Crosslisted as ECON 350.

#### GEOG 420. Environmental Community Projects. 1 Credit.

## Offered Either Fall or Spring; Lecture hours:3

Community-based "clinic" course on environmental problems or projects for local stakeholders, based on integrative, interdisciplinary research and design. Preference to senior ENST, ENSC, and GEOG majors.