

GEOGRAPHY

Overview and Contact Information

Geography is an integrated discipline that studies the relationships between people, places, society, and the environment. Mount Holyoke College geography majors and minors learn about the impacts of social, economic, environmental, and political processes that shape spaces and places, the science of earth systems, the human dimensions of global environmental and climate change, and the use of geographic information science (GIS) and remote sensing techniques to represent and analyze data and knowledge at different spatial scales.

Contact Information

Alan Werner, Chair
 Rhodaline Forjwuor, Academic Department Coordinator

304 Clapp Laboratory
 413-538-2278
<https://www.mtholyoke.edu/acad/geology>

Faculty

This area of study is administered by the Department of Geology and Geography:

Steven Dunn, Professor of Geology

Girma Kebede, Professor of Geography

Mark McMenamin, Professor of Geology

Thomas Millette, Professor of Geography

Alan Werner, Professor of Geology

Michelle Markley, Associate Professor of Geology

Serin Houston, Assistant Professor of Geography and International Relations

J. Michael Rhodes, Five College Professor of Geosciences

Samuel Tuttle, Visiting Assistant Professor of Data Science

Requirements for the Major

A minimum of 36 credits:

GEOG-105	World Regional Geography	4
GEOG-107	Introduction to the Physical Environment	4
GEOG-205	Mapping and Spatial Analysis	4
or GEOG-210	GIS for the Social Sciences and Humanities	
Any four of the following 200-level thematic and regional courses:		16
GEOG-202	Cities in a Global Context	
GEOL-203	Surface Processes	
GEOG-204	Human Dimensions of Environmental Change	
GEOG-206	Political Geography	
GEOG-208	Global Movements: Migrations, Refugees and Diasporas	
ENVST-210	Political Ecology	
GEOG-213	Sustainable Cities	
GEOG-217	The African Environments	

GEOG-230	Environmental Soil Science	
GEOG-295	Independent Study	
Any two of the following 300-level seminar courses:		8
GEOG-304UP	Planning and the Environment: 'Urban and Regional Planning'	
GEOG-311	Seminar	
GEOG-312	Seminar	
GEOG-313	Third World Development	
GEOG-319	Africa: Problems and Prospects	
GEOG-320	Research with Geospatial Technologies	
GEOG-325	Conflict and Displacement in Africa	
GEOG-395	Independent Study	

Total Credits 36

Additional Specifications

- Many geography courses are offered in alternate years. Students should consult the department when planning their major.

Requirements for the Minor

A minimum of 20 credits:

GEOG-105	World Regional Geography	4
Any three of the following 200-level thematic and regional courses:		12
GEOG-202	Cities in a Global Context	
GEOL-203	Surface Processes	
GEOG-204	Human Dimensions of Environmental Change	
GEOG-206	Political Geography	
GEOG-208	Global Movements: Migrations, Refugees and Diasporas	
ENVST-210	Political Ecology	
GEOG-213	Sustainable Cities	
GEOG-217	The African Environments	
GEOG-230	Environmental Soil Science	
GEOG-295	Independent Study	
Any one of the following 300-level courses:		4
GEOG-304UP	Planning and the Environment: 'Urban and Regional Planning'	
GEOG-311	Seminar	
GEOG-312	Seminar	
GEOG-313	Third World Development	
GEOG-319	Africa: Problems and Prospects	
GEOG-320	Research with Geospatial Technologies	
GEOG-325	Conflict and Displacement in Africa	
GEOG-395	Independent Study	

Total Credits 20

Course Offerings

GEOG-105 World Regional Geography

Fall. Credits: 4

This course surveys the major geographic regions of the world in terms of environmental features and resource distributions, economic mainstays, population characteristics, cultural processes, social relationships, and patterns of urbanization and industrial growth. In addition to these topical foci, we use various sub-fields of geography to animate different regions. This approach provides a sense of depth while we also pursue a breadth of knowledge about the world.

Applies to requirement(s): Social Sciences; Multicultural Perspectives
S. Houston

GEOG-107 Introduction to the Physical Environment

Fall. Credits: 4

A systematic introduction to the processes operating on the surface of the earth, their spatial variation and their contribution to the spatial patterning of life on earth. The course stresses interactions among the earth's energy balance, weather, ecological resources and human impacts on environmental systems.

Applies to requirement(s): Math Sciences
T. Millette

GEOG-202 Cities in a Global Context

Not Scheduled for This Year. Credits: 4

Cities are dynamic landscapes informed by myriad economic, political, social, environmental, and cultural processes. This course delves into the forces of urbanization and examines how cities have been investigated, built, experienced, and lived in throughout history and around the globe. By accenting a geographic perspective and drawing upon an array of theoretical ideas and empirical examples, this class grapples with the fascinating complexities of the urban context.

Applies to requirement(s): Social Sciences; Multicultural Perspectives
Other Attribute(s): Community-Based Learning
S. Houston

GEOG-204 Human Dimensions of Environmental Change

Fall. Credits: 4

Using case studies from Africa, Asia, North and South America, and Europe, this course examines the interactions between human institutions (such as political and economic structures, science and technology, class and gender systems, and cultures) and the environmental/earth systems that provide their contexts and have been impacted by them. The course will provide a forum to analyze the environmental consequences of a variety of land-use systems, resource use, and development projects and explore possible alternative strategies of human-environment relations that could create a balance between human needs and environmental sustainability.

Applies to requirement(s): Social Sciences; Multicultural Perspectives
G. Kebede

GEOG-205 Mapping and Spatial Analysis

Spring. Credits: 4

Provides a comprehensive introduction to maps, including their design, compilation, and computer production. Introduces students to the principles of abstracting the Earth's surface into spatial databases using GIS, remote sensing, and Global Positioning Satellites.

Applies to requirement(s): Meets No Distribution Requirement
T. Millette

GEOG-206 Political Geography

Spring. Credits: 4

Systematically studies political phenomena and their geographic expression, at a variety of spatial scales - national, regional, and international. Major themes include nation-state formation, boundary, territory, and ethnic issues, regional blocs and spheres of influence, and conflicts over access to and use of resources.

Applies to requirement(s): Social Sciences
G. Kebede

GEOG-208 Global Movements: Migrations, Refugees and Diasporas

Fall. Credits: 4

The voluntary and involuntary movement of people around the globe is the focus of this course on migrations, refugees, and diasporas.

Questions of borders, nativism, transnationalism, the global economy, and legality thread through this course as we consider the many social, cultural, environmental, economic, and political factors shaping decisions to leave a home or homeland. Historical and contemporary case studies, compelling theoretical texts, and geographic perspectives on these topics collectively animate our discussions.

Crosslisted as: CST-208

Applies to requirement(s): Social Sciences; Multicultural Perspectives
S. Houston

GEOG-210 GIS for the Social Sciences and Humanities

Fall. Credits: 4

This course introduces the use of Geographic Information Systems (GIS) and other geospatial technologies in the social sciences and the humanities. The student will learn to collect, process, and analyze quantitative data within the spatial (geographic) context where they occur. Course content may include research topics from current faculty.

Applies to requirement(s): Meets No Distribution Requirement
E. Marcano

Advisory: Proficiency with computers and quantitative data analysis

GEOG-213 Sustainable Cities

Spring. Credits: 4

Based on present estimates, for the first time in human history, more people now live in urban than rural areas, and population growth projections for the next century indicate that most growth will take place in urban areas. Given this context, this course examines the social, economic, and environmental dimensions of urban sustainability. Topics explored in the course include urban and ecological systems, air and water quality, green design, energy and transportation systems, demographic trends, climate change impacts, and the role of technology in promoting urban sustainability.

Applies to requirement(s): Social Sciences
Other Attribute(s): Speaking-Intensive
T. Millette

GEOG-217 The African Environments

Not Scheduled for This Year. Credits: 4

The course provides an integrated analysis of biogeography, environmental change, and hydrology within each of the biomes found in the African continent: forest, savanna, desert, coast, wetland, mountain, and Mediterranean environments. It also discusses the impact and significance of human activity on African environments by exploring debates about land degradation, climate change, biodiversity and depletion, and conservation and development.

Applies to requirement(s): Social Sciences; Multicultural Perspectives
G. Kebede

GEOG-230 Environmental Soil Science

Spring. Credits: 4

Introduction to the physical, chemical, and biological properties of soils and their relationship to environmental quality, agricultural production, and land management. This course will also describe the processes of origin and development of soils as natural entities and how they affect the different ecosystems where they are located. Some field work required.

Applies to requirement(s): Meets No Distribution Requirement

E. Marcano

Prereq: Any 100 or 200 level science course or GEOG-107.

GEOG-295 Independent Study

Fall and Spring. Credits: 1 - 4

The department

Instructor permission required.

GEOG-304 Planning and the Environment**GEOG-304UP Planning and the Environment: 'Urban and Regional Planning'**

Fall. Credits: 4

This course examines in detail the fabric of urban and suburban settlement and commerce in the pre and post WW-II U.S. Field trips to the greater Springfield area are used to allow students to develop firsthand understanding of interactions between urban and suburban areas and to recognize the major changes to the human landscape driven by suburbanization and urban abandonment. This class will examine the section of Springfield slated for the MGM Casino Development.

Applies to requirement(s): Social Sciences

T. Millette

Prereq: Any 200-level Geography course.

GEOG-311 Seminar

These seminars present selected topics in geography that reflect contemporary problems, current geographical ideas, philosophical and methodological trends in geography, and/or the history and development of geographical thought.

GEOG-312 Seminar

These seminars present selected topics in geography that reflect contemporary problems, current geographical ideas, philosophical and methodological trends in geography, and/or the history and development of geographical thought.

GEOG-313 Third World Development

Fall. Credits: 4

Offers an interdisciplinary perspective on social, economic, and political features of contemporary development in Africa, Asia, and Latin America, regions referred to as the Third World or the South, and provides an introduction to theoretical origins and definitions of economic growth, development, and underdevelopment. It then addresses more specific aspects of development such as trends in population growth, migration, and urbanization; agrarian change; livelihood strategies and aspects of social welfare such as health, education, and shelter; poverty and the environment; and external economic relationships. The latter part of the course draws extensively on selected case studies.

Applies to requirement(s): Social Sciences; Multicultural Perspectives

Other Attribute(s): Speaking-Intensive

G. Kebede

Restrictions: This course is open to Juniors and Seniors.

Prereq: 4 credits in department and 4 credits in related social sciences at 200 level.

GEOG-319 Africa: Problems and Prospects

Not Scheduled for This Year. Credits: 4

This course intends to offer an interdisciplinary perspective on selected contemporary development problems in Africa south of the Sahara. Central to the course will be an examination of the social, economic, and political consequences of colonialism, the physical resource base and ecological crisis, agrarian systems and rural development, gender relations and development, urbanization and industrialization, and the problems and prospects of regional cooperation and integration.

Applies to requirement(s): Social Sciences; Multicultural Perspectives

Other Attribute(s): Speaking-Intensive

G. Kebede

Restrictions: This course is open to Juniors and Seniors.

Prereq: 4 credits in department and 4 credits at the 200 level in geography or related social science.

GEOG-320 Research with Geospatial Technologies

Not Scheduled for This Year. Credits: 4

Geographic Information Systems (GIS) and remote sensing are essential tools for geographic analysis in both the biophysical and social sciences. This course uses a semester-long project that includes field and laboratory instruction to allow students to develop hands-on skills with spatial data and analysis software. Students will be able to present potential employers with a portfolio containing examples of their ability to develop and execute a GIS/remote sensing application project.

Applies to requirement(s): Math Sciences

T. Millette

Prereq: GEOG-205.

GEOG-325 Conflict and Displacement in Africa

Spring. Credits: 4

This course provides an analytical approach to the study of civil/armed conflicts and displacement in post-independent Africa. Using cases from West Africa, Horn of Africa, and the Great Lake region, the course examines geographic, political and economic contexts in which armed conflicts occur by identifying and evaluating competing explanations of the underpinnings of civil conflicts. It analyzes the role of some of the widely debated features of Africa's civil conflicts, including systems of governance, impact of natural resources, questions of sovereignty and self-determination, construction and manipulation of ethnic/cultural identities, impact of religion, and regional inequalities.

Applies to requirement(s): Social Sciences; Multicultural Perspectives

Other Attribute(s): Speaking-Intensive

G. Kebede

Restrictions: This course is open to Juniors and Seniors.

GEOG-395 Independent Study

Fall and Spring. Credits: 1 - 8

The department

Instructor permission required.

GEOG-399 Getting Ahead in Geology and Geography

Fall. Credits: 1

This course provides support and mentoring for geology and geography majors as they pursue internships, summer jobs, independent research, and careers. Experiences will include: resume and communication workshops; self-reflection and sharing opportunities for students returning from internships, work experiences, and semesters abroad; guidance on preparing for, selecting, and applying to graduate school; information about careers in education and teacher licensure; and discussion of new research in geology and geography.

Crosslisted as: GEOL-399

Applies to requirement(s): Meets No Distribution Requirement

M. Markley, P. Taylor

Restrictions: This course is limited to Geography and Geology majors and minors

Notes: Course meets on Fridays after Earth Adventures