

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

Michelle Markley, Chair

Debra LaBonte, Academic Department Coordinator

304 Clapp Laboratory

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<https://www.mtholyoke.edu/acad/geography> (<https://www.mtholyoke.edu/acad/geography/>)

Learning Goals

Students majoring/minoring in geography draw upon their individual interests and passions to chart unique paths through the discipline. Yet, within this diversity, students take courses that are informed by the following key learning goals:

- Understand and use geographic concepts of place, space, and scale to explore human-environment relations.
- Recognize the physical processes that shape the patterns of the earth's surface, including landforms, climate, and ecosystems.
- Explore the many sub-disciplines of geography.
- Apply geographic methods, theories, and perspectives to critically tackle pressing societal questions.
- Articulate geographic research questions and demonstrate effective reading and writing skills.
- Apply mapping and geospatial technologies to analyze geographic data and solve geographic problems.
- Understand and utilize basic quantitative and qualitative research methods.

Faculty

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

Steven Dunn, Professor of Geology

Girma Kebede, Professor of Geography

Michelle Markley, Professor of Geology

Mark McMenamin, Professor of Geology

Thomas Millette, Director of the Geo-Processing Lab; Professor of Geography

Alan Werner, Professor of Geology

Serin Houston, Associate Professor of Geography and International Relations, On Leave 2021-2022

J. Michael Rhodes, Five College Professor of Geosciences

Brittany Wheeler, Visiting Instructor in Geography

Requirements for the Major

A minimum of 36 credits:

Code	Title	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	The Earth's Surface	
GEOG-204	Human Dimensions of Environmental Change	
GEOG-206	Political Geography	
GEOG-208	Global Movements: Migrations, Refugees and Diasporas	
ENVST-210	Political Ecology	
GEOG-224	Atmosphere and Weather	
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 Planning'	
GEOG-312	Seminar in Geography	
GEOG-312RE	Seminar: 'Geographies of Responsibility and Repair'	
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-328	Climate Migration	
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:

Code	Title	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	The Earth's Surface	
GEOG-204	Human Dimensions of Environmental Change	
GEOG-206	Political Geography	
GEOG-208	Global Movements: Migrations, Refugees and Diasporas	
ENVST-210	Political Ecology	
GEOG-224	Atmosphere and Weather	
GEOL-247		

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 Planning'	
GEOG-312	Seminar in Geography	
GEOG-312RE	Seminar: 'Geographies of Responsibility and Repair'	
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-328	Climate Migration	
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
B. Wheeler

GEOG-107 Introduction to the Physical Environment

Not Scheduled for This Year. Credits: 4

A systematic introduction to the ecological 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
S. Houston

GEOG-204 Human Dimensions of Environmental Change

Not Scheduled for This Year. Credits: 4

Using regional case studies from across the world, this course examines some of the causes and consequences of human-induced environmental changes. The course explores the fundamental relationships and processes involved in human-environmental interactions; the various impacts that humans have had over time upon soils, water, flora, fauna, landforms, and the atmosphere; and possible alternative development strategies 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

Fall. 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

Systemically 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

Spring. 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.

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

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. Marciano

Coreq: Geog-210L.

Advisory: Proficiency with computers and quantitative data analysis

GEOG-224 Atmosphere and Weather*Fall. Credits: 4*

This course provides a detailed introduction to the earth's atmosphere with particular emphasis on the troposphere extending from the surface to 10km in elevation. Topics include the earth's solar energy budget, atmospheric pressure and wind systems, global and local meteorological processes, and weather forecasting. The class will make significant use of meteorological data and satellite imagery taken from NOAA's National Weather Service to study seasonal weather patterns, rain and snow events, and catastrophic hurricanes.

*Applies to requirement(s): Math Sciences**T. Millette**Prereq: Any 100-level natural science course.**Advisory: Students who have taken high school earth science but not a college-level natural science course are welcome to request instructor permission to enroll.***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 Planning'***Not Scheduled for This Year. 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-312 Seminar in Geography**

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-312RE Seminar: 'Geographies of Responsibility and Repair'*Fall. Credits: 4*

This seminar deepens students' understanding of responsibility over space and time. We first consider how the field of human geography addresses moral questions, then focus on case studies and theoretical texts discussing injury, responsibility, and repair around the world. With emphasis on migrant, indigenous, and island communities, we connect historical relationships, events, and processes to emerging methods of repair, including claim-making/testimony, reparations, apology and acknowledgment, and environmental justice. Through reading, dialogue, and written reflection, we explore questions of responsibility that resonate in our national landscape and inform our broader political lives.

*Applies to requirement(s): Social Sciences; Multicultural Perspectives**Other Attribute(s): Speaking-Intensive, Writing-Intensive**B. Wheeler**Prereq: 8 credits in Geography. Students with 8 credits of related social science coursework, in lieu of Geography, considered by instructor permission.***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 social justice. 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: One course in geography or one related social sciences course.***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: One course in geography or one related social sciences course.*

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 or GEOG-210.

GEOG-325 Conflict and Displacement in Africa

Not Scheduled for This Year. 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-328 Climate Migration

Spring. Credits: 4

This seminar focuses on climate change-induced human migration from both theoretical and applied perspectives. It examines the predicted scope of this population movement and considers international instruments that could shape responses to this growing category of migrants. A set of contemporary case studies from around the world animate our investigation into what it means to adapt to an altered environment and inform our questions about responsibility for climate change. Throughout the semester, students will grapple with the complex environmental, economic, cultural, and political intersections of migration and Earth's changing climate system.

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

Other Attribute(s): Speaking-Intensive, Writing-Intensive

B. Wheeler

Restrictions: This course is open to juniors and seniors

Prereq: 4 credits in a related 200-level social science course

GEOG-395 Independent Study

Fall and Spring. Credits: 1 - 8

The department

Instructor permission required.

GEOG-399 Getting Ahead in Geology and Geography

Not Scheduled for This Year. Credits: 1

This course provides mentoring for geology and geography majors as they pursue internships, summer jobs, independent research, graduate study, and careers. Experiences 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; and unconditional support for career exploration.

Crosslisted as: GEOL-399

Applies to requirement(s): Meets No Distribution Requirement

M. Markley

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

Notes: Repeatable. Credit/no credit grading. Course meets on Fridays after Earth Adventures