

Geography

Professors Dunn, Kebbede, McMenamin, Millette (on leave fall 2011), Werner; Associate Professor Markley (*chair*); Assistant Professor Houston; Visiting Lecturer Kelley.

Contact Persons

Michelle Markley, *chair*

Cecile Vasquez, *senior administrative assistant*

The geography major is intended to provide students with an understanding of the world around them in its physical, spatial, and human dimensions. Central to the discipline is the study of interactions of humans and environmental systems. Specific topics emphasized in the curriculum include the physical environment, urban and political geography, resource conflict, socioeconomic development, and techniques in geographic data analysis (computer mapping, satellite image analysis, and geographic information systems).

Requirements for the Major

Credits

- A minimum of 32 credits

Courses

- Geography 105, World Regional Geography
- Geography 107, Introduction to the Physical Environment
- Three of the following 200-level thematic and regional courses:
 - Geography 202, Cities of the Twenty-first Century
 - Geography 203/Geology 203, Surface Processes
 - Geography 204, Human Dimensions of Environmental Change
 - Geography 205, Mapping and Spatial Analysis
 - Geography 206, Political Geography
 - Geography 212, Global Economic Geography

- Geography 214, Geography of South Asia
- Geography 215, Geography of the Middle East and North Africa
- Geography 216, North America in Context: A Region in Transition
- Geography 217, The African Environments
- Geography 224, Atmosphere and Weather
- Three 300-level courses, selected from the following:
 - Geography 304, Regional and Town Planning: Special Topics
 - Geography 307, Remote Sensing
 - Geography 311, Seminars: Selected Topics
 - Geography 312, Seminar: Selected Topics
 - Geography 313, Third World Development
 - Geography 319, Africa: Problems and Prospects
 - Geography 321, Geographic Information Systems
 - Geography 322, Field Methods for Ecological Research
 - Geography 395, Independent Study

Most geography courses are offered in alternate years, and majors should consult the department when planning their programs.

Requirements for the Minor

Credits

- A minimum of 20 credits

Courses

- Geography 105, World Regional Geography *and*
- Geography 107, Introduction to the Physical Environment
- Any three of the following 200-level thematic and regional courses:
 - Geography 202, Cities of the Twenty-First Century

- Geography 203/Geology 203, Surface Processes
- Geography 204, Human Dimensions of Environmental Change
- Geography 205, Mapping and Spatial Analysis
- Geography 206, Political Geography
- Geography 212, Global Economic Geography
- Geography 214, Geography of South Asia
- Geography 215, Geography of the Middle East and North Africa
- Geography 216, North America in Context: A Region in Transition
- Geography 217, The African Environments
- Geography 224, Atmosphere and Weather
- Any one of the following 300-level courses:
 - Geography 304, Regional and Town Planning: Special Topics
 - Geography 307/Geology 307, Remote Sensing
 - Geography 311, Seminars: Selected Topics
 - Geography 312, Seminar: Selected Topics
 - Geography 313, Third World Development
 - Geography 319, Africa: Problems and Prospects
 - Geography 321, Geographic Information Systems
 - Geography 322, Field Methods for Ecological Research
 - Geography 395, Independent Study

Course Offerings

105f World Regional Geography

Surveys physical and human geographic patterns, providing a comprehensive background discussion of individual regions. Analyzes each region in terms of its environmental base and resource distribution, agricultural systems and rural development, population growth and characteristics, and patterns of urbanization and industrial growth.

Meets multicultural requirement; meets Social Sciences III-A requirement

S. Houston

4 credits

107f Introduction to the Physical Environment

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 climate, landforms, soils, and vegetation and examines human impacts on environmental systems.

Meets Science and Math II-C requirement

C. Kelley

4 credits

202s Cities of the Twenty-first Century

This is an introductory geography course on world cities and urban systems. We focus on processes that produce spatial differences and interrelations within and between cities across the world. Cities of the twenty-first century, incorporating theoretical, critical and empirical approaches, covers a range of topics, including historical development of cities; colonial and postcolonial structures in Third World cities; urban governance; social patterns within cities; urban economies; urban planning; urban environment, and the linkages among all these.

Meets multicultural requirement; meets Social Sciences III-A requirement

S. Houston

Prereq. Any 100-level geography and or social science class; 4 credits

*204s Human Dimensions of Environmental Change

(Same as Environmental Studies 204) 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 alterna-

tive strategies of human-environment relations that could create a balance between human needs and environmental constraints.

Meets multicultural requirement; meets Social Sciences III-A requirement

G. Kebede

4 credits

205f Mapping and Spatial Analysis

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.

Does not meet a distribution requirement

C. Kelley

4 credits

206s Political Geography

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.

Meets Social Sciences III-A requirement

G. Kebede

4 credits

*214f Geography of South Asia

The region is studied in terms of its physical, cultural, and political geography. Emphasis is given to the numerous ways in which the peoples of South Asia have adapted to and utilized their local environments, the reasons for varying patterns of population growth throughout the region, and the environmental impact of economic development programs.

Meets multicultural requirement; meets Social Sciences III-A requirement

G. Kebede

4 credits

*215f Geography of the Middle East and North Africa

In this course, the Middle East and North Africa are studied in terms of their physical, cultural, economic, and political geography. Emphasis is placed on the environmental

conditions and ecological evolution, population and demographic characteristics, the resource base and major problems in the social, political, and economic transformation of the region.

Meets Social Sciences III-A requirement

G. Kebede

4 credits

217f The African Environments

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 soil erosion, desertification, biodiversity and depletion, and conservation and development.

Meets multicultural requirement; meets Social Sciences III-A requirement

G. Kebede

4 credits

*224f Atmosphere and Weather

In this course we will learn weather forecasting skills. This will involve examining weather observations, satellite and radar images, surface and upper-air weather charts, and predictions made by computer models. We will have an opportunity to learn atmospheric dynamics and gain an understanding of the Earth's radiation budget. Topics will include severe storms, hurricanes, and winter weather.

Meets Science and Math II-C requirement

The department

Prereq. high school earth science or any 100-level natural science course; 4 credits

295fs Independent Study

Does not meet a distribution requirement

The department

Prereq. soph and permission of instructor; 1-4 credits

304s Regional Planning - Special Topics

This course examines the shift from planning as an urban issue to the recognition that planning decisions often have broader regional impacts. The first part of the semester will survey urban planning efforts from the

early 1900s through the 1960s. The second half of the semester will focus on the “new” comprehensive planning efforts, using growth management of urbanization to protect rural areas, agricultural lands and sensitive environments. Emphasis will be placed on current “Smart Growth” approaches to development.

Meets Social Sciences III-A requirement

T. Millette

Prereq. Any 200-level geography course; 4 credits

307s Remote Sensing

This course presents the fundamentals of digital analysis of aerial and satellite imagery. Students are introduced to the characteristics of Earth images and learn to make qualitative and quantitative assessments of multispectral aerial and satellite data. This class includes a term-long collaborative project to measure vegetation change at the Plum Island salt marsh.

Meets Science and Math II-C requirement

T. Millette

Prereq. Geography 205; 4 credits

311f Seminars: Global Movement: Migrations, Refugees, and Diasporas

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.

(Speaking- and writing-intensive course) The voluntary and involuntary movement of people around the globe is the core focus of this course on migrations, refugees, and diasporas. Questions of borders, nativism, transnationalism, the global economy, and legality thread through this seminar 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.

Meets multicultural requirement; does not meet a distribution requirement

S. Houston

Prereq. jr., sr., 4 credits in department and 4

credits in related social sciences at 200 level or permission of instructor; 4 credits

312s Seminars: Sense of Place, Sense of Planet

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.

(Speaking- and writing-intensive course) The complex intersections of local and global processes underpin this exploration of a sense of place and an extended sense of planet. Specifically, we examine human-environment relations at various geographic scales and consider themes such as emotional connections to place, exclusions and displacement, social movements, and sustainability. Several theoretical perspectives, in-class and out-of-class exercises, and thematic readings will further situate us both within South Hadley and the global context.

Meets multicultural requirement; does not meet a distribution requirement

S. Houston

Prereq. jr, sr and 4 credits from the department and four 200-level related social science credits; 4 credits

313f Third World Development

(Speaking- and writing-intensive course) 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.

Meets multicultural requirement; meets Social Sciences III-A requirement

G. Kebbede

Prereq. Prereq. jr., sr., 4 credits in department

and 4 credits in related social sciences at 200 level or permission of instructor; 4 credits

319s Africa: Problems and Prospects

(Speaking-intensive course) 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.

Meets multicultural requirement; does not meet a distribution requirement

G. Kebbede

Prereq. jr, sr, soph with permission of instructor; 4 credits in department and 4 credits at the 200 level in geography or related social science.; 4 credits

***321s Geographic Information Systems**

In this course, students will learn basic and intermediate GIS skills and apply them to study natural hazards. Data from various sources are combined to create a spatial databases from which spatial models will be used to help in the study of different aspects of natural disaster management.

Meets Science and Math II-C requirement

T. Millette

Prereq. Geography 205; 4 credits

395fs Independent Study

Does not meet a distribution requirement

The department

Prereq. jr, sr, permission of instructor; 1-8 credits