GEOGRAPHY (GEOG)

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 Physical Geography
Spring. Credits: 4
This course provides a foundational understanding about how the Earth and its processes work, how they impact and control the habitability of our planet, and how vital they are to our very existence. These foundations are important for all of us to gain a holistic view of our integrated geosphere, atmosphere, hydrosphere, biosphere, and cryosphere. At the same time, we will explore the notion of scientific thinking and analysis. We will discuss how researchers collect data, for ideas, and then test those ideas to help us understand Earth's processes and history. Scientific research can help evaluate the impact of human activity on our home planet and it can have a direct impact on public policy.
Applies to requirement(s): Math Sciences
K. Kanamaru

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
The department

GEOG-204 Human Dimensions of Global Environmental Change Change
Fall. 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
D. Hanaan Dinko

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
E. Marcano

GEOG-206 Political Geography
Fall. 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
K. Surprise

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

GEOG-210 GIS for the Social Sciences and Humanities
Spring. 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-223 Development Geography
Spring. Credits: 4
This course explores the major trends and changes in development theory and their bearings on development policy and practice, critically discussing concepts of development and the emergence and evolution of paradigms in development thinking. We will explore what and who drives (under)development, where (location and scales), and what can be done. The course integrates hands-on experiential learning through case studies and guest lectures to enable students to analyze what theoretical foundations informed past and current development thinking and their prospects and limits.
Applies to requirement(s): Social Sciences
Other Attribute(s): Speaking-Intensive, Writing-Intensive
D. Hanaan Dinko

GEOG-224 Atmosphere and Weather
Fall and Spring. 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
S. Sadai
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
Not Scheduled for This Year. 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-261 Collaborative Research Experience
Collaborative research experiences combine direct mentorship from faculty, group discussions and learning, and independent inquiry that leads to substantive student research projects. The thematic focus of these experiences varies. Students can develop research projects on a topic of their choice related to the class theme or participate in the faculty member's research in the field.

GEOG-261CT Collaborative Research Experience: 'Cities'
Spring. Credits: 4
This collaborative research experience focuses on cities and their dynamism. It affords students the opportunity to combine aspects of both a typical course and of an independent study to examine numerous facets of urban life, such as, the impacts of urban planning and design, lived experiences in cities, and the possibilities for just and regenerative urban futures. Steeped within geographic and urban theories and scholarship, by the end of the semester, students will have produced a substantive research project (on a topic of their choice or aligned with the professor's research), experienced direct mentorship from the professor, and participated in group discussions and collaborative learning.
Applies to requirement(s): Social Sciences
Other Attribute(s): Speaking-Intensive, Writing-Intensive
S. Houston
Restrictions: This course is open to juniors and seniors

GEOG-261MG Collaborative Research Experience: 'Human Migration'
Fall. Credits: 4
This collaborative research experience focuses on human migration and invites students to consider, for example: the spatial and temporal patterns of migration and settlement, migrant representations and their implications, and the impacts of borders and bordering. The class uses geographic and migration theories as analytical guides and combines aspects of a typical course with independent study to examine human migration. By the end of the semester, students will have produced a substantive research project (on a topic of their choice or aligned with the professor's research), experienced direct mentorship from the professor, and participated in group discussions and collaborative learning.
Applies to requirement(s): Social Sciences
Other Attribute(s): Speaking-Intensive, Writing-Intensive
S. Houston
Restrictions: This course is open to juniors and seniors

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
The department
Restrictions: This course is open to juniors and seniors
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-312CJ Seminar: 'Geographies of Climate Justice'
Spring. Credits: 4
Climate change is one of the greatest challenges facing the planet, and it is intimately connected to uneven and inequitable social, political, economic, and environmental geographies. In this seminar course we explore climate justice with a lens on both climate science and critical geographies. Topics include greenhouse gas emissions, ongoing and projected future impacts; differential experiences and narratives of climate change; the ways that suggested climate solutions interface with social and economic difference and marginalization; and more-than-human geographies of climate change. Students will leave this course with a broader understanding of the necessity and practice of climate justice.
Applies to requirement(s): Social Sciences
S. Sadai
Prereq: 8 credits in the sciences.

GEOG-312GE Seminar: 'Geographies of Education'
Spring. Credits: 4
In this course we will explore geographies of education with particular attention to questions of inequity and racism across educational landscapes. Specific topics will include zoning, school choice, racial segregation and neoliberal school reforms, and will draw on scholarship at the intersection of education and geography (including from the sub-fields of educational geographies and children's geographies). Students will complete substantial research projects and hone their abilities to analyze policies and institutions in spatial terms.
Applies to requirement(s): Social Sciences
C. Loomis
Restrictions: This course is open to juniors and seniors

GEOG-314 China in the Global South
Fall. Credits: 4
China is at the heart of development in the 21st century. In other words, it is impossible to understand the twenty-first century without understanding China. But is China a partner or a neocolonial exploiter in the Global South? How can we make sense of China's current record of infrastructure lending in Africa or the recent uptick in China-Africa trade? What is the geography of China's economic statecraft in Africa? To provide some answers, we will explore the on-the-ground realities of China's increasingly complex engagement with developing countries in aid, trade, investment, agribusiness, and technology transfer. We will examine China's emerging role by focusing on the spatial economic statecraft and geostrategic politics of Chinese capital flow.
Applies to requirement(s): Social Sciences; Multicultural Perspectives
Other Attribute(s): Speaking-Intensive, Writing-Intensive
D. Hanaan Dinko
Restrictions: This course is open to juniors and seniors
Prereq: 4 credits in Geography or a related 200-level social science course.

GEOG-328 Climate Migration
Not Scheduled for This Year. 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
S. Houston
Restrictions: This course is open to juniors and seniors
Prereq: 4 credits in a related 200-level social science course

GEOG-331 Water, People, and Politics in the Anthropocene
Spring. Credits: 4
Water is not simply a natural biophysical element that flows neutrally through landscapes. In this course, we will focus on the political, ecological, and historical dimensions of human water use in a changing climate. Throughout the course, we will examine ways in which water crises are produced and play out at various scales, ranging from the macro (global) to the micro (household) and human body. We will begin by strengthening our foundational understanding of water resources and laws that affect distribution, quality, use, and sustainability. Then, we'll dig deeper into the complexities that link water, people, and politics. In the last weeks of the course, we'll work on applying these ideas to dissect real-world issues such as the Flint and the Jackson water crisis. We'll also think about how to harness the newest and best ideas to sustainably and inclusively meet societal and ecological water needs now and in the future.
Applies to requirement(s): Social Sciences
Other Attribute(s): Speaking-Intensive, Writing-Intensive
D. Hanaan Dinko
Restrictions: This course is open to juniors and seniors
Prereq: One course in Geography or one related social science course.

GEOG-395 Independent Study
Fall and Spring. Credits: 1 - 8
The department
Instructor permission required.