<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Term</th>
<th>Prerequisites</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 113</td>
<td>Introduction to Economic Geography</td>
<td>3(3-0)</td>
<td>Fall, Spring</td>
<td>3(3-0) R: Not open to graduate students</td>
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<tr>
<td>GEO 151</td>
<td>Introduction to Human Geography</td>
<td>3(3-0)</td>
<td>Fall, Spring</td>
<td>3(3-0) Systematic study of spatial patterns and processes that have shaped human use and alteration of the world.</td>
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<tr>
<td>GEO 201</td>
<td>Introduction to Plant Geography</td>
<td>3(3-0)</td>
<td>Fall of even years</td>
<td>3(3-0) R: Not open to graduate students</td>
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<tr>
<td>GEO 203</td>
<td>Introduction to Meteorology</td>
<td>3(3-0)</td>
<td>Fall</td>
<td>3(3-0) Fundamentals of meteorology. Energy balance, adiabatic processes, horizontal motion, cyclogenesis, and severe weather.</td>
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<tr>
<td>GEO 204</td>
<td>World Regional Geography</td>
<td>3(3-0)</td>
<td>Fall</td>
<td>3(3-0) Economic, political, cultural, environmental, and technological processes and conditions that explain the diversity of world regions.</td>
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<tr>
<td>GEO 206</td>
<td>Physical Geography</td>
<td>3(3-0)</td>
<td>Fall, Spring</td>
<td>3(3-0) Geographic and functional interrelationships within the physical environment: Earth-sun relationships, weather, climate, soils, vegetation and landforms (terrain characteristics).</td>
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<tr>
<td>GEO 206L</td>
<td>Physical Geography Laboratory</td>
<td>3(3-0)</td>
<td>Fall, Spring, 1(0-2)</td>
<td>3(3-0) P: GEO 113 or GEO 151 or GEO 203 or GEO 204 or (GEO 205 or GEO 206 or GEO 211 or GEO 215 or GEO 221)</td>
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<tr>
<td>GEO 208</td>
<td>Physical Geography of the National Parks</td>
<td>2(2-0)</td>
<td>Fall of odd years</td>
<td>2(2-0) Physical features such as geology, landforms, biota, and waters of United States and Canadian national parks, forests, seashores and lakeshores. Emphasis on formation and distribution.</td>
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<tr>
<td>GEO 211</td>
<td>Environmental Policy and Practice</td>
<td>3(3-0)</td>
<td>Fall</td>
<td>3(3-0) Systematic study of environmental policy and resource management practices in the United States and the broader global context, emphasizing geographical and other social sciences perspectives.</td>
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<tr>
<td>GEO 214</td>
<td>Geography of Drugs</td>
<td>3(3-0)</td>
<td>Fall of even years</td>
<td>3(3-0) Physical, ecological, and human geographies of drugs, drug crops, pharmaceuticals, alcohol, and their diffusions. Cultural geographies and geopolitically-implicated drugs’ consumption, trade, and regulation and prohibition.</td>
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<tr>
<td>GEO 215</td>
<td>Sports Geography</td>
<td>3(3-0)</td>
<td>Fall of odd years</td>
<td>3(3-0) Geographical variables that influence the location, character, and spread of sports at the national and global scale. Human cultures and diffusion. Themes associated with the geography of sports. Origin and spread of collegiate, professional, international, and Olympic sports.</td>
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<tr>
<td>GEO 221</td>
<td>Introduction to Geographic Information</td>
<td>3(3-0)</td>
<td>Fall, Spring</td>
<td>3(3-0) Principles and methods of spatial data collection, handling, analysis, and display. Introduction to remote sensing, geographic information systems, and cartography.</td>
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<tr>
<td>GEO 221L</td>
<td>Introduction to Geographic Information Laboratory</td>
<td>3(3-0)</td>
<td>Fall, Summer</td>
<td>3(3-0) P: GEO 221 or concurrently RB: Basic computer and math skills. Basic skills for working with Geographic Information Systems, remotely sensed imagery, design of maps, geospatial tools and technologies for data analysis and problem-solving.</td>
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<tr>
<td>GEO 235</td>
<td>Geography of Environment and Health</td>
<td>3(3-0)</td>
<td>Fall of even years</td>
<td>3(3-0) Geographic patterns of global health and environmental inequalities; the built, physical and social environment; urban design; infectious and chronic diseases.</td>
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<tr>
<td>GEO 236</td>
<td>Geography of Recreation and Tourism</td>
<td>3(3-0)</td>
<td>Fall of even years</td>
<td>3(3-0) Cultural, physical, and biotic factors affecting the distribution of recreation and tourism resources and participation. U.S. and international examples and case studies.</td>
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<tr>
<td>GEO 286</td>
<td>Undergraduate Research in Geography</td>
<td>3(3-0)</td>
<td>Fall of even years</td>
<td>3(3-0) Supervised research on a topic or topics determined by the instructor. Applications of geographic tools and theory.</td>
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<tr>
<td>GEO 302</td>
<td>Climates of the World</td>
<td>3(3-0)</td>
<td>Fall of odd years</td>
<td>3(3-0) RB: GEO 206 or GEO 203 R: Not open to freshmen. Regional climates and underlying atmospheric circulation patterns. Climate classification, physical climatic processes, spatial and temporal aspects of climate, climate changes. Sources and use of climate data.</td>
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<tr>
<td>GEO 303</td>
<td>Severe and Hazardous Weather</td>
<td>3(3-0)</td>
<td>Spring</td>
<td>3(3-0) P: GEO 203 or approval of department Extratropical cyclones, freezing precipitation and ice storms, lake effect snowstorms, cold waves, blizzards, thunderstorms, tornadoes, downbursts, tropical cyclones, floods, drought, and heat waves.</td>
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<tr>
<td>GEO 306</td>
<td>Environmental Geomorphology</td>
<td>3(3-0)</td>
<td>Fall of even years</td>
<td>3(3-0) Interdepartmental with Geological Sciences. Administered by Geography. P: CSS 210 or GEO 206 or GEO 333 or GLG 201 or GLG 304 or ISP 203A Relationships of running water, weathering, gravity, ice, waves, wind, and biota (including humans) to terrain and soils. Evolution of landscapes. Classical and modern interpretations.</td>
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<tr>
<td>GEO 314</td>
<td>Methods for Investigation of Urban Systems</td>
<td>3(3-0)</td>
<td>Spring</td>
<td>3(3-0) Interdepartmental with Urban Planning. Administered by Urban Planning. Models, approaches, and techniques for urban and regional problem analysis, research, program evaluation, and project management. Application of related computer software.</td>
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<tr>
<td>GEO 324</td>
<td>Remote Sensing of the Environment</td>
<td>3(3-0)</td>
<td>Fall of even years</td>
<td>3(3-0) Features and interpretation methods of remotely-sensed imagery, especially black-and-white and color infrared aerial photos. Basic features of radar, thermal, and multispectral imagery. Interpretation for agriculture, archaeology, fisheries, forestry, geography, landscape architecture, planning, and wildlife management.</td>
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<tr>
<td>GEO 326</td>
<td>Map Design and Production</td>
<td>3(3-0)</td>
<td>Fall of odd years</td>
<td>3(3-0) Techniques of map production, print and digital display.</td>
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<tr>
<td>GEO 330</td>
<td>Geography of the United States</td>
<td>3(3-0)</td>
<td>Fall, Spring, Summer</td>
<td>3(3-0) SA: GEO 230 Geography examination of United States landscapes, cultures, and economies. Investigation of interactions between human, economic, and physical geographies in U.S. regions.</td>
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<tr>
<td>GEO 331</td>
<td>Geography of Canada</td>
<td>3(3-0)</td>
<td>Fall, Spring</td>
<td>3(3-0) SA: GEO 231 Geographic examination of Canadian landscapes, cultures, government structure, health care system, and economies. Interactions of human, economic, and physical geographies in Canada’s regions and sub-regions.</td>
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<tr>
<td>GEO 332</td>
<td>Geography of Michigan and the Great Lakes Region</td>
<td>3(3-0)</td>
<td>Spring</td>
<td>3(3-0) SA: GEO 232 Michigan’s physical, historical, and economic geography. Interrelationships between the physical environment (rocks, landforms, soils, climate, vegetation, hydrology) and historical and contemporary land uses. Demographic and agricultural patterns. Human history and settlement patterns. Contemporary recreational opportunities.</td>
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<tr>
<td>GEO 335</td>
<td>Geography of Latin America</td>
<td>3(3-0)</td>
<td>Fall of odd years</td>
<td>3(3-0) Physical and human geography of Latin America. Current development issues, especially people-environment interaction in urban and rural areas. Topics include migration, urbanization, and industrialization.</td>
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</table>
336 Geography of Europe Fall of even years. 3(3-0)
Major regions and nations, including their physical resources, peoples, political structures, and economies.

337 Geography of Asia-Pacific Spring of odd years. 3(3-0)
Spatial patterns and processes of economic, urban, human and physical geography in eastern Asia, including China, Korea, Japan, Australia, New Zealand, the Indian subcontinent and other Asian countries. Contemporary regional development.

338 Geography of Africa Fall. 3(3-0)
Physical and human geography of Africa. Current development issues, especially people-environment interaction in urban and rural areas. Topics include drought, agricultural patterns, hunger, rural development, migration, and urbanization.

339 Geography of the Middle East and North Africa Spring of odd years. 3(3-0)

340 Geography of Eurasia Spring of even years. 3(3-0)
Physical, ecological, and human geographies of the lands and peoples of the former Russian and Soviet empires and of neighboring regions.

363 Introduction to Quantitative Methods for Geographers Fall. 3(3-0) R: Completion of University mathematics requirement. SA: GEO 463
Quantitative techniques in the analysis and classification of spatial data.

370 Introduction to Zoogeography Fall. 3(3-0) R: Interdepartmental with Fisheries and Wildlife and Integrative Biology. Administered by Integrative Biology. P: IBIO 355 SA: ZOL 370
Patterns of geographical distribution of animals and the ecological and historical processes leading to these patterns.

372 Ecological Monitoring and Data Analysis Spring. 3(2-2) Interdepartmental with Forestry. Administered by Forestry. P: (MTH 124 or MTH 132) and completion of Tier I writing requirement and (STT 201 or STT 224 or STT 231 or STT 421) SA: FOR 472
Design of ecological monitoring systems and analysis of resulting ecological data sets. Monitoring system design, model specification and implementation, and computational considerations from both a design- and model-based perspective. Hands-on introduction to statistical software.

401 Global Plant Geography Fall of even years. 3(3-0) P: GEO 201 or FOR 101 or FOR 204 or PLB 218 or IBIO 355 or approval of department R: Not open to freshmen.
Patterns of global plant distributions. Plant-atmosphere interactions, ecological processes, biogeographic patterns and predictive models of plant distributions.

402 Agricultural Climatology Fall of even years. 3(3-0) Interdepartmental with Biosystems Engineering. Administered by Geography. P: MTH 110 or MTH 116 R: Not open to freshmen or sophomores.
Relationships between climate and agriculture in resource assessment, water budget analysis, meteorological hazards, pests, crop-yield modeling, and impacts of global climate change.

403 Dynamic Meteorology (W) Spring of odd years. 3(3-0) P: (MTH 234 and GEO 203) and completion of Tier I writing requirement R: GEO 405 R: Open to juniors or seniors or master's students or doctoral students.
Principles of fluid dynamics and their application to the atmosphere.

405 Weather Analysis and Forecasting Spring of even years. 4(3-2) P: GEO 203 and (MTH 110 or MTH 116)
Dynamic and thermodynamic principles of atmospheric science applied to the development and evolution of extratropical cyclones. Laboratory sessions include analysis of current observations and satellite imagery.

407 Regional Geomorphology of the United States Spring of odd years. 3(3-0) R: GEO 306 or GLG 201 or GLG 412 or ISP 203A or ISP 203B
Geomorphic characteristics of physiographic regions of the United States.

408 Soil Geomorphology Fall of odd years. 4(3-2) P: CSS 210 or GEO 306 or GLG 201 or GEO 206 or ISP 203A or ISP 203B or ISP 203L or approval of department R: Not open to freshmen.
Soil formation and its relationship to landforms and landscapes. Common geographic relationships among soils, landforms, and vegetation. Description, analysis, and genesis of soils, surficial processes and landscapes.

409 Global Climate Change and Variability Fall of odd years. 3(3-0) P: GEO 203 or GEO 206
Analysis of climate change and variability at various time and space scales. Climate systems, paleoclimatology, global warming, climate models, and climate impact assessment.

410 Geography of Food and Agriculture Fall of even years. 3(3-0) R: GEO 113 or GEO 151 or GEO 204 or GEO 206 R: Not open to freshmen or sophomores.
Spatial patterns of contemporary global agriculture and food systems. Human-environment geography of select agricultural practices and food systems. Effects of agricultural practices on natural and human resources.

411 Stream Systems and Landforms Spring of even years. 3(3-0) R: GEO 206 or GEO 306 or GLG 201 or GLG 431 R: Not open to freshmen or sophomores.

412 Glacial Geology and the Record of Climate Change Spring. 4(3-2) Interdepartmental with Geological Sciences. Administered by Geological Sciences. R: GLG 201 or GEO 306 or GEO 408 or GLG 301 R: Not open to freshmen or sophomores.
In-depth analysis of glacial geology and the record of climate change, with emphasis on North America and Europe. Field trip required.

413 Urban Geography Spring. 3(3-0) Interdepartmental with Urban Planning. Administered by Geography. R: Not open to freshmen or sophomores.
Theories and models of urban spatial form. Underlying structures and processes. Socio-spatial dimensions of modern urbanism. Differentiation and locational conflict in residential, commercial, and industrial space.

414 Geography of Transportation Fall of odd years. 3(3-0) Interdepartmental with Urban Planning. Administered by Geography. P: GEO 113 R: Not open to freshmen.
Spatial principles of transportation. Theories of interaction, network structures, and location-allocation models. Role of transport and transport planning.

415 Location Theory and Land Use Analysis Fall of even years. 3(3-0) Interdepartmental with Urban Planning. Administered by Geography. P: GEO 113 or UP 201 R: EC 201 or EC 202 R: Not open to freshmen or sophomores.
Classical and neoclassical, static and dynamic models of industrial location and spatial organization. Land rent theory. Central place theory. Multi-localizational organization. Growth transmission.

418 The Ghetto Fall of even years. 3(3-0) Interdepartmental with Urban Planning. Administered by Geography. R: Not open to freshmen or sophomores.
Analysis of the ghetto including its spatial organization and structure. Distribution of racial and ethnic populations. Emphasis on U.S. cities.

419 Applications of Geographic Information Systems to Natural Resources Management Spring. 4(2-4) Interdepartmental with Biosystems Engineering and Forestry and Fisheries and Wildlife. Administered by Forestry. R: GEO 221
Application of geographic information systems, remote sensing, and global positioning systems to integrated planning and management for fish, wildlife, and related resources.

424 Advanced Remote Sensing Spring. 4(3-2) P: GEO 324
Interaction of solar radiation with the atmosphere, lithosphere, hydrosphere, and biosphere. Introductory digital image processing. Earth-resources satellite sensors, data products, and applications. Radar and thermal remote sensing.
425 Problems in Geographic Information Science (W) Spring. 3(2-2) Interdepartmental with Urban Planning. Administered by Geography. P: (GEO 325 or GEO 802) and completion of Tier I writing requirement. Advanced theoretical and technical issues in geographic information science utilizing a problems oriented approach. Development and implementation of geographic information science solutions and formal documentation of work.

426 Thematic Cartography Spring. 4(3-2) P: GEO 221 and GEO 221L and GEO 326 or approval of department. Principles, theories, decision making, and techniques in thematic map production. Graphic and Geographic Information Systems applications. Print and digital display.

428 Digital Terrain Analysis Fall of odd years. 3(2-2) P: GEO 325 Theoretical and technical issues of collection, management, analysis, and display of terrain data. Application of photogrammetry, geographic information systems, and cartography.

429 Geoprocessing Spring. 3(3-3) P: GEO 325 or GEO 802 or approval of department. Applications of computer programming to address geographic information problems. Integration of digital spatial data, geographic information systems, spatial analysis, and expert systems.

432 Environmental Ethics (W) Fall of even years. 3(3-0) P: Completion of Tier I writing requirement. R: Not open to freshmen or sophomores. Ethical dimensions of environmental and spatial issues and associated public policies.

435 Geography of Health and Disease Fall. 3(3-0) R: Not open to freshmen or sophomores. Spatio-environmental concepts and techniques applied to health problems. Disease transmission cycles, community nutrition, and health-care planning.

436 Spatial Analysis of Populations Spring of odd years. 3(3-0) R: Not open to freshmen or sophomores. Concepts and methods to measure and evaluate geo-spatial and temporal trends in populations and their components, such as natality, mortality, migration, and characteristics at different geographic scales. Sources of spatial population data. Visualization and analysis of data in a geographical information system.


441 Cultural Geography Spring of odd years. 3(3-0) RB: GEO 151 R: Not open to freshmen. Survey of the geographic study of world cultures, cultural ecologies, cultural landscapes, and cultural influences on societies’ patterns of spatial organization.

442 Social Science Data Analytics Applications Fall. Spring, 3(3-0) Interdepartmental with Political Science and Social Science. Administered by Social Science. P: PLS 202. Application of computational tools for data collection and visualization to various topics in social science research.

453 Metropolitan Environments: Urban Forms and Land Uses Spring. 3(2-2) P: GEO 221 Land use change, the physical fabric of the city, and the growth of regional centers in the American urban landscape. Issues associated with urban developments, practices and patterns in the 20th century and the resulting metropolitan form and function. Extensive use of geographic information software in spatial analysis.

459 Tourism in Regional Development Fall of odd years. 3(3-0) RB: GEO 259 The role of tourism in regional development. Examples from Michigan, the United States and other nations. Environmental considerations.

460 Green Roofs and Walls Fall. 2(2-0) Interdepartmental with Fisheries and Wildlife and Horticulture and Planning. Design and Construction. Administered by Horticulture. P: HRT 203 or FW 101 or GEO 206 or PDC 120 or EGR 100 R: Open to juniors or seniors or graduate students. Green roof and wall design and installation practices including plant species and substrates. Environmental impact, ecosystem services, integration with other environmental practices. Influence of economics, public policy, and industry organizations on the implementation of green roofs on a wide scale. Multidisciplinary nature of planning and implementation of successful green roof and wall projects.

478 Urban Transportation Planning Fall. 3(3-0) Interdepartmental with Urban Planning. Administered by Urban Planning. R: Open to juniors or seniors in the Geography Major or in the Urban and Regional Planning Major or approval of school. Principles of decision-making in urban transportation planning. Demand and supply analysis, social and environmental impacts, implementation programs. Use of computer models.

480 Senior Seminar (W) Fall. 3(3-0) P: Completion of Tier I Writing Requirement R: Open to seniors in the Geography Major or in the Geography Minor. History, philosophy, and methodology of the geographic discipline as it has evolved within academic and social contexts.

490 Independent Study Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department. Supervised individual study in an area supplementary to regular courses.

492 Geographic Research Problems Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Comprehensive introduction to geographies. Concepts and theories of remote sensing to include image interpretation and processing. Global Positioning Systems, spatial data structures, and geographic information systems.

813 Seminar in Urban and Economic Geography Spring. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. RB: Two of GEO 413, GEO 414, GEO 415, GEO 418. Review of research on selected topics in urban and economic geography.

816 The World System of Cities Fall. 3(3-0) Interdepartmental with Global Urban Studies Program. Administered by Geography. R: Open to graduate students. Modern global economic restructuring. Social, economic, and political impacts on world system of cities.

817 China and Globalization Fall of even years. 3(3-0) Interdepartmental with Global Urban Studies Program. Administered by Geography. RB: GEO 113 or GEO 204 or GEO 337 or GEO 413 R: Open to graduate students. Theoretical debates and empirical discussions on current social, economic, environmental, and spatial challenges facing contemporary urban China in an era of globalization. Comparative and thematic approach.

819 Spatial Epidemiology and Medical Geography Spring. 3(3-0) Interdepartmental with Epidemiology. Administered by Epidemiology. P: EPI 810 or GEO 865 R: Open to graduate students in the Department of Epidemiology and Biostatistics or in the Department of Geography or approval of department. SA: HM 819 Concepts, techniques, and utilization of spatio-epidemiologic analyses for human health.
826 Geographic Object-Based Image Analysis Spring. 3(3-0) P: GEO 221 or GEO 324 or approval of department RB: GEO 424
Remote sensing data acquisition, analytical workflow design, and outcome commonsense. Vegetation, urban, and agricultural applications. Mathematical and visual approaches to data extraction.

827 Theory and Practice of Terrestrial Remote Sensing Fall. 3(3-0) RB: GEO 324 or GEO 424
Theory, algorithms, and computational approaches to generate and assess derived satellite products for long-term Earth system monitoring, with an emphasis on estimating biophysical and geophysical land surface variables.

829 Collection and Analysis of Drone Imagery Spring of odd years. 4(2-4) P: GEO 324 or approval of department RB: Advanced level remote sensing coursework.
Multi-platform, sensor data collection, pre-processing and analysis across differing subfields: fieldwork and analysis.

837 Applications of Terrestrial Remote Sensing Spring of odd years. 3(3-0) P: GEO 424 or approval of department
Remote sensing for environmental and regional land cover change research. Advanced image interpretation; applications with emphasis on independent research projects.

858 Gender, Justice and Environmental Change: Issues and Concepts Fall. 3(3-0) Interdepartmental with Anthropology and Criminal Justice and Community Sustainability and Forestry and Fisheries and Wildlife and Sociology and Women's Studies. Administered by Community Sustainability. RB: Background in social science, environmental science, or natural resources.
Issues and concepts related to gender, ecology, and environmental studies. Key debates and theoretical approaches to addressing environmental issues from a gender and social justice perspective. Gender and environment issues and processes from a global perspective.

859 Gender, Justice, and Environmental Change: Methods and Application Spring. 3(3-0) Interdepartmental with Anthropology and Community Sustainability and Forestry and Fisheries and Wildlife and Sociology and Women's Studies. Administered by Anthropology. RB: Background in social science, environmental science, or natural resources.
Methods and case studies related to gender, ecology, and environmental studies. Methodological and fieldwork issues from a feminist perspective in international and intercultural contexts. Qualitative and quantitative methods for integrating social and environmental data.

865 Advanced Quantitative Methods in Geography Spring. 4(4-0) RB: GEO 363

866 Spatial Data Analysis Fall. 4(3-2) Interdepartmental with Statistics and Probability. Administered by Geography. RB: (GEO 363 or STT 421 or STT 430) or equivalent quantitative methods courses. SA: GEO 466
Theory and techniques for statistical analysis of point patterns, spatially continuous data, and data in spatial zones.

869 Agent-Based Modeling Spring. 3(3-0) Interdepartmental with Environmental Science and Policy. Administered by Geography. RB: Basic understanding of data structures and algorithms covered in an introductory course of any programming language. R: Approval of department.
Theoretical concepts related to simulating dynamic geographic phenomena in the intersection between human and natural systems. Innovative agent-based methodology applied to complex social-environmental systems. Hands-on experience of agent-based modeling, with special emphasis on modeling human decision-making and its impact on the natural environment.

871 Seminar in Physical Geography Fall. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. RB: at least one course in physical geography R: Approval of department.
Research on topics in physical geography.

872 Seminar in Human Geography Fall. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. RB: at least one course in human geography R: Approval of department.
Research on topics in human geography.

873 Seminar in Human-Environment Geography Spring. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. RB: at least one course in human geography and one course in physical geography. R: Approval of department.
Research on topics in human-environment geography.

874 Seminar in Geographic Information Science Spring. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. RB: at least one course in geographic information science, cartography or remote sensing R: Approval of department.
Geographic information science (GIS) applications to social and environmental problems. Theory and related issues.

886 Research Design in Geography Spring. 3(3-0) R: Approval of department.
Research and writing in geography. Identification of geographic problems and their relative importance. Structuring and stating hypotheses. Data acquisition and tests for validity.

890 Advanced Readings in Geography Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of department.
Advanced independent readings.

892 Advanced Research in Geography Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Advanced independent research.

899 Master's Thesis Research Fall, Spring, Summer. 1 to 12 credits. A student may earn a maximum of 99 credits in all enrollments for this course. R: Open to graduate students.
Master's thesis research.

986 Theories and Philosophies in Geography Fall of even years. 3(3-0) R: Open to doctoral students in the Geography Major.
Historical development of the discipline within social and intellectual contexts. Philosophical approaches behind geographic research and theory.

999 Doctoral Dissertation Research Fall, Spring, Summer. 1 to 36 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to doctoral students in the Department of Geography.
Doctoral dissertation research.