COLLEGE OF LIBERAL ARTS AND SCIENCES
Department of Geography

BOT Other Catalog Change Pages 247-248, 2011-12 Undergraduate Catalog

The Department of Geography offers the B.A. and B.S. degrees with a major in geography and the B.S. degree with a major in meteorology. Students may pursue a double major in geography and meteorology or a major in meteorology and a minor in geography. The B.S. degree major in geography has emphases in geography and geomatics, offering the opportunity to develop greater understanding of a specific aspect of geography by choosing an area of study in area studies, geographic information systems (GIS), natural environmental systems, or urban/economic systems. By the proper selection of electives, the student can meet federal civil service qualification standards as a soil scientist or hydrologist. An advanced studies certificate is also available in GIS.

The major in meteorology provides training for students interested in general meteorology, weather forecasting, and environmental meteorology, and the education necessary for graduate work in the atmospheric sciences. The program offers the student the opportunity to participate in the NIU Weather Service. Students may pursue a double major in geography and meteorology or the major in meteorology and a minor in geography. Students should consult with a departmental adviser to plan a program of study in either geography or meteorology.

The department offers a minor in geography and a departmental honors program and participates in the interdisciplinary minors in black studies, environmental management systems, environmental studies, international studies, Latino/Latin American studies, Southeast Asian studies, and urban studies.

Major in Geography (B.A. or B.S.)

The emphasis in geography offers the opportunity to develop greater understanding of a specific aspect of geography by choosing an electives from one of four area studies, geographic information systems (GIS), natural environmental systems, or urban/economic systems. By With the proper selection set of electives, the student can meet federal civil service qualification standards as a soil scientist or hydrologist. The emphasis in geomatics integrates land surveying and mapping science.

Students pursuing the emphasis in geography may earn the B.A. or the B.S. degree; those pursuing the emphasis in geomatics must fulfill requirements for the B.S. degree.

Emphasis 1: Geography (B.A. or B.S.)
### Requirements in Department (36)
- GEOG 101 - Survey of Physical Geography (3)
- GEOG 102 - Survey of Physical Geography Laboratory (1)
- GEOG 105 - Introduction to the Atmosphere (3)
- GEOG 106 - Introduction to the Atmosphere Laboratory (1)
- GEOG 202 - World Regional Geography (3)
- GEOG 204 - Geography of Economic Activities (3)
- GEOG 256 - Maps and Mapping (3)
- GEOG 300 - Proseminar (1)
- GEOG 359 - Introduction to Geographic Information Systems (3)
- GEOG 361 - Geographic Measurement and Quantitative Analysis (3)

Electives chosen from one of the following four course groupings or any combination for 12 semester hours.
- Both GEOG 391 and GEOG 491 may be included in these 12 hours for no more than 3 semester hours of credit in each.

### Area Studies
Course work from the following
- GEOG 303 - Water Resources and the Environment (3)
- GEOG 330 - Geography of the U.S. and Canada (3)
- GEOG 332 - Geography of Latin America (3)
- GEOG 335X - Migration (3)
- GEOG 336 - Geography of Africa (3)
- GEOG 338 - Geography of Asia (3)
- GEOG 391D - Internship: Regional Geography (1-3)
- GEOG 408 - Tropical Environmental Hazards (3)
- GEOG 430 - Population Geography (3)
- GEOG 435X - Space in Language and Culture (3)
- GEOG 451 - Political Geography (3)
- GEOG 461 - Applied Statistics in Geographic Research (3)
- GEOG 490 - Community Geography (3)
- GEOG 491 - Undergraduate Research in Geography (3)
- GEOG 498D - Seminar in Current Problems: Regional Geography (3)
- GEOG 498E - Seminar in Current Problems: Human Geography (3)

### Geographic Information Systems
Course work from the following
- GEOG 391J - Internship: Methods and Techniques (1-3)
- GEOG 391K - Internship: Mapping/Geovisualization (1-3)
SECTION C – Items previously in Section B, now reported for inclusion in the 2012-13 Undergraduate Catalog

GEOG 407 - Technical Hazards (3)
GEOG 455 - Land-Use Planning (3)
GEOG 458 - Geovisualization (3)
GEOG 459 - Geographic Information Systems (3)
GEOG 460 - Remote Sensing of the Environment (3)
GEOG 465 - Geographic Field Work (3-8)
GEOG 467 - Workshop in Cartography (3)
GEOG 468 - Workshop in GIS (3)
GEOG 490 - Community Geography (3)
GEOG 491 - Undergraduate Research in Geography (1-3)
GEOG 493 - Computer Methods and Modeling (1-3)
GEOG 498J - Seminar in Current Problems: Methods and Techniques (3)
GEOG 498K - Seminar in Current Problems: Mapping/Geovisualization (3)

Natural Environmental Systems
Course work from the following
GEOG 302 - Soil Science (4)
GEOG 303 - Water Resources and the Environment (3)
GEOG 306 - Severe and Hazardous Weather (3)
GEOG 322 - Geography of World Plant Communities (3)
GEOG 324X - Women in Science (3)
GEOG 370 - Regional Climatology (3)
GEOG 391A - Internship: Physical Geography (1-3)
GEOG 391B - Internship: Environmental Management (1-3)
GEOG 402 - Pedology (4)
GEOG 403 - Soil Geography and Land Use Planning (3)
GEOG 404 - Soil Description and Interpretation (2)
GEOG 406 - Natural Hazards and Environmental Risk (3)
GEOG 408 - Tropical Environmental Hazards (3)
GEOG 413 - Forest Ecology and Management (3)
GEOG 422 - Plant-Soil Interactions (4)
GEOG 442X - Geomorphology (3)
GEOG 453 - Environmental Management (3)
GEOG 455 - Land-Use Planning (3)
GEOG 461 - Applied Statistics in Geographic Research (3)
GEOG 465 - Geographic Field Work (3)
GEOG 490 - Community Geography (3)
GEOG 491 - Undergraduate Research in Geography (1-3)
GEOG 492 - Hydrology (3)
GEOG 498A - Seminar in Current Problems: Physical Geography (3)
SECTION C – Items previously in Section B, now reported for inclusion in the 2012-13 Undergraduate Catalog

GEOG 498B - Seminar in Current Problems: Environmental Management (3)

Urban/Economic Systems
Course work from the following
GEOG 304 - Transportation Geography Credits: 3
GEOG 324X - Women in Science (3)
GEOG 362 - Geography of Urban Systems (3)
GEOG 391G - Internship: Urban/Economic Geography (1-3)
GEOG 403 - Soil Geography and Land Use Planning (3)
GEOG 407 - Technical Hazards (3)
GEOG 430 - Population Geography (3)
GEOG 453 - Environmental Management (3)
GEOG 455 - Land-Use Planning (3)
GEOG 461 - Applied Statistics in Geographic Research (3)
GEOG 463 - Urban Geography (3)
GEOG 464 - Location Analysis (3)
GEOG 490 - Community Geography (3)
GEOG 491 - Undergraduate Research in Geography (1-3)
GEOG 498E - Seminar in Current Problems: Human Geography (3)
GEOG 498G - Seminar in Current Problems: Urban/Economic Geography (3)

Requirements outside Department (B.A. 7-20; B.S. , 10-15)

For the B.A. degree
*MATH 210 - Finite Mathematics (3),
OR *MATH 211 - Calculus for Business and Social Science (3),
OR *MATH 229 - Calculus I (4)
STAT 301 - Elementary Statistics (4)
Fulfillment of foreign language requirement (0-12)
(See “Foreign Language Requirement for the B.A. Degree”)

For the B.S. degree
(See “College Requirements for the B.S. Degree”)
Students should consult the undergraduate adviser for the appropriate sequence for their course of study.

Total Hours for a Major Emphasis I in Geography: 43-56 (B.A.) OR 46-51 (B.S.)

Recommendations
Students interested in environmental studies are strongly advised to complete at least two, one-year sequences of courses in a laboratory science. Students should contact the undergraduate adviser for career goal advisement early in their course of study and regularly consult the Curriculum and...
SECTION C – Items previously in Section B, now reported for inclusion in the 2012-13 Undergraduate Catalog

Course Guide to Geography and Meteorology available in the department office.

Emphasis 2: Geomatics (B.S.)

Requirements in Department (41)
GEOG 101 - Survey of Physical Geography (3)
GEOG 102 - Survey of Physical Geography Laboratory (1)
GEOG 150 - Introduction to Geomatics (3)
GEOG 202 - World Regional Geography (3)
OR GEOG 204 - Geography of Economic Activities (3)
GEOG 250 - Civil Surveying (4)
GEOG 251 - Control Surveying (4)
GEOG 256 - Maps and Mapping (3)
GEOG 300 - Proseminar (1)
GEOG 350 - Land Surveying (4)
GEOG 359 - Introduction to Geographic Information Systems (3)
GEOG 450 - Legal Aspects of Geomatics and Land Surveying (3)

Course work from the following (9)
GEOG 391M - Internship, Geomatics/Surveying (3)
GEOG 403 - Soil Geography & Land Use Planning (3)
GEOG 455 - Land Use Planning (3)
GEOG 459 - Geographic Information Systems (3)
GEOG 455 - Land Use Planning (3)
GEOG 460 - Remote Sensing of the Environment (3)
GEOG 468 - Workshop in GIS (3)
GEOG 474 - Geomatics Design in Land Development (4)
GEOG 475 - Geomatics Planning and Computation (3)
GEOL 425 - Engineering Geology (3)

Requirements outside Department (15-16)
MATH 211 - Calculus for Business and Social Science (3)
OR MATH 229 - Calculus I (4)
PHYS 210 - General Physics I (4)
(Available for general education credit.)
PHYS 211 - General Physics II (4)
(Available for general education credit.)
STAT 301 - Elementary Statistics (4)
SECTION C – Items previously in Section B, now reported for inclusion in the 2012-13 Undergraduate Catalog

Recommendations

Students interested in a career in land surveying will need to satisfy curricular and course requirements for the surveyor in-training examination. Students should consult with the undergraduate adviser early in their course of study for advice on fulfilling those requirements.

Total Hours for Emphasis 2, Geomatics: 56-57 (B.S.)

BOT 5/10/12, UCC 3/1/12, CUC 2/9/12 Section B