

ATTACHMENT

Proposed changes to the Geography curriculum

- Classification of all geography courses into five groups: (1) Human Geography, (2) Physical Geography, (3) Human-Environment Interaction, (4) Geographic Techniques, and (5) Other. Several courses, due to their content, are placed in two groups. However, students can get credit for them only once under of the groups. Previously, there was no formal classification of our courses. The list of courses in each group is shown on the next page.
- Changes to the **Global Insights** Emphasis:
 - Adding to the list of required courses (380) two additional courses (400, 451) and allowing students to choose one of them.
 - Increasing the number of Regional Geography electives from two to three courses.
 - Requiring students to take a greater diversity of elective courses. They have to take three electives from at least two groups of courses. Previously they could take all the electives from just one group of courses.
- Changes to the **Geographic Information Science** Emphasis:
 - Increasing the minimum requirement from 45 to 48 credits.
 - Adding to the list of required courses (380) three additional courses (400, 451, 461) and allowing students to choose one of them.
 - Adding Advanced GIS (472) to the list of required courses.
 - Adding three additional Geographic Techniques (GIS-related) and one Computer Science courses as electives. Previously students could take only two such classes and meet the requirements.
 - Requiring one elective from the Urban and Regional Studies curriculum. Many majors with the GIS emphasis are employed by city/county or private planning agencies, and this requirement will make them more competitive on the job market.
- Changes to the **Environmental Analysis and Management** Emphasis:
 - Adding to the list required courses (380) two additional courses (400, 461) and allowing students to choose one of them.
 - Putting more emphasis on Physical Geography and Human-Environment Interaction courses by replacing two Human Geography electives with several courses from the first two groups.
 - Putting more emphasis on Geographic Techniques (GIS-related) courses by requiring one of them as an elective. Previously none was required.
 - Changing the list of elective courses (two are required) taken from other departments. The new list includes courses from Biology, Economics, Environmental Studies, and Geology.
- Changes to the **Secondary Education Geography** Emphasis:
 - Re-writing the catalog description so it follows the same format as the other revised Geography emphases (including the newly created five course groups). No change in the course requirement for this emphasis is proposed.
- Changes to the **Geography Minor** and **Geography Minor (Elementary Education)** Emphases:
 - Re-writing the catalog description so it follows the same format as the other revised Geography emphases (including the newly created five course groups). No change in the course requirement for these emphases is proposed.

Geography Course Groups

HUMAN GEOGRAPHY

- 102 World Regional Geography (3)**
- 111 Human Geography (3)**
- 213 Population Geography (3)
- 311 Economic Geography (3)
- 316 Ethnic Landscapes of America (3)*
- 321 Political Geography (3)
- 324 Urban Geography (3)
- 325 Geography of Transportation and Industry (3)
- 329 Geography of Recreation and Tourism (3)
- 377 Population and Environment (3)*
- 422 Historical Geography of the US (3)*
- 451 Advanced Topics in Human Geography (3)

PHYSICAL GEOGRAPHY

- 121 Physical Geography: Weather & Climate (4)**
- 122 Physical Geography: Landforms & Soils (4)**
- 304 Soils (3)
- 314 Environmental Conservation (3)*
- 335 Climatology (3)
- 342 Meteorology (3)
- 352 Landscape Morphology (3)
- 363 Biogeography (3)
- 364 Water Resource Management (3)*
- 414 Natural Resource Management (3)*
- 419 Natural Hazards (3)*
- 461 Advanced Topics in Physical Geography (3)

HUMAN-ENVIRONMENT INTERACTION

- 314 Environmental Conservation (3)*
- 364 Water Resource Management (3)*
- 377 Population and Environment (3)*
- 414 Natural Resource Management (3)*
- 419 Natural Hazards (3)*

REGIONAL GEOGRAPHY

- 313 Wisconsin (3)
- 316 Ethnic Landscapes of America (3)*
- 317 United States and Canada (3)
- 319 Latin America (3)
- 331 Europe (3)
- 338 Russian Realm (3)
- 347 Asia-Pacific (3)
- 353 Sub-Saharan Africa (3)
- 354 Middle East & North Africa (3)
- 399 Study Tour (1-8)*
- 422 Historical Geography of the US (3)*

GEOGRAPHIC TECHNIQUES

- 371 Cartography (4)**
- 380 Research Methods (3)
- 381 Air Photo Interpretation (3)
- 382 Remote Sensing of the Environment (3)
- 385 Quantitative Methods in Geography (3)
- 391 Computer Cartography (3)
- 402 Field Methods in Geography (3)
- 471 GIS (3)
- 472 Advanced GIS (3)

OTHER

- 395 Colloquium in Geography (1)
- 399 Study Tour (1-8)*
- 400 Geographic Concepts (3)
- 444 Internship in Geography (1-6)
- 446 Independent Study (1-3)
- 456 Related Readings (1-3)
- 474 Honor Thesis (1-6)

* These courses, due to their content, belong to two groups. However, students can get credit for them only once under one of the groups.

Courses in **bold** are required of all Geography majors.

GEOGRAPHY AND URBAN PLANNING

IV. ADMISSION/GRADUATION REQUIREMENTS

To be eligible for the Geography major or minor, students must earn a minimum grade point average of 2.00 in all courses required for the major and minor.

Those students seeking Wisconsin Teacher Certification must earn a minimum grade point average of 3.00 in all courses required for the Geography major or minor in order to meet requirements of the College of Education and Human Services.

V. REQUIRED CORE COURSES

- GEOG 102 World Regional Geography (3 crs)
- GEOG 111 Human Geography (3 crs)
- GEOG 121 Physical Geography: Weather & Climate (4 crs)
- GEOG 122 Physical Geography: Landforms & Soils (4 crs)
- GEOG 371 Cartography (4 crs)

Course Offerings:

- **Human Geography:** 111, 112, 213, 311, 316,* 321, 324, 325, 329, 377,* 422,* 451
- **Physical Geography:** 121, 122, 304, 314,* 335, 364,* 342, 352, 363, 414,* 419,* 461
- **Human-Environment Interaction:** 314,* 364,* 377,* 414,* 419*
- **Regional Geography:** 102, 104, 313, 316,* 317, 319, 331, 338, 347, 353, 354, 399,* 422*
- **Geographic Techniques:** 371, 380, 381, 382, 385, 391, 402, 471, 472
- **Other:** 395, 399,* 400, 444, 446, 456, 474

* These courses, due to their content, belong to two groups; however, students can get credit for them only once under one of the groups.

VI. THE MAJOR(S), WITH EMPHASES AND/OR OPTIONS

1. GEOGRAPHY MAJOR

A. Global Insights Emphasis

Recommended for students who wish to have a general background in the regional and topical fields of Geography.

Required Units (crs.): 39 minimum

Required Courses: In addition to the Core Courses:

- One course (3 crs.) from the following Geography courses: 380, 400, 451*

Elective Courses:

- Three courses (9 crs.) selected from the following Regional Geography courses: 317, 319, 331, 338, 347, 353, 354
- One course (3 crs.) selected from the following Human Geography or Regional Geography courses: 213, 311, 313, 316, 321, 324, 325, 329, 422, 451*
- One course (3 crs.) selected from the following Physical Geography or Human-Environment Interaction courses: 314, 335, 364, 377, 414, 419
- An additional course (3 crs.) selected from the following Human Geography, Physical Geography, Human-Environment Interaction, or Regional Geography courses: 213, 311, 313, 314, 316, 321, 324, 325, 329, 335, 364, 377, 414, 419, 422, 451*

* Students can get credit for GEOG 451 only once, either under the required course option or as an elective course

B. Geographic Information Science Emphasis

Recommended for students who wish to acquire a greater concentration in the methods and techniques of Geography and for those who seek careers in such fields as cartography and Geographic Information Systems.

Required Units (crs.): 48 minimum

Required Courses: In addition to the Core Courses:

- Geography: 371, 471, 472
- One course (3 crs.) from the following Geography courses: 380*, 400, 451,* 461*

Elective Courses:

Geography:

- Three courses (9 crs.) selected from the following Geographic Techniques or Computer Science courses:
 - Geographic Techniques courses: 380*, 381, 382, 391, 402
 - Computer Science course: 142
- Two courses (6 crs.) selected from two of the following groups:
 - Human Geography courses: 213, 311, 316, 321, 324, 325, 329, 422, 451*
 - Physical Geography courses: 304, 335, 342, 352, 363, 461*
 - Human-Environment Interaction courses: 314, 364, 377, 414, 419

Urban and Regional Studies:

- Two courses (3 crs.) from the following Urban and Regional Studies courses: 300, 317, 351

* Students can get credit for GEOG 380, 451 or 461 only once, either under the required course option or as an elective course

C. Environmental Analysis and Management Emphasis

Recommended for students who wish to acquire a greater concentration in the concepts and methods of environmental geography and for those who seek careers in environmental analysis and environmental resource management.

Required Units (crs.): 48 minimum

Required Courses: In addition to the Core Courses:

- Geography 314, 371, 385,
- One course (3 crs.) from the following Geography courses: 380,* 400, 461*

Elective Courses:

Geography:

- Two courses (6 crs.) selected from the following Physical Geography courses: 304, 335, 342, 352, 363, 461*
- Two courses (6 crs.) selected from the following Human-Environment Interaction courses: 364, 377, 414, 419
- One course (3 crs.) selected from the following Geographic Techniques courses: 381, 382, 391, 402, 471, 472

Environmental Sciences:

- Two courses (3 crs.) selected from the following courses: Environmental Studies: 370, 395; Geology: 320, 365; Economics: 355, 360; Biology: 386

* Students can get credit for GEOG 380 or 461 only once, either under the required course option or as an elective course

D. Secondary Education Geography Emphasis

Recommended for students earning the Bachelor of Science in Education degree and planning to teach Geography in grades 6-12.

Required Units (crs.): 39 minimum

Required Courses: In addition to the Core Courses:

- Geography 311, 313, 317, 324
- One course (3 crs.) selected from the following Physical Geography or Human-Environmental Interaction courses:
 - Physical Geography: 304, 335, 342, 352, 363
 - Human-Environment Interaction: 314, 414, 419
- One course (3 crs.) selected from the following Human Geography, Regional Geography, or Geographic Techniques courses:
 - Human Geography: 316, 321, 377, 422
 - Regional Geography: 319, 331, 338, 347, 353, 354
 - Geographic Techniques: 381, 391, 471

Elective Courses: additional courses beyond the minimum requirements may be taken from the Department's offerings.

VI. THE MINOR(S)

1. GEOGRAPHY MINOR

Required Units (crs.): 22 minimum

Required Courses:

- **Letters and Science:** Geography 102
- **Secondary Education:** Geography 111, 121

Elective Courses:

- **Letters and Science:** sufficient courses from the Department's offerings to meet the Minimum Requirement
- **Secondary Education:** electives must include:
 - One course (3 crs.) selected from the following Physical Geography courses: 122, 304, 335, 352, 364, 419
 - One course (3 crs.) selected from the following Human Geography courses: 213, 311, 314, 324, 325, 377
 - One course (3 crs.) from the following Regional Geography courses: 102, 313, 317, 319, 331, 338, 347, 353, 399, 422

2. GEOGRAPHY MINOR (ELEMENTARY EDUCATION)

Recommended for students who desire a strong geography background for teaching in the elementary schools. This minor can be taken only in combination with the major in Elementary Education.

Required Units (crs.): 25 minimum

Required Courses:

- Geography 111, 121, 311, 313
- Two courses (6 crs.) from the following Regional Geography courses: 102, 316, 317, 319, 331, 338, 347, 353, 354
- One course (3 crs.) from the following Human Geography courses: 213, 311, 321, 324, 325, 329, 377, 422, 451
- One course (3 crs.) from the following Physical Geography courses: 304, 314, 335, 342, 352, 363, 364, 419, 461