GEOLOGY, ENVIRONMENTAL SCIENCE EMPHASIS, COMPREHENSIVE MAJOR

University Requirements

Liberal Arts (Code 160-011)

GRADUATION REQUIREMENTS FOR BACCALAUREATE DEGREE

Credit Requirements
Minimum total for graduation 1 120
Upper division credits (courses numbered 300 and higher) 39
Liberal Education Core 36
Academic Concentrations

Grade Point Requirements 2
Total 2.00 average
Resident 2.00 average
Major 2.00 average
Minor 2.00 average
Certificate 2.00 average

University Residency Requirements 3
Minimum total 30
Senior year 23
Major, Standard, upper division in residence 12
Major, Comprehensive, upper division in residence 21
Certificate 25 percent of credits

Procedures Required for Graduation
Obtain admission to the degree program and/or the College offering it.
Apply for graduation on CampS.

1 Certain programs exceed this minimum.
2 See special requirements in each College.
3 See special requirements for the College of Education and Human Sciences.

Liberal Education Core
The University of Wisconsin-Eau Claire measures learning outcomes to ensure that its graduates have achieved a liberal education and prepared themselves to contribute to a complex society. Upon graduation, each undergraduate will have met the four learning goals of our liberal education core and the 11 learning outcomes they comprise.

Code Title Credits
LIBERAL EDUCATION CORE REQUIREMENTS
Knowledge Goal
Knowledge Outcome 1 (K1): Natural Sciences Two (2) learning experiences

Knowledge Outcome 2 (K2): Social Sciences
Two (2) learning experiences

Knowledge Outcome 3 (K3): Humanities
Two (2) learning experiences

Knowledge Outcome 4 (K4): Fine Arts
One (1) learning experience

Skills Goal
Skills Outcome 1 (S1): Written and Oral Communication
Two (2) learning experiences

One S1 must meet the University Writing Requirement

Skills Outcome 2 (S2): Mathematics
One (1) learning experience

One S2 to meet the University Mathematics Requirement

Skills Outcome 3 (S3): Creativity
One (1) learning experience

Responsibility Goal
Responsibility Outcome 1 (R1): Equity, Diversity, and Inclusivity
Two (2) learning experiences

One R1 must satisfy Design for Diversity

Responsibility Outcome 2 (R2): Global Perspectives
One (1) learning experience

Responsibility Outcome 3 (R3): Civic and Environmental Issues
One (1) learning experience

Integration Goal
Integration Outcome 1 (I1): Integration
Two (2) learning experiences

Service-Learning Goal
Service-Learning 30 hours

College Degree Requirements
Bachelor of Arts or Bachelor of Science Degree (B.A./B.S.)

University Graduation Requirements. All candidates for degrees must fulfill the requirements for credits, curriculum, GPA, and University residency as specified in the section of this catalog titled University Graduation Requirements.

College Graduation Requirements: Grade Point Averages. All candidates for degrees in the College of Arts and Sciences must earn minimum resident and total GPAs of 2.00 in the major, the minor, and the certificate. The resident and total GPAs for the major are computed using all attempted credits applicable to the major including those offered by departments other than the major department. The resident and total GPAs for the minor and the certificate are computed similarly.

Major-Minor and Major-Certificate Requirements. A standard major (a minimum of 36 credits) must be supplemented by a minor (a minimum of 24 credits) or by a certificate (12 to 18 credits) to meet graduation requirements for completing a first and second degree program. No minor or certificate is required with a Comprehensive Major (60 or more credits) or with two majors of 36 or more credits each.
Certain degree programs which include Comprehensive Majors may require more than the minimum of 120 credits for graduation.

Acceptable academic program combinations are determined at the college level. A major and a minor or a major and certificate or two majors (if available) may not be elected in the same department or program, except in the approved combinations listed here.

**College Credits.** Earn at least 90 credits in courses offered by the College of Arts and Sciences.

**Bachelor of Arts Degree in the College of Arts and Sciences (B.A.)**

Fulfillment of all University Graduation Requirements (which includes the Liberal Education Core); all College-level degree requirements (major and minor/certificate emphases, GPAs, earning at least 90 credits in Arts and Sciences course work); foreign language competency at the 102 level. Foreign language competency may be met in one of two ways: (1) Achieve a score on the foreign language placement test that qualifies the student to enter the 201-level course in a foreign language. (2) Earn a grade of at least C (not C-) or a mark of S in a 102-level foreign language course (or AIS 112 or AIS 122 / LANG 122 or CSD 103).

**Bachelor of Science Degree in the College of Arts and Sciences (B.S.)**

Fulfillment of all University Graduation Requirements (which includes the Liberal Education Core); all College-level degree requirements (major and minor/certificate emphases, GPAs, earning at least 90 credits in Arts and Sciences course work); mathematics competency at the MATH 111, MATH 112 or MATH 113 level. Mathematics competency can be met in one of three ways: (1) Achieve a score on the mathematics placement test that qualifies the student to enter MATH 114. (2) Earn a grade of at least C (not C-) or a mark of S in MATH 111, MATH 112, or MATH 113. (3) Achieve a satisfactory score on the MATH 122 competency test. This test may be attempted no more than two times.

**Major Requirements**

The objective of the comprehensive major in geology is to prepare students for graduate programs in geological sciences or for careers as professional geologists, hydrogeologists, or geological engineers. The liberal arts comprehensive major requires completion of the Core and one of the five Emphases listed below.

**Core Requirements for all Liberal Arts and Teaching Emphases in the Comprehensive Geology Major**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-25 credits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 106</td>
<td>Earth Science</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 110</td>
<td>Physical Geology</td>
<td></td>
</tr>
<tr>
<td>GEOL 115</td>
<td>Environmental Geology</td>
<td></td>
</tr>
<tr>
<td>GEOL 118</td>
<td>Societal Issues in Earth Science</td>
<td></td>
</tr>
<tr>
<td>GEOL 312</td>
<td>Mineralogy and Petrology I</td>
<td>5</td>
</tr>
</tbody>
</table>

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 320</td>
<td>Sedimentology and Stratigraphy</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 468</td>
<td>Computers in Geology</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 470</td>
<td>Field Geology I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 115</td>
<td>Chemical Principles (or equivalent)</td>
<td>6</td>
</tr>
<tr>
<td>Capstone Experience</td>
<td>0-2</td>
<td></td>
</tr>
</tbody>
</table>

1 Each major is required to complete a capstone experience.

For liberal arts majors, the capstone options may include: GEOL 395 (for a minimum of two credits) or GEOL 471. The capstone will consist of student selection of one of the following options: faculty/student collaborative research, preparation and presentation of a department seminar, internship, field experiences, or other approved experiences. Students working with their adviser will submit a proposal to the department faculty outlining their choice of the capstone experience and explicitly stating how the capstone fits into their personal career goals. The proposal for a capstone experience must be submitted to the chair of the department no later than the second week of the first semester of the senior year.

For teaching majors, the capstone may be satisfied by successful completion of the professional semester in the College of Education and Human Sciences.

**Environmental Science Emphasis**

Recommended for students who are interested in careers working in environmental fields or who desire to attend graduate school in environmental science, environmental law, or resource planning. Requires completion of the Core plus the required credits as listed below to total at least 60 credits.

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>GEOL 301</td>
<td>Earth Resources</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 308</td>
<td>Water Resources</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 315</td>
<td>Hydrogeology I</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 330</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td>or GEOL 418</td>
<td>Earth History</td>
<td></td>
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<tr>
<td>GEOL 345</td>
<td>Geomorphology and Aerial Photography Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>or GEOL 420</td>
<td>Glacial Geology</td>
<td></td>
</tr>
<tr>
<td>GEOL 416</td>
<td>Hydrogeology II</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 335</td>
<td>Geographic Information Systems I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 114</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

Select one of the following: 3-4

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 321</td>
<td>Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 328</td>
<td>Conservation Biology</td>
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<tr>
<td>BIOL 336</td>
<td>Terrestrial Ecology</td>
<td></td>
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<tr>
<td>BIOL 338</td>
<td>Vegetation Ecology</td>
<td></td>
</tr>
<tr>
<td>BIOL 376</td>
<td>Aquatic Ecology</td>
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</tbody>
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Plus electives to total at least 60 credits selected from any geology course numbered 291 or higher.