GEOLGY, ENVIRONMENTAL  SCIENCE EMPHASIS, COMPREHENSIVE MAJOR

Liberal Arts (Code 160-011)

University Requirements

**Code** | **Title** | **Credits**
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**GRADUATION REQUIREMENTS FOR BACCALAUREATE DEGREE**
Credit Requirements
Minimum total for graduation | 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</table>
| LIBERAL EDUCATION CORE REQUIREMENTS | Knowledge Goal | a minimum of 36 credits

<table>
<thead>
<tr>
<th>Knowledge Goal</th>
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</thead>
</table>
| 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

<table>
<thead>
<tr>
<th>Skills Goal</th>
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</table>
| Skills Outcome 1 (S1): Written and Oral Communication | Two (2) learning experiences
| Skills Outcome 2 (S2): Mathematics | One (1) learning experience
| Skills Outcome 3 (S3): Creativity | One (1) learning experience

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<thead>
<tr>
<th>Responsibility Goal</th>
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| Responsibility Outcome 1 (R1): Equity, Diversity, and Inclusivity | Two (2) learning experiences
| Responsibility Outcome 2 (R2): Global Perspectives | One (1) learning experience
| Responsibility Outcome 3 (R3): Civic and Environmental Issues | One (1) learning experience

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<tr>
<th>Integration Goal</th>
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| Integration Outcome 1 (I1): Integration | Two (2) learning experiences

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<tr>
<th>Service-Learning Goal</th>
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</table>
| 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 112 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.

NOTE: Communication classes, both written and oral, are strongly recommended to fulfill liberal education requirements in any of the following emphases.

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### 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>
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</thead>
<tbody>
<tr>
<td>23-25</td>
<td>Select one of the following:</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>
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</tbody>
</table>

**Required:**

- GEOL 312 Mineralogy and Petrology I
- GEOL 320 Sedimentology and Stratigraphy
- GEOL 468 Computers in Geology
- GEOL 470 Field Geology I
- CHEM 115 Chemical Principles (or equivalent)

Capstone Experience ¹

0-2

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**

- GEOL 301 Earth Resources
- GEOL 308 Water Resources
- GEOL 315 Hydrogeology I
- GEOL 330 Structural Geology
- GEOL 416 Hydrogeology II
- GEOL 420 Geomorphology and Aerial Photography Interpretation
- GEOL 435 Glacial Geology
- GEOL 440 Geologic Information Systems I
- MATH 114 Calculus I

Select one of the following: ³-⁴

- BIOL 321 Ecology
- BIOL 328 Conservation Biology
- BIOL 336 Terrestrial Ecology

³-⁴ Earn at least 90 credits in courses offered by the College of Arts and Sciences; foreign language competency at the 102 level. Foreign language competency may be met in one of three ways: (1) Achieve a score on the foreign language placement test that qualified 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). (3) Achieve a satisfactory score on the MATH 112 competency test. This test may be attempted no more than two times.

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**Courses and Emphases:**

- **Geology Major:**
  - Core Requirements
  - Major Requirements
  - Emphases
- **Bachelor of Arts Degree in the College of Arts and Sciences (B.A.):**
  - Course and program requirements
  - Major-Minor and Major-Certificate Requirements
  - Credited courses
- **Bachelor of Science Degree in the College of Arts and Sciences (B.S.):**
  - Course and program requirements
  - Major-Minor and Major-Certificate Requirements
  - Credited courses

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**Additional Information:**

- Core Requirements for all Liberal Arts and Teaching Emphases
- Environmental Science Emphasis
- Requirements for completion

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**Notes:**

- Communication classes, both written and oral, are strongly recommended to fulfill liberal education requirements.
- 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.
- 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.
<table>
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<th>Course Code</th>
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<tr>
<td>BIOL 338</td>
<td>Vegetation Ecology</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

NOTE: No degree credit may be earned under the Satisfactory/Unsatisfactory option in any required courses in a geology major or minor.