GEOLOGY, EARTH AND SPACE SCIENCE EMPHASIS, COMPREHENSIVE MAJOR - TEACHING

Teaching (Code 160-015)

University Requirements

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<th>Code</th>
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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.

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Liberal Education Core Requirements

Knowledge Goal

Knowledge Outcome 1 (K1): Natural Sciences Two (2) learning experiences

Skills Goal

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

Responsibility Goal

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

Integration Goal

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

Service-Learning Goal

Service-Learning 30 hours

College Degree Requirements

University Requirements in Teacher Education in the College of Education and Human Sciences

College Requirements for Teacher Education

All candidates for teacher education baccalaureate degrees must also meet the following:

1. Liberal Education requirements in the College of Education and Human Sciences.
2. Grade point requirements: undefined
3. Residency requirements: undefined
4. Criteria and requirements for Professional Programs and for Admission to the Professional Semester.
5. Specific requirements of programs offered in the College of Education and Human Sciences. (See the departmental sections of this catalog.)

Early Adolescence Through Adolescence and Early Childhood through Adolescence

(formerly Secondary Education and Special Subjects)

Liberal Education Requirements are listed in the table below

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

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

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

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

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

K1 (Natural Sciences)
At least one Biology course
AND at least one of Chemistry, Physics, Geography, or
Geology course (one science lab required)

**K2 (Social Sciences)**
PSYC 260  Educational Psychology  3
AND another learning experience

**K3 (Humanities)**
One literature course AND another learning experience

**K4 (Fine Arts)**
One fine arts course

**S1 (Written and Oral Communication)**
At least one writing course from the following:
- WRIT 114  Intensive Blugold Seminar in Critical Reading and Writing
- WRIT 116  Blugold Seminar in Critical Reading and Writing
- WRIT 118  Accelerated Blugold Seminar in Critical Reading and Writing
- WRIT 120  Blugold Seminar in Critical Reading and Writing for Transfer Students
AND at least one oral communication course from the following:
- CJ 201  Introduction to Interpersonal Communication
- CJ 202  Fundamentals of Speech
- CJ 203  Fundamentals of Human Communication

**S2 (Mathematics)**
LE approved math course

**S3 (Creativity)**
ES 497  Field Experience Seminar (included in major)  2

**R1 (Equity, Diversity, Inclusivity)**
ES 385  Social Foundations: Human Relations  3
(included in major)
AND another learning experience

**R2 (Global Perspectives)**
One LE approved course

**R3 (Civic and Environmental Issues)**
One LE approved course

**IL (Integration)**
ES 497  Field Experience Seminar (included in major)  2
AND another learning experience

NOTE: Course in Western History or Western Culture and course in Non-Western History or Non-Western Contemporary Culture is required.

### Teaching Licensure Requirements - EA-A Licensure

#### Program Options B and C
These program options are organized around content majors and education courses and are designed to prepare teachers for early adolescence through adolescence (EA-A) teaching or for early childhood through adolescence (EC-A) teaching in selected areas. Each program requires the student to complete:

1. a comprehensive major (at least 60 credits) or a standard major (at least 36 credits) plus one of the following: another standard major (at least 36 credits), or a minor (at least 24 credits), or a certificate (12-18 credits). Students choosing another major or minor may choose from the approved majors and minors listed in the table below. The approved majors and minors lead to additional certification.

2. a professional sequence consisting of teaching methods and related courses. Advising is done through the content major department.

Upon admission to program, candidates are assigned an adviser in education as well.

#### Option B: EA-A

**Early Adolescence through Adolescence Licensure**

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<tr>
<th>Code</th>
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<tr>
<td></td>
<td><strong>Professional Sequence</strong></td>
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<tr>
<td>ES 212</td>
<td>Initial Teaching Experience in Elementary, Middle, and High School Settings</td>
<td>2</td>
</tr>
<tr>
<td>ES 312</td>
<td>General Methods of Teaching</td>
<td>2</td>
</tr>
<tr>
<td>ES 317</td>
<td>Middle Level Methods and Curriculum</td>
<td>2</td>
</tr>
<tr>
<td>ES 318</td>
<td>Teacher Assisting</td>
<td>1</td>
</tr>
<tr>
<td>ES 328</td>
<td>Content Area Reading and Study Strategies</td>
<td>2</td>
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<tr>
<td>ES 385</td>
<td>Social Foundations: Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>ES 445</td>
<td>Student Teaching in Middle Level &amp; ES 470</td>
<td>14</td>
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<tr>
<td>ES 490</td>
<td>Historical, Legal, and Philosophical Foundations of Education</td>
<td>3</td>
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<tr>
<td>ES 497</td>
<td>Field Experience Seminar</td>
<td>2</td>
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<tr>
<td>SPED 300</td>
<td>Inclusive Practices for Secondary Educators</td>
<td>2</td>
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Note: Although majors must be from the approved list below, the second plan may be from the approved list. Students pursuing EA-A licensure are not required to elect a second plan that leads to a teaching license.

#### Approved Majors and Minors for Option B

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<th>Code</th>
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<tr>
<td>ES 359</td>
<td>Fall only</td>
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<td>ES 367</td>
<td>Spring only</td>
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Broadfield Science add-on certification is available with these majors and requires ES 359 (fall only) and ES 367 (spring only). Students should contact their advisor to discuss their intention to add the Broadfield Science certification.

### Admission Requirements

**Admission to Professional Education Programs**

### Major Requirements

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

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Select one of the following:  
GEOL 106 Earth Science  
GEOL 110 Physical Geology  
GEOL 115 Environmental Geology  
GEOL 118 Societal Issues in Earth Science

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.

Earth and Space Science Emphasis
This emphasis is for students planning to teach Earth and Space Science at the middle or high school level. In addition to a focus on geology, oceanography, astronomy, and meteorology, this major also provides the breadth required to be well-rounded in science. This emphasis includes the Core plus required and elective credits as listed below.

Sixty semester credits, including the core and the following:

Required Courses
GEOL 102 Oceanography  
GEOL 301 Earth Resources  
or GEOL 308 Water Resources  
GEOL 418 Earth History  
PHYS 211 General Physics  
or PHYS 231 University Physics I  
PHYS 226 Astronomy-Solar System  
MATH 114 Calculus I  
GEOG 178 Conservation of the Environment  
or BIOL 180 Environmental Biology and Conservation  
GEOG 340 Climatology  
GEOG 361 Environmental Hazards  
Plus electives to total at least 60 credits selected from the following:  
PHYS 212 General Physics  
or PHYS 232 University Physics II  
PHYS 229 Astronomy-Stars and Galaxies  
PHYS 315 The Mysterious Universe

GEOG 280 Cartographic Design  
GEOG 304 Introduction to Geomorphology  
GEOG 338 Remote Sensing of the Environment  
GEOG 350 Soils and the Environment  
GEOG 363 Watershed Analysis  
GEOG 364 Fluvial Processes and Landforms  
or any geology course numbered 300 or higher

This major is restricted to students in the College of Education and Human Sciences: Education Studies: Option B and leads to licensure to teach Earth and Space Science in Early Adolescence through Adolescence classrooms.

Broadfield Science Licensure
Completion of the following requirements and ES 367 adds Broadfield Science licensure to the Teaching major:

A) Select fourteen credits from one of the following areas: 14
Area 1
BIOL 151 Biology of Humans  
BIOL 214 Human Anatomy and Physiology I  
BIOL 221 Foundations of Biology I  
BIOL 222 Foundations of Biology II  
BIOL 223 Foundations of Biological Inquiry  
BIOL 314 Human Anatomy and Physiology II
Area 2
CHEM 213 Quantitative Analysis  
CHEM 218 Introduction to Inorganic Chemistry  
CHEM 304 Environmental Chemistry  
CHEM 325 Organic Chemistry I with Laboratory
Area 3
PHYS 212 General Physics  
or PHYS 232 University Physics II  
and additional credits from 229 and above 232.

B) Select eight credits in each of the two areas not selected in A above: 8
Area 1
BIOL 151 Biology of Humans  
BIOL 214 Human Anatomy and Physiology I  
BIOL 221 Foundations of Biology I
Area 2
CHEM 213 Quantitative Analysis  
CHEM 218 Introduction to Inorganic Chemistry  
CHEM 304 Environmental Chemistry  
CHEM 325 Organic Chemistry I with Laboratory
Area 3
PHYS 212 General Physics  
or PHYS 232 University Physics II  
additional credits from 229 and above 232