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

Teaching (Code 160-015)

University Requirements

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

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.

Applicability of Credits Toward Graduation

Junior College or Two-Year College Credits. A maximum of 72 semester credits earned in a junior college or two-year college will be accepted as degree credits at UW-Eau Claire.

Extension Credits. Credits earned in credit outreach courses offered by UW-Eau Claire are treated as resident credits. Credits earned in extension courses offered by other units of the University of Wisconsin System are treated as transfer credits. All other (non-UW) extension and correspondence credits are normally limited to one-fourth of the total required for graduation from any curriculum.

WTCS Credits. A maximum of 72 semester credits earned in college parallel programs at Madison Area Technical College, Milwaukee Area Technical College, Nicolet Area Technical College, or Chippewa Valley Technical College may be accepted as degree credits at UW-Eau Claire. A set number of general education courses will be accepted from other technical schools. Occupational and technical courses may also be considered for transfer if the quality and content of the course work from the technical college is judged to be comparable to course work at UW-Eau Claire. Refer to the Transfer Credit Wizard (https://my.uwec.edu/psp/PUBLIC/EMPLOYEE/HRMS/c/EAU_SS_CUSTOM.EAU_TRNCRDWZ.GBL) or contact the UW-Eau Claire Admissions Office for information about the current transfer policy.

USAFI Credit. UW-Eau Claire will accept up to 32 semester credits for work done through the United States Armed Forces Institute, under the provision for non-UW correspondence credit (see Extension Credits above).

Activity Credit (band, chorus, drama, KINS 100-184 courses) Students may count toward graduation no more than one credit of KINS 110-184 courses. Students may count toward graduation no more than four credits earned in any single activity course and no more than 12 credits resulting from any combination of activity courses (excluding KINS 110-184 courses).

Other Restricted Credits. For other University restrictions, see the following: Cooperative Education; Credit by Examination; Satisfactory/Unsatisfactory Registration; Transfer of Credits. College or departmental restrictions may also be placed on Independent Study (399-499 courses), Directed Study (395-495), and other types of credits.

APPLICABILITY OF CREDITS TOWARD GRADUATION

<table>
<thead>
<tr>
<th>Credit Restrictions</th>
<th>Total degree credit</th>
<th>Major, Standard</th>
<th>Major, Comprehensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory/Unsatisfactory</td>
<td>maximum 12</td>
<td>maximum 1</td>
<td>maximum 2</td>
</tr>
<tr>
<td>Total degree credit</td>
<td>maximum ¼ of total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major or minor</td>
<td>maximum ½ of total</td>
<td></td>
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<tr>
<td>Two-Year College Credits</td>
<td>maximum 72</td>
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</table>

Activity credit (band, chorus, drama, KINS 100-184)

Total KINS 100-184 maximum 1 credit
Total Band, chorus, drama maximum 12 credits
Single course band, chorus, drama maximum 4 credits

Extension credits

<table>
<thead>
<tr>
<th>Credit Restrictions</th>
<th>Total degree credit</th>
<th>Other extension/ correspondence</th>
<th>USAFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>UW-System</td>
<td>no maximum</td>
<td>maximum ¼ of total</td>
<td>32 credits</td>
</tr>
<tr>
<td>Other extension/ correspondence</td>
<td>maximum ¼ of total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

USAFI

Maximum 32 credits

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.
LIBERAL EDUCATION CORE REQUIREMENTS

Knowledge Goal

Knowledge Outcome 1 (K1): Natural Sciences
Two (2) learning experiences
One experience in laboratory science must be selected from either K1 or K2.

Knowledge Outcome 2 (K2): Social Sciences
Two (2) learning experiences
One experience in laboratory science must be selected from either K1 or K2.

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

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:
   - Resident 2.75 average
   - Total 2.75 average
   - Major 2.75 average
   - Minor (for certification only) 2.75 average
3. Residency requirements:
   - Minimum Total 30 credits
   - Senior Year 23 credits
   - Major, in upper division courses 12 credits
   - Comprehensive Major, in upper division courses 21 credits
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

<table>
<thead>
<tr>
<th>Knowledge Goal</th>
<th>Skills Goal</th>
<th>Responsibility Goal</th>
<th>Integration Goal</th>
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</table>

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, but are not required to do so. Students pursuing EA-A licensure are not required to elect a second plan that leads to 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 advisor in education as well.

**Option B: EA-A**

**Early Adolescence through Adolescence Licensure**

**Professional Sequence**

- **ES 212** Initial Teaching Experience in Elementary, Middle, and High School Settings 2
- **ES 312** General Methods of Teaching 2
- **ES 317** Middle Level Methods and Curriculum 2
- **ES 318** Teacher Assisting 1
- **ES 328** Content Area Reading and Study Strategies 2
- **ES 385** Social Foundations: Human Relations 3

**Prescribed special methods course(s) (see approved majors and minors below)**

- **ES 445** Initial Teaching Experience in Education and Student Teaching in Secondary Education 12
- **ES 490** Historical, Legal, and Philosophical Foundations of Education 3
- **ES 497** Field Experience Seminar 2
- **SPED 300** Inclusive Practices for Secondary Educators 2

**Approved Majors and Minors for Option B**

<table>
<thead>
<tr>
<th>Comprehensive Majors</th>
<th>Code</th>
<th>Prescribed Methods Course</th>
<th>Additional Requirements</th>
<th>Praxis II Content Test Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>540-006</td>
<td>ENGL 319, ENGL 419</td>
<td></td>
<td>ETS 5038</td>
</tr>
<tr>
<td>Earth and Space Science</td>
<td>160-015</td>
<td>ES 360 (F)</td>
<td></td>
<td>ETS 5435</td>
</tr>
<tr>
<td>Mathematics</td>
<td>180-002</td>
<td>ES 360 (F)</td>
<td></td>
<td>ETS 5061</td>
</tr>
<tr>
<td>Physical Science</td>
<td>240-004</td>
<td>ES 360 (F) and ES 360 (F)</td>
<td></td>
<td>ETS 5435</td>
</tr>
<tr>
<td>Physics-Mathematics</td>
<td>210-003</td>
<td>ES 357 (Sp) and ES 360 (F)</td>
<td>BIOL 180 or GEOG 178</td>
<td>ETS 5161 and ETS 5435 (regardless of emphasis)</td>
</tr>
<tr>
<td>Physics Emphasis</td>
<td>210-004</td>
<td>ES 357 (Sp) and ES 360 (F)</td>
<td>BIOL 180 or GEOG 178</td>
<td>ETS 5161 and ETS 5435 (regardless of emphasis)</td>
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<tr>
<td>Mathematics Emphasis</td>
<td>210-004</td>
<td>ES 357 (Sp) and ES 360 (F)</td>
<td>BIOL 180 or GEOG 178</td>
<td>ETS 5161 and ETS 5435 (regardless of emphasis)</td>
</tr>
<tr>
<td>Social Studies</td>
<td>500-XXX</td>
<td>ES 356</td>
<td>ECON 103, BIOL 180 or GEOG 178</td>
<td>ETS 5081</td>
</tr>
</tbody>
</table>
Spanish 320-405  ES 366 (F)  Study abroad in language  WPT and OPI or OPIc
Teaching English to Speakers of Other Languages (TESOL)  550-408  ES 405 (F)  1 yr college level foreign language  ETS 5362

Broadfield Science add-on certification is available with these majors and requires ES 360 (fall 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
Teaching (Code 160-015)

Core Requirements for all Liberal Arts and Teaching Emphases in the Comprehensive Geology Major
23-25 credits
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

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
- or 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 360 adds Broadfield Science licensure to the Teaching major:

A) Select fourteen credits from one of the following areas:

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:

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<tr>
<th>Area 1</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td></td>
<td>BIOL 151</td>
<td>Biology of Humans</td>
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<td></td>
<td>BIOL 221</td>
<td>Foundations of Biology I</td>
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<table>
<thead>
<tr>
<th>Area 2</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td></td>
<td>CHEM 213</td>
<td>Quantitative Analysis</td>
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<td>CHEM 325</td>
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<tr>
<th>Area 3</th>
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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>PHYS 212</td>
<td>General Physics</td>
</tr>
<tr>
<td>or PHYS 232</td>
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additional credits from 229 and above 232