BIOLOGY, MAJOR - TEACHING

Teaching (Code 080-205)

University Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GRADUATION REQUIREMENTS FOR BACCALAUREATE DEGREE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Credit Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum total for graduation 1</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Upper division credits (courses numbered 300 and higher)</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Liberal Education Core</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Academic Concentrations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade Point Requirements 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.00 average</td>
</tr>
<tr>
<td></td>
<td>Resident</td>
<td>2.00 average</td>
</tr>
<tr>
<td></td>
<td>Major</td>
<td>2.00 average</td>
</tr>
<tr>
<td></td>
<td>Minor</td>
<td>2.00 average</td>
</tr>
<tr>
<td></td>
<td>Certificate</td>
<td>2.00 average</td>
</tr>
<tr>
<td></td>
<td>University Residency Requirements 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum total</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Senior year</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Major, Standard, upper division in residence</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Major, Comprehensive, upper division in residence</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Certificate</td>
<td>25 percent of credits</td>
</tr>
</tbody>
</table>

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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LIBERAL EDUCATION CORE REQUIREMENTS</td>
<td>a minimum of 36 credits</td>
</tr>
<tr>
<td></td>
<td>Knowledge Goal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge Outcome 1 (K1): Natural Sciences</td>
<td>Two (2) learning experiences</td>
</tr>
</tbody>
</table>

One experience in laboratory science must be selected from either K1 or K2.

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

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>K1 (Natural Sciences)</td>
<td></td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<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>
</tr>
<tr>
<td>ES 385</td>
<td>Social Foundations: Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

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

- ES 445  Student Teaching in Middle Level Education
- ES 446  Internship Teaching in Middle Level Education
- or ES 470  Education and Student Teaching in Secondary Education
- or ES 475  Internship Teaching in Secondary Education

- ES 490  Historical, Legal, and Philosophical Foundations of Education | 3 |
- ES 497  Field Experience Seminar | 2 |
- SPED 300  Inclusive Practices for Secondary Educators | 2 |

**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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES 359</td>
<td>(fall only)</td>
<td></td>
</tr>
<tr>
<td>ES 367</td>
<td>(spring only)</td>
<td></td>
</tr>
</tbody>
</table>

**1** 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 Biology Majors

Ecology and Environmental Biology Emphasis (Code 080-001); Microbiology Emphasis (Code 080-002); Biology, Liberal Arts (Code 080-203); Biology, Teaching (Code 080-205).

Thirty-six semester credits, including the core and required courses:
Core Courses

BIOL 221  Foundations of Biology I  4
BIOL 222  Foundations of Biology II  3
BIOL 223  Foundations of Biological Inquiry  2

Total Credits  9

Required Courses:

BIOL 180  Environmental Biology and Conservation  3
BIOL 321  Ecology  3
BIOL 323  Genetics  3
BIOL 324  1
BIOL 496  Student Academic Apprenticeship  1-2

Additional biology courses to complete the 36-credit total in biology.

1 Course in development

In addition to the 36 credits in biology, chemistry requirement chosen from CHEM 103 and CHEM 104 OR CHEM 115. This major is restricted to students in the College of Education and Human Sciences: Education Studies: Option B and leads to licensure to teach Biology in Early Adolescence through Adolescence classrooms.

Information for Teaching Majors

Biology majors entering teaching must also take ES 367.

Broadfield Science Licensure:

Completion of the following requirements and ES 359 may be used in lieu of a minor and adds Broadfield Science licensure to the Teaching major:

A. At least 14 credits from one of the following areas:

Area 1

Required:

CHEM 103  General Chemistry I
& CHEM 104 and General Chemistry II

OR

CHEM 115  Chemical Principles

Additional courses selected from below:

CHEM 213  Quantitative Analysis
CHEM 218  Introduction to Inorganic Chemistry
CHEM 325  Organic Chemistry I with Laboratory

Area 2

PHYS 211  General Physics
& PHYS 212  and General Physics

OR

PHYS 231  University Physics I
& PHYS 232  and University Physics II

Additional Physics credits above 212

Area 3

Select one of the following:

GEOL 106  Earth Science

OR

GEOL 110  Physical Geology

OR

GEOL 115  Environmental Geology

OR

GEOL 118  Societal Issues in Earth Science

GEOG 104  The Physical Environment

PHYS 226  Astronomy-Solar System

or PHYS 229  Astronomy-Stars and Galaxies

B. Eight credits in each of the two areas not selected in A above:

Area 1

CHEM 103  General Chemistry I
or CHEM 115  Chemical Principles

CHEM 104  General Chemistry II
or CHEM 150  Survey of Biochemistry

Area 2

Select one of the following:

PHYS 211  General Physics
& PHYS 212  and General Physics

OR

PHYS 231  University Physics I
& PHYS 232  and University Physics II

Area 3

GEOL 106  Earth Science

OR

GEOL 110  Physical Geology

OR

GEOL 115  Environmental Geology

OR

GEOL 118  Societal Issues in Earth Science

GEOG 104  The Physical Environment

PHYS 226  Astronomy-Solar System

or PHYS 229  Astronomy-Stars and Galaxies

GEOG 340  Climatology

GEOG 361  Environmental Hazards

Required:

PHYS 226  Astronomy-Solar System

Additional courses from the following:

GEOL 102  Oceanography
GEOL 301  Earth Resources
GEOL 303  Rocky Mountain Field Studies
GEOL 308  Water Resources
PHYS 229  Astronomy-Stars and Galaxies
GEOG 200  Foundations of Geography
GEOG 304  Introduction to Geomorphology
GEOG 340  Climatology
GEOG 361  Environmental Hazards