

# SCIENCE TEACHING, PHYSICS EMPHASIS COMPREHENSIVE MAJOR

Teaching (Code 241-001)

## University Requirements

### GRADUATION REQUIREMENTS FOR BACCALAUREATE DEGREE

Credit Requirements	
Minimum total for graduation <sup>1</sup>	120
Upper division credits (courses numbered 300 and higher)	39
Liberal Education Core ( <a href="http://catalog.uwec.edu/undergraduate/graduation-requirements/#header1">http://catalog.uwec.edu/undergraduate/graduation-requirements/#header1</a> )	36
Academic Concentrations ( <a href="http://catalog.uwec.edu/undergraduate/graduation-requirements/#header16">http://catalog.uwec.edu/undergraduate/graduation-requirements/#header16</a> )	
Grade Point Requirements ( <a href="http://catalog.uwec.edu/undergraduate/graduation-requirements/#header14">http://catalog.uwec.edu/undergraduate/graduation-requirements/#header14</a> ) <sup>2</sup>	
Total	2.00 average
Resident	2.00 average
Major	2.00 average
Minor	2.00 average
Certificate	2.00 average
University Residency Requirements ( <a href="http://catalog.uwec.edu/undergraduate/graduation-requirements/#header15">http://catalog.uwec.edu/undergraduate/graduation-requirements/#header15</a> )	
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.

<sup>1</sup> Certain programs exceed this minimum.

<sup>2</sup> 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\\_TRNCRDZWZ.GBL](https://my.uwec.edu/psp/PUBLIC/EMPLOYEE/HRMS/c/EAU_SS_CUSTOM.EAU_TRNCRDZWZ.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	Credit Restrictions
<b>Satisfactory/Unsatisfactory</b>	
Total degree credit	maximum 12
Major, Standard	maximum 1 course
Major, Comprehensive	maximum 2 courses
Minor	maximum 1 course
<b>Credit by Examination</b>	
Total degree credit	maximum ¼ of total
Major or minor	maximum ½ of total
<b>Two-Year College Credits</b>	
Total degree credit	maximum 72 credits
<b>Activity credit (band, chorus, drama, KINS 100-184)</b>	
Total KINS 100-184	maximum 1 credit
Total Band, chorus, drama	maximum 12 credits
Single course band, chorus, drama	maximum 4 credits
<b>Extension credits</b>	
UW-System	no maximum
Other extension/correspondence	maximum ¼ of total
<b>USAFI</b>	
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 five learning goals of our liberal education core and the 12 learning outcomes they comprise.

### LIBERAL EDUCATION CORE REQUIREMENTS

a minimum of  
36 credits

#### Knowledge Goal

Knowledge Outcome 1 (K1): Natural Sciences (<http://catalog.uwec.edu/undergraduate/attribute-k1/>) Two (2) learning experiences

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

Knowledge Outcome 2 (K2): Social Sciences (<http://catalog.uwec.edu/undergraduate/attribute-k2/>) Two (2) learning experiences

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

Knowledge Outcome 3 (K3): Humanities (<http://catalog.uwec.edu/undergraduate/attribute-k3/>) Two (2) learning experiences

Knowledge Outcome 4 (K4): Fine Arts (<http://catalog.uwec.edu/undergraduate/attribute-k4/>) One (1) learning experience

#### Skills Goal

Skills Outcome 1 (S1): Written and Oral Communication (<http://catalog.uwec.edu/undergraduate/attribute-S1/>) Two (2) learning experiences

One S1 must meet the University Writing Requirement (<http://catalog.uwec.edu/undergraduate/graduation-requirements/#header10>)

Skills Outcome 2 (S2): Mathematics (<http://catalog.uwec.edu/undergraduate/attribute-S2/>) One (1) learning experience

One S2 to meet the University Mathematics Requirement (<http://catalog.uwec.edu/undergraduate/graduation-requirements/#header11>)

Skills Outcome 3 (S3): Creativity (<http://catalog.uwec.edu/undergraduate/attribute-S3/>) One (1) learning experience

#### Responsibility Goal

Responsibility Outcome 1 (R1): Equity, Diversity, and Inclusivity (<http://catalog.uwec.edu/undergraduate/attribute-R1/>) Two (2) learning experiences

One R1 must satisfy Design for Diversity (<http://catalog.uwec.edu/undergraduate/attribute-DDIV/#header13>)

Responsibility Outcome 2 (R2): Global Perspectives (<http://catalog.uwec.edu/undergraduate/attribute-R2/>) One (1) learning experience

Responsibility Outcome 3 (R3): Civic and Environmental Issues (<http://catalog.uwec.edu/undergraduate/attribute-R3/>) One (1) learning experience

#### Integration Goal

Integration Outcome 1 (I1): Integration (<http://catalog.uwec.edu/undergraduate/attribute-I1/>) Two (2) learning experiences

#### Service-Learning Goal

Service-Learning (<http://catalog.uwec.edu/undergraduate/attribute-SL/#header13>) 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:

Abbreviation	Full Title
Resident	2.75 average
Total	2.75 average
Major	2.75 average
Minor (for certification only)	2.75 average

3. Residency requirements:

Abbreviation	Full Title
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.)

## Teaching Licensure Requirements - Grades 4-12

### Program Options B and C

These program options are organized around content majors and education courses and are designed to prepare teachers for grades 4-12 teaching or for grades K-12 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 a K-12 licensure are not required to elect a second plan that leads to certification.
2. a professional sequence consisting of teaching methods and related courses.

Students are assigned an education academic advisor and a faculty advisor through the content major department.

### Option B: Grades 4-12

Code	Title	Credits
<b>Professional Sequence</b>		
ES 212	Exploring Schooling K-12	2
ES 312	General Methods of Teaching	2
ES 317	Middle Level Methods and Curriculum	2
ES 318	Teacher Assisting	1
ES 328	Disciplinary Literacy and Study Strategies	2
ES 385	Social Foundations: Human Relations	3
<b>Prescribed special methods course(s) (see approved majors and minors below)</b>		
ES 445 & ES 470	Student Teaching in Middle Level Education and Student Teaching in Secondary Education	5-10
or ES 446	Internship Teaching in Middle Level 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
SEIP 300	Inclusive Practices for Secondary Educators	3

#### Approved Majors and Minors for Option B

Comprehensive Majors	Code	Prescribed Methods Course	Additional Requirement	Praxis II Content Test Required
English & Language Arts	541-001	ENGL 319, ENGL 419		See department for ETS exam number
Mathematics	184-001	ES 357		See department for ETS exam number
Social Studies, History Emphasis	500-020	ES 356	ECON 103, BIOL 180 or GEOG 178	See department for ETS exam number
Science Teaching	241-XXX	ES 360	BIOL 180 or GEOG 178	See department for ETS exam number
Majors	Code	Prescribed Methods Course	Additional Requirements	Praxis II Content Test Required
Mathematics	184-201	ES 357		See department for ETS exam number

Minors	Code	Prescribed Methods Course	Additional Requirements	Praxis II or ACTFL Content Test Required
Coaching	971-403	KINS 492		no addt'l exam
Mathematics	180-407	ES 357		See department for ETS exam number

## Admission Requirements

### Admission to Education Programs

#### Admission to the Major

Formal application to the professional education program must be made by October 1 for spring admission or March 1 for fall admission. In order to submit an application to an Education Program, students must satisfy all of the requirements listed below:

1. Approval by the appropriate department in the College of Education and Human Sciences. See Department of Education for Equity and Justice (<http://catalog.uwec.edu/undergraduate/education-human-sciences/education-for-equity-justice/>) and Special Education and Inclusive Practices (<http://catalog.uwec.edu/undergraduate/education-human-sciences/special-education-inclusive-practices/>) sections of this catalog for criteria to be considered in making these recommendations.
2. Pre-education status.
3. Students must have attained at least Sophomore Status
4. **Minimum** total GPA of 2.5. Admission is competitive; thus the minimum GPA does not assure admission to a professional program in education.
5. Met the University Writing Requirement (complete WRIT 114, WRIT 116, WRIT 118, or WRIT 120 or the equivalent earning a C or better)
6. Met the University Mathematics requirements (complete one college-level math course earning C or better)
7. Good academic standing.
8. Complete an introductory education course with a field placement (eg. SEIP 208, ES 212 or the equivalent) with a grade of C or better.
9. Specific department criteria are found under the Department of Education for Equity and Justice (<http://catalog.uwec.edu/undergraduate/education-human-sciences/education-for-equity-justice/>) and Special Education and Inclusive Practices (<http://catalog.uwec.edu/undergraduate/education-human-sciences/special-education-inclusive-practices/>) Department Overview Pages.

#### Application Procedure

Students must formally apply to the professional program. **The number of students admitted to a program is often limited by resources available and not everyone who applies can be guaranteed admission.** See the appropriate section of this catalog for criteria upon which the departmental recommendation will be based. Note that minimum criteria for a department may exceed the minimum criteria listed above.

Students who do not meet all the criteria listed above or who do not receive a favorable departmental recommendation may reapply during a later application period.

#### Special or Transfer Students

Special students and transfer students who desire to be admitted to the College of Education and Human Sciences should inform the Admissions Office

upon application for admission to the University. They should indicate their area of interest and what teaching major they wish to pursue. These students are expected to have a minimum GPA of 2.5.

## Admission to the Teaching Professional Semester (Student Teaching)

### Admission to the Professional Education Semester

The “professional semester” is defined as the senior semester in which a student is enrolled in the field experience of student teaching or internship.

### Filing Notice of Intent to Student Teach Applications

Students who plan to enter the professional semester during the fall semester of the next academic year must file a Notice of Intent to Student Teach with the Teacher Education Program office in the fall. Students who plan to enter the professional semester during the spring semester of the next academic year must file a Notice of Intent to Student Teach with the Teacher Education Program office in the spring. Information concerning the Notice of Intent to Student Teach will be advertised widely and posted across campus each semester with an associated due date.

Students are encouraged to submit their Notice of Intent to Student Teach by the announced due date. Considerable time is required to process each notice—that is, to determine eligibility, to make arrangements with schools for an appropriate field experience assignment, and to allow for introductions, orientations, and, in some cases, interviews. Students who file on time will benefit by the careful consideration that can be given to their requests; the later a notice is received, the fewer the placement assignments and choices still available will be. Failure to file a Notice of Intent to Student Teach on time may result in a delay of the professional semester.

### Transfer and Special Students

No transfer or special student can enter the professional semester until after a full semester of residence and after earning a minimum of 15 credits at UW-Eau Claire. Senior transfer students enrolling in September must file an application for admission to the professional semester by December 1 for the following fall.

### Criteria for Admission

No application for admission to the professional semester will be processed in the case of transfer and special students unless a full semester of residence and a minimum of 15 credits have been earned at UW-Eau Claire.

Factors to be considered in the application for admission to the professional semester are:

1. Criteria for admission to a professional program have been met.
2. Good academic standing, as defined in the catalog section on Academic Standing and Progress.
3. A minimum of 90 credits completed prior to the professional semester.
4. Approval of the major and minor department(s). Departments may have separate criteria they use to determine approval.
5. Resident and total GPAs of at least 2.75; GPAs of at least 2.75 in the major(s) and minor(s) intended for certification. All college-level courses attempted by the student are included when major, minor, and total GPAs are determined for admission to the professional semester and for graduation.
6. Completion of the 30 hour Human Relations Fieldwork requirement.
7. Evidence of freedom from tuberculosis. Tests are provided by Student Health Services or results of tests must be provided by the student when filing for the professional semester.

8. Approval by the appropriate departments in the Colleges of Education and Human Sciences and Arts and Sciences.
9. Completion of required criminal background check.

### Deadline for Meeting Criteria

For placements in the fall semester, criteria for which the student is responsible (GPA, TB test, and criminal background check) must be met by March 1 of the preceding semester.

For placements in the spring semester, these criteria must be met by October 1 of the preceding semester.

For placements in the summer session, these criteria must be met by February 1 of the preceding semester.

Failure to meet criteria on time may result in a delay of the professional semester.

## Licensure to Teach

### Criteria for Recommendation for Licensure:

1. Completion of a baccalaureate degree.
2. Completion of an approved teacher education major, minor, or certificate.
3. A 2.75 or higher GPA in the major and minor (where certifiable) and in the combination of all course work in the major, minor (where certifiable), and professional education courses exclusive of student teaching. All college-level courses attempted by the student except student teaching are included when major, minor, and professional education GPAs are determined for recommendation for licensure.
4. Completion of student teaching courses with a mark of S.
5. Content area proficiency through one of the following:

Students will earn a minimum 3.0/4.0 GPA in content courses **OR** through obtaining a passing score on the appropriate Praxis II or ACTFL written portion (WPT) exam for Languages candidates. All Languages candidates must pass the OPI/OPIc within three years prior to the start of student teaching.

**For students who neither meet the minimum GPA requirement nor pass the appropriate Praxis II/ACTFL exam after at least two attempts,** a content portfolio may be submitted which parallels the content evaluated on the Praxis II exam. Portfolio artifacts will be approved in consultation with the Coordinator of the Teacher Education Program. The portfolio may only be submitted once. No portfolio option will be allowed for the WPT exam. The standardized examination and passing score shall be determined by the State Superintendent. All Elementary-Middle and Special Education majors and minors, and Early Childhood majors must earn a passing score on the FORT.

### Wisconsin Application

College of Education and Human Sciences graduates who desire to teach in Wisconsin, will apply for licensure using the WI Department of Public Instruction’s (DPI), ELO (Electronic Licensing Online) by following all steps listed on the site including fingerprinting if applicable.

Upon completion of all program requirements and University and WI Department of Public Instruction teaching requirements, information will be forwarded to WI DPI verifying this completion (including the completion of all required tests), a degree and any add-on certifications that have been awarded, and certifications the teaching candidates are eligible for with licensure. Candidates will then apply for their Initial License.

## Out-of-state Applications

It is recommended that graduates seeking licensure to teach in states other than Wisconsin request application forms and instructions from the Department of Education of the state in which licensure is desired. Certification requirements vary by state. Inquiry early in the period of professional preparation is advisable. In most cases, an official transcript of credits must accompany the completed application form; additional tests or course work may be required. Therefore, it is imperative to check requirements of other states. Wisconsin and most other states require institutional endorsement. In general, candidates will be able to obtain licenses in other states; however, these licenses may be issued with stipulations. **It is the student's responsibility to understand the licensing requirements of other states. UW-Eau Claire programs are designed to meet the requirements in Wisconsin only.**

## Major Requirements

### Teaching (Code 241-001)

The comprehensive major in Science Teaching, Physics Emphasis prepares education students to teach all science courses in a regular education setting grades 4 through 12.

Advisors: Erik Hendrickson

Code	Title	Credits
67-71 credits, including:		
<b>Physics Emphasis Core</b>		<b>32</b>
PHYS 231	University Physics I	5
PHYS 232	University Physics II	5
PHYS 315	The Mysterious Universe	3
PHYS 332	University Physics III	3
PHYS 340	Optics	4
PHYS 350	Electric and Electronic Circuits	4
MATH 114	Calculus I	4
MATH 215	Calculus II	4
<b>Additional Requirements</b>		<b>9</b>
ES 360	Teaching Science in Grades 4-12	3
ES 385	Social Foundations: Human Relations	3
<b>and choose one: (3 credits)</b>		
GEOG 178	Planet Earth: Conservation of the Environment	
BIOL 180	Environmental Biology and Conservation	
GEOL 204	Understanding Earth's Environment	
<b>Chemistry Core</b>		<b>6-9</b>
<b>choose one option:</b>		
Option 1		9
CHEM 105	General Chemistry I Lecture	
and		
CHEM 106	General Chemistry I Laboratory	
and		
CHEM 109	General Chemistry II with Lab	
or:		
Option 2		6
CHEM 115	Chemical Principles	
<b>Earth &amp; Space Science Core</b>		<b>11</b>

PHYS 226	Astronomy-Solar System	4
<b>and choose one: (4 credits)</b>		
GEOL 106	Earth Science	
GEOL 110	Physical Geology	
GEOL 115	Environmental Geology	
GEOL 118	Societal Issues in Earth Science	
<b>and choose one: (3 credits)</b>		
GEOL 301	Earth Resources and Sustainability	
GEOL 304	Global Environmental Change	
GEOL 308	Water Resources	
<b>Biology Core</b>		<b>9-10</b>
<b>choose one option:</b>		
Option 1 - Take 3 of the following 4 courses:		9-10
BIOL 105	General Biology	
BIOL 106	Exploring the Living World	
BIOL 151	Biology of Humans	
BIOL 196	Human Nutrition	
<b>or</b>		
Option 2		9
BIOL 221	Foundations of Biology I	
and		
BIOL 222	Foundations of Biology II	
and		
BIOL 223	Foundations of Biological Inquiry	

## Program Learning Outcomes

Students completing this program will be expected to meet the following learning outcomes:

- Qualitatively describe natural phenomena and man-made devices in terms of the basic laws of physics in areas of classical mechanics, thermodynamics, electromagnetism, optics, electronic circuits, quantum physics, and special relativity.
- Convert a physical situation described in English into a mathematical model.
- Apply the mathematical tools commonly used in physics to obtain analytical and numerical solutions to problems modeling physical situations.
- Synthesize appropriate concepts and methods from different courses in the solutions of problems and apply physical and mathematical principles across disciplinary boundaries.
- Acquire sufficient content knowledge in physics, chemistry, biology, and Earth/space science by earning a minimum GPA in the major of 3.0 or by passing the appropriate Praxis II content exam.
- Communicate verbally, graphically, and in writing the concepts of physics to adolescent learners.
- Demonstrate an understanding of foundational biological principles in the areas of cell/molecular biology, genetics, evolution, ecology, diversity of life, and structure & function of organisms.
- Demonstrate an understanding of Earth/space science processes.
- Develop an understanding of chemical principles and be able to apply them to predict and rationalize chemical properties, including structure & bonding, reactivity & stability, and instrumentation theory.

## Sample Degree Plan

### Science Teaching, Physics Emphasis Comprehensive Major (B.S.)

The following is a sample degree plan, based on the 2023-2024 catalog. It is based on the 120-credit graduation requirement and assumes no transferred credits, no requirements waived by placement tests, no courses taken in the summer or winter, no repeated courses, and no remedial courses that may be required. This sample degree plan is intended for first-year students entering UW-Eau Claire in the fall semester. Your own degree plan may differ depending on the course of study selected (second major, minor, etc.). UW-Eau Claire cannot guarantee all courses will be offered as shown, but will provide a range of courses that may enable prepared students to fulfill their requirements in a timely period. This sample degree plan is just a guide. Please consult your advisor, your degree audit, and the catalog to create your own degree plan. Note: In order to earn the required minimum of 120 credits for the degree in four years, you should plan to take 15 credits each semester or 30 credits each year.

To earn a degree, students must fulfill all University Graduation Requirements, including the Liberal Education (LE) Core. LE Core course work in the following sample degree plan uses abbreviations such as LE-K1, LE-S2, LE-R3, and LE-I1 to represent the learning outcomes students will meet via completion of their liberal education course work. Please click here (<https://catalog.uwec.edu/undergraduate/graduation-requirements/>) for a description of the Liberal Education Core outcomes and requirements. Note that the LE Core may be completed through both course and non-course experiences.

#### FIRST YEAR

FIRST SEMESTER		
MATH 114	Calculus I (LE-S2)	4
PHYS 231	University Physics I (LE-K1)	5
Writing Requirement:		
WRIT 114	Intensive Blugold Seminar in Critical Reading and Writing (LE-S1)	
or		
WRIT 116	Blugold Seminar in Critical Reading and Writing (LE-S1)	
LE Core Elective: Knowledge 4 (LE-K4) Fine Arts		3
TOTAL		17

#### SECOND SEMESTER

LE Core Elective: Knowledge 2 (LE-K2) Social Sciences		3
MATH 215	Calculus II	4
PHYS 232	University Physics II (LE-K1)	5
CHEM 105	General Chemistry I Lecture <sup>c</sup>	3
CHEM 106	General Chemistry I Laboratory (LE-K1)	2
TOTAL		17

#### SECOND YEAR

FIRST SEMESTER		
CHEM 109	General Chemistry II with Lab	4
PHYS 332	University Physics III (LE-I1)	3
PHYS 226	Astronomy-Solar System <sup>a</sup>	4
LE Core Elective: Knowledge 3 (LE-K3) Humanities and LE Option: Responsibility 2 (LE-R2) Global Perspectives		3
LE Core Elective: Responsibility 1 (LE-R1) Equity, Diversity, and Inclusivity		3
TOTAL		17

SECOND SEMESTER		
BIOL 105	General Biology <sup>d</sup>	3
PHYS 340	Optics <sup>b</sup>	4
ES 212	Exploring Schooling K-12	2
PSYC 260	Educational Psychology (LE-K2)	3
Communication LE Core Elective Elective: (LE-S1)		3
CJ 201	Introduction to Interpersonal Communication	
or		
CJ 202	Fundamentals of Speech	
or		
CJ 203	Fundamentals of Human Communication	
TOTAL		15

#### THIRD YEAR

FIRST SEMESTER - Apply for Admission to Major		
PHYS 350	Electric and Electronic Circuits <sup>a</sup>	4
BIOL 106	Exploring the Living World	2
Conservation of the Environment (R3,I1):		3
BIOL 180	Environmental Biology and Conservation	
or		
GEOG 178	Planet Earth: Conservation of the Environment (LE-R3, LE-I1)	
Geology Core Course:		
GEOL 106	Earth Science	
or		
GEOL 110	Physical Geology	
or		
GEOL 115	Environmental Geology	
or		
GEOL 118	Societal Issues in Earth Science	
PHYS 315	The Mysterious Universe	3
TOTAL		16

#### SECOND SEMESTER

BIOL 151	Biology of Humans	4
Geology Core Course:		3
GEOL 301	Earth Resources and Sustainability	
or		
GEOL 304	Global Environmental Change	
or		
GEOL 308	Water Resources	
ES 385	Social Foundations: Human Relations (LE-R1 DDIV, LE-SL)	3
LE Core Elective: Knowledge 3 (LE-K3) Humanities		3
TOTAL		13

#### FOURTH YEAR

FIRST SEMESTER		
ES 312 & ES 317 & ES 318 & ES 328	General Methods of Teaching and Middle Level Methods and Curriculum and Teacher Assisting and Disciplinary Literacy and Study Strategies	7

ES 490	Historical, Legal, and Philosophical Foundations of Education	3
ES 360	Teaching Science in Grades 4-12	3
SEIP 300	Inclusive Practices for Secondary Educators	3
TOTAL		16
<b>SECOND SEMESTER</b>		
ES 497	Field Experience Seminar (LE-S3)	2
Student Teaching		10
ES 445 & ES 470	Student Teaching in Middle Level Education and Student Teaching in Secondary Education (5 credits)	
or		
ES 446 & ES 475	Internship Teaching in Middle Level Education and Internship Teaching in Secondary Education	
TOTAL		12

**Minimum total for the baccalaureate degree = 120 credits**

- a Offered only in fall semesters
- b Offered only in spring semesters
- c Can replace CHEM 105/106/109 with CHEM 115
- d Can replace BIOL 105/106/151 with BIOL 221/222/223

**RECOMMENDATIONS FOR HIGH IMPACT PRACTICES (HIPs)**

The University of Wisconsin-Eau Claire encourages all students to participate in High Impact Practices. The following information identifies any specific recommendations that faculty in this major have concerning which HIPs might be most beneficial to students, and any recommendations about when those HIPs best fit into the degree plan. Students should also consult their faculty advisor for information on HIPs. There are many additional high impact opportunities available. Talk to your academic advisor for more information about incorporating HIPs like Study Abroad, Intercultural Immersion, Internship, and/or Student/Faculty Collaborative Research into your time at UW-Eau Claire.

**Liberal Education (LE) Core Guidance****Liberal Education Core (LE Core)**

The LE Core comprises 17 learning experiences across 11 learning outcomes. Students must complete a minimum of 36 credits in courses approved for the LE Core.

- K1 – Natural Sciences; two experiences (one lab science experience is required in K1 or K2).
- K2 – Social Sciences; two experiences (one lab science experience is required in K1 or K2).
- K3 – Humanities; two experiences.
- K4 – Fine Arts; one experience.
- S1 – Written and Oral Communication; two experiences (one experience must satisfy the University writing requirement).

- S2 – Mathematics; one experience (must satisfy the University math competency requirement).
- S3 – Creativity; one experience (can be fulfilled in a student's major).
- R1 – Equity, Diversity, and Inclusivity; two experiences (one experience must meet the UW System Design for Diversity (DD) requirement).
- R2 – Global Perspectives; one experience.
- R3 – Civic and Environmental Issues; one experience.
- I1 – Integration; two experiences (one experience can be fulfilled in a student's major).
- SL—Service Learning; 30 hours

**Additional LE Core Information**

- Most LE Core learning experiences are course based, and many courses meet more than one learning outcome (e.g., K3 and R2 or K1 and R3).
- Some learning experiences can also be met outside of a traditional course (e.g., undergraduate research (S3), study abroad (I1)).
- S1 – An English placement score that fulfills the University writing requirement fulfills one S1 experience.
- S1 – A foreign Language placement score that qualifies the student to enter the 102 level satisfies one S1 experience.
- S1, R2 – A foreign language placement score that qualifies the student to enter the 202 level satisfies one experience in S1 and the R2 experience.
- S2 – A math placement score that qualifies the student to enter Math 111, 112, 113 or 114 fulfills the S2 experience.
- S3 – Completion of two credits from any approved music ensemble fulfills the S3 experience.
- I1 – Any semester long study abroad program can fulfill one I1 experience.