

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

	Credit Restrictions
Satisfactory/Unsatisfactory	
Total degree credit	maximum 12
Major, Standard	maximum 1 course
Major, Comprehensive	maximum 2 courses
Credit by Examination	
Total degree credit	maximum ¼ of total
Major or minor	maximum ½ of total
Two-Year College Credits	
Total degree credit	maximum 72 credits
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	
UW-System	no maximum
Other extension/correspondence	maximum ¼ of total
USAFI	
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 a minimum of 36 credits

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

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

K2 (Social Sciences)		
PSYC 260	Educational Psychology	3
AND another learning experience		
S3 (Creativity)		
ES 497	Field Experience Seminar (included in major)	2
R1 (Equity, Diversity, Inclusivity)		
ES 385	Social Foundations: Human Relations (included in major)	3
AND another learning experience		
I1 (Integration)		
ES 497	Field Experience Seminar (included in major)	2
AND another learning experience		

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 & ES 470	Student Teaching in Middle Level Education and Student Teaching in Secondary Education	12
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
SPED 300	Inclusive Practices for Secondary Educators	2

Approved Majors and Minors for Option B

Comprehensive Majors	Code	Prescribed Methods Course	Additional Requirement	Praxis II Content Test Required
English	540-006	ENGL 319, ENGL 419		ETS 5038
Earth and Space Science	160-015 ¹	ES 360 (F)		ETS 5435
Mathematics	180-002	ES 357		ETS 5061
Physical Science ¹	240-004	ES 360 (F)	BIOL 180 or GEOG 178	ETS 5435
Physics-Mathematics ¹				ETS 5161 and ETS 5435 (regardless of emphasis)
Physics Emphasis	210-003	ES 357 (Sp) and ES 360 (F)	BIOL 180 or GEOG 178	
Mathematics Emphasis	210-004	ES 357 (Sp) and ES 360 (F)	BIOL 180 or GEOG 178	
Social Studies	500-XXX	ES 356	ECON 103, BIOL 180 or GEOG 178	ETS 5081

Majors	Code	Prescribed Methods Course	Additional Requirements	Praxis II Content Test Required
Biology ¹	080-205	ES 360 (F)	BIOL 180 or GEOG 178	ETS 5435
Chemistry ¹	100-204	ES 360 (F)	BIOL 180 or GEOG 178	ETS 5435
Economics	360-204	ES 356	ECON 103, BIOL 180 or GEOG 178	ETS 5081
English	540-210	ENGL 319, ENGL 419		ETS 5038
History	380-206	ES 356	ECON 103, BIOL 180 or GEOG 178	ETS 5081
Mathematics	180-207	ES 357		ETS 5161
Physics ¹	230-205	ES 360 (F)	BIOL 180 or GEOG 178	ETS 5435
Political Science	420-203	ES 356	ECON 103, BIOL 180 or GEOG 178	ETS 5081

Minors	Code	Prescribed Methods Course	Additional Requirements	Praxis II or ACTFL Content Test Required
Biology	080-403	ES 360 (F)	BIOL 180 or GEOG 178	ETS 5435
Chemistry	100-406	ES 360 (F)	BIOL 180 or GEOG 178	ETS 5435
Coaching	971-403	KINS 492		no add't'l exam
Economics	360-404	ES 356	BIOL 180 or GEOG 178	ETS 5081
English	540-408	ENGL 319, ENGL 419		ETS 5038
French	260-404	ES 366 (F) in language	Study abroad	WPT and OPI or OPIc
Geography	140-413	ES 356	ECON 103, BIOL 180 or GEOG 178	ETS 5081
Geology	160-402	ES 360 (F)		
German	280-404	ES 366 (F)	Study abroad in language	WPT and OPI or OPIc
History	380-404	ES 356 (SP)	ECON 103, BIOL 180 or GEOG 178	ETS 5081
Learning Disabilities	950-471			ETS 5146
Mathematics	180-407	ES 357		ETS 5161
Physics	230-403	ES 360 (F)	BIOL 180 or GEOG 178	ETS 5435
Political Science	420-403	ES 356	ECON 103, BIOL 180 or GEOG 178	ETS 5081
Sociology	480-404	ES 356	ECON 103, BIOL 180 or GEOG 178	ETS 5081

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

¹ 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:	4
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	5
GEOL 320 Sedimentology and Stratigraphy	4
GEOL 468 Computers in Geology	1
GEOL 470 Field Geology I	3
CHEM 115 Chemical Principles (or equivalent)	6
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	3
GEOL 301	Earth Resources	3
or GEOL 308	Water Resources	
GEOL 418	Earth History	4
PHYS 211	General Physics	5
or PHYS 231	University Physics I	
PHYS 226	Astronomy-Solar System	4
MATH 114	Calculus I	4
GEOG 178	Conservation of the Environment	3
or BIOL 180	Environmental Biology and Conservation	
GEOG 340	Climatology	3
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	
GEOL 304	Introduction to Geomorphology	
GEOL 338	Remote Sensing of the Environment	
GEOG 350	Soils and the Environment	
GEOL 363	Watershed Analysis	
GEOL 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:	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