SCIENCE TEACHING, EARTH/SPACE SCIENCE EMPHASIS COMPREHENSIVE MAJOR

Teaching (Code 241-003)

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 (http://catalog.uwec.edu/ | 36 |
| undergraduate/graduation-requirements/#header1) | |
| Academic Concentrations (http://catalog.uwec.edu/ | |
| undergraduate/graduation-requirements/#header16) | |
| Grade Point Requirements (http://catalog.uwec.edu/ undergraduate/graduation-requirements/#header14) ² | |
| Total | 2.00 average |
| Resident | 2.00 average |
| Major | 2.00 average |
| Minor | 2.00 average |
| Certificate | 2.00 average |
| University Residency Requirements (http://catalog.uwec.edu/undergraduate/graduation-requirements/#header15) | |
| 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 | |

Procedures Required for Graduation

Obtain admission to the degree program and/or the College offering it.

Apply for graduation on CampS.

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 |
| Minor | maximum 1 course |
| 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 | |

Certain programs exceed this minimum.

² See special requirements in each College.

| 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 |

| Integration Goal | |
|--|-------------------------|
| Integration Outcome 1 (I1): Integration (http:// | Two (2) |
| catalog.uwec.edu/undergraduate/attribute-I1/) | learning experiences |
| Service-Learning Goal | |
| Service-Learning (http://catalog.uwec.edu/undergraduate/ | 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
- 2. Grade point requirements:

attribute-SL/#header13)

| 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:

| Minimum Total 30 credits Senior Year 23 credits Major, in upper 12 credits division courses Comprehensive 21 credits Major, in upper division courses | 4 | Abbreviation | Full Title |
|---|---|-----------------|------------|
| Major, in upper 12 credits division courses Comprehensive 21 credits Major, in upper | I | Minimum Total | 30 credits |
| division courses Comprehensive 21 credits Major, in upper | 9 | Senior Year | 23 credits |
| Major, in upper | | | 12 credits |
| | I | Major, in upper | 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

experience

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.

3. ES 212, ES 313, and ES 314 with a minimum grade of C (not C-) in each course. Students must also earn a C or better in the prescribed methods courses for their major. See list of prescribed methods courses below.

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

Option B: Grades 4-12

| Code Title | | Credits |
|------------------------------|--|---------|
| Professional Sequence | e | |
| ES 212 | Exploring Schooling K-12 | 2-3 |
| ES 313 | Curriculum, Instructional Methods, and Disciplinary Literacies in Grades K-12 | 3 |
| ES 314 | Collaboration, Engagement, and Assessment in Grades K-12 | 3 |
| ES 385 | Social Foundations: Human Relations | 3 |
| Prescribed special me | thods course(s) (see approved | |
| majors and minors be | elow) | |
| ES 445 | Student Teaching in Middle Level | 5-10 |
| & ES 470 | Education | |
| | and Student Teaching in Secondary | |
| | Education | |
| 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 (Students must earn a minimum grade of C or above in prescribed methods courses.

| 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-humansciences/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
- 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/educationhuman-sciences/education-for-equity-justice/) and Special Education and Inclusive Practices (http://catalog.uwec.edu/undergraduate/educationhuman-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 may be 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 a teacher education program 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.
- 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.
- 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 College of Education and Human Sciences and the College of 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.
- ${\bf 2. \ \ Completion \ of \ an \ approved \ teacher \ education \ major, minor, or \ certificate.}$
- 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.

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

Title

Teaching (Code 241-003)

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

Credits

Advisor: Scott Clark

Code

| 60-73 credits, including | g: | |
|--------------------------|---|----|
| Earth & Space Science | e Core | 27 |
| Choose one: (4 cre | dits) | |
| GEOL 110 | Physical Geology | |
| GEOL 115 | Environmental Geology | |
| GEOL 118 | Societal Issues in Earth Science | |
| and choose two: (6 | credits) | |
| GEOL 102 | Oceanography | |
| GEOL 301 | Earth Resources and Sustainability | |
| GEOL 304 | Global Environmental Change | |
| GEOL 308 | Water Resources | |
| Other required course | es: | 13 |
| GEOL 312 | Mineralogy and Petrology I | 5 |
| GEOL 320 | Sedimentology and Stratigraphy | 4 |
| PHYS 226 | Astronomy-Solar System | 4 |
| and choose one (4 | credits) | |
| GEOL 315 | Hydrogeology I | 4 |
| or | | |
| GEOL 418 | Earth History | 4 |
| or the combination of: | | |
| GEOL 468 | Geological Field Methods | 1 |
| and | | |
| GEOL 470 | Field Geology I | 3 |
| Additional Requirement | ents | 9 |
| ES 360 | Teaching Science in Grades 4-12 | 3 |
| ES 385 | Social Foundations: Human Relations | 3 |
| and choose one: (3 | credits) | |
| GEOG 178 | Planet Earth: Conservation of the Environment | |
| BIOL 180 | Environmental Biology and Conservation | |

| GEOL 204 | Understanding Earth's Environment | |
|---|-----------------------------------|------|
| Physics Emphasis Co | ore | 9-18 |
| choose one: | | |
| option 1 (9 credits) | | |
| PHYS 211 | General Physics | 5 |
| and | | |
| PHYS 212 | General Physics | 4 |
| or | | |
| option 2 (18 credits) | | |
| PHYS 231 | University Physics I | 5 |
| and | | |
| PHYS 232 | University Physics II | 5 |
| and | | |
| MATH 114 | Calculus I | 4 |
| and | | |
| MATH 215 | Calculus II | 4 |
| Chemistry Core | | 6-9 |
| choose one optio | n: | |
| 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 | |
| Biology Core | | 9-10 |
| choose one optio | n: | |
| 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 | |
| or | | |
| Option 2 | | 9 |
| BIOL 221 | Foundations of Biology I | |
| and | | |
| BIOL 222 | Foundations of Biology II | |
| and | | |
| BIOL 223 | Foundations of Biological Inquiry | |
| | 3 , , | |

Program Learning Outcomes

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

- Develop a comprehensive understanding of Earth and space sciences.
- Teach ethically and professionally, cultivating an awareness of the interplay of society, the environment, natural resources, and the climate.
- Be able to contextualize Earth's place in the solar system, the galaxy, and the universe.
- · Describe common rocks and minerals.
- Use and interpret topographic maps, geological maps, air photos, geographic information systems (GIS) data, and geological cross sections.

- Acquire a knowledge of surficial Earth processes and their principles.
- Develop geologic models and effectively communicate a geologic interpretation based on observations.
- $\bullet\,$ Characterize the origin of earth and water resources.
- Use mathematics and computational methods to analyze scientific data.
- Recognize the value of contributions from a diverse population.