EDUCATION, BS: EARLY ADOLESCENCE - ADOLESCENCE LEVEL: SCIENCE

The Science Education program is available for students who plan to teach middle or high school science. Science Education students gain real world experience in the classroom through student teaching or on-the-job experiences at area schools. Students who satisfactorily complete the program requirements also meet the Wisconsin teacher certification requirements for teaching science subject areas in those grades. Students at this level of certification may add the following licenses while pursuing or after obtaining their Science licensure as their initial certification:

- Bilingual
- English as a Second Language
- World Languages

Requirements

University General Education Requirements (GER)

**GER Competency Requirements**

**Oral and Written Communication, Part A**

English Placement Test score at level 4 or higher, or pass English 102 with a grade of C or better

**Oral and Written Communication, Part B**

Complete a GER-Owcb approved advanced course with a grade of C or better

**Quantitative Literacy, Part A**

Math Placement Test code 30 or higher, or pass Math 102, 103, 105, or 175 with a grade of C or better

**Quantitative Literacy, Part B**

Complete a GER-QLB approved advanced course with a grade of C or better

**Foreign Language**

Complete one of the following:

- 2 consecutive semesters of college instruction in a single foreign language with passing grades
- 2 consecutive years of high school instruction in a single foreign language with passing grades

Demonstrate language proficiency on approved exam

**GER Distribution Requirements**

**Arts**

Select one approved GER-A designated course

**Humanities**

Select two approved GER-HU designated courses

**Social Sciences**

Select two approved GER-SS designated courses

**Natural Sciences**

- Select one approved GER-NS or GER-NS+ designated course
- Select one approved GER-NS+ designated course, which includes a lab component

**Cultural Diversity**

Select one approved GER-CD designated course

Total Credits: 9-42

Program-specific requirements fulfill, or partially fulfill, University GER requirements. Program identifies certain course categories (ie. literature, biology, political science, etc) be used to fulfill some GERs in order to meet PI 34 Statutory Requirements and/or program requirements.

**Program Admission Requirements** (p. 2)

**Program Core**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUN 103</td>
<td>Public Speaking (GER-HU, fulfilled prior to program admission)</td>
<td>3</td>
</tr>
<tr>
<td>CURRINS 328</td>
<td>Introduction to Teaching Science in Middle and High School (fulfilled prior to program admission)</td>
<td>3</td>
</tr>
<tr>
<td>MTHSTAT 215</td>
<td>Elementary Statistical Analysis (QL-B, GER-NS)</td>
<td>6</td>
</tr>
</tbody>
</table>

Select a MATH elective to satisfy another 3 credits.

**Minority Group Relations (Act 31)**

A component of the Human Relations Requirement for Teacher Certification is met by completing one of the following courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 213</td>
<td>American Indian Peoples of Wisconsin (GER-Cd, GER-SS)</td>
<td>3</td>
</tr>
<tr>
<td>ENGLISH 276</td>
<td>Introduction to American Indian Literature: (GER-Cd, GER-HU)</td>
<td>3</td>
</tr>
<tr>
<td>AIS 203</td>
<td>Western Great Lakes American Indian Community Life of the Past (GER-Cd, GER-SS)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 263</td>
<td>North American Indian History Since 1887 (GER-Cd, GER-SS)</td>
<td>3</td>
</tr>
</tbody>
</table>

Both statutory requirements can be met by taking one class from the list under Minority Group Relations (Act 31).

**Conservation of Natural Resources (choose one)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES 210</td>
<td>Introduction to Conservation and Environmental Science (GER-NS)</td>
<td>3</td>
</tr>
<tr>
<td>CES 471</td>
<td>Practicum in Natural Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 350</td>
<td>Conservation of Natural Resources (GER-SS)</td>
<td>3</td>
</tr>
</tbody>
</table>

**History and Philosophy of Science (choose one)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHILOS 213</td>
<td>Introduction to the Philosophy of Science (GER-HU)</td>
<td>3</td>
</tr>
<tr>
<td>PHILOS 324</td>
<td>Philosophy of Science</td>
<td>3</td>
</tr>
<tr>
<td>PHILOS 335</td>
<td>Philosophy of Biology</td>
<td>3</td>
</tr>
<tr>
<td>PHILOS 520</td>
<td>Philosophy of the Natural Sciences</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 502</td>
<td>Development of Modern Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 20-25

Program may allow fulfillment of Act 31 with a 1-day workshop.
Content Area

The selection of at least one major and one minor (highly suggested) should be made in consultation with a faculty advisor prior to applying for admission to the School of Education. Contact your faculty advisor for the "MACSTEP Program Packet," which includes course lists and specific details regarding the majors and minors.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>Broad Field Science</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earth and Space Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life and Environmental Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 The Broad Field Science major consists of 54 credits in science, including:
- 14 credits in each of two of the following: biology, chemistry, earth, and physics
- 8 credits in each of the remaining science areas
- Electives to be selected in consultation with a faculty advisor

Majors can earn a certification in another subject (biology, chemistry, physics, and earth and space science) if they have 15 credits in that subject area.

Professional Education Requirements

MACSTEP Sequence - Milwaukee Area Collaborative Secondary Science (and Math) Teacher Education Program. Formal admission to the School of Education required. A grade of C or better must be met for all professional requirements, including student teaching.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRINS 510</td>
<td>Cooperative Strategies for Pre and Early Adolescents</td>
<td>2</td>
</tr>
<tr>
<td>CURRINS 518</td>
<td>Science Methods I: Middle/Secondary Methods and Fieldwork</td>
<td>3</td>
</tr>
<tr>
<td>CURRINS 545</td>
<td>Reading in the Content Areas: Middle, Junior, and Senior High School</td>
<td>3</td>
</tr>
<tr>
<td>CURRINS 629</td>
<td>Change and Change Strategies in Education</td>
<td>3</td>
</tr>
<tr>
<td>ED PSY 541</td>
<td>Assessment in Science and Math I</td>
<td>1</td>
</tr>
</tbody>
</table>

Fall

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRINS 510</td>
<td>Cooperative Strategies for Pre and Early Adolescents</td>
<td>1</td>
</tr>
<tr>
<td>CURRINS 516</td>
<td>Field Work in Middle School</td>
<td>3</td>
</tr>
<tr>
<td>CURRINS 519</td>
<td>Science Methods II: Middle/Secondary Methods and Fieldwork</td>
<td>6</td>
</tr>
<tr>
<td>ED PSY 542</td>
<td>Assessment in Science and Math II</td>
<td>1</td>
</tr>
</tbody>
</table>

Spring

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXCEDUC 536</td>
<td>Inclusion for Secondary Science and Math Educators</td>
<td>1</td>
</tr>
<tr>
<td>EXCEDUC 537</td>
<td>Math and Science Methods for All Learners</td>
<td>1</td>
</tr>
</tbody>
</table>

EXCEDUC 538

Student Teaching (Spring) 4

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRINS 427</td>
<td>Student Teaching in Science</td>
<td>10-12</td>
</tr>
</tbody>
</table>

Total Credits 37-39

4 Students must complete paperwork in order to be assigned a student teaching placement. To be approved for placement, additional criteria must be met. See Benchmarks (p. 2) for details.

Additional Requirements for Graduation

- Minimum cumulative grade point average of 2.75 in all professional education courses. This includes any transfer coursework that is counted towards certification at UWM, as well as grades earned in student teaching or field experiences;
- Satisfactory completion of a minimum 128 credits;
- Completion of the last year of coursework (30 credits) in residence at UW-Milwaukee; and
- Completion of edTPA (Teacher Performance Assessment) required for certification.

Advance to Major

Program Admission Requirements

Application to the Science Education program requires satisfactory completion of the requirements listed below. For more information about the application process, visit our website at: http://uwm.edu/education/academics/science/.

- Pre-Professional Skills Test: Passing scores on one of the following exams: Praxis I, CORE, ACT, SAT; or GRE. ACT, SAT, and GRE scores must be within five years of admission term to academic program. Please see your academic advisor for additional information.
- English Composition: Achieve a placement level of 4 or higher on the English Placement Test, or complete ENGLISH 102 or an equivalent with a grade of C or better.
- Mathematics Skills: Achieve a placement level of 30 or higher on the Math Placement Test, or complete MATH 103, MATH 105, MATH 175, or an equivalent with a grade of C or better.
- Completion of COMMUN 103, with a grade of C or better. Note: Completion of this course also fulfills part of the Humanities GER requirement.
- Completion of CURRINS 328, Introduction to teaching Science in Middle and High School, with a grade of C or better.
- A 2.5 minimum cumulative GPA in all UWM and transfer courses at the time of admission application.
- A 2.75 cumulative GPA in all Science content courses.
- A minimum of 58 credits (UWM and transfer credits) at the time of admission application. It is not required to have all the Core Curriculum courses completed at the time of application.
- Meeting with faculty advisor to review admission application. Faculty signature required on application.
Benchmarks

Student Teaching

Students must complete paperwork in order to be assigned a student teaching placement. To determine your deadline (February or April), visit the Office of Clinical Experiences website at uwm.edu/education/academics/clinical-experiences/.

To be approved for placement, you must meet the following criteria:

• Be admitted to the School of Education;
• Completion of all required coursework;
• Cumulative GPA of a minimum 2.5;
• A minimum of 2.75 in all your science content area and professional education courses;
• Passing scores reflected on your transcript for the Praxis II exam: General Science: Content Knowledge #10435;
• Removal of all F or I (incompletes) grades;
• TB test results submitted to the Office of Clinical Experiences; and
• Criminal Background Check submitted to the Office of Clinical Experiences;

Undergraduate Advising

Our purpose is to provide collaborative, mentoring relationships which promote educational, career, and professional development. We value a student-centered, holistic, and ethical approach to advising based on strong partnerships with students, faculty and staff, and the larger campus community. We are committed to creating a respectful and supportive environment. We encourage students to be self-reliant through informed decisions and choices based upon dissemination of accurate information. We value our own continuous professional development to enhance the quality of the advising experience.

How to Prepare for an Advising Meeting

• Review your Advisement Report in PAWS.
• Come prepared with questions or topics for discussion.
• Make a list of courses you think you should take.
• Investigate opportunities to prepare for the job you want.
• Keep a record of your academic progress.
• Understand you are ultimately responsible for creating your educational, life, and career plans.
• Maintain honest and open communication with your advisor.
• Take responsibility for choices you make as a student and member of the UW-Milwaukee community.

Scheduling an Appointment

Office of Student Services
Enderis Hall, Room 209
(414) 229-4721
soeinfo@uwm.edu

Walk-In Hours

Walk-in advising is for current School of Education students and is limited to 10-15 minutes. Offered weekly on Thursday from 1-4 PM, these opportunities allow for you to meet briefly with your assigned academic advisor, or an advisor familiar with your program of study.

Transfer Student Not Yet Enrolled at UWM?

If you are attending a different college or university and would like to transfer to UWM to study in the School of Education and have questions, please connect with our Transfer Advisor, Emilee Schultz, at (414) 229-6019 or emilee@uwm.edu.

Graduate Advising

If you are a School of Education graduate student, you may schedule an appointment with your faculty advisor by contacting your faculty advisor directly. Faculty contact information can be found in the People Directory. Your faculty advisor will be listed in your PAWS account. If you are unsure who your advisor is, please contact Graduate Program Admissions Specialist Allison Hochmuth.

Honors in the Department of Teaching and Learning

Departmental Honors are granted to students who have achieved a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester.

Honors in the School of Education

Dean’s Honor List

GPA of 3.750 or above, earned on a full-time student’s GPA on 12 or more graded credits in a given semester.

Honors Degree and Honors Degree with Thesis

 Granted to graduating seniors who complete Honors College requirements, as listed in the Honors College section of this site.

Commencement Honors

Students with a cumulative GPA of 3.500 or above, based on a minimum of 40 graded UWM credits earned prior to the final semester, will receive all-university commencement honors and be awarded the traditional gold cord at the December or May Honors Convocation. Please note that for honors calculation, the GPA is not rounded and is truncated at the third decimal (e.g., 3.499).

Final Honors

Earned on a minimum of 60 graded UWM credits: Cum Laude - 3.500 or above; Magna Cum Laude - 3.650 or above; Summa Cum Laude - 3.800 or above.