# MATHEMATICS, MAJOR - TEACHING

## Teaching (Code 180-207)

### University Requirements

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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### Credit Requirements

- Minimum total for graduation: 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: 3

- 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.
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.

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### 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

### 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>
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<th>Code</th>
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<tbody>
<tr>
<td></td>
<td>K1 (Natural Sciences)</td>
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</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

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<tr>
<th>Code</th>
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<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  14
- & 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
- 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>
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<tbody>
<tr>
<td>ES 359</td>
<td>(fall only)</td>
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<tr>
<td>ES 367</td>
<td>(spring only)</td>
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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

**Thirty-six semester credits, including:**

- MATH 114  Calculus I  4
- MATH 215  Calculus II  4
- MATH 216  Calculus III  4
- MATH 324  Linear Algebra and Matrix Theory  4
<table>
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<tr>
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<tr>
<td>MATH 330</td>
<td>Modern Geometry</td>
<td>4</td>
</tr>
<tr>
<td>MATH 345</td>
<td>Introduction to Probability and Mathematical Statistics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 425</td>
<td>Abstract Algebra I</td>
<td>3</td>
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</table>

Additional credits to be chosen from mathematics courses numbered above 305

**Technology requirement for licensure:**

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<th>Course</th>
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<tr>
<td>MATH 451</td>
<td>Teaching Mathematics with Technology</td>
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<tr>
<td>OR</td>
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<tr>
<td>CS 170</td>
<td>Computing for the Sciences and Mathematics</td>
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This major is restricted to students in the College of Education and Human Sciences; Education Studies: Option B and leads to licensure to teach Mathematics in Early Adolescence through Adolescence classrooms.

1. MATH 347 may be substituted for MATH 345.
2. CS 170 does not count toward the 36 credits required for the mathematics major.