

# MATHEMATICS TEACHING:

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## In Workflow

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6. Provost/Chancellor (kleinepa@uwec.edu; beckejan@uwec.edu; forciesm@uwec.edu)
7. Final External Approvals (hoffmamf@uwec.edu)
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10. Reg Cat (none)

## Approval Path

1. Tue, 29 Mar 2022 17:44:15 GMT  
Alex Smith (smithaj): Approved for MATH Chair
2. Tue, 05 Apr 2022 15:33:36 GMT  
Jill Prushiek (prushijt): Approved for EHS Dean PreCurrComm (PIM)
3. Tue, 05 Apr 2022 16:06:51 GMT  
Jill Prushiek (prushijt): Approved for EHS Dean (PIM)

## New Program Proposal

Date Submitted: Tue, 15 Mar 2022 15:09:58 GMT

## Viewing: : Mathematics Teaching

Last edit: Tue, 05 Apr 2022 16:06:46 GMT

Changes proposed by: Jill Prushiek (prushijt)

## Preparer(s)

### Preparer Name:

Prushiek

## Program Level

Undergraduate

## Program Type

Major

## Degree Type

BS

## Name of Program

Mathematics Teaching

## Major Type

Standard

## Administrative Department

Mathematics

## College

Education and Human Sciences

## Effective Catalog Year

2023-2024

Is this content intended to be shared across multiple programs/catalog pages?

No

## Program Requirements (Includes Course Lists):

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Code	Title	Credits
<b>Thirty-six semester credits, including:</b>		
MATH 114	Calculus I	4
MATH 215	Calculus II	4
MATH 216	Calculus III	4
MATH 324	Linear Algebra	4
MATH 330	Modern Geometry	4
MATH 345	Introduction to Probability and Mathematical Statistics <sup>1</sup>	4
MATH 425	Abstract Algebra I	3

Additional credits to be chosen from mathematics courses numbered above 305

### Technology requirement for licensure:

MATH 451	Teaching Mathematics with Technology
OR	
CS 170	Computing for the Sciences and Mathematics <sup>2</sup>

This major is restricted to students in the College of Education and Human Sciences: The Department of Education for Equity and Justice: Option B and leads to licensure to teach Mathematics in grades 4-12 classrooms.

<sup>1</sup> MATH 347 may be substituted for MATH 345.

<sup>2</sup> CS 170 does not count toward the 36 credits required for the mathematics major.

## Additional Program Requirements (If Applicable)

## Additional Admission Requirements Unique to Program (If Applicable)

## Other Catalog Notes/Restrictions (If Applicable)

## Learning Outcomes

Please state the Learning Outcomes for this New Program:

Description
Outcome 1 Apply a broad range of perspectives, including numerical, graphical, algebraic, analytical and verbal, to effectively connect and communicate mathematical ideas.
Outcome 2 Use mathematics to model and solve appropriate problems.
Outcome 3 Write mathematical proofs.
Outcome 4 Work independently and collaboratively on mathematical problems.
Outcome 5 Read and synthesize mathematical literature.
Outcome 6 Combine multiple techniques of proof to establish the truth of a mathematical statement.

## Summary and Rationale

### Target Audience(s)

The target audience is the same as the current target audience.

### Evidence of long-term need

The long-term need for teachers continues to increase across the country.

### Anticipated Enrollment

The anticipated enrollment is the same as the current enrollment.

### Alignment with university mission

The major aligns with the university mission.

### Statement of benefits to students

Students will continue to benefit from instruction by exemplary faculty and staff.  
Students will continue to prepare to be future teachers who are collaborative leaders.

**Department(s), program(s), college(s), and university predecessor programs**

The previous Mathematics Teaching major was an emphasis of the Mathematics major. We are elevating this current emphasis to a major with its own entitlement to be more transparent to the public and prospective students who are looking to teach mathematics and want to attend UWEC to pursue this major.

**Relationship to existing programs**

This new major will still have an administrative home in the Mathematics Department.

This major will be a stand-alone, entitled major versus an emphasis of the current mathematics major.

We are requesting a redirection of an academic degree program through the UW System so that prospective students and their families will see that UWEC offers teaching majors in various disciplines. As per the requirements of redirecting an academic program, the curricular changes do not exceed 50%. The requirements for the currently approved emphasis will not change; and the redirection of the current mathematics teaching emphasis to an entitled major will allow prospective students to clearly see we offer a mathematics teaching major.

**Resources****Does the department have the necessary staffing to offer this program?**

Yes

**Explain need for student support, library resources, etc.:**

There is no additional need for student support, library resources, etc. Students will continue to be supported by the university.

**Describe funding needs to initiate and maintain the program, including source(s) of funding and any needed resource reallocation:**

No additional funding is required to initiate and maintain this program. The program will continue to be funded as it is now.

**Proposed frequency of offering for courses included in the program:**

Courses required for this major will continue to be offered on a regular basis so that students can complete their degree in a timely manner.

**Proposed arrangements for ongoing faculty advising for students in the program**

Academic advising and faculty advising for students in this program will remain the same.

**Provide justification that this program is not a duplication of another program that is currently being offered**

This program is not a duplication of another program. The proposed program is a redirection of the current Mathematics, Teaching Emphasis (180-207) to an entitled major.

Key: 403