MATHEMATICS TEACHING, COMPREHENSIVE MAJOR:

In Workflow
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Approval Path
1. Mon, 14 Mar 2022 14:08:05 GMT
   Amanda Sedahl (thielena): Rollback to Initiator
2. Tue, 29 Mar 2022 17:44:04 GMT
   Alex Smith (smithaj): Approved for MATH Chair
3. Tue, 05 Apr 2022 15:32:37 GMT
   Jill Prushiek (prushijt): Approved for EHS Dean PreCurrComm (PIM)
4. Tue, 05 Apr 2022 16:05:49 GMT
   Jill Prushiek (prushijt): Approved for EHS Dean (PIM)

New Program Proposal
Date Submitted: Tue, 15 Mar 2022 15:11:36 GMT
Viewing: Mathematics Teaching, Comprehensive Major
Last edit: Tue, 05 Apr 2022 16:05:44 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, Comprehensive Major

Major Type
Comprehensive

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):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 114</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 215</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 216</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>MATH 324</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<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 ¹</td>
<td>4</td>
</tr>
<tr>
<td>MATH 425</td>
<td>Abstract Algebra I</td>
<td>3</td>
</tr>
</tbody>
</table>

Required mathematics courses:
- MATH 373  Issues in Secondary Mathematics  4
- MATH 451  Teaching Mathematics with Technology  4

Remaining credits to be chosen from MATH 297 (at most one credit counts for major), and mathematics courses numbered above MATH 305

Required education courses:
- ES 212  Exploring Schooling K-12  2
- PSYC 260  Educational Psychology  3

Professional sequence:
- ES 312  General Methods of Teaching  2
- ES 317  Middle Level Methods and Curriculum  2
- ES 318  Teacher Assisting  1
- ES 328  Disciplinary Literacy and Study Strategies  2
- ES 357  Teaching Mathematics in Grades 4-12  2

Elective education courses choose two:
- CSD 150  Introduction to Communication Sciences and Disorders
- ES 415  Assessment and Evaluation in Grades 1-12
- PSYC 332  Psychology of Adolescence
- SEIP 306  Applied Behavior Analysis for Teachers

¹ MATH 347 may be substituted for MATH 345.

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

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:

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome 1 Apply a broad range of perspectives, including numerical, graphical, algebraic, analytical and verbal, to effectively connect and communicate mathematical ideas.</td>
</tr>
<tr>
<td>Outcome 2 Use mathematics to model and solve appropriate problems.</td>
</tr>
<tr>
<td>Outcome 3 Write mathematical proofs.</td>
</tr>
<tr>
<td>Outcome 4 Work independently and collaboratively on mathematical problems.</td>
</tr>
<tr>
<td>Outcome 5 Read and synthesize mathematical literature.</td>
</tr>
<tr>
<td>Outcome 6 Combine multiple techniques of proof to establish the truth of a mathematical statement.</td>
</tr>
</tbody>
</table>
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 Comprehensive 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, Comprehensive Major Teaching Emphasis (180-002) to an entitled major.

Reviewer Comments
Amanda Sedahl (thilena) (Mon, 14 Mar 2022 14:08:05 GMT): Rollback: Changes made in error

Key: 398