MATH EDUCATION MAJOR: ELEMENTARY/MIDDLE SCHOOL EDUCATION K-8 OPTION (B.S.)

https://ceps.unh.edu/mathematics-statistics/program/bs/mathematics-education-elementary-middle-school-option

Description

This professional degree program prepares students for teaching mathematics at the elementary and/or middle school level. The program is coordinated with the education department's teacher certification programs. For the elementary option, full certification requires the five-year program. Students may complete the degree requirements for middle school option with full teacher certification in either four or five years.

Students electing the four-year option leading to middle school certification must plan for one semester of student teaching (EDUC 694C Supervised Teaching/Mathematics) in their senior year; this requires careful planning with your program adviser to accommodate the scheduling of required MATH courses. Requirements for admission to student teaching include receiving credit for EDUC 500 and a minimum cumulative 2.8 GPA.

The five-year program for either option includes a year-long teaching internship in the fifth year. The internship requires admission into a UNH Department of Education graduate program that leads to certification. See Education, College of Liberal Arts. (https://catalog.unh.edu/graduate/programs-study/education)

Graduation Requirements

In all courses used to satisfy the requirements for its major programs, the Department of Mathematics and Statistics requires that a student earn a grade of C- or better and have an overall grade-point average of at least 2.00 in these courses.

For teacher licensure a grade of B- or better is required in all Education courses.

Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MATH 425</td>
<td>Calculus I</td>
<td>4</td>
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<tr>
<td>MATH 426</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 445</td>
<td>Mathematics and Applications with MATLAB</td>
<td>4</td>
</tr>
<tr>
<td>or CS 410</td>
<td>Introduction to Scientific Programming</td>
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<tr>
<td>MATH 531</td>
<td>Mathematical Proof</td>
<td>4</td>
</tr>
<tr>
<td>MATH 539</td>
<td>Introduction to Statistical Analysis</td>
<td>4</td>
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<tr>
<td>MATH 545</td>
<td>Introduction to Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>or MATH 645</td>
<td>Linear Algebra for Applications</td>
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<tr>
<td>MATH 621</td>
<td>Number Systems for Teachers</td>
<td>4</td>
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<tr>
<td>MATH 622</td>
<td>Geometry for Teachers</td>
<td>4</td>
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</tbody>
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MATH 623 Probability and Statistics for Teachers 4
MATH 625 Functions and Algebra for Teachers 4
MATH 700 Introduction to Mathematics Education 4
MATH 703 Teaching of Mathematics in Grades K-5 4
or MATH 709 Teaching of Mathematics in Grades 6-12 4
MATH 760 Geometry 4
MATH 790 Historical Foundations of Mathematics 4

Capstone 2-4

MATH 797 Senior Seminar
or MATH 799 Senior Thesis

Other Required Courses

PHYS 406 Introduction to Modern Astronomy 4
EDUC 500 Exploring Teaching 4
EDUC 700 Educational Structure and Change 4
EDUC 701 Human Development and Learning: Educational Psychology 4
EDUC 705 Contemporary Educational Perspectives 4

Total Credits 78-80

Note: EDUC 703F Teaching Elementary School Science, EDUC 703M Teaching Elementary Social Studies, EDUC 706 Introduction to Reading in the Elementary School, and EDUC 751A Educating Exceptional Learners: Elementary are requirements for K-6 or K-8 certification and may be taken as an undergraduate.

EDUC 751A Educating Exceptional Learners: Elementary or EDUC 751B Educating Exceptional Learners: Secondary are required for middle school certification (grades 5 - 8 only) and may be taken as an undergraduate.