

# SECONDARY MATHEMATICS MINOR

**Prerequisite Grade Policy:** Students must have earned a grade  $\geq$ C or better in any course that is to be used to satisfy a prerequisite requirement for a subsequent mathematics course offered by the Eastern Washington University Department of Mathematics.

**Grade Requirements:** Students must receive a grade  $\geq$ C in each course used to satisfy the requirements of an undergraduate major or minor in mathematics.

## Required MATH Courses

|               |   |   |
|---------------|---|---|
| MATH/HONS 161 | CALCULUS I (with a grade $\geq$ C satisfies the university proficiencies in math) | 5 |
| MATH 162      | CALCULUS II   | 5 |
| MATH 225      | FOUNDATIONS OF MATHEMATICS  | 5 |
| or MATH 301   | DISCRETE MATHEMATICS  |   |
| or MATH 411   | DISCRETE MATHEMATICS FOR K-8 TEACHERS   |   |
| MATH 370      | SURVEY OF GEOMETRIES  | 5 |
| or MATH 312   | GEOMETRY FOR THE K-8 TEACHER  |   |
| or MATH 470   | FOUNDATIONS OF GEOMETRY   |   |
| MATH 385      | PROBABILITY AND STATISTICAL INFERENCE I   | 5 |
| or MATH 380   | ELEMENTARY PROBABILITY AND STATISTICS   |   |
| or MATH 417   | ADVANCED MATHEMATICS FOR MIDDLE SCHOOL TEACHERS                                   |   |

## Required MTED Courses

|          |   |   |
|----------|---|---|
| MTED 425 | ASSESSMENT IN THE MATHEMATICS CLASSROOM | 3 |
| MTED 476 | MATHEMATICAL PROGRESSIONS               | 4 |
| MTED 477 | MATHEMATICAL DISCUSSIONS                | 4 |

**Total Credits** **36**

## Students who earn a Secondary Mathematics Minor from EWU should be able to:

- apply of pedagogical content knowledge for secondary mathematics in planning and teaching;
- critically read, analyze, evaluate, transform, and implement mathematics education literature;
- demonstrate the mathematical habits of mind of a community of mathematicians;
- demonstrate understanding of mathematical learning progressions and connections within secondary mathematics;
- describe and explain mathematical concepts and procedures addressed in high school and early college and connections among them;
- display a sensitivity and ability to respond productively to the mathematical thinking of secondary students;
- employ habits of mind to continue improving teaching practices that support mathematics learning;
- reason mathematically to develop proofs that communicate the reasoning clearly.