BASIC MATHEMATICS TEACHING OPTION

This option is offered within the following major(s):

- Education - College of Education (http://catalog.oregonstate.edu/college-departments/education/education-ba-bs-hba-hbs)

This option is for students wanting to earn a bachelor’s degree in Education and qualify for an Oregon Teaching License to teach basic mathematics at the middle school (grades 5–9) and only grade 9 in high school.

Pre-Education Level

Students at this level will be taking general education prerequisite courses and required contact course work.

Note: Pre-Education students should meet with the Double Degree Advisor at least once a year in order to ensure they are on track to meet the prerequisite and content mastery requirements prior to applying to the Professional Level.

Complete prior to Professional level.

**Code** | **Title**                                                                 | **Hours**
---|---|---
**Pre-Education General Course Work**
ED 216  | *PURPOSE, STRUCTURE, AND FUNCTION OF EDUCATION IN A DEMOCRACY* | 3
ED 219  | CIVIL RIGHTS AND MULTICULTURAL ISSUES IN EDUCATION | 3
ED 253  | LEARNING ACROSS THE LIFESPAN | 3
ED 309  | FIELD PRACTICUM | 3
ED 472  | FOUNDATIONS OF ESOL EDUCATION | 3
ED 479  | LINGUISTICS FOR TEACHERS | 3

**Basic Mathematics Content Mastery Requirements**

**Standard 1. Algebra/Trigonometry**

MTH 112  | *ELEMENTARY FUNCTIONS* | 4

**Standard 2. Calculus**

MTH 241  | *CALCULUS FOR MANAGEMENT AND SOCIAL SCIENCE* | 4

or MTH 251  | *DIFFERENTIAL CALCULUS* | 4

**Standard 3. Foundations in Elementary Mathematics**

MTH 211  | *FOUNDATIONS OF ELEMENTARY MATHEMATICS* | 4
MTH 212  | FOUNDATIONS OF ELEMENTARY MATHEMATICS | 4
& MTH 390  | FOUNDATIONS OF ELEMENTARY MATHEMATICS | 4

**Standard 4. Statistics and Probability**

ST 201  | PRINCIPLES OF STATISTICS | 4
ST 202  | PRINCIPLES OF STATISTICS | 4

**Standard 5. Math Electives**

Select at least 6 credits of the following:

MTH 245  | *MATHEMATICS FOR MANAGEMENT, LIFE, AND SOCIAL SCIENCES* | 4
MTH 252  | INTEGRAL CALCULUS | 3
MTH 341  | LINEAR ALGEBRA I | 3
Any Statistics (ST) Course | 3

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**Professional Level**

To be accepted into the Professional Level, a student must have completed the required Pre-Education General Courses and the Content Mastery Requirements with a minimum 3.0 GPA or by special petition. In addition, students need two letters of recommendation and passing scores on required licensure exams.

The following courses are taken during the Professional year-long program.

**Code** | **Title**                                                                 | **Hours**
---|---|---
**Professional Level Course Work**
ED 340  | *SUPPORTIVE DIFFERENTIATED ENVIRONMENTS* | 3
ED 407  | SEMINAR | 1
ED 409  | PRACTICUM/CLINICAL EXPERIENCE (September Experience) | 2
ED 409  | PRACTICUM/CLINICAL EXPERIENCE (Fall Practicum) | 3
ED 410  | INTERNSHIP/WORK EXPERIENCE (Part-time Student Teaching) | 3
ED 410  | INTERNSHIP/WORK EXPERIENCE (Full-time Student Teaching) | 10
ED 412  | LEARNING STYLES AND NEEDS IN ADOLESCENCE | 2
ED 424  | TEACHER AS REFLECTIVE PRACTITIONER | 2
ED 425  | CURRICULUM IMPLEMENTATION AND INSTRUCTIONAL STRATEGIES 7-12 | 4
ED 427  | ALTERNATIVE ASSESSMENT FOR MIDDLE AND HIGH SCHOOL | 2
ED 493  | READING, LITERATURE, AND LANGUAGE DEVELOPMENT IN THE CONTENT | 2

**Standard 6. Mathematics Education**

SED 414  | INQUIRY IN MATHEMATICS AND MATHEMATICS EDUCATION (Elementary or Secondary Section) | 3

Total Hours | 55

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1. Not required if you have taken HDFS 311 INFANT AND CHILD DEVELOPMENT, HDFS 313 ADOLESCENT DEVELOPMENT and HDFS 314 ADULT DEVELOPMENT AND AGING with a 3.0 or higher GPA.
2. Can be waived with 60 hours supervised/documated volunteer service.
3. To be completed prior to Professional Level. These requirements are based on standards from the National Council of Teachers of Mathematics for teaching grades 7–12. Most of these classes will also meet requirements for a student’s first degree.
   - Must have 3.0 accumulative GPA on all course work to fulfill content mastery requirements.
   - All grades must be taken as A–F graded courses; no P/N or S/U grades accepted for content mastery courses.
   - Baccalaureate Core Course
   - Writing Intensive Course (WIC)
Basic Mathematics Teaching Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ED 494</td>
<td>CONTENT STANDARDS AND CURRICULUM DEVELOPMENT FOR HIGH SCHOOL</td>
<td>3</td>
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Total Hours: 37

* Baccalaureate Core Course
^ Writing Intensive Course (WIC)

Option Code: 61