



# WEBER STATE UNIVERSITY

## MATH TEACHING MAJOR

### POSSIBLE COURSE SEQUENCE

#### FRESHMAN Fall 17 Credit Hours

MATH <b>QL</b> 1080 (Gen Ed <b>QL</b> )	Pre-Calculus	5
CHF <b>SS</b> 1500 (Gen Ed <b>SS</b> ) <i>or</i> <b>PSY</b> 3140	Human Development <i>or</i> <i>Psychology of Adolescence</i>	3 3
COMM <b>HU</b> 1020 <i>or</i> COMM <b>HU</b> 2110 (Gen Ed <b>HU</b> )	Principles of Public Speaking <i>or</i> <i>Interpersonal &amp; Small Group Communication</i>	3 3
Gen Ed	Core or Breadth	3
Gen Ed	Core or Breadth	3

#### FRESHMAN Spring 16 Credit Hours

MATH 1210	Calculus I	4
EDUC 1010	Exploring Teaching	3
Gen Ed	Core or Breadth	3
Gen Ed	Core or Breadth	3
Gen Ed	Core or Breadth	3

#### FRESHMAN Summer 4 Credit Hours

MATH 1220	Calculus II	4
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#### FRESHMAN YEAR TOTAL CREDITS—37

#### SOPHOMORE Fall 15 Credit Hours

MATH 2120 (F only)	Euclidean Geometry	3
MATH 2210	Calculus III	4
* PHYS PS2210 (Gen Ed <b>PS</b> )	Physics for Scientists & Engineers	5
MATH 2270	Linear Algebra	3

#### SOPHOMORE Spring 15 Credit Hours

MATH 2280	Ordinary Differential Equations	3
MATH 3110 (Sp only) <i>or</i> MATH 4110	Foundations of Algebra <i>or</i> <i>Modern Algebra I</i>	3 3
MATH 3120 (Sp only)	Foundations of Geometry	3
Gen Ed	Core or Breadth	3
Gen Ed	Core or Breadth	3

#### SOPHOMORE YEAR TOTAL CREDITS—30

\**or* CHEM PS1210 Principles of Chemistry I (5) and CHEM 1220 Principles of Chemistry II (5) (Gen Ed **PS**)

#### JUNIOR Fall 15 Credit Hours

MATH 3410	Probability & Statistics	3
MTHE 4010 (F only)	Capstone Mathematics	3
MATH Elective	Upper div MATH 3000 or higher	3
Gen Ed	Core or Breadth	3
Elective Credit	Any non required course	3

#### JUNIOR Spring 12 Credit Hours

MTHE 3010 (Sp only)	Methods & Technology for Teaching	3
MATH 3160 (Sp only)	Number Theory	3
MATH Elective	Upper div MATH 3000 or higher	3
Elective Credit	Any non required course	3

#### JUNIOR YEAR TOTAL CREDITS—27

#### SENIOR Fall 15 Credit Hours

MATH 4210 (F only)	Intro Real Analysis	3
Ed Block	Secondary Teacher Education Core	12

#### SENIOR Spring 12 Credit Hours

Secondary Teacher Education Student Teaching	12
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#### SENIOR YEAR TOTAL CREDITS—27

This is a **suggested course sequence** and not an academic contract with the specific department. Curriculum and program requirements are subject to change without notification. For further advisement please contact the Mathematics Department at 801-626-6095 or [math@weber.edu](mailto:math@weber.edu).

### GENERAL EDUCATION

#### GEN ED Core Required

**QL** Quantitative Literacy (3-5)  
**EN** English (3)  
**AI** American Institutions (3)  
**CIL** Comp & Info Literacy (3)  
(CIL may be satisfied with exams or specific courses.)  
\*see catalog for Diversity courses

**TOTAL 12-14 credits**

#### GEN ED Breadth Required

**HU** Humanities/**CA** Creative Arts (9 total for HU & CA)  
**SS** Social Science (6)  
**PS** Physical Science/  
**LS** Life Science  
(9 total for PS & LS)  
\*see catalog for Diversity courses

**TOTAL 24 credits**

## WEBER STATE UNIVERSITY MATHEMATICS DEPARTMENT

Bldg. 4 Office 518-C 1702 University Circle Ogden UT 84408  
801-626-6095 office 801-626-6427 fax [math@weber.edu](mailto:math@weber.edu) [www.weber.edu/mathematics](http://www.weber.edu/mathematics)

# MATHEMATICS TEACHING MAJOR

## BACHELOR'S DEGREE (BS or BA)

**Program Prerequisite:** Mathematics Teaching majors must meet the Teacher Education admission and licensure requirements.

**Minor:** Not required for the Mathematics Teaching major.

**Grade Requirements:** A grade of "C" or better in courses required for this major (a grade of "C-" is not acceptable). Mathematics Teaching majors must achieve an overall GPA of 3.00 for admission to the Teacher Education program.

**Credit Hour Requirements:** A total of 120 credit hours is required for graduation -- 31-46 of these are required within the major. A total of 40 upper division credit hours is required (courses numbered 3000 and above) -- at least nine credit hours of upper division mathematics must be completed at Weber State University.

**Advisement:** All Mathematics majors should see the Mathematics Department to be assigned an advisor. Students should meet with advisors at least once a year to help plan programs and check on progress. Call [801-626-6095](tel:801-626-6095) for more information or to schedule an appointment.

## Major Course Requirements for Mathematics Teaching BS or BA Degree

### **MATHEMATICS COURSES REQUIRED (48 CREDIT HOURS)**

<b>MATH 1210</b>	Calculus I (4) <i>Su, F, Sp</i> (Prerequisite—MATH 1050 and MATH 1060, or MATH 1080)
<b>MATH 1220</b>	Calculus II (4) <i>Su, F, Sp</i> (Prerequisite—MATH 1210)
<b>MATH 2120</b>	Euclidean Geometry (3) <i>F</i> (Prerequisite—MATH 1210)
<b>MATH 2210</b>	Calculus III (4) <i>Su, F, Sp</i> (Prerequisite—MATH 1220)
<b>MATH 2270</b>	Elementary Linear Algebra (3) <i>Su, F, Sp</i> (Prerequisite—MATH 1220)
<b>MATH 2280</b>	Ordinary Differential Equations (3) <i>F, Sp</i> (Prerequisite—MATH 1220)
<b>MATH 3110</b>	Foundations of Algebra (3) <i>Sp</i> (Prerequisite—MATH 1210)
<i>or</i> <b>MATH 4110</b>	Modern Algebra I (3) <i>F</i> (alternate years) (Prerequisite—MATH 2270)
<b>MATH 3120</b>	Foundations of Euclidean & non-Euclidean Geometry (3) <i>Sp</i> (Prerequisite—MATH 1220 and MATH 2120)
<b>MATH 3160</b>	Number Theory (3) <i>Sp</i> (Prerequisite—MATH 1210)
<b>MATH 3410</b>	Probability and Statistics (3) <i>F, Sp</i> (Prerequisite—MATH 1220)
<b>MATH 4210</b>	Intro Real Analysis (3) <i>F, Sp</i> (Prerequisite—MATH 2210 and MATH 2270)
<b>MTHE 3010</b>	Methods & Technology for Teaching Secondary Mathematics (3) <i>Sp</i> (Prerequisite—MATH 1220 and two upper division MATH courses)
<b>MTHE 4010</b>	Capstone Mathematics of High School Teachers. (3) <i>F, Sp</i> (Prerequisite—MATH 3110 and MATH 3120)

Plus **two upper division MATH courses** (3000 and above) not otherwise required (6)

### • **SUPPORT COURSES REQUIRED (14-19 CREDIT HOURS)**

**CHF SS1500** Human Development (3) *Su, F, Sp* (Course will satisfy Gen Ed SS requirement)

**COMM HU1020** Principles of Public Speaking (3) *Su, F, Sp* (Courses will satisfy Gen Ed HU requirement)

*or* **COMM HU2110** Interpersonal and Small Group Communication (3) *F, Sp, Su*

**EDUC 1010** Exploring Teaching (3)

**PHYS PS2210** Physics for Scientists & Engineers (5) *F, Sp* (Co-requisite MATH 1210) (Courses will satisfy Gen Ed PS requirement)

*or* **CHEM PS1210** Principles of Chemistry I (5) *Su, F, Sp* (Prerequisite—MATH 1010)

**& CHEM 1220** Principles of Chemistry II (5) *Su, F, Sp* (Prerequisite—CHEM PS1210)

A student must also complete requirements for a secondary education licensure as determined by the Jerry and Vickie Moyes College of Education. (McKay Education Building, Room 224 801-626-6309)

### • **GENERAL EDUCATION REQUIRED COURSES (36-38 CREDIT HOURS) PLUS ELECTIVE CREDITS**

### • **LANGUAGE COURSES REQUIRED TO FULFILL THE BA (14 CREDIT HOURS)**

6 credit hours of foreign language and the following language arts courses: **MATH 1210** Calculus I (4) *and* **MATH 1220** Calculus II (4)