

Program: **Mathematics**  
 Major: **Mathematics**  
 Degree: **Bachelor of Science (B.S.)**

Dept: **Mathematics and Statistics**  
 College: **Mathematics and Science**  
 Major Code: **6160**

**University Core (Total Listed 42-44)**

Specific courses within the University Core are listed on pages 96-97.  
 • Courses from the major may apply to the areas marked in the University Core.

**Written and Oral Communication ..... 9**

**Quantitative Reasoning/Scientific Method ..... 10-11**

- Math..... 3
- Life Science ..... 4
- Physical Science..... 3-4

**Critical Inquiry and Aesthetic Analysis ..... 6**

- Aesthetic Analysis ..... 3
- Critical Inquiry..... 3

**American Historical and Political Analysis ..... 6**

- American National Government ..... 3
- American History ..... 3

**Cultural and Language Analysis ..... 3-4**

- Second Language ..... 4
- OR
- Cultural Analysis..... 3

**Social and Behavioral Analysis ..... 3**

**Life Skills ..... 5**

- Required Health Course..... 2
- Elective Life Skills..... 3

**Minimum  
 Required Hours**

**Prerequisite Courses**

**Prerequisite Courses ..... 0-6**

- MATH 1533 Algebra for STEM **OR** Placement Score **AND**
- MATH 1593 Plane Trigonometry **OR** Placement Score

Upon completion of the above courses, corresponding general education requirements will be satisfied. (These courses are required for this major regardless of previous degrees conferred.)

**Major Requirements**

**Mathematics ..... 47**

**Required..... 30**

- MATH 2313 Calculus 1
- MATH 2323 Calculus 2
- MATH 2333 Calculus 3
- MATH 2343 Calculus 4
- MATH 2753 Technology for Professional Math and Statistics
- MATH 3113 Foundations of Advanced Math
- MATH 3143 Linear Algebra
- MATH 3183 Introduction to Modern Algebra
- MATH 4143 Introduction to Analysis 1
- STAT 4113 Mathematical Statistics 1

**Electives ..... 17**

At least nine (9) hours must be selected from the following:

- MATH 3103 Differential Equations
- MATH 3163 Elementary Number Theory
- MATH 4153 Introduction to Analysis 2
- MATH 4483 History of Mathematics
- STAT 4123 Mathematical Statistics 2

All other elective courses must be selected from 3000 and 4000 level MATH courses (including those MATH courses listed above).

**Electives to bring total to..... 124**

It is strongly recommended that PHY 1114 General Physics I and Lab be taken in the general education core.

**Minimum Grade Requirements**

1. Average in (a) all college course work, (b) course work at UCO, and (c) major courses ..... 2.50
2. A minimum grade of "C" must be earned in all courses in the major to count toward meeting degree requirements.

**For other regulations pertaining to graduation, see pages 68-69 of the 2018-2019 catalog.**