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

**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 67-68 of the 2017-2018 catalog.