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

Minimum Required Hours

University of Central Oklahoma Undergraduate Catalog 2018-2019

Minimum Grade Requirements

1. Average in (a) all college coursework, (b) coursework at UCO, and (c) major coursework ............................................................... 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.

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

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 - Applied Mathematics ................................. 48

Required courses ........................................................................ 27

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

Applied Mathematics ................................................................. 21

Required courses:
STAT 2113 Statistical Methods
MATH 3103 Differential Equations
MATH 4113 Operations Research 1
STAT 4113 Mathematical Statistics 1
MATH 4263 Numerical Linear Algebra OR
MATH 4363 Applied Numerical Analysis

Any 3000 and 4000 level MATH or STAT course to bring the total to 21.

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

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