

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

Dept: **Biology**
 College: **Mathematics and Science**
 Major Code: **6000**

University Core (Total Listed 42-44)

For a full list of courses see [University Core](#).

• 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**

Support Courses

Support Courses.....0-6

Students majoring in Biology are encouraged to complete the following courses in high school.

Two years of high school algebra and one year of Trigonometry **OR**

MATH 1453 Applied Algebra **OR**
 MATH 1513 College Algebra **AND**
 MATH 1593 Plane Trigonometry

Major Requirements

Biology..... 67

Biology Core (required of all degree candidates) 26

Required Courses:

BIO	1204	Biology for Majors: Principles
BIO	1225	Biology for Majors: Diversity
BIO	2203	Cell Biology
BIO	2211	Cell Biology Laboratory
BIO	3054	Microbiology for Majors and Lab
BIO	3303	Genetics
BIO	3543	General Ecology
BIO	3703	Evolution
*BIO	4840	Capstone

Mathematics 6

Required courses:

MATH	2153	BioCalculus
STAT	2103	Intro Statistics for Sciences

Chemistry..... 15

Required courses:

CHEM	1103	General Chemistry I
CHEM	1112	General Chemistry I - Recitation/Lab
CHEM	1223	General Chemistry II
CHEM	1232	General Chemistry II - Recitation/Lab
CHEM	3303	Organic Chemistry I OR
CHEM	3013	Organic Chemistry for Life Sciences
CHEM	3312	Organic Chemistry I Lab OR
CHEM	3022	Organic Chemistry for Life Sciences Lab

**Minimum
Required Hours**

Physics..... 4

Required course:
 PHY 1114 General Physics I and Lab

**Upper Division Biology Electives
 (to bring major total to 67)**** 16

** Any 3000/4000 level UCO BIO course or its equivalent **AND/OR**
 CHEM 3403 Biochemistry I

** At least five courses taken for the B.S. in Biology must be BIO courses with a lab. These courses include the three lab courses required as part of the core: BIO 1225, BIO 2211, and BIO 3054.

*To enroll in a Capstone Experience, students must complete a minimum of 60 credit hours. This 0 credit hour course is designed to be taken in conjunction with a capstone experience. Capstone experiences may include the following courses or special projects in biology. Special projects include but are not limited to independent research, service learning, professional school applications, or other equivalent experiences as approved by the Capstone Coordinator. Approval of the Capstone Coordinator is required before starting any capstone experience. A reflective writing piece, which must receive a passing score, will be required for all capstones.

BIO	3000	Workshop in Biology
BIO	3990	Advanced Topics in Biology
BIO	4012	Intro to Biological Research
BIO	4871	Senior Seminar
BIO	4900	Practicum in Biology
BIO	4920	Workshop in Biology
BIO	4930	Individual Study in Biology
BIO	4950	Internship in Biology
BIO	4960	Institute in Biology
BIO	4970	Study Tour in Biology

A maximum of 2 credit hours of the courses listed above, whether taken in conjunction with the capstone experience or not, will apply to the 67 credit hours required in the major except when BIO 4012 is chosen. If BIO 4012 is chosen as the capstone experience, an additional 2 credit hours may be taken.

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**Minimum
Required Hours**

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Electives to bring total to..... 124

General Physics II is a recommended elective.

Graduating seniors must take a national assessment exam in Biology as a graduation requirement for the B.S. in Biology.

Minimum Grade Requirements

1. Average in (a) all college course work, (b) course work at UCO, and (c) major courses..... 2.00
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 [Academic Degree Requirements.](#)