

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)**

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**

**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 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

**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  
pages 68-69 of the 2018-2019 catalog.**