

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

Dept: **Biology**  
 College: **Mathematics and Science**  
 Major Code: **6002**

**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**

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Required Hours**

**Support Courses**

**Support Courses ..... 0-3**

Students majoring in Biology-Medical Laboratory Science are encouraged to complete the following courses in high school.

- Two years of high school algebra **OR**
- MATH 1513 College Algebra

**Major Requirements**

**Biology-Medical Laboratory Sciences ..... 87**

Students may earn the B.S. in Biology-Medical Laboratory Science from UCO upon completion of the following three year curriculum and an additional one year in a hospital school approved by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

**Biology and Chemistry ..... 47**

Required Courses:

- BIO 1204 Biology I for Majors
- BIO 1225 Biology II for Majors and Lab
- BIO 2203 Cell Biology
- BIO 2211 Cell Biology Laboratory
- BIO 2604 Human Physiology and Lab
- BIO 3054 Microbiology for Majors and Lab
- BIO 3303 Genetics
- BIO 4515 Pathogenic Microbiology and Immunology and Lab
- 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
- CHEM 3312 Organic Chemistry I Lab
- CHEM 3403 Biochemistry I

**Mathematics ..... 6**

Required courses:

- MATH 2153 BioCalculus
- STAT 2103 Intro Statistics for Sciences

**Elective Biology and/or Chemistry ..... 4**

Selected from the following courses:

- BIO 3403 Comparative Animal Physiology OR
- BIO 3464 Comparative Animal Physiology and Lab
- BIO 3414 Histology and Lab

- BIO 3803 Mammalian Physiology I
- BIO 3813 Mammalian Physiology II
- BIO 4414 Virology and Lab
- BIO 4774 Parasitology and Lab
- CHEM 3203 Introductory Physical Chemistry
- CHEM 3323 Organic Chemistry II
- CHEM 3332 Organic Chemistry II Lab
- CHEM 3442 Experimental Biochemistry
- CHEM 4103 Biochemistry II

**#Medical Technology ..... 30**

Students must complete an appropriate one year program with an approved affiliate Hospital Medical Laboratory Science Program and satisfactorily complete the following courses through UCO.

- BIO 4117 Clinical Microbiology
- BIO 4236 Clinical Hematology
- BIO 4246 Clinical Immunology
- CHEM 4125 Clinical Chemistry I
- CHEM 4325 Clinical Chemistry II
- CHEM 4351 Topics in Medical Technology

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

#The Medical Laboratory Science degree can only be obtained upon completion of the one year clinical hospital training. Completion of the three-year requirements at UCO does NOT assure acceptance into one of the affiliated hospitals. Acceptance into a hospital program is highly competitive.

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