

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)

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.....0-3

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 1453 Applied 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 for Majors: Principles
- BIO 1225 Biology for Majors: Diversity
- 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

**Minimum
Required Hours**

- 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 [Academic Degree Requirements](#).