



# Major in Medical Laboratory Science, B.S.

2018-2019

## ***Additional Sources of Information***

### **WEBSITE:**

www.swau.edu

### **DEPARTMENT CONTACTS:**

Chair

Peter McHenry, Ph.D.

Faculty

Art Chadwick, Ph.D.

Amy McHenry, Ph.D.

Arthur Schwarz, Ph.D.

Jared Wood, Ph.D.

### **LOCATION:**

Scales Hall

### **MAIL:**

Department of Biological Sciences

100 W. Hillcrest Street

Keene, TX 76059

Modern medicine depends on thousands of highly trained laboratory technicians, technologists, and scientists who bear the responsibility of running vital tests on body fluids and tissues. Individuals who want to help treat and prevent disease and who love working in a laboratory will enjoy this rigorous program. Southwestern Adventist University's Bachelor of Science (B.S.) degree in Medical Laboratory Science (MLS) offers students practical training that essentially guarantees a job in this highly technical field. MLS graduates are in high demand: Nearly every MLS student is offered a position upon graduation—usually at the clinical internship site. Agreements with Andrews University and Tarleton State University allow Southwestern students to take their senior year of clinical classes at those institutions while remaining a student of Southwestern Adventist University. In addition, students in the Department of Biological Sciences are presented with rare leadership opportunities through the Biology Club and the potential to work with professors as Laboratory Teaching Assistants and Tutors.

### **Potential Careers:**

Hospital laboratory, Physician/Veterinary office, Reference laboratory, Forensics, Biotech, Industry/Pharmaceutical research, Education, State Health Department

### **Job Market**

Median Pay: \$53,612/year (www.glassdoor.com, visited February 1, 2018). Job Outlook (next 10 years): 16% growth (much faster than average) Source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, Medical and Clinical Laboratory Technologists and Technicians, on the Internet at <http://www.bls.gov/ooh/healthcare/medical-and-clinical-laboratory-technologists-and-technicians.htm> (visited May 19, 2016).

### **General Education Requirements:**

To view general education requirements for this major please visit [catalog.swau.edu/Undergraduate/2018-2019](http://catalog.swau.edu/Undergraduate/2018-2019).

100 W. Hillcrest Street  
Keene TX 76059

(800) 433-2240 TOLL-FREE

(817) 202-6794 PHONE

(817) 556-4712 FAX

www.swau.edu



<b>BIOL 111</b>	General Biology I.....	<b>4</b>
<b>BIOL 112</b>	General Biology II.....	<b>4</b>
<b>BIOL 180</b>	Biology Research Seminar .....	<b>1</b>
<b>BIOL 318</b>	Microbiology and Immunology .....	<b>4</b>
<b>BIOL 320</b>	Genetics .....	<b>4</b>

**RECOMMENDED COGNATES:**

<b>CHEM 431</b>	Biochemistry I .....	<b>3</b>
<b>PHYS 121</b>	General Physics I .....	<b>4</b>
<b>PHYS 122</b>	General Physics II .....	<b>4</b>
<b>BIOL ELEC*</b>	Human Biology (U.D.).....	<b>8</b>

**REQUIRED COGNATES:**

<b>COMM 111</b>	Speech.....	<b>3</b>
<b>CSIS 102</b>	Microcomputer Literacy and Applications <i>or</i>	
<b>CSIS 104</b>	Spreadsheet and Database Applications.....	<b>1-3</b>
<b>CHEM 231</b>	Organic Chemistry I.....	<b>4</b>
<b>CHEM 111</b>	General Chemistry I .....	<b>4</b>
<b>CHEM 112</b>	General Chemistry II .....	<b>4</b>
<b>CHEM 231</b>	Organic Chemistry I.....	<b>4</b>
<b>CHEM 232</b>	Organic Chemistry II.....	<b>4</b>
<b>MATH 141</b>	Introduction to Statistics and Probability.....	<b>3</b>

*\* Human Physiology and Immunology are especially recommended for those applying to Tarleton State University. Also note that Human Physiology is not offered every year.*

**SAMPLE FOUR-YEAR SCHEDULE**

	FIRST SEMESTER	SECOND SEMESTER
<i>First Year</i>	BIOL 111—General Biology I .....4 BIOL 180—Biology Research Seminar .....1 CHEM 111—General Chemistry I .....4 ENGL 121—Freshman Composition.....3 Religion Elective .....3 UNIV 111—Wellness for Life .....2 <b>TOTAL .....17</b>	BIOL 112—General Biology II .....4 CHEM 112—General Chemistry II .....4 Computer Science Elective .....3 History Elective .....3 Social Science Elective .....3 <b>TOTAL .....17</b>
<i>Second Year</i>	BIOL 318—Microbiology and Immunology .....4 CHEM 231—Organic Chemistry I.....4 ENGL 220—Research Writing.....3 MATH 141—Introduction to Statistics and Probability .....3 Kinesiology Activity Elective .....1 <b>TOTAL .....15</b>	CHEM 232— Organic Chemistry II.....4 History Elective .....3 Religion Elective .....3 BIOL 320—Genetics .....4 Communication Elective—Speech Elective.....3 <b>TOTAL .....17</b>
<i>Third Year</i>	CHEM 431—Biochemistry I .....3 PHYS 121—General Physics I .....4 Biology Elective—Human Physiology* .....4 Kinesiology Elective.....1 Religion Elective.....3 <b>TOTAL .....15</b>	Religion Elective (U.D.).....3 PHYS 122—General Physics II .....4 Biology Elective—Immunology* .....4 Literature Elective .....3 Fine Arts Elective .....3 <b>TOTAL .....15</b>
<i>Fourth Year</i>	Clinical Training July- June  Senior Year- Clinical training at an affiliated hospital institution.	<b>TOTAL FOR FOURTH YEAR.....59</b>

**= 151 Hours = 64 Hours Upper Division**