

## Medical Laboratory Technology (9320)

### Associate of Applied Science Degree

Medical Laboratory Technology, a clinical laboratory science, serves an essential and responsible role in the healthcare system.

Physicians rely on laboratory technicians and the results of their analyses to aid them in determining diagnosis, treatment, and evaluation of the effectiveness of treatment.

Lakeland's Medical Laboratory Technology program combines basic science, general education, medical laboratory, and clinical laboratory experiences.

Medical laboratory technicians are an important part of the medical diagnostic team. They perform tests in all areas of the clinical laboratory. A medical laboratory technician performs testing which gives the physician clues as to the absence, presence, extent, and causes of disease. This skilled professional utilizes a wide array of intricate precision instruments such as automated analyzers, microscopes, and electronic counters. Clinical experiences include rotations in microbiology, parasitology, mycology, urinalysis, immunology, blood banking, hematology, and chemistry departments in a hospital laboratory.

All students enrolled in this program must complete a criminal background check and drug screening. In accordance with clinical site requirements, students with a criminal record may be ineligible to participate in a clinical course/rotation/practicum. Delays, for any reason, in obtaining these results may cause an interruption in the clinical rotation sequence or inability to complete program requirements. Additional background screening may be required by individual facilities.

A minimum GPA of 2.0 and a "C" grade or higher is required in all medical laboratory technology and general education courses as listed in the curriculum guide for the AAS degree in medical laboratory technology. Satisfactory/Unsatisfactory grades may not be used to fulfill health program requirements.

### Admission Procedures

**Students must meet specific admission requirements for this program.** Listed below are requirements for admission to the Medical Laboratory Technology Program:

#### Option 1: High School Option

This option is for current high school seniors or high school graduates who apply to the program within two years of high school graduation.

- Complete college application(s).
- Composite score of 21 or higher on the American College Test (ACT) or combined score of 940 on the Scholastic Aptitude Test (SAT).
- Place into MATH 1330 Statistics for the Health Sciences or higher or pass MATH 0850 Beginning Algebra.
- Complete high school algebra, chemistry, and biology with a "C" grade or higher.
- An overall high school GPA of 2.5 on a 4.0 scale or equivalent.
- Meet with the program director and counselor to review program prerequisites and requirements.

Upon successful completion of the above criteria, the applicant will be admitted into the program. Students must complete HLTH 1215 Medical Terminology for Health Professions with a "C" grade or higher prior to enrolling in their first MDLT course.

#### Option 2: College Option

This option is for students who do not qualify for admission under Option 1.











- Complete college application(s).
- Submit high school transcript as well as any college transcript(s).
- Meet with the program director and counselor to review program prerequisites and requirements.
- Students must have a cumulative GPA of 2.0 or higher in program applicable courses. The following courses, or equivalent courses from other regionally accredited colleges, must be completed with a combined minimum cumulative GPA of 2.5 or higher and a "C" grade or higher.
  - HLTH 1215 Medical Terminology for Health Professions
  - BIOL 2210 Anatomy and Physiology I

**NOTE:** Students must meet one of these requirements to take BIOL 2210 with a "C" or higher:

1. High school biology within last five years and high school chemistry.
2. High school biology within last five years and CHEM 1100 Elementary Chemistry I: Intro to Inorganic Chemistry.
3. BIOL 1200 Fundamentals of Biology for the Health Technologies

Students are required to take the Math Placement Test and be placed into MATH 1330 Statistics for the Health Sciences or complete MATH 0850 Beginning Algebra with a "C" grade or higher.

**Note:** Students planning to transfer to a four-year college are encouraged to take ENGL 1120 English Composition II in addition to the following requirements.

Course	Title	Credit Hours
<b>First Semester</b>		
BIOL 2210	Anatomy and Physiology I	4
CHEM 1100	Elementary Chemistry I: Intro to Inorganic Chemistry <sup>1</sup>	4
FYEX 1000	First Year Experience	1
MDLT 2150	Hematology and Coagulation 	5
MDLT 2151	Blood Collection Techniques 	1
MDLT 2152	Urinalysis 	1
MDLT 2153	Body Fluid Analysis 	1
<b>Credit Hours</b>		<b>17</b>
<b>Second Semester</b>		
BIOL 2220	Anatomy and Physiology II	4
BIOL 2700	Microbiology	4
ENGL 1110 or ENGL 1111	English Composition I (A) <sup>2</sup> or English Composition I (B)	3
MDLT 2250	Clinical Immunology 	3
MDLT 2350	Immunohematology 	4
<b>Credit Hours</b>		<b>18</b>
<b>Summer</b>		
CHEM 1150 or BIOS 2901	Elementary Chemistry II: Intro to Organic and Biochemistry <sup>3</sup> or Clinical Molecular Diagnostics	4
PSYC 1500 or SOCY 1150	Introduction to Psychology or Principles of Sociology	3
<b>Credit Hours</b>		<b>7</b>
<b>Third Semester</b>		
COMM 1150	Fundamentals of Interpersonal Communications <sup>4</sup>	2
MDLT 2550	Clinical Chemistry 	5
MDLT 2650	Clinical Microbiology 	5
<b>Credit Hours</b>		<b>12</b>
<b>Fourth Semester</b>		
MATH 1330	Statistics for the Health Sciences (or other college-level mathematics course) <sup>5</sup>	3
MDLT 2750	Clinical Directed Practicum 	6
MDLT 2850	Medical Laboratory Technology Seminar 	2
<b>Credit Hours</b>		<b>11</b>
<b>Total Credit Hours</b>		<b>65</b>

- <sup>1</sup> Students planning to transfer to a four-year college should consider taking MATH 1650 College Algebra (A), CHEM 1500 General Chemistry I, and CHEM 1600 General Chemistry II and consult with a counselor.
- <sup>2</sup> English course selection is based on placement test results (ENGL 1111 English Composition I (B) is 4 credits, only 3 credits apply to the degree).
- <sup>3</sup> CHEM 1150 is recommended for students planning on earning a Medical Laboratory Science degree.
- <sup>4</sup> Students may substitute COMM 1100 Effective Interpersonal Communications. This 3 credit course may be required for students transferring to a four-year college.
- <sup>5</sup> Students planning on transferring to a four-year college should take a sequence of math as advised by their counselor.



This course is designated as a technical course in the program. Students must earn a "C" grade or higher in the course to fulfill the college's graduation requirements policy.