

# Associate of Applied Science Degree Science and Health Technologies

## Medical Laboratory Technology (9320)

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 general tests in all areas of the clinical laboratory. Working under the supervision of a medical technologist or pathologist, 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.

All students enrolled in a nursing or allied health program/certificate must complete a criminal background check. 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 background 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.

Drug Testing may be requested in accordance with clinical affiliation requirements and/or for patient/student health and safety.

A minimum GPA of 2.0 and a "C" grade or higher is required in all science and program-specific courses for graduation.

### 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.

**Please Note: Deadlines for submission of applications may be obtained from the admissions or counseling offices.**

- Complete college application(s).
- Composite score of 21 or higher on the American College Test (ACT) or combined score of 1400 on the Scholastic Aptitude Test (SAT).
- 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 1210 (Medical Terminology) with a "C" grade or higher prior to enrolling in their first health technology course.

#### OPTION 2: College Option

This option is for students who do not qualify for admission under Option 1. **Please Note: Deadlines for submission of applications may be obtained from the admissions or counseling offices.**

- Complete college application(s).
- Submit high school transcript as well as any college transcript(s).
- Successful passing score on the required program pre-admission test.
- Meet with the program director and counselor to review program prerequisites and requirements.
- The following courses, or equivalent courses at other regionally accredited colleges, must be completed with a "C" or higher and have a minimum cumulative GPA in program applicable courses of 2.0 or higher.
  - HLTH 1210 Medical Terminology
  - BIOL 2210 Anatomy & 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.
3. Biology 1200 Fundamentals of Biology for the Health Technologies.

Students are required to take the Math Placement Test and be placed into MATH 0950 or complete MATH 0850 with a "C" grade or higher.

#### OPTION 3: Advanced Education Option

Students pursuing this option must have an Associate of Applied Science Degree in Nursing or Allied Health, Bachelor of Science Degree in a natural science, or an Associate of Science Degree to be waived from the preadmission testing. All other Option 2 requirements apply.

#### First Semester:

BIOL 2210 . . . . .	Anatomy and Physiology I . . . . .	4
CHEM 1100* . . . . .	Elementary Chemistry I . . . . .	4
MDLT 2150 . . . . .	Hematology and Coagulation . . . . .	5
MDLT 2151 . . . . .	Blood Collection Techniques . . . . .	1
MDLT 2152 . . . . .	Urinalysis . . . . .	1
MDLT 2153 . . . . .	Body Fluid Analysis . . . . .	1

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#### Second Semester:

BIOL 2220 . . . . .	Anatomy and Physiology II . . . . .	4
BIOL 2700 . . . . .	Microbiology . . . . .	4
<b>ENGL 1110** . . . . .</b>	<b>English Composition I (A) . . . . .</b>	<b>3</b>
	<b>OR</b>	
<b>ENGL 1111 . . . . .</b>	<b>English Composition I (B) . . . . .</b>	
MDLT 2250 . . . . .	Clinical Immunology . . . . .	3
MDLT 2350 . . . . .	Immunohematology . . . . .	4

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**Summer:**

CHEM 1150 . . . . .	Introduction to Organic Chemistry . . . . .	4
ENGL 1120 . . . . .	English Composition II . . . . .	3
<b>PSYC 1500 . . . . .</b>	<b>Introduction to Psychology . . . . .</b>	<b>3</b>
<b>OR</b>		
<b>SOCY 1150 . . . . .</b>	<b>Principles of Sociology . . . . .</b>	

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**Third Semester:**

ITIS 1000 . . . . .	Introduction to Personal Computers . . . . .	1
MDLT 2550 . . . . .	Clinical Chemistry . . . . .	5
MDLT 2650 . . . . .	Clinical Microbiology . . . . .	5
SPCH 1150*** . . . . .	Fundamentals of Interpersonal Communication . . . . .	2

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**Fourth Semester:**

MDLT 2750 . . . . .	Clinical Directed Practicum . . . . .	6
MDLT 2850 . . . . .	Medical Laboratory Technology Seminar . . . . .	2
Choose course(s) from the Arts and Humanities Electives list. . . . .		3

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**Program Total: 68**

*\*Students planning to transfer to a four-year college should consider taking MATH 1650, CHEM 1500, and CHEM 1600 and consult with a counselor.*

*\*\*English course selection is based on placement test results (ENGL 1111 is 4 credits, only 3 credits apply to the degree).*

*\*\*\*Students may substitute SPCH 1100. This 3 credit course may be required for students transferring to a four-year college.*

**Arts and Humanities Electives: minimum 3 credits**

ARTS 1120, 2220, 2230, 2240; ENGL 2250, 2260, 2280, 2290; HUMX 1100, 1200; MUSC 1200, 2200, 2250; PHIL 1500, 2000