

PROGRAM GUIDE

Applied Studies Division

Medical Laboratory Technology



Medical Laboratory Technology



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 analysis to aid them in determining diagnosis, treatment and evaluation of the effectiveness of treatment.

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.

Career Opportunities

According to the Bureau of Labor Statistics Occupational Outlook Handbook, employment of medical laboratory scientists and medical laboratory technicians is projected to grow 22 percent through 2022, much faster than average for all occupations. An increase in the aging population will lead to a greater need to diagnose medical conditions through laboratory procedures. Motivated medical laboratory technicians go on to earn their bachelor's degree to become eligible to take the certification examination to work as a medical laboratory scientist.

Medical laboratory technicians have numerous choices of practice settings. Hospitals, independent laboratories, clinics, public health facilities and industry currently have positions open for qualified medical laboratory technicians. Additional opportunities are available for medical laboratory technicians in molecular diagnostics, molecular biotechnology companies, invitro fertilization laboratories, research laboratories, and forensic laboratories. In industry, medical laboratory technicians work in product development, marketing, sales, education, and analyzer repair.

Lakeland's Program

Lakeland's medical laboratory technology program is a two-year program leading to an Associate of Applied Science degree in medical laboratory technology. The program combines basic science, general education, medical laboratory techniques, and clinical laboratory experiences. Lakeland students receive personal attention from faculty currently employed in the medical field and gain hands-on training in a simulated hospital laboratory on campus. In addition, the program provides students with 480 clinical training hours at area laboratories.

Lakeland's medical laboratory technology program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences.

National Accrediting Agency for Clinical Laboratory Sciences 5600 N. River Road, Suite 720 Rosemont, IL 60018 773.714.8880 • naacls.org

The Lakeland Advantage

- Small class sizes allow for individual instruction.
- This is a two-year program leading to an Associate of Applied Science degree.
- Students gain 16 weeks of clinical experience.
- Graduates are eligible to take the ASCP Board of Registry certifying examination.

First Semester:

BIOL 2210	4
CHEM 1100*Elementary Chemistry I	4
FYEX 1000First Year Experience	
MDLT 2150 Hematology and Coagulation	
MDLT 2151Blood Collection Techniques	
MDLT 2152 Urinalysis	
MDLT 2153 Body Fluid Analysis	
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Cogond Compaton	17
Second Semester:	
BIOL 2220 Anatomy and Physiology II	
BIOL 2700 Microbiology	4
ENGL 1110** English Composition I (A)	3
OR	
ENGL 1111 English Composition I (B)	
MDLT 2250 Clinical Immunology	3
MDLT 2350Immunohematology	4
	18
Summer:	10
	4
CHEM 1150Introduction to Organic ChemistryOR	4
BIOS 1500 Introduction to Biochemistry	
PSYC 1500Introduction to Biochemistry	2
OR	3
SOCY 1150Principles of Sociology	
Joen 1130	
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Third Semester:

COMM 1150***Fundamentals of Interpersonal Communication	1 5
Fourth Semester: MATH 1330 or other college-level mathematics course**** MDLT 2750Clinical Directed Practicum	- 3
MDLT 2850Medical Laboratory Technology Seminar	2
1 Program Total: 6	1 6

*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 COMM 1100. This 3 credit course may be required for students transferring to a four-year college.
- ****Students planning on transferring to a four-year college should take a sequence of math as advised by their counselor.
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Lakeland Community College Admission Requirements

For admission into Lakeland, students must be a high school graduate or have obtained a high school diploma equivalency. Please consult Lakeland Community College's Enrollment Guide (available on Lakeland's website at lakelandcc.edu/enrollment) for specific admissions requirements and procedures.

Health Program Admission Requirements

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 1400 on the Scholastic Aptitude Test (SAT).
- Place into MATH 1330 Statistics for the Health Sciences or higher or pass MATH 0850 Intermediate 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 Professionals) 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.

- 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.
- 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 Professionals
 - 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 1330 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.

For more information

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Medical Laboratory Technology/Multi-Skilled Health Technology/ Phlebotomy

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Curriculum and program requirements are subject to change. Find the most up-to-date information in the college catalog, available on the website at lakelandcc.edu.





Quality Education

Lakeland prepares you for a high-demand career or for transfer to a four-year college or university. Professors at Lakeland are experts in their fields with real-world experience. Small class sizes allow for personalized attention.



Affordable Tuition

Save thousands on your college education. Lakeland's tuition is about one-third the cost of most four-year schools. Financial assistance is available, including federal and state grants, scholarships, loans, and work study employment.



Convenience

Lakeland offers convenient day, evening and weekend class times, and a growing number of online courses. The main campus in Kirtland is only 20 miles northeast of Cleveland. Classes are also offered in Madison.



Focus on Students

Lakeland offers a variety of student services to help you succeed, such as counseling, tutoring, wireless computer labs, career services, free parking, and affordable child care.

Accreditation

Lakeland Community College is accredited through the Higher Learning Commission (HLC) and participates in the Academic Quality Improvement Program (AQIP). The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604-1413, phone: 800.621.7440, www.hlcommission.org.

