

2023-2024 Academic Year

Medical Laboratory Technology

Associate in Applied Science Degree (A.A.S.)

Math, Science, and Health Professions Division 609.570.3383 admiss@mccc.edu

Medical laboratory technology is a field of professional study involving students in the exciting and challenging world of science and medicine. Laboratory professionals perform diagnostic laboratory tests on medical specimens which provide information used to diagnose health and disease.

Combining courses in general education and medical laboratory science with a clinical practice conducted at an approved area healthcare facility, the **Medical Laboratory Technology** program prepares students for careers as medical laboratory technicians. It is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont IL 60018; 773-714-8880; www.naacls.org.

A graduate of the program is eligible for certification by successfully completing the examination given by the American Society for Clinical Pathologists. Graduates are eligible for immediate employment in hospital labs, physician offices, public health labs, as well as pharmaceutical and research companies.

PROGRAM OUTCOMES

- Integrate knowledge learned and experienced in the disciplines of general education, mathematics, science, and medical laboratory science;
- Achieve entry-level career competencies of a medical laboratory technician by testing biological samples using current technology to generate accurate, quality-assured laboratory results used for health and disease evaluation;
- Utilize critical-thinking skills to assess and problem- solve laboratory data for patient diagnoses:
- Maintain familiarity with the profession's code of ethics and consistently act within those standards during interactions with fellow classmates and working professionals in the clinical setting:
- Describe the importance of continuing education in lifelong learning and in obtaining and upholding professional credentialing;
- Demonstrate academic and technical competence in the professional courses of the curriculum through college and applied clinical education experiences;
- Take the national ASCP certification exam.

Admission to the Medical Laboratory Technology program requires a high school diploma or its equivalent, satisfactory performance on the MCCC college skills placement test, and completion of any required academic foundation courses.

Applicants are encouraged to consult their academic advisor. For further information, contact the MLT program coordinator or visit the <u>program website</u>.

B.S. (Bachelor of Science) Degree Completion

In addition to acquiring certification, successful graduates of the Medical Laboratory Technology A.A.S. program can apply to bachelor's degree completion programs through established articulation agreements arranged with MCCC and a variety of four-year colleges.

Students follow the standard MLT curriculum (at right), with course substitutions and additional coursework as follows:

- * FIRST SEMESTER: select MAT 146 as the Mathematics elective
- * SECOND SEMESTER: select CHE 101 instead of 107
- * additional science courses: BIO 101, 102, 208; CHE 102
- * additional general education courses: HIS 112, 113; MAT 200; world language levels I and II

SEE ALSO:

Medical Laboratory Assistant certificate program

DEGREE CURRICULUM

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The course sequence below represents a recommended example of how this degree program can be completed in two years, presuming a Fall Term start and satisfaction of all Developmental Studies (foundation courses) requirements and prerequisites. Actual approaches toward completion depend on each student's anticipated transfer institution, career objectives, or other individual circumstances.

Students are encouraged to meet regularly with an academic advisor or Success Coach to consider options, establish plans, and monitor progress.

Code Course (lecture/lab hours) Credits

PRE-PROFESSIONAL PHASE FIRST SEMESTER **BIO 103** Anatomy and Physiology I (3/3) 4 BIO 101 and 102 are acceptable alternatives for BIO 103 and 104. Consult academic advisor for details. **ENG** 101 English Composition I (3/0) 3 Health elective $\underline{\mathsf{HPE}}$ — HPE 113 Medical Terminology preferred. Select also from HPE 110 or 111. 2-3 OR **CSH** 100 College Success for Health Professions (1/1) Best for first-time degree seeking students. Some exemptions apply. Consult academic advisor for details. MAT -Mathematics elective 3-4 Select from MAT 125, 140, 146, 200. Social Science general education elective 3

PSY 101 preferred. Consult academic advisor for details.

SECOND SEMESTER

BIO 104 Anatomy and Physiology II (3/3)

4

 BIO 101 and 102 are acceptable alternatives for BIO 103 and 104. Consult academic advisor for details.

BIO 201	Microbiology (3/3)	4
CHE 101	General Chemistry I (3/3)	
	OR	4
CHE 107	General and Physiological Chemistry (3/2)	
CMN 111	Speech: Human Communication (3/0)	
	OR	3
	 CMN 111 or 112 is the preferred general education elective; others may be applied. Consult academic advisor for details. 	
<u>CMN 112</u>	Public Speaking (3/0)	
ENG 102	English Composition II (3/0)	3
	PROFESSIONAL PHASE	
SUMMER, FALL, SPRING		
MLT 112	Introduction to Medical Laboratory Technology (2/3)	3
MLT 200	Clinical Chemistry (3/2)	4
MLT 207	Clinical Immunohematology (3/3)	4
MLT 212	Clinical Hematology (3/3)	4
MLT 214	Clinical Microbiology (5/3)	6
MLT 215	Clinical Practice (560 hours)	10
		64-66

NOTE: Students who did not complete a year of high school biology and/or chemistry are advised to take Mercer's BIO 113 Biological Science Concepts and/or CHE 100 Introductory Chemistry courses.

NOTE: Students must earn a minimum grade of C in all BIO, CHE, MAT, and <u>general education</u> courses within two attempts. Students must earn a minimum grade of C+ in all MLT courses during the professional phase within two attempts.