

PRE-MEDICAL LABORATORY SCIENCES

Cindy Brown

Clinical Associate Professor and Education
Coordinator, University of Wisconsin-
Milwaukee

Lynn M. Peterson

Health Sciences and 2+2 Program Advisor

Carroll University offers an opportunity to major in Medical Laboratory Sciences (formerly Clinical Laboratory Sciences) through a partnership with the University of Wisconsin- Milwaukee (UWM). The partnership allows students the benefits of close, personal attention during the first two and one-half years at Carroll while still providing access to the advanced clinical training facilities at UWM in the final stages of the program.

Medical Laboratory Science students can select one of several emphases at UWM:

- Medical Technology
- Cytotechnology
- Public Health Microbiology

These emphases provide a range of career opportunities in settings including hospitals, independent laboratories, public health facilities, industries, research laboratories, or sales and marketing centers. Long-term employment prospects in these areas are forecasted to be excellent.

Entry into the professional training phase of the program is competitive and dependent upon completion of general education requirements, a minimum GPA of 2.50 (overall and in required science courses), a grade of 'C' or better in courses transferring from Carroll and in all junior-level courses, and completion of all required and elective courses (90 credits) by second semester of the junior year.

Medical Laboratory Sciences Major

Bachelor of Science

Science and mathematics courses taken at Carroll University

Biology 130, Introduction to Human Anatomy and Physiology I

Biology 140, Introduction to Human Anatomy and Physiology II

Biology 212, Microbiology

Biology 220, Introduction to Genetics

Biology 271, Immunology

Mathematics 112, Introduction to Statistics

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Chemistry 109, Principles of Chemistry I
Chemistry 110, Principles of Chemistry II
Chemistry 201, Analytical Chemistry
Chemistry 203, Organic Chemistry I
Chemistry 204, Organic Chemistry II
Chemistry 308, Biochemistry I
Nursing 236, Human Pathophysiologic Responses
Computer Science 107, Problem Solving Using Information Technology

Other Carroll University courses required in this transfer program

CCS 100, Cultural Seminar
English 170, Writing Seminar
GE 1 (F,H,S)
GE 2 (F,H,S or P)

One social science elective must satisfy UWM's Diversity requirement prior to graduation. ENG 164, American Indian Literature and Cultures will satisfy this diversity requirement as well as a GE 1 (P1, CCD).

Students must also demonstrate completion of UWM's language requirement by achieving one of the following:

- complete with passing grades (prior to entering university) at least two years of high school level instruction in a single foreign language, or
- complete with passing grades at least two semesters (minimum of 6 credits) of university level instruction in a single foreign language, or
- demonstrate foreign language ability at least equivalent to the above by means of a satisfactory score on an approved placement, proficiency, program or other appropriate examination.

Because of the specialized requirements of this program, students should work closely with the MLS Advisor.

Sample Program at Carroll University

Class Standing	Fall Semester	Spring Semester	Winter/Summer Term
Freshman	BIO 130 CHE 109 CCS 100 GE1 (F,H,S)	BIO 140 CHE 110 ENG 170 ENG 164 (GE1-P, CCD)	BIO 212
Sophomore	CHE 203* BIO 220 MAT 112 GE1 (F,H,S)	CHE 204* NRS 236 GE1 (F,H,S) Elective	CSC 107
Junior	BIO 271** CHE 201 GE2 (F,H,S or P) CHE 308	[at UWM]	

* Organic Chemistry (CHE 203 and 204) are also offered as summer courses.

**Currently Immunology (BIO 271) is held in the fall of odd years. For those who need to take it as a sophomore, a summer Microbiology (BIO 212) course will be necessary as a prerequisite.

Sample Program for Medical Technology at UWM

	Fall Semester	Spring Semester	Summer Term
Junior	[at Carroll University]	Hematology Clinical Chemistry Medical Microbiology Molecular Diagnostics	Clinical Hematology Hemostasis Clinical Microbiology Medical Parasitology Urinalysis Clinical Chemistry
Senior	Adv. Hematology Immunoematology Blood Banking Lab Diagnosis Lab Practicum Toxicology	Adv. Hematology Practicum Adv. Clinical Lab Science Adv. Immunoematology Adv. Microbiology Practicum Adv. Chemistry Practicum Professional Development	