

MEDICAL LABORATORY SCIENCE (MLAB)

200 Level Courses

MLAB 200: *Introduction to Medical Laboratory Science*. 1 credit.
Introduction to the profession of Medical Laboratory Science. Offered by Biology. Limited to three attempts.

Schedule Type: Lecture

Grading:
This course is graded on the Undergraduate Regular scale.

300 Level Courses

MLAB 300: *Science Writing*. 2 credits.
Intensive practice in biological science writing. Science Writing will fulfill the university's writing intensive requirement as well as prepare Medical Laboratory Science students for the types of writing that they will encounter in the industry including, but not limited to: writing, resumes, grants, cover letters, etc. A transfer student who has previously taken an equivalent course to BIOL 308 that did not meet the writing intensive requirements in the major may pair this with the transferred BIOL 308 to L308 and meet the writing intensive experience in the Biology major. Offered by Biology. Limited to three attempts.

Specialized Designation: Writing Intensive in the Major

Schedule Type: Lecture

Grading:
This course is graded on the Undergraduate Regular scale.

400 Level Courses

MLAB 401: *Orientation to the Problems and Practices of the Clinical Laboratory*. 1-2 credits.
Orientation to clinical lab; specimen collection and record keeping; management principles and problems; educational theories as they apply to the teaching of clinical laboratory procedures; and quality control principles. Notes: Not offered on campus. Offered by Biology. May be repeated within the term.

Recommended Prerequisite: Completion of requirements for BS with major in medical technology except for 30 credits of professional study, and admission to school of medical technology approved by National Accrediting Agency for Clinical Laboratories.

Schedule Type: Internship

Grading:
This course is graded on the Undergraduate Regular scale.

MLAB 402: *Clinical Hematology and Coagulation*. 2-3 credits.
Morphology of blood cells in health and disease; theories of hematopoiesis and coagulation; techniques for measurement of hematologic parameters; and hematologic pathologies and their lab evaluation. Notes: Not offered on campus. Offered by Biology. May be repeated within the term.

Recommended Prerequisite: Completion of requirements for BS with major in medical technology except for 30 credits of professional study, and admission to school of medical technology approved by National Accrediting Agency for Clinical Laboratories.

Schedule Type: Internship

Grading:
This course is graded on the Undergraduate Regular scale.

MLAB 403: *Clinical Microscopy*. 1-3 credits.
Methods for the routine examination of urine, feces, and certain other body fluids, especially the microscopic identification of normal and pathologic components. Includes a study of the kidney and theories of microscopy. Notes: Not offered on campus. Offered by Biology. May be repeated within the term.

Recommended Prerequisite: Completion of requirements for BS with major in medical technology except for 30 credits of professional study, and admission to school of medical technology approved by National Accrediting Agency for Clinical Laboratories.

Schedule Type: Independent Study

Grading:
This course is graded on the Undergraduate Regular scale.

MLAB 404: *Serology and Immunohematology*. 1-7 credits.
Clinical lab procedures involving antigen-antibody reactions, and theoretical bases of such procedures. Includes both diagnostic and blood bank techniques. Notes: Not offered on campus. Offered by Biology. May be repeated within the term.

Recommended Prerequisite: Completion of requirements for BS with major in medical technology except for 30 credits of professional study, and admission to school of medical technology approved by National Accrediting Agency for Clinical Laboratories.

Schedule Type: Internship

Grading:
This course is graded on the Undergraduate Regular scale.

MLAB 405: *Clinical Microbiology*. 1-8 credits.
Biology and pathology of bacteria, rickettsia, fungi, parasites, and viruses of clinical importance and their culture and identification. Notes: Not offered on campus. Offered by Biology. May be repeated within the term.

Recommended Prerequisite: Completion of requirements for BS with major in medical technology except for 30 credits of professional study, and admission to school of medical technology approved by National Accrediting Agency for Clinical Laboratories.

Schedule Type: Internship

Grading:
This course is graded on the Undergraduate Regular scale.

MLAB 406: *Clinical Chemistry*. 1-10 credits.
Chemical reactions and procedures used in clinical determinations on blood, urine, and cerebral spinal fluid. Includes manual, automated methods of chemical analyses. Notes: Not offered on campus. Offered by Biology. May be repeated within the term.

Recommended Prerequisite: Completion of requirements for BS with major in medical technology except for 30 credits of professional study, and admission to school of medical technology approved by National Accrediting Agency for Clinical Laboratories.

Schedule Type: Internship

Grading:

This course is graded on the Undergraduate Regular scale.

MLAB 407: *Clinical Molecular Biology*. 1-15 credits.

Course presents advanced methods in nucleic acid testing to human medico-legal, forensic, and pathology applications. Topics include but are not limited to: Polymorphisms, Paternity Testing, Single Nucleotide Polymorphisms, Bone Marrow Engraftment, Mitochondrial DNA Polymorphisms and Disorders, Chromosomal Abnormalities, Single Gene Disorders, Lysosomal Storage Disorders, Cystic Fibrosis, and Quality Assurance in the Molecular Biology laboratory. Offered by Biology. May be repeated within the degree.

Recommended Prerequisite: Complete of requirements for BS with a major in Medical Laboratory Science except for the 30 credits professional study.

Schedule Type: Laboratory

Grading:

This course is graded on the Undergraduate Regular scale.

MLAB 408: *Clinical Histology*. 1-15 credits.

Introduction to the field of Histotechnology including lectures on tissue fixation, processing and embedding, microtomy, and staining. Offered by Biology. May be repeated within the term.

Recommended Prerequisite: completion of requirements for BS with major in Medical Laboratory Science except for the 30 credits of professional study.

Schedule Type: Internship

Grading:

This course is graded on the Undergraduate Regular scale.

MLAB 409: *Clinical Histology Practicum*. 1-15 credits.

Hands-on rotations in histologic fixations, tissue processing, slide preparation and staining. Offered by Biology. May be repeated within the term.

Recommended Prerequisite: Completion of requirements for BS with major in Medical Laboratory Science except for the 30 credits of professional study.

Schedule Type: Internship

Grading:

This course is graded on the Undergraduate Regular scale.