# 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. May not be repeated for credit. Equivalent to MTCH 200.

**Schedule Type:** Lecture

## 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. Offered by Biology. May not be repeated for credit.

**Specialized Designation:** Writing Intensive in the Major

**Schedule Type:** Lecture

## 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. Equivalent to MTCH 401.

**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

**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. Equivalent to MTCH 402.

**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

**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. Equivalent to MTCH 403.

**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:** Laboratory

**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. Equivalent to MTCH 404.

**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

**MLAB 405:** *CLINICAL MICROBIOLOGY.* 1-8 credits. 
Biologic 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. Equivalent to MTCH 405.

**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

**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. Equivalent to MTCH 406.

**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

**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 of professional study.

**Schedule Type:** Internship

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**Accrediting Agency for Clinical Laboratories:**

2 credits.