

MEDICAL LAB TECHNICIAN (MLT)

MLT 1001 Introduction to Clinical Laboratory/Principles of Lab Analysis (3 Credits)

An overview and introduction to laboratory information systems, urinalysis, hematology, chemistry, immunology, immunohematology, microbiology, and phlebotomy. Universal precautions and proper procedures in regard to specimen processing and analysis will be taught to the student. Laboratory mathematics, quality control, and the proper use of instrumentation will be presented as used in the clinical laboratory, physician's office laboratory, and laboratory science areas. Tours of area clinical laboratories will provide students with exposure to current instrumentation used in the field.

Previous: Legacy Equivalent(s): MLT* 101

MLT 1002 Urinalysis and Body Fluids (2 Credits)

This course is designed to provide students with an introduction to basic theories, principles and techniques as applied to the medical laboratory area of urinalysis and body fluids. Major topics covered include: renal physiology and disease, physical, chemical and microscopic examination of urine and body fluids, the collection of urine and body fluids, fecal examination, basic correlation of laboratory result with disease states and quality control.

Previous: Legacy Equivalent(s): MLT* 102

MLT 2000 Clinical Hematology and Coagulation (4 Credits)

This course is designed to acquaint the student with the study of blood in health and disease. The origin, development and function of human blood cells, and a review of the vascular and coagulation systems will be discussed. Normal and abnormal findings will be studied through manual and automated procedures. Specific topics include: complete blood counts (CBC) and coagulation profile, normal values, quality control, and blood disorders.

Prerequisites: MLT 1001

Additional fees may apply

Previous: Legacy Equivalent(s): MLT* 200

MLT 2002 Clinical Chemistry (4 Credits)

This course is designed to acquaint the student with the theory and function of the clinical chemistry laboratory. Course of study includes analysis of blood and body fluid in routine and emergency testing in the clinical chemistry lab. The theory of manual testing as it is applied to automated procedures, interpretation and analysis of test results and how these correlate to the patient's clinical diagnosis will be stressed.

Prerequisites: MLT 1001

Additional fees may apply

Previous: Legacy Equivalent(s): MLT* 202

MLT 2004 Clinical Immunology and Immunohematology (4 Credits)

This course is designed to acquaint the student with the theory and functions of the immune system and the theory and practice of clinical immunology and immunohematology. Emphasis will be placed on the various serological procedures and their diagnostic significance.

Prerequisites: MLT 1001

Additional fees may apply

Previous: Legacy Equivalent(s): MLT* 204

MLT 2006 Clinical Microbiology (4 Credits)

This course is designed to acquaint the student with the clinical microbiology laboratory and routine medically significant organisms. The course will cover microorganisms in general, as well as pathogens including anaerobic bacteria, gram negative and gram positive bacteria, spirochetes, parasites, viruses, and fungi that are medically significant to humans. The course will include the principal characteristics and procedures used in clinical microbiology to identify normal flora and medically significant bacteria. The laboratory identification of the organism is based on morphological, cultural, and biochemical characteristics. Additional topics will include safety in the microbiology lab, quality control, and antimicrobial susceptibility testing.

Prerequisites: MLT 1001

Additional fees may apply

Previous: Legacy Equivalent(s): MLT* 206

MLT 2095 Clinical Internship I (4 Credits)

This 200-hour experience will consist of a supervised clinical internship in a hospital clinical laboratory to enhance student learning and to apply classroom theory to laboratory practice in a clinical setting. The rotation scheduled provides experience in some of the following departments: Immunohematology, Chemistry, Hematology, Coagulation, Microbiology, Immunology, and Urinalysis. Students are required to complete a minimum of #25 venipunctures during the course of the 200-hour internship.

Prerequisites: A grade of B- or higher in MLT 2006, and permission of program coordinator

Previous: Legacy Equivalent(s): MLT* 210

MLT 2195 Clinical Internship II (4 Credits)

This 200-hour experience will consist of a supervised clinical internship in a hospital clinical laboratory to enhance student learning and to apply classroom theory to laboratory practice in a clinical setting. The rotation schedule provides experience in some of the following departments: Immunohematology, Chemistry, Hematology, Coagulation, Microbiology, Immunology, and Urinalysis.

Prerequisites: A grade of B- or higher in MLT 2095, and permission of program coordinator

Previous: Legacy Equivalent(s): MLT* 212