

MEDICAL LABORATORY TECH (MLAB)

MLAB 1201 Introduction to Clinical Laboratory Science 2 Credits (2 Lec, 1 Lab)

This course is an introduction to medical laboratory science, structure, equipment and philosophy.

Course Type: Technical

MLAB 1227 Coagulation 2 Credits (2 Lec, 1 Lab)

This is a course in coagulation theory, procedures, and practical applications. It includes quality control, quality assurance, safety and laboratory procedures which rely on commonly performed manual and/or semi-automated methods.

Prerequisite(s): MLAB 1201.

Co-requisite(s): MLAB 2164

Course Type: Technical

MLAB 1235 Immunology/Serology 2 Credits (2 Lec, 1 Lab)

This course is an introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures as well as quality control, quality assurance, and safety.

Prerequisite with concurrency: MLAB 1201

Course Type: Technical

MLAB 1311 Urinalysis and Body Fluids 3 Credits (2 Lec, 2 Lab)

This course is an introduction to the study of urine and body fluid analysis. It includes the anatomy and physiology of the kidney, physical, chemical and microscopic examination of urine, cerebrospinal fluid, and other body fluids as well as quality control, quality assurance and safety.

Prerequisite(s): a student must enroll in the medical laboratory technology program.

Course Type: Technical

MLAB 1415 Hematology 4 Credits (3 Lec, 4 Lab)

This is a study of blood cells in normal and abnormal conditions. It includes instruction in the theory and practical application of hematology procedures, including quality control, quality assurance, safety, manual and/or automated methods as well as blood cell maturation sequences, and normal and abnormal morphology with associated diseases. NOTE: A student must have been accepted into the medical laboratory technology program or have permission from the department chair.

Prerequisite with concurrency: MLAB 1201

Course Type: Technical

MLAB 2132 Seminar in Medical Laboratory Technology 1 Credit (0 Lec, 3 Lab)

This course is designed to reinforce didactic information with laboratory methodologies and to allow exploration of advanced techniques in medical laboratory technology.

Prerequisite(s): MLAB 2401; MLAB 2321; MLAB 2167

Prerequisite with concurrency: MLAB 2238; MLAB 2168

Course Type: Technical

MLAB 2164 Practicum I-Medical Laboratory Technician 1 Credit (0 Lec, 9 Lab)

This course covers practical general training and experiences in the workplace. The College and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study.

Prerequisite(s): MLAB 1311, MLAB 2534, MLAB 1201, PLAB 1223

Co-requisite(s): MLAB 1227

Course Type: Technical

MLAB 2165 Practicum II-Medical Laboratory Technician 1 Credit (0 Lec, 9 Lab)

This course covers practical general training and experiences in the workplace. The College and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study.

Prerequisite(s): MLAB 1415

Course Type: Technical

MLAB 2167 Practicum III-Medical Laboratory Technician 1 Credit (0 Lec, 9 Lab)

This course covers practical general training and experiences in the workplace. The College and the employer develop and document an individualized plan for the student. The plan relates to the workplace training and experiences to the student's general and technical course of study.

Prerequisite(s): SCIT 1370;

Co-requisite(s): MLAB 2401

Course Type: Technical

MLAB 2168 Practicum IV-Medical Laboratory Technician 1 Credit (0 Lec, 9 Lab)

This course covers practical general training and experiences in the workplace. The College and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study.

Prerequisite(s): MLAB 2431 and MLAB 1415 and MLAB 1235

Course Type: Technical

MLAB 2238 Advanced Topic in Medical Laboratory Technician 2 Credits (2 Lec, 0 Lab)

This course examines the integration of all areas of the clinical laboratory and correlates test data with diagnostic applications and pathophysiology using critical thinking skills.

Course Type: Technical

MLAB 2267 Practicum III-Medical Laboratory Technician 2 Credits (0 Lec, 16 Lab)

This course covers practical general training and experiences in the workplace. The College and the employer develop and document an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study.

Prerequisite(s): MLAB 2401

Course Type: Technical

MLAB 2321 Molecular Diagnostics for Clinical Laboratory Science 3

Credits (2 Lec, 2 Lab)

This course is a comprehensive overview of the fundamental principles of clinical molecular diagnostics and explores the use of molecular techniques in diagnosis of disease.

Course Type: Technical

MLAB 2401 Clinical Chemistry 4 Credits (3 Lec, 4 Lab)

As an intermediate level course, it is an introduction to the principles, procedures, physiological basis, and significance of testing performed in Clinical Chemistry. Includes quality control, reference values, and safety.

Co-requisite(s): MLAB 2167

Course Type: Technical

MLAB 2431 Immunohematology 4 Credits (3 Lec, 4 Lab)

This course is a study of blood antigens and antibodies. Presents quality control, basic laboratory technique and safety. Include the principles, procedures and clinical significance of test results in genetics, blood group systems, pre-transfusion testing, adverse effects of transfusions, donor selection and components, and hemolytic disease of the newborn.

Course Type: Technical

MLAB 2434 Clinical Microbiology 4 Credits (3 Lec, 4 Lab)

This course covers instruction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, quality control, quality assurance, safety, setup, identification, susceptibility testing, and reporting results.

Prerequisite(s): MLAB 1201 or department chair approval

Course Type: Technical

MLAB 2534 Clinical Microbiology 5 Credits (4 Lec, 4 Lab)

This course covers instruction in the theory, practical application, and pathogenesis of clinical microbiology, parasitology, and mycology including collection, quality control, quality assurance, safety, setup, identification, and susceptibility testing, and reporting results.

Prerequisite with concurrency: MLAB 1201

Course Type: Technical