Note: Affiliated colleges and universities assign credit according to individual requirements

**Course Number:** MT490  
**Course Title:** Clinical Hematology/Coagulation  
**Total Lecture Hours:** 34  
**Total Lab Rotation:** 7 Week Rotation  
**Credit:** 7 hours  
**Description:** Composition and function of blood; diseases related to blood disorders; and role of platelets and coagulation. Manual and automated techniques of diagnostic tests for abnormalities.

**Course Number:** MT491  
**Course Title:** Clinical Immunohematology  
**Total Lecture Hours:** 26  
**Total Lab Rotation:** 7 Week Rotation  
**Credit:** 6 hours  
**Description:** Review of immunologic and genetic principles that relate to Immunohematology. Procedures/topics cover blood collection, donor testing, storage and labeling of blood products, pre-transfusion testing, adverse reactions to transfusion, histocompatibility and regulatory requirements of FDA, CAP and AABB.

**Course Number:** MT492  
**Course Title:** Clinical Chemistry  
**Total Lecture Hours:** 32  
**Total Lab Rotation:** 6 Week Rotation  
**Credit:** 7 hours  
**Description:** Enzymology, endocrinology, biochemistry of lipids, carbohydrates and proteins; metabolism of nitrogenous end products; physiology and metabolism of fluids and electrolytes; and toxicology as related to the body and diseases. Technical procedures include colorimetry, spectrophotometry, electrophoresis, chromatography, automation and quality control.

**Course Number:** MT493  
**Course Title:** Clinical Microbiology  
**Total Lecture Hours:** 35  
**Total Lab Rotation:** 8 Week Rotation  
**Credit:** 7 hours  
**Description:** Review of all aspects of Bacteriology, Mycobacteriology, Mycology, and Parasitology including specimen processing, culture identification, clinical features of infectious disease, and the role of the clinical microbiology laboratory.
Course Number: MT 494
Course Title: Clinical Immunology, Serology, Virology
Total Lecture Hours: 11
Total Lab Rotation: 3 Week Rotation
Credit: 3 hours

Course Number: MT495
Course Title: Clinical Seminar I
Total Lecture Hours: 23
Total Lab Rotation: 4 Week Rotation
Credit: 4 hours
Description: Includes courses in Phlebotomy, Specimen Collection and Processing, Anatomical Pathology/Cytology Laboratory Overview, Laboratory Management, Education and Molecular Pathology.

Course Number: MT496
Course Title: Clinical Urinalysis
Total Lecture Hours: 7
Total Lab Rotation: 2 Week Rotation
Credit: 2 hours
Description: Renal anatomy and physiology, normal and abnormal urinary constituents, basic laboratory urinalysis, including processing, analysis, and reporting results of urine specimens. Formation, function and testing of body fluids.

Course Number: MT497
Course Title: Clinical Seminar II
Total Lecture Hours: 14
Credit: 1 hour
Description: Includes lectures in Orientation, Introduction to Clinical Laboratory Science, Laboratory Safety, HIPAA, Library Services, Research Design, Laboratory Information System and Laboratory Procedure Writing.

Course Number: MT498
Course Title: Technical Training
Total Lab Hours: <20 hours per week
Offered: As needed by individual laboratory
Credit: 1 hour
Description: A training level position designed to offer additional training outside of academic hours in a particular area of the laboratory. After completing the required laboratory rotation, the trainee may perform tests directly under the supervision of a technologist or supervisor. The training is non-compulsory, but is an integral part of the established curriculum as it builds on skills learned during the required rotation and immerses the student in a real-time laboratory experience. Students are paid an hourly training level wage.