Course Number: MT490  
Course Title: Clinical Hematology/Coagulation  
Total Lecture Hours: 34  
Total Lab Rotation: 8 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: 6 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: 7 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/Immunohistochemistry 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 hours  
Description: Includes lectures in Orientation, Introduction to Clinical Laboratory Science, Laboratory Safety, HIPAA, Library Services, Research Design, Laboratory Information System, Laboratory Procedure Writing, Anatomical Pathology/Cytology Overview, and Instrument Comparison.

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.