MEDICAL LABORATORY TECHNICIAN (MEDT)

MEDT 1000 MLT Orientation
2.0 credit hours
64.0 Classroom Hours = 16.0 Lecture Hours + 48.0 Lab Hours
An introduction to medical laboratory technology including the role, function and ethics of the technician, medical terminology, blood drawing and basic laboratory techniques.

MEDT 1010 Fundamentals of Phlebotomy
2.0 credit hours
37.5 Classroom Hours = 22.5 Lecture Hours + 15.0 Lab Hours
The student will be trained to perform a variety of blood collection methods using proper techniques and precautions including vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture specimen collection on adults, children, and infants. Emphasis will be place on infection prevention, proper patient identification, proper labeling of specimens, and quality assurance. Students will be taught specimen handling, processing, and accessioning. Prerequisite: Must be 16 years of age or permission of the instructor.

MEDT 1100 Hematology
5.0 credit hours
138.0 Classroom Hours = 48.0 Lecture Hours + 90.0 Lab Hours
The study of the formation, function, and identification of normal mature, immature, and abnormal human blood cells; cellular morphology in anemias and leukemias and other blood disorders; the mechanism of blood coagulation; and the laboratory tests necessary to determine the levels and function of these many different cells and components. Lecture and lab. Prerequisites: Successful completion of MEDT 1000.

MEDT 1710 Immunology
1.5 credit hours
23.0 Classroom Hours = 23.0 Lecture Hours
This course involves the study of the immunologic principles of antibody and antigen detection in the blood serum and other body fluids. Prerequisites: Successful completion of MEDT 1000.

MEDT 2010 Serology
1.5 credit hours
36.0 Classroom Hours = 24.0 Lecture Hours + 12.0 Lab Hours
The basic theory and concepts in serology are covered with emphasis on the many different serology test procedures utilized in the modern day laboratory. Prerequisites: Successful completion of MEDT 1710.

MEDT 2100 Medical Microbiology
5.0 credit hours
108.0 Classroom Hours = 48.0 Lecture Hours + 60.0 Lab Hours
The morphology, isolation and identification of microorganisms pathogenic to man, including bacteria, fungi, parasites, and viruses. Specimen collection and handling, antimicrobial susceptibility testing and infectious disease control are included. Prerequisites: Successful completion of MEDT 1000 and BIOS 1100 or BIOS 2250. Fee $30.

MEDT 2250 Urinalysis
2.0 credit hours
52.0 Classroom Hours = 20.0 Lecture Hours + 32.0 Lab Hours
The study of chemical and cellular changes in the urine in health and illness. Lecture and lab. Prerequisite: Successful completion of MEDT 1000.

MEDT 2410 Clinical Chemistry
5.0 credit hours
132.0 Classroom Hours = 66.0 Lecture Hours + 66.0 Lab Hours
General principles and techniques of test procedures performed in clinical chemistry laboratories, with practice in manual and semiautomated techniques, and techniques in electrophoresis, toxicology, endocrinology and specialized body fluids testing. Lecture and lab. Prerequisites: MEDT 1000 and CHEM 1090 or CHEM 1050. Fee $100.

MEDT 2500 Blood Banking
4.0 credit hours
96.0 Classroom Hours = 51.0 Lecture Hours + 45.0 Lab Hours
The fundamental principles of immunology related to blood banking; donor selection, blood collection, and processing blood components, preparation and administration of blood and blood products; blood group genetics and inheritance. Basic blood banking techniques will be performed. Lecture and lab. Prerequisite: Successful completion of MEDT 2010.

MEDT 2720 Clinical Hematology Practicum
4.0 credit hours
192.0 Classroom Hours = 192.0 Lab Hours
The theory, practical application and technical performance of hematological, coagulation, immunological, serological, and phlebotomy procedures. Prerequisites: Successful completion of MEDT 1100.

MEDT 2730 Clinical Chemistry Practicum
4.0 credit hours
192.0 Classroom Hours = 192.0 Lab Hours
The theory, practical application and technical performance of clinical chemistry procedures. Prerequisites: Successful completion of MEDT 2410.

MEDT 2740 Clinical Microbiology Practicum
4.0 credit hours
192.0 Classroom Hours = 192.0 Lab Hours
The theory, practical application and technical performance of procedures used for isolation and identification of bacterial, mycotic, parasitic and viral organisms infecting humans. Prerequisites: Successful completion of MEDT 2100.

MEDT 2750 Clinical Blood Bank Practicum
4.0 credit hours
192.0 Classroom Hours = 192.0 Lab Hours
The theory, practical application and technical performance of blood bank procedures required for transfusion of blood and blood components and for handling and storage of blood and blood components. Prerequisites: Successful completion of MEDT 2500.

MEDT 2760 Clinical Urinalysis Practicum
1.0 credit hours
48.0 Classroom Hours = 48.0 Lab Hours
The theory, practical application and technical performance of procedures utilized in the analysis of urine and other body fluids. Prerequisites: Successful completion of MEDT 2250.

MEDT 2770 Clinical Sp Studies Practicum
1.0 credit hours
48.0 Classroom Hours = 48.0 Lab Hours
The theory, practical application and technical performance of specialized clinical chemistry laboratory and blood banking procedures used in diagnostic laboratory medicine. Prerequisites: Successful completion all program required MEDT prefixed courses and all general education program requirements.