CLINICAL LABORATORY SCIENCE TECHNOLOGY (CLSC)

CLSC 111, INTRODUCTION TO CLINICAL LABORATORY SCIENCE TECHNOLOGY 2 (2)
Introduction of the student to the profession of laboratory medicine. This includes: organizational structure of hospitals and laboratories; medical ethics; related medical terminology; quality assurance; laboratory safety; laboratory calculations; venous and micro skin puncture blood collection techniques; basic laboratory equipment, and knowledge of routine laboratory tests by department. (TAG, CTAG)
General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: High school algebra or equivalent and acceptance into the Clinical Laboratory Science Technology program; Corequisite: CLSC 131, CLSC 132 and CLSC 133
Typically Offered: Fall Semester

CLSC 131, INTRODUCTION TO HEMATOLOGY 2 (2)
Introduction to venous and micro blood collection techniques. Introduction to basic hematology theory and laboratory procedures. College competency required in the performance of venous and micro blood collection, normal WBC differentials, erythrocyte sedimentation rates, platelet counts, and reticulocyte counts. Prerequisite: High school algebra or equivalent. (A special fee will be assessed.)(TAG)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: High school algebra or equivalent; Corequisite: CLSC 111, CLSC 133
Typically Offered: Fall Semester

CLSC 132, BODY FLUIDS AND URINALYSIS 2 (2)
Body fluid cell counts and chemical analysis, and basic urinalysis theory and procedures. College competency required in the performance of routine urinalysis, CSF cell counts. (A special fee will be assessed.)(TAG)
General Education: IN1, IN4
Course Entry Requirement(s): Prerequisite: CLSC 131; Corequisite: CLSC 111, CLSC 133
Typically Offered: Fall Semester

CLSC 133, HEMATOLOGY I/URINALYSIS CLINICAL PRACTICUM 3 (9)
Clinical practicum in Hematology and Urinalysis at an affiliated clinical agency. Clinical competency required in the performance of venous and micro blood collection, routine urinalysis, CSF cell counts, normal WBC differentials, erythrocyte sedimentation rates, platelet counts, and reticulocyte counts. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: High school algebra or equivalent; Corequisite: CLSC 111, CLSC 131, CLSC 132
Typically Offered: Fall Semester

CLSC 134, ADVANCED HEMATOLOGY AND HEMOSTASIS 2 (3.5)
Hematologic and cytochemical findings in anemias, leukemias and selected diseases; instrumentation; calculations; abnormal histogram and scattergram interpretation; basic theory in hemostasis and coagulation test procedures. College laboratory required with competency in hematology and coagulation procedures. (A special fee will be assessed.)(TAG)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CLSC 135; Corequisite: CLSC 136
Typically Offered: Spring Semester

CLSC 135, IMMUNOHEMATOLOGY CONCEPTS & PROCEDURES 2 (3.5)
Humoral immune response; basic blood groups and types; direct and indirect antiglobulin tests; crossmatching; donor testing and selection; hemolytic disease of the newborn; Rh immune globulin candidacy testing; advanced coagulation tests; quality control. College laboratory required with competency in immunohematology procedures. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CLSC 132 and CLSC 133; Corequisite: CLSC 136
Typically Offered: Spring Semester

CLSC 136, HEMATOLOGY II/IMMUNOHEMATOLOGY CLINIC PRACTICUM 3 (9)
Clinical practicum Advanced Hematology methods and instrumentation, abnormal WBC differentials, and Immunohematology methods at an affiliated clinical agency. Clinical competency hematology, coagulation, and immunohematology methods required. (A special fee will be assessed.)
General Education: IN1, IN2, IN4
Course Entry Requirement(s): Prerequisite: CLSC 132 and CLSC 133
Typically Offered: Spring Semester

CLSC 213, CLINICAL MICROBIOLOGY, IMMUNOLOGY AND SEROLOGY 9 (22)
Review of clinically popular specimen collection and plate reading techniques in medical microbiology; medias used for isolation of microorganisms; study of key biochemical tests identifying commonly isolated pathogenic bacteria to genus/species; antibiotic sensitivity testing; etiologic agents of common bacterial/viral disorders; etiology, epidemiology, and diagnosis of clinically important pathogenic fungi and parasites; common instrumentation used in clinical microbiology laboratories; study of principles and procedures for serological diagnosis of pregnancy, infections and immunologic diseases. College/clinical laboratory required with competency in isolation techniques, gram straining, plate reading, antimicrobial sensitivity testing, microorganism identification, and serology. (A special fee will be assessed.)
General Education: IN1, IN4, IN5
Course Entry Requirement(s): Prerequisite: CLSC 134 and CLSC 136
Typically Offered: Fall Semester

CLSC 221, CLINICAL CHEMISTRY 10 (23)
Chemistry for Clinical Laboratory Science students will include carbohydrates, nonprotein nitrogen metabolism, water and electrolyte balance, trace elements, arterial blood gases, liver function tests, protein metabolism, enzymology, renal function tests, lipid metabolism, abnormal hemoglobins, endocrinology, therapeutic drug monitoring and toxicology. Instrumentation and correlation of laboratory data to human disease. Clinical and college laboratory required with competency in accurate/precise measurement of organic and inorganic analyses in body fluids. (A special fee will be assessed.)
General Education: IN1, IN2, IN4, IN5
Course Entry Requirement(s): Prerequisite: CLSC 213; Corequisite: CHMY 162
Typically Offered: Spring Semester