

COURSE DESCRIPTIONS

List of course Descriptions

CLS 103 Phlebotomy/Introduction to MLT

3 Credits Pre-requisite:

This course provides instruction in the skills needed for the proper collection and handling of blood and other specimens used for diagnostic purposes. Emphasis is placed on ethics, legalities, safety, universal precautions, national patient safety goals, health care delivery systems, patient relations and communication. Additionally students will understand the pre-analytical variables that affect laboratory specimens and how to work successfully as part of the extended laboratory team. Upon completion, students will have gained educational instruction to be able to demonstrate competency in all areas of theoretical comprehension and techniques of phlebotomy.

CLS 106 Clinical Seminar

2 Credits Pre-requisite: CLS 103 Co-Requisite CLS 255

This course provides the student the opportunity to review with faculty specific learning objectives/competencies, clinical rotation evaluations and provides the student with tools to use in preparation and review for the National and State Certification exams. While enrolled in this class students will be required to participate in Service Learning Activities in which they will use their skills learned in their field of study to benefit the community. Students will take competency exams at the completion of rotation at each section in the laboratory.

CLS 113 Urinalysis and Body Fluids

3 Credits Pre-requisite:

Theory, techniques and practice of urinalysis with emphasis on identification of elements in sediment. Analysis of various body fluids, examination of slides, chemistry of spinal fluids, semen, plural and synovial fluids.

CLS 161 Integrated Lab Simulation

4 Credits Pre-requisite:

This practicum will be presented in allied health laboratory. The instrumentation that will be used by the students with supervision include the Abbott Ruby Hematology analyzer, Piccolo chemistry analyzer, Qualigen, Triage meter, Clinitek Status urinalysis analyzer, CoaguChek XS coagulation analyzer and manual procedures for microbiology.

****Required 60 hours of instruction**

CLS 177 Job Readiness

1 Credit Pre-requisite:

Job readiness is designed to prepared students to get, keep and excel at a new job. Basic employability skills include effective communication, problem solving, resume building, and interviewing. The course is also designed to help participants develop good work habits that facilitate their ongoing success. Instruction typically includes lectures, discussions, and role playing.

CLS 201 Immunology

4 Credits Pre-requisite:

The foundations of diagnostic serology, immunohematology, histocompatibility and hematology as well as new technology such as monoclonal antibodies and molecular biology are covered in order for students to become better prepared for a career in laboratory medicine.

CLS 220 Parasitology, Virology, Mycology

3 Credits Pre-requisite: CLS 201

The study is presented with the theories, techniques, and methods used in basic parasitology, virology, and mycology. Emphasis is placed on special bacteria, identification, life cycles, culture growth, and pathological states of infection and infestation. Upon completion, students should be able to identify certain parasites, demonstrate various staining and culture procedures, and discuss the correlation of certain microorganisms to pathological conditions.

CLS 225 Hematology

4 Credits Pre-requisite: CLS 103

Identification of normal and abnormal blood cells in various hematological disorders. Theory and application of hematology procedures. Theory and mechanisms of hemostasis.

CLS 235 Clinical Chemistry

4 Credits Pre-requisite:

Principles of instrumentation and the theory and application of the biochemical tests performed in the clinical laboratory. The student will receive instruction in the basic techniques required for performing routine manual determinations.

CLS 240 Immunohematology (Hybrid)

4 Credits Pre-requisite:

Lecture and laboratory. Fundamental principle of immunology are presented and applied to serology and blood banking. Donor selection, blood collection and processing, blood components and compatibility testing. Preparation and administration of blood and genetics of blood inheritance.

CLS 245 Clinical Microbiology

4 Credits Pre-requisite:

The morphology, culture characteristics and identification of bacteria pathogenic to man and their role in infectious disease are discussed, as well as antibiotics susceptibility testing and rapid identification systems.

CLS 255 Clinical Internship

**12 credits Pre-requisite: Must have completed all General Education and Program
Core classes with a GPA of 2.0 or better.**

Supervised experience in the hematology/coagulation, chemistry, microbiology, urinalysis, phlebotomy, parasitology and blood banking departments of the affiliated clinical laboratory. The student will have an opportunity to intern in an affiliated laboratories dependent upon their staffing situation. Students will be evaluated by the clinical liaison at each site. Students are required to complete 520-540 hours of internship.