

Master Syllabus

ALH 1115 - Specimen Processing

Division: Health Sciences

Department: Allied Health

Credit Hour Total: 2.0

Lecture Hrs: 1.0 **Lab Hrs:** 3.0

Prerequisite(s): BIO 1107

Date Revised: February 2014

Course Description:

Theory and application of lab safety, universal precautions, specimen collection, quality assurance and other techniques fundamental to specimen processing for a clinical laboratory. One classroom, three lab hours per week.

General Education Outcomes:

- ▣ Written Communication Competency
- ▣ Critical Thinking/Problem Solving Competency
- ▣ Values/Citizenship/Community Competency
- ▣ Information Literacy Competency
- ▣ Computer Literacy Competency
- ▣ Oral Communication Competency

Course Outcomes:

General Laboratory Equipment

Demonstrate the use of microscopes and spectrophotometric analysis with specimen preparation.

Assessment Method: Simulations

Performance Criteria: 80% or better on given rubric

Automation in the Clinical Laboratory

Demonstrate the use of automated analyzers, functions performed, and advantages/disadvantages of automation in the clinical laboratory.

Assessment Method: Simulations

Performance Criteria: 80% or better on given rubric

Systems of Measurement

Demonstrate the use of the systems of measurements of mass and volume commonly used in the clinical laboratory, including pipetting techniques.

Assessment Method: Simulations

Performance Criteria: 80% or better on given rubric

Safety in the Clinical Laboratory

Demonstrate the use of universal precautions as they relate to hazards encountered in the clinical laboratory.

Assessment Method: Simulations

Performance Criteria: 80% or better on given exam

Quality Assurance in the Clinical Laboratory

Discuss quality assurance procedures, components of a quality plan, controls, validation, proficiency testing, understanding accuracy, precision, sensitivity and specificity, types and sources of error in the clinical laboratory, corrective action, and preventative action.

Assessment Method: Simulations

Performance Criteria: 80% or better on given rubric

Introduction to Clinical Laboratory Science

Describe careers available in the laboratory field, definitions of licensure, certification, registration and accreditation, description of governing agencies and accrediting bodies, and a description of the major routine laboratory tests in Blood Bank, Hematology, Chemistry, Immunology, Microbiology, and Urinalysis.

Assessment Method: Locally developed exams

Performance Criteria: 80% or better on given exam

Outline:

Introduction to Clinical Laboratory Science
Safety in the Clinical Laboratory
Systems of Measurement
General Laboratory Equipment
Automation in the Clinical Laboratory
Quality Assurance in the Clinical Laboratory