

## 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
- Critical Thinking/Problem Solving
- Values/Citizenship/Community
- Information Literacy
- Computer Literacy
- Oral Communication

#### 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