

Master Syllabus

CLT 2510 - Immunology/Serology/Immunohematology

Division: Health Sciences

Department: Clinical Laboratory Technology

Credit Hour Total: 2.0

Lecture Hrs: 1.0 **Lab Hrs:** 4.0

Prerequisite(s): CLT 2410

Other Prerequisite(s): AND Restricted to Majors

Date Revised: May 2013

Course Description:

This course is an introduction to the principles of immunology, covering the broad areas of the body's defense mechanisms, the nature of the mammalian immune system and the immune response, and discusses immunological disease states of auto-immunity, tumor immunology, transplant immunology, immunodeficiency, and the theory behind immunoassays used in the laboratory environment. One classroom, two lab hours per week.

General Education Outcomes:

- Critical Thinking/Problem Solving Competency

Course Outcomes:

Primary and Secondary Immune Responses

Describe primary and secondary immune responses

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on given assessment tool

Types and Functions of Lymphatic System

Describe clonal selection, types and functions of white blood cells, T and B lymphocytes and their recirculation via the lymphatic system

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on given assessment tool

Receptor-mediated Triggering of Cellular Response

Identify complement, cytokines, receptor-mediated triggering of cellular responses via second messengers

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on given assessment tool

Antibody Structure and Function

Define Antibody structure and function

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on given assessment tool

Immune System in Health and Disease

Describe immune system in health and disease

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on given assessment tool

Immunity

Define natural vs. adaptive immunity

Assessment Method: Locally developed exams
Performance Criteria:

70% or better on given assessment tool

Outline:

Natural vs. adaptive immunity
Clonal selection, types and functions of white blood cells
T and B lymphocytes and their recirculation via the lymphatic system
Antibody structure and function
Primary and secondary immune responses
Complement, cytokines, receptor-mediated triggering of cellular responses via second messengers
Immune system in health and disease