

Master Syllabus

CLT 2410 - Clinical Microbiology/Parasitology

Division: Health Sciences

Department: Clinical Laboratory Technology

Credit Hour Total: 4.0

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

Prerequisite(s): BIO 1222AND CLT 1200

Other Prerequisite(s): AND Restricted to Majors

Date Revised: March 2016

Course Description:

Basic concepts of microbiology with emphasis on microbial pathogenesis and immunity. Medically important microorganisms including bacteria, fungi, viruses, rickettsia, protozoa, and the diseases which they produce. This course will also introduce students to the basic knowledge of the physical and chemical properties of clinically significant micro-organisms, the emphasis will be on describing phenotypic characteristics of clinically relevant organisms and the principles of antimicrobial action. Three classroom, three lab hours per week.

General Education Outcomes:

- ▣ Critical Thinking/Problem Solving Competency
- ▣ Written Communication Competency

Course Outcomes:

Safety

Demonstrate diagnostic microbiology safety and quality assurance

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given assessment tool

Microbial Growth and Nutrition

Identify microbial growth and nutrition requirement

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given assessment tool

Genetics of Microorganisms

Define the genetics of microorganisms

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given assessment tool

Foundations of Microbiology

Describe foundations of microbiology

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given assessment tool

Eukaryotic Microorganisms

Describe and compare Eukaryotic microorganisms: The Bacteria, Protists, Fungi, and Helminths

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given assessment tool

Impact of Microorganisms with Humans

Define the interactions and impact of microorganisms with humans

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given assessment tool

Infectious Diseases of Humans

Identify microbial agent causing the infectious diseases of humans

Assessment Method: Locally developed exams

Performance Criteria:

70% or better on given assessment tool

Outline:

Foundations of Microbiology

Microbial Growth and Nutrition

Genetics of Microorganisms

Eukaryotic Microorganisms: The Bacteria, Protists, Fungi, and Helminths

Interactions and Impact of Microorganisms with Humans

Infectious Diseases of Humans

Diagnostic microbiology safety and quality assurance