

## 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

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### 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