Miami Dade College

Course Description

MLT2403 | Clinical Microbiology 2 | 2.00 credits

This course will provide a working knowledge of clinical bacteriology and should complement the Microbiology 2 Lab. The student will be exposed to some of the indigenous flora and the pathogenicity of microorganisms as they affect various body sites. Specimen transport, collection, laboratory identification techniques, and antimicrobial therapy also provides the knowledge base necessary for working in a clinical setting.

Course Competencies:

Competency 1: The student will demonstrate knowledge and application of most common bacterial organisms found in the upper and lower respiratory tract, urine, blood, genital tract, wounds and body fluids by:

1. Differentiating pathogenic microorganisms from indigenous flora
2. Recognizing the normal flora and pathogens associated with the respiratory tract, urinary tract, genital tract, gastrointestinal tract, cerebral spinal fluid, blood and skin
3. Interpreting key biochemical characteristics for accurate identification of aerobic pathogenic organisms

Competency 2: The student will demonstrate knowledge and application of the most commonly encountered clinical anaerobic organisms by:

1. Stating the proper incubation requirements/techniques for anaerobic organisms.
2. Stating the proper media and functions for selectively identifying anaerobes.
3. Recognizing clinically significant anaerobes based on their distinguishing growth and biochemical characteristics

Competency 3: The student will demonstrate knowledge and application of identification and susceptibility methods used in the clinical laboratory by:

1. Recognizing methods for identification and susceptibility testing
2. Assessing and describing manual and automated instrumentation for bacteria identification and susceptibility.
3. Interpreting susceptibility testing results

Competency 4: The student will demonstrate knowledge and application of the Mycobacteria species in the clinical laboratory by:

1. Describing the characteristics used for identifying the most commonly encountered Mycobacteria species
2. Describing infections caused by Mycobacteria
3. Stating the proper media for recovery of Mycobacteria.
4. Describing the key characteristic reactions for each Mycobacteria species

Learning Outcomes:

1. Critical Thinking
2. Communication
3. Information Literacy