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Course Description
MLT2440L | Clinical Microbiology Lab 1 | 1.00 credit

This course provides a practical overview of mycology and parasitology. Students will also obtain hands-on experience working with formalin preserve ova and parasites. They will also obtain the knowledge necessary to be able to identify at least the genus level of the most commonly encountered yeasts and fungi using microscopic and macroscopic techniques. This course should be taken concurrently with Clinical Microbiology. Corequisite: MLT2440.

Course Competencies:

Competency 1: The student will demonstrate knowledge and comprehension of laboratory procedures of parasites by:
1. Stating proper techniques for collecting and transport of specimens for parasitology examination
2. Performing wet mount smears using iodine or saline from previously prepared specimens
3. Correctly identifying parasites on a stained blood and fecal smears

Competency 2: The student will demonstrate knowledge and application in identifying the most clinically important parasites by:
1. Stating and recognizing fundamental characteristics of groups of parasites
2. Recognizing and identifying forms and stage(s) of parasites
3. Identifying the key structures that identify certain parasites

Competency 3: The student will demonstrate knowledge and comprehension of laboratory procedures specimen collection and quality control by:
1. Stating the commonly used sites in the body for specimen collection
2. Recognizing the importance of proper collection and transport
3. Adhering to the safety measures outlined in the laboratory
4. Practicing safety and universal precautions
5. Explaining and demonstrating quality control procedures

Competency 4: The student will demonstrate knowledge and application by identifying yeast and mold commonly encountered in the clinical lab by:
1. Identifying the appropriate media and ingredients used in the mycology lab for primary isolation of organisms
2. Demonstrating technique (s) commonly used to identify the structures of molds for genus and species classification
3. Performing identification techniques for most common yeast recovered from clinical specimens

Learning Outcomes:
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information