

## **Course Description**

## MLT2620 | Clinical Chemistry 2 | 2.00 credits

Theoretical concepts and principles of proteins, enzymes, and lipids with emphasis on their relationship to various disease states. Prerequisite: MLT1610; corequisite: MLT2620L.

## **Course Competencies:**

Competency 1: The student will demonstrate knowledge of the principles and practices of clinical chemistry by:

- 1. Describing the basic concepts, components and methods for Quality Control
- 2. Describing the different types of safety hazards encountered in Clinical Chemistry
- 3. Determining common sources of error in Clinical Chemistry Analysis
- 4. Selecting proper specimens for analysis in Clinical Chemistry

**Competency 2:** The student will demonstrate knowledge of different laboratory analytes by:

- 1. Describing the function, structure, the basic principles and the clinical significance of each of the following chemical substances:
  - a. Enzymes and isoenzymes
  - b. Lipids
  - c. Hormones
  - d. Proteins

Competency 3: The student will demonstrate an understanding of Pathophysiology by:

- 1. Explaining the functions, ailments and laboratory tests used to diagnose the following:
  - a. Liver Function
  - b. Cardiac Function
  - c. Adrenal and Gonadal Function
  - d. Pituitary and Thyroid Function
  - e. Pancreatic & Gastrointestinal Function

## **Learning Outcomes:**

- Solve problems using critical and creative thinking and scientific reasoning
- Use computer and emerging technologies effectively