

Course Description

MLT2624L | Special Techniques in Clinical Chemistry | 2.00 credits

The principles and performance of radioimmunoassay, EMIT, ELISA, and toxicological techniques for thyroid function, hormones, and toxic substances. Prerequisites: MLT1610, 1610L; corequisites: MLT2620, 2620L.

Course Competencies:

Competency 1: The student will demonstrate knowledge and application of the principle of electrophoresis by:

- 1. Performing Electrophoresis techniques
- 2. Correlating the significance of the different protein electrophoresis procedures in state of disease
- **3.** Listing several substances that can be separated electrophoretically and explaining the clinical significance of abnormalities found in each.

Competency 2: The student will demonstrate knowledge and application of the principle of different toxicology procedures by:

- 1. Evaluating pharmacokinetics
- 2. Describing forms of administration
- 3. Describing Drugs of Abuse screening techniques.
- 4. Explaining Drugs of Abuse confirmatory testing

Competency 3: The student will demonstrate knowledge and comprehension of molecular diagnostic procedures by:

- 1. Describing the advantage of molecular diagnostic procedures
- 2. Recognizing and identifying assays for detection and quantitation of DNA and RNA
- 3. Listing and explaining the procedure of the Polymerase chain reaction (PCR)
- 4. Listing and explaining the procedure of Hybridization Techniques

Learning Outcomes:

- 1. Communication
- 2. Numbers / Data
- 3. Critical Thinking
- 4. Computer / Technology Usage