

# Course Competency

## MLT 2624L SP TECH/CLIN CHEM L

### Course Description

The principles and performance of electrophoresis for identification of protein, lipids and enzymes abnormalities; immunoassays, fluorescent polarization immunoassay and ELISA for quantitation of hormone levels; and EMIT, FPIA, Thin layer Chromatography for identification of different drugs.

Course Competency	Learning Outcomes
<p><b>Competency 1:</b>The student will demonstrate knowledge and application of the principle of electrophoresis by:</p>	<ol style="list-style-type: none"> <li>1. Critical thinking</li> <li>2. Numbers / Data</li> <li>3. Computer / Technology Usage</li> </ol>
<ol style="list-style-type: none"> <li>1. Performing Electrophoresis techniques</li> <li>2. Correlating the significance of the different protein electrophoresis procedures in state of disease</li> <li>3. Listing several substances that can be separated electrophoretically and explaining the clinical significance of abnormalities found in each.</li> </ol>	
<p><b>Competency 2:</b>The student will demonstrate knowledge and application of the principle of different toxicology procedures by:</p>	<ol style="list-style-type: none"> <li>1. Communication</li> <li>2. Numbers / Data</li> <li>3. Critical thinking</li> <li>4. Computer / Technology Usage</li> </ol>
<ol style="list-style-type: none"> <li>1. Evaluating pharmacokinetics</li> <li>2. Describing forms of administration</li> <li>3. Describing Drugs of Abuse screening techniques.</li> <li>4. Explaining Drugs of Abuse confirmatory testing</li> </ol>	
<p><b>Competency 3:</b>The student will demonstrate knowledge and comprehension of molecular diagnostic procedures by:</p>	

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| <ol style="list-style-type: none"><li>1. Describing the advantage of molecular diagnostic procedures</li><li>2. Recognizing and identifying assays for detection and quantitation of DNA and RNA</li><li>3. Listing and explaining the procedure of the Polymerase chain reaction (PCR)</li><li>4. Listing and explaining the procedure of Hybridization Techniques</li></ol> |  |
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Updated: FALL TERM 2022