

## **Course Description**

## MLT1300L | Clinical Hematology Laboratory | 2.00 credits

Manual and automated procedures in hematology. This includes blood cell counts and other basic hematologic procedures in the simulated laboratory and in the clinical setting. Corequisite: MLT1300.

## **Course Competencies:**

**Competency 1:** The student will demonstrate understanding of the principals involved in Safety and quality control procedures used in the laboratory procedures by:

- 1. Identifying laboratory safety as described in the OSHA including instructions in standard precautions
- 2. Understanding and evaluate appropriate quality control procedures as needed to ensure the accuracy of all reported hematologic test results
- 3. Understanding how equipment maintenance, corrective actions and troubleshooting defective equipment affect test results

**Competency 2:** The student will demonstrate understanding of the origin of blood and blood products and its applications by:

- 1. Evaluating the process of hematopoiesis
- 2. Identifying and describing classic morphologic characteristics of maturation for the erythrocytes, leukocytes, and thrombocytes
- 3. Interpreting stained peripheral blood and analyzing abnormal smears to identify common anemias and Leukemias

Competency 3: The student will an understanding of Hematological applications and instrumentation by:

- 1. Recognizing proper specimens for analysis in hematology
- 2. Explaining the analytical principles and diagnostic utility of hematological laboratory testing
- 3. Evaluating laboratory results and correlating clinical data to identify common hematological conditions and diseases

## **Learning Outcomes:**

- Communicate effectively using listening, speaking, reading, and writing skills
- 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
- Demonstrate knowledge of diverse cultures, including global and historical perspectives
- Create strategies that can be used to fulfill personal, civic, and social responsibilities
- Use computer and emerging technologies effectively