



South Central College

## MDLT 2826 Clinical: Hematology & Coagulation

### Course Outcome Summary

#### Course Information

<b>Description</b>	During the clinical hematology and coagulation experience, the student is assigned to an affiliated hospital/clinic laboratory for the purpose of acquiring practical experience in a laboratory setting while under direct supervision. The experience allows the student to apply knowledge learned in the didactic phase of their training with practical hands-on experience for preparation of employment in a clinical laboratory. Students practice basic laboratory procedures/techniques, and phlebotomy. (Prerequisites: MDLT 1825, MDLT 1835, and MDLT 2807)
<b>Total Credits</b>	2
<b>Total Hours</b>	96

#### Types of Instruction

Instruction Type	Credits/Hours
Internship	2/96

#### Pre/Corequisites

MDLT 1825, MDLT 1835, and MDLT 2807

#### Institutional Core Competencies

Communication - Students will be able to demonstrate appropriate and effective interactions with others to achieve their personal, academic, and professional objectives.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

#### Course Competencies

**1. Explain the importance of proper patient identification.**

**Learning Objectives**

Describe the importance of treating patients while using excellent interpersonal skills as well as the collection of a blood specimen.

Name the major type of error in specimen collection.

**2. Discuss the importance of patient confidentiality.**

### Learning Objectives

Explain why confidentiality is an important issue for clinical laboratory professionals.

Discuss the legal ramifications of violating the HIPPA (Health Insurance Portability and Accountability Act).

### 3. Discuss criteria for the acceptance/rejection of specimens according to the clinical facility's established protocol.

#### Learning Objectives

List and explain the common types of coagulation and hematology specimen collection, transportation, and processing procedures.

Discuss common preanalytical, analytical, and postanalytical variables that affect coagulation and hematology specimen collection, transportation, and processing.

### 4. Demonstrate acceptable attitude toward laboratory work, laboratory personnel, clients/patients, and other medical professionals.

#### Learning Objectives

List personal qualities that characterize a clinical laboratory professional.

Explain how a clinical laboratory professional demonstrates personal qualities.

Explain importance of good communication between clinical laboratory professionals and other medical professionals.

Demonstrate acceptable attitudes toward laboratory work, laboratory personnel, and laboratory safety.

Discuss importance of working as a team member to ensure quality patient care.

### 5. Summarize the importance of Total Quality Management (TQM).

#### Learning Objectives

Define the following terms: quality assurance, quality control, accuracy, precision, reference interval, random error, systemic error, dispersion, delta check, trend, shift, and confidence intervals.

Evaluate laboratory data using the multirule system for quality control.

Describe the pre-analytical, analytical, and post-analytical phases of quality assurance.

Discuss proficiency-testing programs in the clinical laboratory.

Describe the basic terms and state the formulas for the standard deviation and coefficient of variation.

Describe the use of Levey-Jennings quality control charts.

Apply appropriate corrective measurements to quality control errors

### 6. Demonstrate respect and compliance with laboratory safety protocol.

#### Learning Objectives

Explain the importance of laboratory safety.

Choose appropriate personal protective equipment when working in the laboratory.

List and describe the basic aspects of infection control policies and practices.

Identify hazards related to handling chemicals, and biologic specimens.

Select the correct means for disposal of waste generated in the clinical laboratory.

Outline the steps required in documentation of an accident in the workplace.

### 7. Perform selected laboratory methods/procedures safely, efficiently, and accurately by recognizing the importance of established procedures, quality control, and intra-laboratory communication according to the clinical facility's established protocol.

#### Learning Objectives

Explain the general principles of common analytical methods/procedures.

Discuss the limitations of common analytical methods/procedures.

Discuss existing clinical applications for common analytical methods/procedures.

### 8. Perform the daily functional checks and maintenance on clinical facility's equipment and analyzers.

#### Learning Objectives

Discuss importance of routinely performing maintenance, calibration, and troubleshooting of laboratory analyzers and equipment.

Demonstrate proper procedures in maintenance, calibration, operation, and troubleshooting of laboratory analyzers and equipment.

**9. Differentiate normal versus abnormal test results.**

**Learning Objectives**

Given laboratory data, evaluate clinical significance of test results.  
Cite normal, abnormal, and critical reference intervals for common laboratory methods/procedures.  
Correlate test results with clinical disease states.

**10. Correlate pathologic conditions and the laboratory's role in diagnosis and treatment.**

**Learning Objectives**

List common coagulation pathologic conditions.  
List common hematology pathologic conditions.  
Discuss common coagulation and hematology methods/procedures used for diagnosis and treatment of common coagulation and hematology abnormalities.

**SCC Accessibility Statement**

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: [www.southcentral.edu/disability](http://www.southcentral.edu/disability)

This material can be made available in alternative formats by contacting the Academic Support Center at 507-389-7222.