

# Minnesota State College Southeast

## MEDL 1125: Coagulation

### A. COURSE DESCRIPTION

Credits: 1

Lecture Hours/Week: \*.\*

Lab Hours/Week: 2

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers theories of normal coagulation and explores mechanisms involved in coagulation disorders. Emphasis is placed on laboratory evaluation of hemostasis. Students will perform coagulation testing procedures. (Prerequisite: Must be a Medical Laboratory Technician accepted student) (1 credit: 0 lecture/1lab)

**B. COURSE EFFECTIVE DATES:** 05/07/2012 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Understand the basic principles of hemostasis
2. Demonstrate comprehension of the technical and procedural aspects of coagulation laboratory tests
3. Correlate coagulation test results to disease processes
4. Perform coagulation test procedures
5. Exhibit an awareness of regulatory requirements, safety regulations, ethical standards and practices in the coagulation laboratory
6. Utilize effective oral and written communication skills

### D. LEARNING OUTCOMES (General)

1. Identify platelet structure and discuss platelet's role in hemostasis
2. Identify primary and secondary hemostasis components
3. Summarize the activity of the extrinsic, intrinsic and common pathways
4. Summarize the fibrinolytic pathway, its regulators and its products
5. Identify disorders of the primary and secondary hemostasis systems
6. Differentiate among acquired thrombosis risk factors related to lifestyle and disease and congenital risk factors
7. Compare and contrast the clinical symptoms of platelet disorders and clotting factor deficiencies and suggest a diagnosis that is consistent with information provided
8. Explain the principle and rationale for the use of each laboratory test to detect and monitor hemorrhagic disorders
9. Identify, select, describe and interpret the results of clot-based coagulation screening tests, coagulation factor assays and tests of fibrinolysis
10. Characterize laboratory tests for the monitoring of antithrombotic therapy
11. Identify testing applications of various coagulation analyzers
12. Perform prothrombin time and partial thromboplastin time testing and interpret the results
13. Adhere to and practice safety and regulatory requirements in the coagulation laboratory
14. Participate in an assimilation laboratory experience

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted