



Course Description

MLT1330 | Clinical Coagulation | 1.00 credits

Didactic study of hemostasis, various clotting mechanisms, and related disease states. Corequisite: MLT1130L.

Course Competencies:

Competency 1: The student will demonstrate knowledge of the process of hemostasis by:

1. Describing the process of hemostasis.
2. Listing the conditions that can compromise the hemostatic process.
3. Stating the role of the vascular system and platelets in the hemostatic process.

Competency 2: The student will name all the factors of the procoagulant system and demonstrate knowledge of their role in coagulation by:

1. Explaining the process of platelet adhesion and aggregation.
2. Naming all the factors of the pro-coagulant system (generic, common name, and roman numeral designation)
3. Explaining the process and interaction of the factors in the coagulation cascade (Intrinsic, Extrinsic, and Common Pathways).
4. Identifying factors and the significance of the factors as related to laboratory data in the intrinsic and extrinsic system

Competency 3: The student will demonstrate knowledge of all the hereditary and acquired factor deficiencies by:

1. Describing Hemophilia A and B with cause, symptoms, complications, and treatments.
2. Describing all of the hereditary factor deficiencies with cause, symptoms, complications, and treatments.
3. Describing the acquired and hereditary platelet disorders with causes, symptoms, diagnosis, complications, and treatments.
4. Explaining the relationship between the Von-Willebrand molecule and Factor VIII.
5. Describing Von-Willebrand's disease with cause, symptoms, complications, and treatments.
6. Describing the laboratory tests associated with these deficiencies

Competency 4: The student will demonstrate knowledge of the hypercoagulable state and fibrinolysis by:

1. Describing the hypercoagulable state with causes, symptoms, and treatments of choice.
2. Explaining fibrinolysis and the fibrinolytic process.
3. Describing the condition known as Disseminated Intravascular Coagulation (DIC) with symptoms, primary causative agents, complications, and treatments of choice.
4. Giving a description of the patient's condition and laboratory results correlate the disease and/or condition with the appropriate testing and expected results.
5. Integrating specific aspects of natural and acquired inhibition with the coagulation process

Learning Outcomes:

1. Critical Thinking
2. Numbers / Data
3. Computer / Technology Usage
4. Social Responsibility
5. Ethical Issues