Miami Dade College

Course Description

MLT1330L | Clinical Coagulation Laboratory | 1.00 credits

Performance of selected coagulation assays by manual and automated methods. The significance of test results to assess hemostasis in health and disease is included. Corequisite: MLT1330.

Course Competencies:

Competency 1: The student will demonstrate knowledge of the role of platelets in hemostasis by:

1. Testing to identify Platelet adhesion
2. Interpreting laboratory tests to identify platelet aggregation and interpret the values obtained.
3. Identifying the substances released by platelets and assessing the values for the role of platelets in aggregation.
4. Identifying the substances released by platelets and assess their values for the role of platelets in the coagulation cascade.
5. Using relevant laboratory instruments and identifying platelet adhesion
6. Describing platelet aggregation.
7. Identifying the changes in platelets after injury.
8. Identifying the substances released by platelets and their role in aggregation.
9. Identifying the substances released by platelets and their role in the coagulation cascade

Competency 2: The student will describe the process and interaction of the factors in the coagulation cascade by:

1. Performing tests to identify the reactions of intrinsic pathways.
2. Performing lab tests to identify the reactions of extrinsic pathways.
3. Performing lab tests to identify the reactions of the common pathway.
4. Performing the lab test to quantify the amount of fibrinogen present in the patient's sample.
5. Performing lab tests to quantify the amount of fibrinogen degradation products found in the patient's sample

Competency 3: The student will demonstrate knowledge of Von - Willebrand's Disease through laboratory tests by:

1. Performing tests to identify the causative agent for Von - Willebrand's agent
2. Using the patient's history and case study given, perform lab tests to identify the symptoms of Von - Willebrand's factor.
3. Describing the complications that can arise with the different types of Von Willebrand's disease based on lab interpretation of results.

Competency 4: The student will demonstrate knowledge of fibrinolysis and hypercoagulable states through all hereditary and acquired factor deficiencies by:

1. Identifying laboratory tests affected by medications like Coumadin and heparin and their interferences.
2. Identifying and describing diseases and or conditions that predispose patients to thrombotic episodes.
3. Identifying the diagnostic laboratory tests associated with DIC (Disseminated Intravascular Coagulation)
4. Identifying the laboratory tests associated with detection and inhibition of fibrinolysis.

Learning Outcomes:

1. Numbers / Data
2. Critical Thinking
3. Communication
4. Computer / Technology Usage