

Common Course Outline
MLTC 253
Clinical Internship-Hematology and Coagulation
2 Credits

Community College of Baltimore County

Description

MLTC 253 – Clinical Internship-Hematology and Coagulation engages students to experience a 15-day internship at an affiliated hospital laboratory or reference laboratory. The course provides students with practical skills in manual and automated hematology and coagulation procedures, including problem-solving, evaluation of quality control results, and instrument maintenance.

2 Credits: 15 day internship

Prerequisite: MLTC 180

Corequisite: MLTC 250

Overall Course Objectives

Upon completion of this course students will be able to:

1. comply with the standard operating procedures for specimen handling and distribution;
2. follow departmental protocol and demonstrate safe work practices;
3. perform, evaluate, and document quality control procedures;
4. perform the various periodic (daily, weekly) maintenance procedures for each piece of equipment used during the clinical rotation in hematology and coagulation;
5. state the confidentiality policy of the facility as related to testing procedures and reporting, according to Health Insurance Portability and Accountability Act (HIPAA) guidelines;
6. operate automated hematology instruments with minimal supervision and produce results within acceptable ranges;
7. prepare slides and perform normal and abnormal differentials, with platelet evaluations and identification of red blood cell morphology;
8. identify the stages of immature white cell and immature red cells;
9. perform routing hematology tests, such as erythrocyte sedimentation rate, reticulocyte count, and sickle cell screen;
10. perform a body fluid cell count and differential;
11. perform and be able to explain the principles of routine coagulation tests, including prothrombin time, partial thromboplastin time, thrombin time, fibrinogen, fibrin degradation products, and D-dimer; and
12. demonstrate professional qualities, such as promptness, uniform policy, effective communication skills, initiative, and flexibility.

Major Topics

- I. Hematology Laboratory
 - A. Automated and semi-automated instrumentation
 - B. Quality control
 - C. Safety
 - D. Specimen preparation
 - E. Slide preparation
 - F. Differential counts
 - G. Routine hematology testing
 - H. Usual tests
- II. Coagulation Laboratory
 - A. Automated and Semi-automated instrumentation
 - B. Quality control
 - C. Safety
 - D. Specimen preparation
 - E. Routine coagulation testing
 - F. Unusual tests

Course Requirements

Grading procedures will be determined by the individual faculty member but will include the following:

Grading/exams

- A technical evaluation/checklist
- A laboratory practical
- A clinical objective write-up
- A professional evaluation
- A post-internship exam

Written Assignments: Students are required to use appropriate academic resources.

Other Course Information

This course is a Medical Laboratory Technology program core course.

This course is part of a program sequence that requires admission to the program.

This course is offered in the fall only.