

Common Course Outline
MLTC 253
Clinical Internship I, Hematology and Coagulation
Two Semester Hours

The Community College of Baltimore County

Description

MLTC 253 - Two credits - Clinical Internship I, 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. 32 laboratory hours per week. Prerequisites: MLTC 180, Hematology and Coagulation and permission of Program Director.

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 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 routine 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. Unusual 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/exams: Grading procedures will be determined by the individual facility, but, at minimum, will include the following:

Technical Evaluation by clinical instructor (performance check sheets to be provided by MLT Program director)

Professional Evaluation by clinical instructor (performance check sheets to be provided by MLT program director)

1 written final exam

1 final performance-based proficiency evaluation

Other Course Information

This course is a Medical Laboratory Technology program core course.