

# Common Course Outline

MLTC 202

## Urinalysis & Body Fluids

2 Credits

### Community College of Baltimore County

#### Description

**MLTC 202 – Urinalysis & Body Fluids** presents the analysis of the chemical constituents of other body fluids, as well as, the principles and procedures of the complete urinalysis. The course includes specimen collection and processing, correlation of normal and pathologic physiology, and diagnostic implications in health and disease. Laboratory Exercises emphasize analytical accuracy and precision, using both manual techniques and automated laboratory instruments. Other body fluids include cerebrospinal, serous, seminal, amniotic, and fecal analysis.

**2 Credits:** 1 lecture hour per week; 3 laboratory hours per week

**Prerequisite:** MLTC 200

#### Overall Course Objectives

Upon completion of this course students will be able to:

1. describe the relationship of biochemical analytes in the clinical setting to the understanding of both the pathology and the physiology of the human body;
2. describe the requirements for collection, storage and handling methods of specimens and the adverse changes that can result if specimens are improperly collected or stored;
3. explain the principles and methodologies of the many diagnostic tests performed in the urinalysis laboratories to identify normal and disease processes;
4. identify and explain the major tests performed on body fluids (including cerebrospinal fluid, serous, synovial, amniotic, gastric, semen, feces and sweat) in the hematology, chemistry, microbiology, and immunobiology laboratories;
5. demonstrate understanding of correlating lab test results from urine and other body fluid analyses with normal and disease processes;
6. perform and interpret manual chemistry and urinalysis tests;
7. identify pre-analytic variables that adversely affect procedures and results;
8. evaluate quality control procedures used in chemistry and urinalysis testing; and
9. demonstrate an understanding of laboratory safety and standard precautions.

#### Major Topics

- I. Urinalysis
  - A. Physical examination
  - B. Chemical examination
  - C. Microscopic examination
  - D. Renal diseases

- E. Metabolic diseases
- II. Discussion and Analysis of other body fluids
  - A. Cerebrospinal fluid
  - B. Semen
  - C. Synovial fluid
  - D. Serous fluid
  - E. Amniotic fluid
  - F. Fecal analysis

### **Course Requirements**

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

### **Grading/exams**

- A minimum of two (2) graded case studies
- Weekly laboratory assignments
- Weekly lecture quizzes and assignments
- A minimum of two (2) lecture exams
- A minimum of two (2) laboratory proficiencies
- Professionalism
- A cumulative final examination

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 summer only.

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