MLT Urinalysis and Body Fluids

Course Information

Developers: Medical Laboratory Technology State Curriculum Committee

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Credit Hours: **3**

Prerequisite: Admission to the MLT program or instructor approval.

Description:

This course will provide the student with in-depth knowledge of the function of the kidney, urine formation, and the procedures utilized in performing a routine urinalysis and body fluid analysis. Correlation of abnormal findings and disease states will be discussed. Other body fluids included in this course are feces, seminal, amniotic, cerebrospinal, pleural, pericardial, and peritoneal. Discrimination between normal and abnormal findings and correlation of this knowledge to disease states will be included in the course material.

Outcomes:

1. Relate the proper specimen collection and handling, type of quality control used, reference ranges, principle of analysis currently available, and sources of analytical errors for each of the analytes discussed or approached in the course.
2. Perform all procedures with regard to prescribed safety protocol and confidentiality.
3. Correlate abnormal results with the most likely disease process by determining the clinical significance of the findings.
4. Identify the forces involved in fluid formation in the body and correlate the body cavity with containing fluid.
5. Describe the basic physiology and anatomy of the kidney and relate this function to normal and abnormal test results.
6. Describe disease states of the renal system as to etiology, clinical symptoms and expected laboratory results.
7. Relate the appropriate method of collection and preservation of urine specimens for all urinalysis testing.
8. Perform routine urinalysis and body fluid analysis.
9. List reagents and techniques used to identify amino acids, carbohydrates other than glucose, mucopolysaccarides, mucolipids, amino acids, and proteins.

10. Correctly prepare specimens for cell morphology examination and describe and recognize various cell types that occur in body fluids.

11. Relate the origin, composition, the methods of analysis, the diagnostic importance of test results and explain the specific methodology used for each of the following body fluids: CSF, amniotic, cerebrospinal, synovial, seminal, feces, pleural, pericardial and peritoneal.