MELT 1635: Biological Fluids

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 2
Lab Hours/Week: 2
OJT Hours/Week: *
Prerequisites: None
Corequisites: None
MnTC Goals: None

This course begins by introducing the learner to the importance of urinalysis (UA) in the medical laboratory. The anatomy and physiology of the kidney is studied, followed by the routine analysis of urine, including the physical, chemical, and microscopic examination. Lab practice of the above is emphasized. Renal and metabolic disorders that produce abnormalities in the urine are explored. The analysis of miscellaneous body fluids is then studied, including serous, synovial, amniotic, sweat, spinal, seminal fluid, and fecal material.

B. COURSE EFFECTIVE DATES: 04/18/2024 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Understand anatomy and physiology of urinary tract.
2. Recognize acceptable collection and processing of urine specimens.
3. Perform physical, chemical, and microscopic analysis of multiple urine specimens.
4. Analyze final report for discrepancies amongst findings.
5. Recognize and resolve variables related to urinalysis.
6. Relate abnormal urine findings to specific metabolic diseases.
7. Relate abnormal urine findings to specific renal diseases.
8. Discuss the analysis of miscellaneous body fluids.

D. LEARNING OUTCOMES (General)

1. The learner will be able to demonstrate knowledge of the physical/chemical testing of urine specimens.
2. The learner will be able to demonstrate knowledge of the microscopic examination of urine.
3. The learner will be able to demonstrate knowledge of metabolic and renal diseases as they relate to urinalysis findings.
4. The learner will be able to exhibit competence in the testing of miscellaneous body fluids.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus
G. SPECIAL INFORMATION

None noted