

Minnesota State College Southeast

MEDL 1150: Medical Laboratory Technician Review

A. COURSE DESCRIPTION

Credits: 1

Lecture Hours/Week: 1

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course is a review of previously learned course material. (Prerequisite: None) (1 credits: 1 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 12/16/2013 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Phlebotomy
2. Urinalysis/Body Fluids
3. Immunology
4. Coagulation
5. Hematology
6. Chemistry

D. LEARNING OUTCOMES (General)

1. Phlebotomy
 - a. List the equipment needed for venipuncture and capillary blood collection
 - b. Identify pre-analytical variables in specimen collection
 - c. Describe the proper technique for collecting a capillary and venous blood specimen
 - d. Identify specimen problems that may be associated with blood collection
2. Urinalysis/Body Fluids
 - a. Understand basic anatomy and physiology of the kidney
 - b. Demonstrate comprehension of the technical and procedural aspects of urinalysis and body fluid laboratory tests
 - c. Correlate urinalysis laboratory test results to disease processes
3. Immunology
 - a. Understand basic Immunological principles
 - b. Demonstrate comprehension of the technical and procedural aspects of immunological laboratory tests
 - c. Correlate immunological test results to disease processes
4. Coagulation
 - a. Understand the basic principles of hemostasis
 - b. Demonstrate comprehension of the technical and procedural aspects of coagulation laboratory tests
 - c. Correlate coagulation test results to disease processes
5. Hematology I
 - a. Describe basic anatomy and cellular structure and function as it relates to hematopoiesis and cellular production in the human body.
 - b. Describe red blood cell, white blood cell, and platelet development, differentiation, morphology and maturation.
 - c. Discuss the red blood cell metabolism, hemoglobin metabolism, and iron metabolism.
6. Chemistry
 - a. Demonstrate the analysis of various chemical constituents of plasma, serum and other body fluids.
 - b. Understand the physiology and clinical significance of carbohydrate metabolism, bilirubin metabolism, lipids, renal function, liver function and blood gas analysis.
 - c. Relate abnormalities of chemical constituents to cardiovascular, renal, liver, gastrointestinal, and bone disorders and diseases.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted