A. COURSE DESCRIPTION

Credits: 4
Lecture Hours/Week: 0
Lab Hours/Week: 8
OJT Hours/Week: *. *

Prerequisites:
This course requires all three of these prerequisites
MEDL 2105 - Hematology 2
MEDL 2110 - Clinical Chemistry 2
MEDL 2101 - Clinical Microbiology

Corequisites: None
MnTC Goals: None

This course provides the student an opportunity to practice the principles and procedures of laboratory medicine, under supervision, in a clinical laboratory setting. Students will perform and report patient laboratory analysis in the various areas of a clinical laboratory; hematology, chemistry, microbiology, coagulation, urinalysis, immunology, and immunohematology departments. In addition, students will prepare a case study. (Prerequisite: MEDL2101, MEDL2105. Must be a Medical Laboratory Technician accepted student) (4 credits: 0 lecture/4 lab)

B. COURSE EFFECTIVE DATES: 05/07/2012 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Demonstrate comprehension of the technical and procedural aspects of laboratory tests
2. Exhibit an awareness of regulatory requirements, safety regulation and ethical standards of practice
3. Correlate laboratory tests to disease processes
4. Recognize appropriate test selection and abnormal test results
5. Collect and process biological specimens for analysis
6. Perform laboratory procedures that require limited independent judgment
7. Recognize unexpected results and instrument malfunction and take appropriate action
8. Utilize effective oral and written communication skills
9. Perform information processing in the clinical laboratory setting
D. LEARNING OUTCOMES (General)

1. Observe and participate in the routine operations of a clinical laboratory
2. Perform manual and automated analysis following laboratory policies
3. Perform routine hematology procedures to include; complete blood count, reticulocyte count, and body fluid count, erythrocyte sedimentation rate, and microscopic blood cell morphology
4. Confirm the presence of normal and abnormal blood cells
5. Perform routine hemostasis procedures
6. Perform microbiology procedure to include: specimen processing, gram staining and interpretation, examination and interpretation of culture plates, biochemical procedures and interpretation, and set up and interpret antibiotic susceptibility testing
7. Perform routine clinical chemistry testing
8. Analyze quality assurance and quality control in all section of the laboratory and evaluate the appropriate action needed when results are out of control limitations
9. Utilize semi-automated and automated analyzers with limited supervision
10. Demonstrate preventive maintenance on laboratory instruments
11. Perform standard immunohematological procedures including: ABO, Rh, indirect and direct antiglobulin testing, crossmatching, and cord blood work-ups.
12. Perform routine urinalysis procedures
13. Perform routine immunology testing procedures
14. Perform phlebotomy procedures
15. Maintain accurate record keeping in all sections of the laboratory
16. Strive to maintain a professional appearance and demeanor at all times
17. Adopt effective communication procedures with patients, laboratory staff and other healthcare personal
18. Demonstrate the ability to follow instructions and accept direction
19. Maintain safety practices at all times
20. Compose a case study document and evaluate the review questions provided

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted