DEPT: Medical Laboratory Technician  COURSE NO. MDLT 1100

NUMBER OF CREDITS: 3

COURSE TITLE: Introduction to Laboratory Sciences

CATALOG DESCRIPTION: This is an orientation course designed to familiarize the student with a career in the medical laboratory field, medical terminology, certification process, professional organizations, and ethical/legal issues. The course has heavy emphasis on phlebotomy skills. The course also introduces the students to laboratory information system (computers) as they are sued in the laboratory.

AUDIENCE: Students in the Medical Laboratory Technician, Phlebotomy, and Medical Assistant Programs or students who would like to know more about the laboratory science and/or phlebotomy.

PRE-REQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE: None

LENGTH OF COURSE: One semester

THIS COURSE IS USUALLY OFFERED:
In the Fall semester only. NOTE: This course is a pre-requisite for all the MDLT courses that involve a laboratory.

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT:
   a. To provide an introduction to the profession of laboratory science including a review of other hospital professions.
   b. To provide an introduction to safety and infection control in the medical field.
   c. To provide the content for phlebotomy skills

2) THINKING SKILLS
   a. Develop problem-solving strategies
   b. Correct use of phlebotomy tubes as they relate to test ordered.
   c. Proper handling of specimens
3) COMMUNICATION SKILLS
   a. Communication skills as they relate to working with patients of all ages, sex, mental states, and ethical backgrounds
   b. Communication skills as they relate to working with other professionals in the medical field
   c. Communication skills as they relate to working with co-workers
   d. Understanding verbal and non-verbal messages

4) HUMAN DIVERSITY:
   a. Working together in small groups especially in the laboratory exercises to experience ways diverse people organize projects and cooperate
   b. Working together to enhance communication skills

TOPICS TO BE COVERED:

Selected topics from the following:
   a. History of phlebotomy
   b. Quality Assurance and Legal Issues
   c. Infection Control, Safety, First Aid and personal wellness
   d. Medical Terminology
   e. Circulation System
   f. Blood collection equipment, additives and order of draw
   g. Venipuncture procedures
   h. Blood collection variables, complications and procedural errors
   i. Skin puncture procedures
   j. Special collections and Point of Care Testing
   k. Arterial puncture procedures
   l. Non-blood specimens and tests
   m. Computers and Specimen Handling and Processing

LIST OF EXPECTED COURSE OUTCOMES

1. To develop an understanding of the function and organization of the hospital and medical field setting
2. To understand, know, and use safety and infection control practices, policies and procedures.
3. To perform venipunctures and skin punctures accurately and safely.
4. To learn to communicate with patients and diversity of patients.
5. To properly handle all blood and non-blood specimens
6. To understand quality assurance and legal issues.
7. To begin the process of learning medical terminology
8. To begin the process of learning about laboratory information systems.
LEARNING/TEACHING TECHNIQUEST INCLUDES:
1. Lectures
2. Demonstrations
3. Laboratory exercises
4. Problem solving/case studies
5. Interactive lectures
6. Films/videos/slides
7. Demonstration of phlebotomy skills

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDES:
1. Reading
2. Textbook questions
3. Tests
4. Worksheets
5. Laboratory exercises
6. Performance of phlebotomy skills

The information in this course outline is subject to revision

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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