

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

**DEPT. MDLT**

**COURSE NUMBER: 1100**

**NUMBER OF CREDITS: 3**

**Lecture: 2 Lab: 1 OJT: 0**

<b>Course Title:</b>
Introduction to Laboratory Sciences

<b>Catalog Description:</b>
Introduction to Laboratory Sciences course 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 used in the laboratory.

<b>Prerequisites or Necessary Entry Skills/Knowledge:</b>
None

**FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)**

- ☐ Goal 1: Communication: By meeting the following competencies:
- ☐ Goal 2: Critical Thinking: By meeting the following competencies:
- ☐ Goal 3: Natural Sciences: By meeting the following competencies:
- ☐ Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- ☐ Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- ☐ Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- ☐ Goal 7: Human Diversity: By meeting the following competencies:
- ☐ Goal 8: Global Perspective: By meeting the following competencies:
- ☐ Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- ☐ Goal 10: People and the Environment: By meeting the following competencies:

<b>Topics to be Covered</b>
History of phlebotomy
Quality Assurance and Legal Issues
Infection Control, Safety, First Aid and personal wellness
Medical Terminology
Circulation System
Blood collection equipment, additives and order of draw
Venipuncture procedures
Blood collection variables, complications and procedural errors

Skin puncture procedures
Special collections and Point of Care Testing
Arterial puncture procedures
Non-blood specimens and tests
Computers and Specimen Handling and Processing

## Student Learning Outcomes

Demonstrate an understanding of the history of the clinical laboratory, the professionalism desired in clinical laboratory personnel, governmental and non-governmental regulations, confidentiality, and organization of the hospital and medical field setting.

Describe medical-legal and ethical issues related to clinical laboratory profession.

Safely perform venipunctures and process clinical specimens according to current established procedures in accordance with most current standards developed by the Clinical & Laboratory Standards Institute (CLSI), The Joint Commission, and OSHA.

Identify policies and procedures used in the clinical laboratory to assure quality specimens.

Communicate with patients (verbally and non-verbally), discuss diversity of patients, and interact appropriately and professionally.

Identify and use basic medical terminology as applies to the clinical laboratory.

Explain coding of basic diagnostic laboratory procedures.

Demonstrate understanding of quality assurance and quality control in clinical laboratory.

Identify the different clinical laboratory setting and roles in healthcare organization.

Discuss the various departments in the clinical laboratory.

**Is this course part of a transfer pathway:** Yes ☐ No ☒

**\*If yes, please list the competencies below**

Revised Date: 3/29/2022