

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. MDLT

COURSE NUMBER: 2106

NUMBER OF CREDITS: 3

Lecture: 2 Lab: 1 OJT: 0

### Course Title:

Immunohematology

### Catalog Description:

Immunohematology (Bloodbanking) teaches the theory of red cell antigen-antibody interactions as it relates to blood grouping and typing, antibody detection compatibility testing. Blood donor screening component preparation are also discussed. In laboratory the student will perform basic blood banking procedures. Accuracy in procedure interpretation is emphasized.

### Prerequisites or Necessary Entry Skills/Knowledge:

MDLT 1100 and MDLT 1120

### 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:

### Topics to be Covered

This course focuses on the concepts and techniques used in transfusion medicine.

### Student Learning Outcomes

Apply principles of safety, quality assurance, and quality control in immunohematology.

Describe blood group genetics, characteristic of the blood group system, and the principles of immunology as they relate to immunohematology.

List the requirements for the donation of blood; and describe the preparation, storage, and use of blood components.

Evaluate laboratory test results; select additional procedures to be performed; correlate test results with patient conditions.

Describe the principles and perform routine blood bank tests.

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

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

Revised Date: 3/29/2022