

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

**DEPT. MDLT**

**COURSE NUMBER: 1120**

**NUMBER OF CREDITS: 3**

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

<b>Course Title:</b>
Immunology

<b>Catalog Description:</b>
Immunology introduces the student to a wide array of clinical laboratory techniques that are based on the concepts studied in immunology. The topics range from the very simple to the very complex procedures that are used in all areas of the clinical laboratory.

<b>Prerequisites or Necessary Entry Skills/Knowledge:</b>
MDLT 1100

**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>
Natural Immunity
Lymphoid System
Antigens, Antibodies, and Major Histocompatibility Complex
Complement system
Precipitation reactions
Agglutination
Labeled immunoassays
Hypersensitivity
Autoimmunity

## Student Learning Outcomes

Describe, define, and evaluate basic principle of immunology as it relates to the natural immune system, lymphatic system, antigens, antibodies, and complement system.

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

Define hypersensitivity and autoimmune diseases.

Evaluate normal and abnormal immunological tests with associated diseases.

Demonstrate proficiency in the skills necessary to perform immunological tests, to evaluate the immune system, within stated limits of accuracy.

Demonstrate proficiency in the skills necessary to perform blood typing, dilutions, and antibody titers, within stated limits of accuracy.

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

\*If yes, please list the competencies below

Revised Date: 3/29/2022