

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. SURG

COURSE NUMBER: 1110

NUMBER OF CREDITS: 2

Lecture: 2 Lab: 0 OJT: 0

Course Title:
Surgical Microbiology

Catalog Description:
Surgical Microbiology will enable you to recognize how you can prevent the spread of disease and promote wound healing. You will study the structure and function of microorganisms, pathogenic microorganisms and their diseases along with the methods of transmission. The concept of standard precautions will be explored. Various methods of sterilization and disinfection will be discussed. You will study the wound healing process and classifications in conjunction of the body's defenses against disease.

Prerequisites or Necessary Entry Skills/Knowledge:
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:

Topics to be Covered
Introduction to Microbiology
Cell Structure
Functions of Microorganisms
Process of Infections
Defense Mechanisms
Wound Healing

Student Learning Outcome
Discuss the historical background of microbiology and be able to identify basic equipment used to identify microorganisms.
Differentiate among various basic microorganisms based on characteristics such as cellular structures, life cycle, mode of transmission, and diseases caused by those microorganisms.
Describe the conditions that affect the life and death of microorganisms.
Discuss the relationship between humans and pathogenic and non-pathogenic bacteria.
Identify and describe how tissues react and are restored to normal function following trauma.
Demonstrate knowledge of the stages of wound healing, complications of wound healing, and classification of wounds.

Is this course part of a transfer pathway: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

*If yes, please list the competencies below

Revised Date: 1/24/2022