

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 students to prevent the spread of disease and promote wound healing. Students 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. The student will study wound healing process in conjunction with the body's defense 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, types, and functions of microorganisms
Microscopes-staining, media, and nomenclature
Common causative agents
Immunology
Process of infection
Wound healing process

Student Learning Outcome
Discuss the impact of microbiology concerning the correlation of the practice of sterile technique and infection control in the OR.
Identify the name and function of various parts of the compound microscope.
Compare and contrast the structure and characteristics of different microorganisms
Analyze the various immune responses that occur in the body as defenses against invasion by pathogens.
Describe the infectious process as it relates to the surgical practice
Discuss the historical background of microbiology.

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: 4/19/2024