

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. SURG

COURSE NUMBER: 1120

NUMBER OF CREDITS: 2

Lecture: 2 Lab: 0 OJT: 0

### Course Title:

Surgical Pharmacology

### Catalog Description:

Surgical Pharmacology will enable students to assist in the preparation of medications used in the operating room. The student will distinguish the different uses, routes of administration, side effects, and supplies/equipment needed in the administration of these medication. The metric and apothecary systems of measure will be studied. Students will convert standard time to military time, do temperature conversions, and learn how to prepare a solution. Emphasis will be placed on the legal and safety aspects of drug administration.

### Prerequisites or Necessary Entry Skills/Knowledge:

SURG 1110 and SURG 1130

### 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

Pharmacology-terminology, concepts, classifications, forms, actions & effects, and routes

Anesthesia, types, equipment and device types

Preoperative and perioperative medications

General Anesthesia, complication and interventions of anesthesia

Local Anesthesia

Medication measurement, handling, label information, and preparations

<b>Student Learning Outcome</b>
Analyze the principles of anesthesia administration.
Explain the necessity of each component of anesthesia preparation of the surgical patient.
Compare and contrast methods, agents, and techniques of anesthesia administration and preparation.
Correlate anesthesia monitoring devices with patient homeostasis.
Explain anesthesia complications and interventions.
Calculate medication conversions and dosages.
Apply general terminology to medication use.
Demonstrate the safe use of medication and solution handling in a surgical environment

<b>Is this course part of a transfer pathway: Yes</b> <input type="checkbox"/> <b>No</b> <input checked="" type="checkbox"/>
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*\*If yes, please list the competencies below*

Revised Date: 4/19/2024