

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. NURS

COURSE NUMBER: 2255

NUMBER OF CREDITS: 2

Lecture: 2 Lab: 0 OJT 0

### Course Title:

Pharmacology: A Pathophysiologic Approach II

### Catalog Description:

Pharmacology A Pathophysiologic Approach II provides an opportunity to synthesize pharmacologically, basic pathophysiologic, and nursing concepts to minimize the risk of harm to patients. Promotes use of current information to prevent error and support decision-making pertaining to the nervous, urinary, integumentary, endocrine, and gastrointestinal systems. Calculation of medication dosages for liquid injections, IV drip rates, IV calculations and dosage problems for infants and children will be addressed.

### Prerequisites or Necessary Entry Skills/Knowledge:

Admission to the Associate in Science nursing program and NURS 2130.

### 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

Classification of medications

Therapeutic effects, side effects, and adverse effects of medications correlated with patient safety issues.

Dosage calculation for safe medication management: liquid injections, IV drip rates, IV calculations and Dosage problems for infants and children.

Pathophysiology is related to the nervous, urinary, integumentary, endocrine, and gastrointestinal systems as it correlates with pharmacologic therapy.

### Student Learning Outcomes

Integrating conceptions of evidence-based practice as they relate to pharmacologic interventions for patient care (QSEN: patient-centered care and Evidence-Based Practice)

Identify and examine classifications of medications utilized to manage common disorders. (NLN: Nursing Judgement).

Explain knowledge of pathophysiology with principles of pharmacology to facilitate patient safety. (QSEN: Safety).

Assess the therapeutic effects, side effects, and adverse effects of classes of medications from a pathophysiologic perspective. (QSEN: Safety).

Implement patient-centered care interventions to facilitate safety related to pharmacologic therapy. (NLN: Nursing Judgment).

Distinguish priority assessments and interventions that demonstrate clinical judgment and facilitate pharmacologic safety. (QSEN: Safety/NLN: Nursing Judgment).

Demonstrates IV and pediatric mathematical calculation with minimal risk for pharmacologic dosage safety through individual performance (QSEN: Safety).

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

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

Revised Date: 1/4/2023