# Lassen Community College Course Outline

## NURS 1 - Pharmacology

# 3 Units

# I. Catalog Description

This course is an introduction to the principles of pharmacology, medication administration, and computation of medication dosage. It includes the study of major drug categories in all routes. This is a web-enhanced course; computer and internet access are required. Students must complete all course hours and assignments as required. Must pass dosage calculation test with 100%. Students must receive 75% on their final as well as in the course to remain in the nursing program. NURS 1 is offered as a concurrent course with NURS 2, NURS 3, and NURS 4 during the first semester of the program. A course grade of D or below will result in failure in all concurrent courses. Students must be accepted into the Lassen Community College Registered Nursing Program.

#### Diversity statement

Our commitment to diversity requires that we strive to eliminate barriers to equity and that we act deliberately to create a safe and inclusive environment where individual and group differences are valued and leveraged for the growth and understanding as an educational community.

#### Prerequisites:

Prerequisite(s): Microbiology with all Lab (BIOL 20), Human Anatomy with a Lab (BIOL 21), Human Physiology with a Lab (BIOL 22), College Composition (ENGL 1), Elementary Statistics (MATH 40), all completed with a grade of C or better.

Corequisite(s): Medical Surgical 1 (NURS 2), Clinical Practice I (NURS 3), Nursing Lab I (NURS 4)

Transfer Status: CSU 51 Hours lecture, 102 Hours out-of-class: 153 Total Hours of Student Learning Scheduled: Fall

# II. Coding Information

Repeatability: Non-repeatable Grading Option: Graded Credit Type: Credit - Degree Applicable/Credit TOP Code: 1230.10

# III. Course Objectives

#### A. Course Student Learning Outcomes

Upon completion of this course the student will be able to:

- 1. Identify basic pharmacological principles and mechanism of action for all classification of drugs.
- 2. Explain pharmacological principles in a clear, concise, and organized fashion both oral and written.
- 3. Analyze the therapeutic effects, benefits, adverse reactions, toxicities, and drug

interactions.

### **B.** Course Objectives

Upon completion of this course the student will be able to:

- 1. Analyzes pharmacological concepts and mechanisms of common conditions to guide clinical decision making.
- 2. Distinguish between relevant and irrelevant assessment findings to minimize pathologies and manage pharmacotherapeutics to promote optimal patient outcomes.
- 3. Identify holistic treatment options by tracing human response to disease processes across the lifespan.
- 4. Distinguish drug categories and safe medication administration.

# IV. Course Content

## A. Outline of Topics

- 1. Introduction to Nursing Pharmacology
- 2. Chemotherapeutic Agents
- 3. Drugs Acting on the Immune System
- 4. Drugs Acting on the Central and Peripheral Nervous System
- 5. Drugs Acting on the Autonomic Nervous System
- 6. Drugs Acting on the Endocrine System
- 7. Drugs Acting on the Reproductive System
- 8. Drugs Acting on the Cardiovascular System
- 9. Drugs Acting on the Renal System
- 10. Drugs Acting on the Respiratory System
- 11. Drugs Acting on Gastrointestinal System
- 12. Understand parenteral agents, topical agents, ophthalmic agents, vitamins, alternative and complementary therapies.
- 13. Intravenous Fluids and Medication
- 14. Pharmacological calculations

# V. Assignments

## A. Appropriate Readings

- Nursing Journals
- Case Study
- Instructor Handouts

#### **B.** Writing Assignments

- Handwritten drug cards
- Written essay

## C. Expected Outside Assignments

- Mastery level of 4 on the CoursePoint
- Students will be required to complete two hours of outside-of-class homework for each hour of lecture.

#### Specific Assignments that Demonstrate Critical Thinking

• Handwritten drug cards

- Case Study
- Mastery level of 4 on the CoursePoint
- Medication Calculations

## VI. Methods of Evaluation

- Participation
- Written essay
- Handwritten drug cards
- Mastery level 4 on the CoursePoint
- Dosage Calculation Test scoring 100%
- Midterm
- Final with a grade of 75% or above

### VII. Methods of Delivery

Check those delivery methods for which this course has been separately approved by the Curriculum/Academic Standards Committee.

Х	Traditional Classroom Delivery	Correspondence Delivery
	Hybrid Delivery	Online Delivery

#### **Traditional Classroom Delivery**

Lecture, discussion, audio/visual aids, demonstration, group exercises, guest speakers, lab, individualized programs and other as needed.

## VIII. Representative Texts and Supplies

#### <u>Required</u>

Craig, G. P. (2020). *Clinical calculations made easy* (7<sup>th</sup> ed.). Wolters Kluwer. ISBN: 9781975103736

- Access to CoursePoint is required

Karch, A. M. (2020). Focus on nursing pharmacology (8<sup>th</sup> ed.). Wolters Kluwer. ISBN: 978-1-9751-0096-4

- Access to CoursePoint is required

Vallerand, A.H., & Sanoski, C.A. (2023). *Davis's drug guide for nurses* (18<sup>th</sup> ed.). F.A. Davis. ISBN: 978-1719646406

Five hundred 3x5 white blank non-lined index cards

Index card box (to organize drug cards)

#### Recommended

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7<sup>th</sup> ed.). American Psychological Association. ISBN: 978-1-4338-3215-4

# IX. Discipline/s Assignment

Nursing

# X. Course Status

Current Status: Active Original Approval Date: 10/04/2022 Course Originator: Board Approval Date: 11/08/2022 Chancellor's Office Approval Date: 12/07/2022 Revised By: Heidi Gray, Christi Myers, Celeste Wiser Curriculum/Academic Standards Committee Revision Date: 10/3/2023