

Pharmacology

Course Design

2005-2006

Course Information

Organization

EASTERN ARIZONA COLLEGE

Division

Science & Allied Health

Course Number

HCE 219

Title

Pharmacology

Credits

3

Developed by

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Lecture/Lab Ratio

3hrs. lec. per week.

Transfer Status

ASU:	NAU:	UofA:
NUR Departmental Elective	NUR 190	Elective Credit
Note: ADN FROM AN ACCREDITED PROGRAM AND EVIDENCE OF RN LICENSURE SATISFIES 29 HOURS OF LOWER DIVISION NURSING COURSEWORK FOR ASU BSN DEGREE. EXAMINATIONS FOR UPPER DIVISION CREDIT ARE AN OPTION. CONTACT ASU AT (480)965-2987.		

Activity Course

No

CIP Code

51.0800

Assessment Mode

Pre-Post test (100 Questions, 200 Points)

Semester Taught

Fall and Spring Semesters

GE Category

None

Separate Lab

No

Awareness Course

No

Intensive Writing Course

No

Prerequisites

CHM 138 or combination of HCE 115 and HCE 156

Educational Value

TO GENERAL EDUCATION: Apply concepts learned in GE.

TO MAJOR / PROGRAM: This is a required course for AAS Nursing

TO OTHER COURSES OR CURRICULA: Interrelated with other nursing courses.

Goals

- 1 Students will demonstrate understanding of pharmacology.
- 2 Students will apply the knowledge of pharmacologic basis to nursing practice.

Description

The study of the interaction of chemicals with living organisms to produce biologic effects. The emphasis is on the general principles of drug action that form the basis for understanding the actions of specific drugs. This course introduces the pharmacologic basis of clinical practice. Identical to NUR 219.

Textbooks

Lilley, L.L., Harrington, S., & Snyder, J.S. (2004). *Lilley: Pharmacology and the Nursing Process*. Edition: 4th. Publisher: Mosby. Required

A current (within the last two years) drug book such as Mosby's or Davis's.. Required

McGuiston, L E. & Gutierrez, K. J. (2002). *Real-World Nursing Survival Guide: Pharmacology*. Publisher: W. B. Saunders. Not Required

Zerwich, J., Claborn, J. C., Gaglione, T., & Miller, C. J. (2004) Mosby's Pharmacology Note Cards. Publisher: Elsevier/Mosby. Not required. 0-323-03191-9

Albanese, J. & Nutz, P. (2006). Mosby's 2007 Nursing Drug Cards. Publisher: Elsevier/Mosby. Not required. 0-323-03655-4

Supplies

Index cards, markers, highlighters, and notebooks

Competencies and Performance Standards

1. **Examine the basics of pharmacology for nursing.**

Learning objectives

What you will learn as you master the competency:

- a. Review the nursing process and drug therapy.
- b. Compare and contrast pharmacological principles including pharmaceutics, pharmacokinetics, pharmacodynamics, pharmacotherapeutics, pharmacognosy, and

- toxicology.
- c. Explain the implications of life span considerations.
- d. Summarize legal, ethical, and cultural considerations.
- e. Discuss the prevention and response to medication errors.
- f. Describe patient education in relation to drug therapy.
- g. Recognize the impact of over-the-counter drugs and herbal products.
- h. Identify commonly abused substances.
- i. Review the basics of drug administration.

Performance Standards

Competence will be demonstrated:

- o in completion of class assignments and activities.

Performance will be satisfactory when:

- o learner participates in class discussions and activities.
- o learner provides acceptable verbal responses to questions about principles of drug action.

2. Understand drugs affecting the central nervous system.

Learning objectives

What you will learn as you master the competency:

- a. Examine use of analgesic agents and the nursing process.
- b. Examine use of general and local anesthetics and the nursing process.
- c. Examine use of CNS depressants and muscle relaxants and the nursing process.
- d. Examine antiepileptics agents and the nursing process.
- e. Examine antiparkinsonian agents and the nursing process.
- f. Examine psychotherapeutic agents and the nursing process.
- g. Examine CNS stimulant agents and the nursing process.

Performance Standards

Competence will be demonstrated:

- o in the completion of the assignments.
- o in analyzing a case study and answer questions correctly.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class discussions and activities.

3. Understand drugs affecting the autonomic nervous system.

Learning objectives

What you will learn as you master the competency:

- a. Examine adrenergic agents and the nursing process.
- b. Examine adrenergic-blocking agents and the nursing process.

- c. Examine cholinergic agents and the nursing process.
- d. Examine cholinergic-blocking agents and the nursing process.

Performance Standards

Competence will be demonstrated:

- o in completion of class assignments.
- o in analyzing a case study and answer questions correctly.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class activities.

4. Understand drugs affecting the cardiovascular and renal systems.

Learning objectives

What you will learn as you master the competency:

- a. Examine positive inotropic agents and the nursing process.
- b. Examine antidysrhythmic agents and the nursing process.
- c. Examine antianginal agents and the nursing process.
- d. Examine antihypertensive agents and the nursing process.
- e. Examine diuretic agents and the nursing process.
- f. Review the physiology of fluid and electrolyte balance and the nursing process.
- g. Examine coagulation modifying agents and the nursing process.
- h. Examine antilipemic agents and the nursing process.

Performance Standards

Competence will be demonstrated:

- o in analyzing a case study and answer questions correctly.
- o in completion of class assignments.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class activities.

5. Understand drugs affecting the endocrine system.

Learning objectives

What you will learn as you master the competency:

- a. Examine pituitary agents and the nursing process.
- b. Examine thyroid and antithyroid agents and the nursing process.
- c. Examine antidiabetic agents and the nursing process.
- d. Examine adrenal agents and the nursing process.
- e. Examine women's health agents and the nursing process.
- f. Examine men's health agents and the nursing process.

Performance Standards

Competence will be demonstrated:

- o in analyzing a case study and answer questions correctly.
- o in completion of class assignments.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class discussions and activities.

6. Understand drugs affecting the respiratory system.

Learning objectives

What you will learn as you master the competency:

- a. Examine antihistamines, decongestants, antitussives, and expectorants and the nursing process.
- b. Examine bronchodilators and other respiratory agents and the nursing process.

Performance Standards

Competence will be demonstrated:

- o in analyzing a case study and answer questions correctly.
- o in completion of class assignments.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class discussions and activities.

7. Understand antiinfective and anti-inflammatory agents.

Learning objectives

What you will learn as you master the competency:

- a. Examine antibiotics and the nursing process.
- b. Examine antivirals and the nursing process.
- c. Examine antitubercular agents and the nursing process.
- d. Examine antimalarial, antiprotozoal, and anthelmintic agents and the nursing process.
- e. Examine antiseptic and disinfectant agents and the nursing process.
- f. Examine anti-inflammatory, antirheumatoid, and related agents and the nursing process.

Performance Standards

Competence will be demonstrated:

- o in completion of class assignments.
- o in analyzing a case study and answer questions correctly.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class discussions and activities.

8. Understand immune and biologic modifiers and chemotherapeutic agents.

Learning objectives

What you will learn as you master the competency:

- a. Examine immunosuppressant agents and the nursing process.
- b. Examine immunizing agents and the nursing process.
- c. Examine antineoplastic agents and the nursing process.
- d. Examine immunomodulating agents and the nursing process.
- e. Introduce gene therapy and pharmacogenomics.

Performance Standards

Competence will be demonstrated:

- o in analyzing a case study and answer questions correctly.
- o in completion of class assignments.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class discussions and activities.

9. Understand drugs affecting the gastrointestinal system and nutrition.

Learning objectives

What you will learn as you master the competency:

- a. Examine acid-controlling agents and the nursing process.
- b. Examine antidiarrheals and laxatives and the nursing process.
- c. Examine antiemetic and antinausea agents and the nursing process.
- d. Examine vitamins and minerals and the nursing process.
- e. Examine nutritional supplements and the nursing process.

Performance Standards

Competence will be demonstrated:

- o in completion of class assignments.
- o in analyzing a case study and answer questions correctly.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class discussions and activities.

10. Understand miscellaneous therapeutics: hematologic, dermatologic, ophthalmic, and otic agents.

Learning objectives

What you will learn as you master the competency:

- a. Examine blood-forming agents and the nursing process.
- b. List antiarthritic agents.
- c. Describe antigout agents.

- d. Describe immunomodulating agents.
- e. Identify antihistamines.

Performance Standards

Competence will be demonstrated:

- o in the completion of the assignments.
- o in analyzing a case study and answer questions correctly.
- o in completion of tests.

Performance will be satisfactory when:

- o learner participates in class discussions and activities.

11. Recognize the drugs affecting endocrine system

Learning objectives

What you will learn as you master the competency:

- a. Describe anterior pituitary hormones.
- b. List posterior pituitary hormones.
- c. Describe and give examples of sex hormones.
- d. Describe and give examples of adrenal hormones.
- e. Describe and give examples of thyroid hormones.
- f. Describe and list pancreatic hormones.

Performance Standards

Competence will be demonstrated:

- o in the completion of the assignments.
- o in analyzing a case study and answer questions correctly.
- o in completion of tests.

Criteria - Performance will be satisfactory when:

- o learner participates in class discussions and activities.

Types of Instruction

Classroom Presentation & Demonstration

Grading Information

Grading Rationale

Methods of Evaluation:

- a. Quizzes and/or written assignments totaling 200 points for the lecture portion of the class will be given.
- b. A pre-test, four written examinations, a mid-term and a final written examination/post-test will be given.
- c. Class is graded on a total point scale. The pre-test does not count. Each exam is worth 100 points, the quizzes and/or written assignments are worth 200, midterm and final exam/post-test are worth 200 each,

the total point value would be 1,000 points. The final is worth 20% of the final grade.

Assignments:

There will be four quizzes worth 25 points each, and 10 assignments of 10 points each for a total of 200 points.

Grading Scale

- A 90 -100% of total point value (900-1000 points)
- B 80-89.99% of total point value (800-899 points)
- C 70-79.99% of total point value (700-799 points)
- F 0 = 69.99% of total point value (0 - 699 points) unacceptable to pass