

UNIVERSITY OF MARYLAND  
SCHOOL OF NURSING

**COURSE TITLE:** NURS 637 Geriatric Pharmacotherapy

**CREDITS:** 3 (Spring only)

**FACULTY:** Patricia Grunwald, PharmD.

**Faculty Coordinator:** Barbara Resnick, PhD, CRNP  
Tel: 410-706-5178  
Beeper: 410-909-7137

**COURSE DESCRIPTION:**

This course is designed to provide advanced knowledge of commonly prescribed pharmacologic agents in the care of older adults for graduate students preparing for the advanced practice roles in gerontological nursing. Rational for the use of appropriate, safe, and effective pharmacologic agents in the treatment of selected health problems in aging will be presented. Clinical considerations in the selection, initiation, maintenance, and discontinuation of drug treatment will be examine especially as it relates to the older adult. Legal implications of pharmacotherapy will also be reviewed.

**CO-REQUISITE:**

This course must be taken concurrently with NURS 636 for all students in the GNP program and follows the content areas presented in that course.

**PRE-REQUISITES:** NURS 634

**COURSE OBJECTIVES:**

1. Related the pathophysiologic alterations to the rationale for utilization of specific pharmacologic agents in the management of common health problems in older adults.
2. Describe the characteristics of selected pharmacologic agents which include: therapeutic effects, adverse reactions, drug interactions, toxic effects, contraindications, dosages and dosage forms, and clinically relevant pharmacokinetic considerations which may affect nursing care.
3. Identify factors important in the selection, initiation, maintenance or discontinuation of appropriate, safe, and effective pharmacologic agents.
4. Describe the impact of the legal system on the administration of pharmacologic agents by advanced practice nurses.
5. Utilize clinical data from a patient case to discuss the impact

of pharmacologic agents on the course of illness and nursing interventions.

**COURSE REQUIREMENTS:**

1. Preparation for class by reading assigned chapters/articles.
2. Utilization of pharmacotherapy knowledge gained from undergraduate pharmacology courses and years of administration of drugs.

**EVALUATION:**

1. Class participation related to topics and case studies 10%
2. Drug information question: Each student will identify a drug information question to research and write a 3-5 page double spaced typed summary of the question with a literature search and references included. For example, questions should focus on:
  - a) the pharmacologic management of a particular disease;
  - b) idiosyncratic response to a drug; or
  - c) advantages and disadvantages to a particular drug treatment for a given diagnosis (treatment of osteoporosis with Fosamax; treatment of CHF with digoxin; treatment of DJD with NSAIDS). 30%
3. Midterm 30%
4. Final 30%

**TEXTBOOKS:**

DiPiro, J.T. et al (1996). Pharmacotherapy: A Pathophysiological Approach. (3rd Ed). Norwalk: Appleton & Lange.

## Topical Class Schedule

- Week 1  
Jan 29 Pharmacokinetic and pharmacodynamic changes in the elderly. Patterns of drug use in the elderly.
- Week 2  
Feb 5 Respiratory - bronchodilators, inhalers, antiTB agents, antihistamines, decongestants, expectorants
- Week 3  
Feb 12 Cardiac - antihypertensives, diuretics
- Week 4  
Feb 19 Cardiac - antiarrhythmics, cardiac glycosides, anticoagulants, coronary vasodilators
- Week 5  
Feb 26 GI - antacids, histamine antagonists, laxatives, antispasmodics, antidiarrheals
- Week 6  
March 5 Analgesics - pain management, antiinflammatory agents, narcotics, muscle relaxants
- Week 7  
March 12 Midterm
- Week 8  
March 19 Hem & Neuro - iron, folate, B12; anticonvulsants, anti-parkinsonism agents; glaucoma agents
- Week 9  
March 26 SPRING BREAK
- Week 10  
April 2 \*PAPERS DUE\*  
Antibiotics; Hormones-estrogen, testosterone, steroids
- Week 11  
April 9 Patient compliance and prescribing patterns; immunizations
- Week 12  
April 16 Psychoactive drugs - antidepressants, antianxiety, hypnotics, sedatives
- Week 13  
April 23 Endocrine - insulin, hypoglycemic agents, thyroid
- Week 14  
April 30 Final Exam
- Week 15  
May 7 Legal implications of geropharmacotherapy