

**ODESSA COLLEGE ASSOCIATE DEGREE NURSING PROGRAM**  
**SYLLABUS RNSG 1201 (Web Based)**  
**SUMMER I - 2011**

**COURSE TITLE:** PHARMACOLOGY

**CREDIT:** TWO HOURS

**PLACEMENT:** FIRST SEMESTER OF NURSING PROGRAM; MAY BE TAKEN PRIOR TO PROGRAM ADMISSION

**PREREQUISITES:** BIOL 2401 OR CONSENT OF DEPARTMENT

**COREQUISITES:** BIOL 2402 OR PROGRAM ADMISSION WITH RNSG 1215, RNSG 1105, RNSG 1309, RNSG 1341, RNSG 1160, AND RNSG 1260

**LICENSING/CERTIFICATION BOARD:** TEXAS BOARD OF NURSING (BON)

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**COURSE DESCRIPTION:** Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. (SCANS 1, 2, 3, 4, 6, 9)

**LEARNING OUTCOMES:** Identify the roles and responsibilities of the nurse in administering pharmacological agents; and utilize knowledge of pharmacology needed to demonstrate safe administration of medications.

**COURSE OBJECTIVES:** Course Objectives utilize the framework of Differentiated Entry Level Competencies of Graduates of Texas Nursing Programs. At the completion of the course, the student should be able to: (PO=Corresponding Program Objective)

**As Provider of Care:**

1. Define terms, concepts, and basic processes associated with drug therapy. (PO 1, 3)
2. Recognize health data of clients as it applies to drug administration and evaluation of side effects and actions.(PO 1, 3, 7)
3. Describe the pathophysiology of selected conditions for which pharmacotherapy is commonly used.(PO 1, 2, 3)
4. Identify client-related and drug-related factors that influence drug effects. (PO 1, 7)
5. Discuss principles of therapy with major drug groups in relation to drug selection, dosage, route, and use in special populations (e.g., children, older adults, clients with impaired renal or hepatic function) (PO 1, 2)
6. Describe the professional attributes of nursing care for clients receiving drug therapy. (PO 3)

**As Coordinator of Care:**

7. Recognize the interdisciplinary relationships between the nurse and other members of the health care team related to planning and delivery of drug therapy. (PO 9)

**As Member of a Profession:**

8. State the legal parameters of professional nursing practice involving pharmacotherapeutics, including those specified in the Nursing Practice Act. (PO 3, 12)

**TEACHING/LEARNING METHODS:** Facilitated discussion boards; power points.

**EVALUATION AND GRADING:** The grading policy for the Associate Degree Nursing Program is followed. No assignments or tests are optional. Components of student evaluation include the following:

Unit Exams (4)	15% each	60%
Comprehensive Final Exam		40%
<b>TOTAL</b>		<b>100%</b>

There will be four unit exams consisting of approximately 50 questions each. Each exam will cover several chapters. The comprehensive final exam consists of *approximately* 100 questions. Questions may be multiple-choice, matching, fill in the blank or true/false. *A missed exam must be made up within the scheduled week \*\*See Course Policies: Make-up exams.* There will be no review done after a unit test, until all students in the course have taken the test and no review of the final exam. You must notify the instructor if and when you are unable to take a test BEFORE the test date.

**Grading: The minimum passing grade is a 75. Grades will not be rounded up to passing.** This means that a grade of 74.5, 74.6, 74.7, 74.8, & 74.9 will not be rounded up to 75.

**Academic Alerts:** Academic alerts are issued when a course grade falls below passing (to include all grades up to that point in the semester). Alerts will be reissued after each Unit Exam as long as the course grade remains below passing. ***It is the student's responsibility to contact the instructor for assistance.***

**Note to Students:** Check the syllabus and calendar often for important information. Use Unit Objectives and "Medications by Chapter" as your guide for reading and to obtain specific medication information you are required to learn. Important information is summarized in boxes or tables in the text and in the Power Points. "Review and Application Exercises" at the end of each chapter and the textbook Study Guide will help you review. (Although some chapters are skipped, I encourage you to look at them. You will need your book as a reference for future use in the RN program to help you learn about these drugs as you study the problems/systems. For example, chapters 14 and 15 cover Substance Abuse and CNS stimulants, which you will cover in Psychiatric Nursing. It would be wise to familiarize yourself with these.)

**Beneficial to your success on exams:** Summarizing each medication by chapter on 3x5 cards or on medication sheets provides you with a good tool for exams and future reference (see examples in "course documents"). Students are responsible for attaining all of the pertinent information required for this course. Remember, "online" does not mean self-paced so ***deadlines for reading assignments and exams are not optional.***

## **REQUIRED TEXTBOOKS:**

Abrams, A.C., Pennington, S. S., & Lammon, C. B. (2009). *Clinical drug therapy: Rationales for nursing practice*. 9<sup>th</sup> edition. Lippincott Williams & Wilkins: Philadelphia.

Deglin, J. & Vallerand, A. (2010). *Davis Drug Guide for Nurses* (12<sup>th</sup> Ed.). Davis: Philadelphia.

## **UNIT OBJECTIVES:**

### **Unit I**

#### Chapter 1     Introduction to Pharmacology

Objectives:

1. Differentiate between pharmacology and drug therapy.
2. Describe a prototypical drug.
3. Distinguish between generic and trade names of drugs.
4. Discuss major drug laws and standards and the role of the Food and Drug Administration.
5. Discuss the main categories of controlled substances in relation to therapeutic use and potential for abuse.
6. Identify nursing responsibilities in handling controlled substances correctly.
7. Discuss the potential impact of drug costs on drug therapy regimens.
8. Select Authoritative sources for drug information, and learn where to locate important drug information in each source.

#### Chapter 2     Basic Concepts and Processes

Objectives:

1. Review cellular physiology in relation to drug therapy.
2. Review the pathways and mechanisms by which drugs cross biologic membranes and move through the body.
3. Discuss each process of pharmacokinetics.
4. Discuss the clinical usefulness of measuring serum drug levels.
5. Review major characteristics of the receptor theory of drug action.
6. Discuss drug related and client related variables that affect drug actions.
7. Discuss the differences between agonist drugs and antagonist drugs.
8. Identify signs and symptoms that may occur with adverse drug effects on major body systems.
9. Discuss general management of drug overdose and toxicity; and selected antidotes.

### ***Skip Chapter 3***

#### Chapter 4     Nursing Process in Drug Therapy

Objectives:

1. Assess patients for conditions and factors that are likely to influence drug effects.
2. Identify nondrug interventions to prevent or decrease the need for drug therapy.
3. Discuss interventions to increase therapeutic effects and decrease adverse effects if drug therapy.
4. Discuss guidelines for rational choices of drugs, dosages, routes, and times of administration.
5. Describe how to evaluate clients for therapeutic and adverse responses to drug therapy.
6. Identify major considerations in drug therapy for children and older adults.

7. Discuss major considerations for clients with impaired renal or hepatic function, or critical illness.

#### Chapter 5 Physiology of the CNS

Objectives:

1. Describe the process of neurotransmission.
2. Describe the neurotransmitters, and their roles in nervous system functioning.
3. Discuss signs and symptoms of mild, moderate, and severe CNS depression.
4. Discuss general types and characteristics of CNS depressant drugs.

#### Chapter 6 Opioid Analgesics and Pain Management

Objectives:

1. Discuss major types and characteristics of pain and the nurse's role in assessing and managing the client's pain.
2. List characteristics of opioid analgesics in terms of mechanism of action, indications for use, and major adverse effects.
3. Describe why higher doses of opioid analgesics are needed when the drugs are given orally.
4. Contrast the use of opioid analgesics in opioid-naïve and opioid-tolerant patients.
5. Assess level of consciousness and respiratory status before and after administering opioids.
6. Describe signs and symptoms of opioid overdose and withdrawal and the treatment of each.
7. Describe characteristics and treatment of opioid toxicity.
8. Describe morphine as the prototype of opioid analgesics.
9. Teach clients about safe, effective use of opioid analgesics.
10. Differentiate between ceiling and non ceiling opioids.

#### Chapter 7 Analgesic, Antipyretic, Anti-Inflammatory, & Related Drugs

Objectives:

1. Discuss aspirin and other nonsteroidal anti-inflammatory drugs (NSAID's) in terms of mechanism of action, indications for use, contraindications, nursing process, and principles of therapy. Find anti-inflammatory drugs in your nursing drug handbook.
2. Discuss the role of prostaglandins in the etiology of pain, fever, and inflammation.
3. Compare and contrast aspirin, other NSAID's, and acetaminophen in terms of indications for use and adverse effects and related patient teaching.
4. Differentiate among antiplatelet, analgesic, and anti-inflammatory doses of aspirin.
5. Differentiate between nonselective NSAID's and cyclooxygenase-2 inhibitor celecoxib.
6. Discuss recognition and management of acetaminophen toxicity.
7. Identify factors influencing the use of aspirin, NSAIDs, and acetaminophen in special populations.
8. Discuss the use of NSAIDs, antiemetic drugs, triptans, and ergot antimigraine drugs.

#### Chapter 8 Antianxiety & Sedative-Hypnotic Drugs

Objectives:

1. Discuss characteristics, sources, and signs and symptoms of anxiety.
2. Discuss functions of sleep and consequences of sleep deprivation.

3. Describe nondrug interventions to decrease anxiety and insomnia.
4. Discuss client teaching of guidelines for reasonable, safe use of antianxiety and sedative-hypnotic drugs.
5. Discuss the use of flumazenil (Romaxicon) and other treatment measures for overdose of benzodiazepines.
6. List characteristics of benzodiazepines antianxiety and hypnotic drugs in terms of indication for use, mechanism of action, nursing process implications, and potential for abuse and dependence.
7. Describe strategies for preventing, recognizing, or treating benzodiazepine withdrawal reactions.
8. Contrast characteristics of selected nonbenzodiazepines and benzodiazepines.

#### Chapter 9 Antipsychotic Drugs

##### Objectives:

1. Discuss common manifestations of psychotic disorders, including schizophrenia.
2. Discuss characteristics of phenothiazines and related antipsychotics.
3. Describe the main elements of acute and long term treatment of psychotic disorders.
4. Compare characteristics of “atypical” antipsychotic drugs with those of “typical” phenothiazines and related antipsychotic drugs
5. State interventions to decrease adverse effects of antipsychotic drugs.
6. State interventions to promote compliance with outpatient use of antipsychotic drugs.

#### Chapter 10 Antidepressants and Mood Stabilizers

##### Objectives:

1. Describe major features of depression and bipolar disorder.
2. Discuss characteristics of antidepressants in terms of mechanism of action, indications for use, adverse effects, principles of therapy, and nursing process implications.
3. Compare and contrast selective serotonin reuptake inhibitors with tricyclic antidepressants.
4. Discuss selected characteristics of atypical antidepressants.
5. Describe the use of lithium in bipolar disorder.
6. Describe the nursing role in preventing, recognizing, and treating overdoses of antidepressant drugs and lithium.
7. Discuss important factors in using antidepressant drugs and lithium in special populations.
8. Identify the different categories of antidepressants: SSRIs, TCAs, SNRIs, MAOIs and other atypical antidepressants.

#### Chapter 11 Antiseizure Drugs

##### Objectives:

1. Identify types and potential causes of seizures.
2. Discuss major factors that influence choice of an antiseizure drug for a client with a seizure disorder.
3. Differentiate characteristics and effects of commonly used antiseizure drugs.
4. Differentiate between older and more recent antiseizure drugs.
5. Compare advantages and disadvantages of monotherapy vs. combination drug therapy for seizure disorders.

6. Apply the nursing process to patients receiving antiseizure drugs.
7. Describe strategies for prevention and treatment of status epilepticus.
8. Discuss the use of antiseizure drugs in special populations.

#### Chapter 12 Antiparkinson Drugs

Objectives:

1. Describe major characteristics of Parkinson's disease.
2. Differentiate the types of commonly used antiparkinson drugs.
3. Discuss therapeutic and adverse effects of dopaminergic and anticholinergic drugs.
4. Discuss the use of antiparkinson drugs in selected populations.
5. Apply the nursing process to patients experiencing parkinsonism

#### Chapter 13 Skeletal Muscle Relaxants

Objectives:

1. Discuss common symptoms and disorders for which skeletal muscle relaxants are used.
2. Differentiate uses and effects of selected skeletal muscle relaxants.
3. Describe nonpharmacologic interventions to relieve muscle spasm and spasticity.
4. Apply the nursing process with patients experiencing muscle spasm or spasticity.

### **UNIT I EXAM**

#### **Unit II**

#### Chapter 16 Physiology of the Autonomic Nervous System (ANS)

Objectives:

1. Identify physiologic effects and functions of the sympathetic nervous system.
2. Identify physiologic effects and functions of the parasympathetic nervous system.
3. Describe signal events that occur when receptors of the ANS are stimulated.
4. State names and general characteristics of drugs affecting the ANS.

#### Chapter 17 Adrenergic Drugs

Objectives:

1. Identify effects produced by stimulation of alpha- and beta-adrenergic receptors.
2. Discuss use of epinephrine to treat anaphylactic shock, acute bronchospams, and cardiac arrest.
3. Identify clients at risk for experiencing adverse effects with adrenergic drugs.
4. Discuss commonly used over-the-counter preparations containing adrenergic drugs.
5. Describe signs and symptoms of noncatecholamine adrenergic drug toxicity.
6. Discuss treatment of overdose with non-catecholamine adrenergic drugs.
7. Teach patient about the safe, effective use of adrenergic drugs.
8. Discuss principles of therapy and nursing process for using adrenergic drugs in special populations.

#### Chapter 18 Antiadrenergic Drugs

Objectives:

1. List characteristics of antiadrenergic drugs in terms of effects on body tissues, indications of use, nursing process implications, principles of therapy, and observation of client response.

2. Compare and contrast beta-adrenergic blocking drugs in terms of cardioselectivity, indications for use, and adverse effects.
3. Discuss client education regarding safe, effective use of antiadrenergic drugs.
4. Discuss principles of therapy and nursing process for using antiadrenergic drugs in special populations.

#### Chapter 19 Cholinergic Drugs

##### Objectives:

1. Describe effects and indication for use of cholinergic drugs.
2. Describe major nursing care for clients receiving cholinergic drugs.
3. Describe signs, symptoms, and treatment of overdose with cholinergic drugs.
4. Discuss atropine and pralidoxime as antidotes for cholinergic drugs.
5. Discuss drug therapy for myasthenia gravis.
6. Discuss the use of cholinergic drugs for paralytic ileus and urinary retention.
7. Discuss drug therapy for Alzheimer's Dementia.
8. Discuss principles of therapy for using cholinergic drugs in special populations.
9. Teach patients about safe, effective use of cholinergic drugs.

#### Chapter 20 Anticholinergic Drugs

##### Objectives:

1. List characteristics of anticholinergic drugs in terms of effects on body tissues, indications for use, nursing process implications, and observation of client response.
2. Explain uses, indications, and precautions for Atropine as the prototype of anticholinergic drugs. Locate Atropine in your drug handbook.
3. Describe signs and symptoms of atropine or anticholinergic drug overdose and its treatment.
4. Discuss clinical disorders in which anticholinergic drugs are used.
5. Describe the mechanism by which atropine relieves bradycardia.
6. Discuss principles of therapy and nursing process for using anticholinergic drugs in special populations.
7. Teach patients about the safe, effective use of anticholinergic drugs.

#### ***Skip Chapters 21 & 22***

#### Chapter 23 Corticosteroids

##### Objectives:

1. Review the physiologic effects of endogenous corticosteroids
2. Discuss clinical indications for use of exogenous corticosteroids.
3. Differentiate between physiologic and pharmacologic doses of corticosteroids.
4. Differentiate between short-term and long-term corticosteroid therapy.
5. State the rationale for giving corticosteroids topically when possible rather than systemically.
6. Recognize at least 10 adverse effects of long term corticosteroid therapy.
7. Analyze the use other drugs and interventions to decrease the need for corticosteroids.
8. Discuss the use of corticosteroids in selected populations and conditions.
9. Apply the nursing process with a patient receiving long term systemic corticosteroid therapy, including teaching needs.

#### Chapter 24 Thyroid and Antithyroid Drugs

Objectives:

1. Discuss physiologic effects of thyroid hormone.
2. Identify subclinical, symptomatic, and severe effects of inadequate or excessive thyroid hormone.
3. Describe characteristics, uses, and effects of thyroid drugs.
4. Describe characteristics, uses, and effects of antithyroid drugs.
5. Discuss the influence of thyroid and antithyroid drugs on the metabolism of other drugs.
6. Describe client teaching of self-care activities related to the use of thyroid and antithyroid drugs.
7. Apply the nursing process with patients receiving thyroid and antithyroid drugs.

#### Chapter 25 Hormones That Regulate Calcium & Bone Metabolism

Objectives:

1. Describe the roles of parathyroid hormone, calcitonin, and vitamin D in regulating calcium metabolism.
2. Identify individuals at risk for hypocalcemia.
3. Discuss the prevention and treatment of hypocalcemia and osteoporosis.
4. Identify individuals at risk for hypercalcemia.
5. Outline appropriate management strategies of hypercalcemia as a medical emergency.
6. Evaluate the use of calcium and vitamin D supplements, calcitonin, and bisphosphonate drugs in the treatment of osteoporosis.

#### Chapter 26 Antidiabetic Drugs

Objectives:

1. Describe the major effects of endogenous insulin on body tissues.
2. Discuss insulin and insulin analogs in terms of characteristics and uses.
3. Discuss the relationship among diet, exercise, and drug therapy in controlling diabetes.
4. Discuss different types of oral antidiabetic agents in terms of mechanisms of action, indications for use, adverse effects, and nursing process implications.
5. Discuss the benefits of maintaining glycemic control in preventing complications of diabetes.
6. State reasons for combining insulin with oral agents or combining different types of oral agents.

### **UNIT II EXAM**

#### ***Skip Chapters 27 & 28***

#### **Unit III**

#### Chapter 29 General Characteristics of Antimicrobial Drugs

Objectives:

1. Identify populations who have an increased risk for infection.
2. Discuss common pathogens and methods of infection control.
3. Discuss assessment of clients for local and systemic signs of infection.
4. Discuss common and potentially serious adverse effects of antimicrobial drugs.
5. Identify clients at increased risk for adverse reactions to antimicrobial drugs.
6. Discuss guidelines for safe and accurate administration of antibiotics.

7. Discuss important elements of using antimicrobial drugs in special populations.

### Chapter 30 Beta-Lactam Antibacterials: Penicillins, Cephalosporins, and Other Drugs

#### Objectives:

1. Describe general characteristics of beta-lactam antibacterials.
2. Question patients about allergies before giving antibiotics.
3. State the rationale of combining penicillin with a beta-lactamase inhibitor drug.
4. Discuss similarities and differences between Cephalosporins and penicillins.
5. Discuss Cephalosporins in relation to antibacterial spectrum, indications for use and adverse effects.
6. Describe major characteristics of carbapenem and monobactam drugs.
7. Apply principles of beta-lactam antibacterial therapy.

### Chapter 31 Aminoglycosides and Fluoroquinolones

#### Objectives:

1. Discuss the aminoglycosides and fluoroquinolones drug groups including a basic description, indications, and contraindications for use.
2. Discuss the importance of measuring serum drug levels during aminoglycoside therapy.
3. Describe measures to decrease nephrotoxicity and ototoxicity with aminoglycosides.
4. Discuss principles of using aminoglycosides and fluoroquinolones in renal impairment and critical illness.

### Chapter 32 Tetracyclines, Sulfonamides, and Urinary Agents

#### Objectives:

1. Discuss major characteristics and clinical uses of tetracyclines.
2. Recognize doxycycline as the drug of choice for renal impairment.
3. Discuss characteristics, clinical uses, adverse effects, and nursing implications of selected sulfonamides.
4. Describe the use of urinary antiseptics in the treatment of urinary tract infections.
5. Teach patients strategies for preventing, recognizing, and treating urinary tract infections.

### Chapter 33 Macrolides, Ketolides, and Miscellaneous Antibacterials

#### Objectives:

1. Discuss the drug groups Macrolides, Ketolides, and Miscellaneous Antibacterials including a basic description, indications, and contraindications for use.
- 2.

### Chapter 34 Drugs for Tuberculosis and *Mycobacterium avium* Complex Disease

#### Objectives:

1. Describe characteristics of latent, active, and drug-resistant tuberculosis infections.
2. List characteristics, uses, effects, and nursing implications of using primary antitubercular drugs.
3. Identify populations at high risk for developing TB.

### Chapter 35 Antiviral Drugs

#### Objectives:

1. Describe characteristics of viruses and common viral infections.

2. Discuss the principles of therapy for antiviral drugs (include indications & adverse effects), and identify at least two commonly used antiviral drugs.
- 3.

#### Chapter 36 Antifungal Drugs

Objectives:

1. Describe characteristics of fungi and fungal infections.
2. Discuss antibacterial drug therapy and immunosuppression as risk factors for development of fungal infections.
3. Describe commonly used antifungal drugs in terms of indications for use, adverse effects, and nursing process.
4. Differentiate between adverse effects associated with systemic and topical antifungal drugs.
5. Teach patients about prevention and treatment of fungal infections.

#### ***Skip Chapters 37 through 42***

#### Chapter 43 Physiology of the Respiratory System

Objectives:

1. Review roles and functions of the main respiratory tract structures in oxygenation of body tissues.
2. Describe the role of carbon dioxide in respiration.
3. List common signs and symptoms associated with respiratory function.
4. Identify general categories of drugs used to treat respiratory disorders.

#### Chapter 44 Drugs for Asthma and Other Bronchoconstrictive Disorders

Objectives:

1. Describe the main pathophysiologic characteristics of bronchoconstrictive disorders.
2. Discuss the uses and effects of bronchodilating and anti-inflammatory drugs.
3. Explain the nursing process in relation to these drugs.
4. Discuss the principles of therapy for these drugs.
5. Differentiate between “quick relief” and long-term control of asthma symptoms.
6. Discuss the use of antiasthmatic drugs in special populations.
7. Teach patients self-care and long-term control measures.

#### Chapter 45 Antihistamines and Allergic Disorders

Objectives:

1. Differentiate effects of histamine on selected body tissues.
2. Identify histamine receptors.
3. Describe types of hypersensitivity or allergic reactions.
4. Discuss allergic rhinitis, allergic contact dermatitis, and drug allergies as conditions for which antihistamines are commonly used.
5. Identify the effects of histamine that are blocked by histamine (H1) receptor antagonist drugs.
6. Differentiate first- and second-generation antihistamines.
7. Describe antihistamines in terms of indications for use, adverse effects, and nursing process implications.

#### Chapter 46 Nasal Decongestants, Antitussives, and Cold Remedies

Objectives:

1. Discuss common respiratory disorders and their symptoms.
2. Review decongestants and adverse effects of adrenergic drugs.
3. Describe general characteristics and effects of antitussive agents.
4. Discuss the advantages and disadvantages of using combination products to treat the common cold.
5. Evaluate over-the counter allergy, cold, cough and sinus remedies for personal or patient use.
6. Use the nursing process in the care of individuals with the common cold.

### **UNIT III EXAM**

#### **Unit IV**

##### Chapter 47 Physiology of the Cardiovascular System

Objectives:

1. Review the functions of the heart, blood vessels, and blood in supplying oxygen and nutrients to body tissue.
2. Describe the role of vascular endothelium in maintaining homeostasis.
3. Discuss atherosclerosis and the basic disorder causing many cardiovascular disorders for which drug therapy is required.
4. List cardiovascular disorders for which drug therapy is a major treatment modality.

##### Chapter 48 Drug Therapy for Heart Failure

Objectives:

1. Describe the major manifestations and causes of heart failure (HF).
2. Differentiate the types of drugs used to treat HF.
3. List characteristics of Digoxin in terms of effects on myocardial contractility and cardiac conduction, indications for use, principles of therapy, and select nursing process implications.
4. Discuss Indications for and Contraindications to use of Digoxin.
5. Identify signs & symptoms of Digoxin toxicity; & therapeutic and toxic serum levels.
6. Identify clients at risk for development of Digoxin toxicity.
7. Discuss nursing interventions to prevent or minimize Digoxin toxicity.

##### Chapter 49 Antidysrhythmic Drugs

Objectives:

1. Discuss cardiac electrophysiology and identify two types of cardiac dysrhythmias.
2. Describe general characteristics and major classifications of antidysrhythmic drugs.
3. Discuss select prototypical antidysrhythmic drugs.
4. Discuss general considerations for the client taking these drugs.

##### Chapter 50 Antianginal Drugs

Objectives:

1. Describe the types, causes, and effects of angina pectoris.
2. Describe the general characteristics and types of antianginal drugs.
3. Discuss nitrate antianginals
4. Discuss calcium channel blockers in terms of their effects on body tissues, clinical indications for use, common adverse effects, and select nursing process implications.

#### ***Skip Chapter 51***

## Chapter 52 Antihypertensive Drugs

### Objectives:

1. Describe hypertension and factors that control blood pressure.
2. Review the effects of alpha-adrenergic blockers, beta-adrenergic blockers, calcium channel blockers, and diuretics in hypertension.
3. Discuss angiotensin-converting enzyme inhibitors and angiotensin II receptor blockers in terms of mechanisms of action, indications for use, adverse effects, and nursing process implications.
4. Describe rationale for using combination drugs in the management of hypertension.

## Chapter 53 Diuretics

### Objectives:

1. Review renal physiology.
2. List characteristics of diuretics in terms of mechanism of action, indications for use, principles of therapy, and nursing process implications.
3. Recognize commonly used potassium-wasting and potassium-sparing diuretics.
4. Discuss the rationale for using combination products containing a potassium-wasting and a potassium-sparing diuretic.
5. Discuss the rationale for concomitant use of a loop diuretic and a thiazide or related diuretic.

## Chapter 54 Drugs That Affect Blood Coagulation

### Objectives:

1. Review the physiology of hemostasis and thrombosis.
2. Describe characteristics and uses of anticoagulant, antiplatelet, and thrombolytic agents.
3. Compare and contrast heparin and warfarin in terms of indications for use, onset and duration of action, route of administration, blood tests used to monitor effects, and nursing implications.
4. Discuss antiplatelet agents in terms of indications for use and effects on blood coagulation.
5. Describe thrombolytic agents in terms of indications and contraindications for use, routes of administration, and major adverse effects.
6. Describe systemic hemostatic agents for treating overdoses of anticoagulant and thrombolytic drugs (e.g.; antidotes for warfarin and heparin).

## Chapter 55 Drugs for Dyslipidemia

### Objectives:

1. Discuss the role of dyslipidemia in the etiology of atherosclerosis.
2. Describe dyslipidemic drugs in terms of mechanism of action, indications for use, and major adverse effects.

***(No objectives for Ch. 56, read if you need to review the Digestive System)***

***Skip Chapters 57 & 58***

## Chapter 59 Drugs Used for Peptic Ulcer and Acid Reflux Disorders

### Objectives:

1. Describe the main elements of peptic ulcer disease and gastroesophageal reflux disease (GERD).

2. Differentiate the types of drugs used to treat peptic ulcers and acid reflux disorders.
3. Discuss the advantages and disadvantages of proton pump inhibitors.
4. Differentiate between prescription and over-the-counter uses of histamine 2 receptor blocking agents.
5. Describe characteristics, uses, and effects of antacids.
6. Discuss rationale for using combination antacid products.

#### Chapter 60 Laxatives and Cathartics

Objectives:

1. Differentiate the major types of laxatives.
2. Differentiate the consequences of occasional use versus chronic use.
3. Discuss rational choices of laxatives for selected client populations or purposes.
4. Discuss bulk-forming laxatives as the most physiologic agents.
5. Discuss possible reasons for and hazards of overuse and abuse of laxatives.

#### Chapter 61 Antidiarrheals

Objectives:

1. Identify clients at risk for development of diarrhea.
2. Discuss guidelines for assessing diarrhea.
3. Describe types of diarrhea in which antidiarrheal drug therapy may or may not be indicated.
4. Discuss characteristics, effects, and nursing process implications of commonly used antidiarrheal agents.

#### Chapter 62 Antiemetics

Objectives:

1. Identify clients at risk of developing nausea and vomiting.
2. Discuss guidelines for preventing, minimizing, or treating nausea and vomiting.
3. Differentiate the major types of antiemetic drugs.
4. Discuss characteristics, effects, and nursing process implications of selected antiemetic drugs.

### **UNIT VI EXAM**

### **COMPREHENSIVE FINAL EXAM - TBA**

## COURSE POLICIES:

### ALL STUDENTS ARE EXPECTED TO:

1. Adhere to requirements delineated in the Nursing Student Handbook (available on the Nursing web page to all students on the OC website).
2. Achieve a grade of at least **75** in RNSG 1201 to pass the course.
3. Refer to the course calendar for class schedule and units to be studied. Utilize unit objectives for study. These objectives are statements of the minimum competencies to be achieved. Read and study references and learn unfamiliar terms ***prior to class***. Remember, you will receive from your education whatever **you** put into it.
4. The student is responsible for any material covered through audio-visual media, independent study, required readings, and discussions. In the case of contradictory information, and *unless otherwise directed*, the course textbooks are the authority to be used.
5. **Make-up exams:** Please notify the instructor if you have to miss an exam *before* the exam date. Students are allowed **one** make up exam. A second missed exam will be given a zero. Make up exams will be scheduled at the instructor's convenience and must be within one week of the scheduled exam. The exam may be in a different format, such as essay or fill-in-the-blank and will cover the same material as the corresponding unit exam. Exam format is at the discretion of the instructor.

**On-line Students:** You may experience being “bumped off” during an exam. If this occurs the only recourse is for the instructor to clear the attempt at the exam which means, the student must contact the instructor and will restart the exam. If you click the “back” button on the tool bar at the top of the screen you will be bumped off of the test. Each student will have no more than two (2) tests cleared due to being “bumped off”, for the semester. You cannot stop and restart an exam; once the exam is begun, you must complete it.

6. E-mail correspondence will be through your OC student e-mail only, not your personal e-mail address. You must activate your OC e-mail account. If you have problems with your e-mail, contact the Student Success Center at 432-335-6673. Please access and check your OC e-mail daily for information or updates to this course and use your campus e-mail to correspond with your instructor by e-mail.
7. Black Board is used as a communication tool for this course. You will need to check it frequently for announcements, any documents you may need, or information that you may need. Students can use this Black Board for communication with the instructor as well.

**ATTENDANCE POLICY:** Students will be held accountable for all material presented or assigned in this course in the determination of course grades. **Attendance** will be “taken” by using the discussion board under Blackboard. Each week, a question will be posted by the instructor for you to answer and you will be required to post a response to one of your classmates' postings; try to spread out your responses so all will have a response from someone. **“I agree” or “Good job” does not count as a posting!!!** If you have an emergency, contact the instructor immediately or you will be held liable for the missed posting for the week.

**Planning for success:** For every 1 credit hour per summer course, you should plan to spend a minimum of 12 (3 x 4) hours per week studying for that course. For this course you should be spending the equivalent of 8 (2 x 4) hours per week of class time and 24 (6 x 4) hours per week of study time which equals a minimum of 32 (8 x 4) hours per week. Just remember, pace yourself, and the more you use the information, the better you will do! (Summer classes have a fourth of the time as in a regular semester, so multiply the time by about four times.)

**Exams:** There will be Four Unit Exams and a Comprehensive Final. On-line students will be allowed one hour and ten minutes to take unit exams (due to time required for each question to load on blackboard). Questions may be multiple choice, fill in the blank, matching, labeling, multiple-multiples, or true/false. There are 4 Unit Tests, worth 15% each, a total of 60 and the final exam is worth 40% of your course grade. Students will be allowed 2 hours to complete the final exam. *You will be allowed to bring a single 3 x 5 card with notes front and back hand written, not computer generated, , to the final exam.*

You may take an exam **one time only** and you will be able to see only one question at a time. “Back tracking” will not be permitted. This means you must answer each question before going on to the next question. The exam will be timed as indicated above. Students will have a 24 hour time period in which to take unit exams as indicated on the course calendar.

## Course Calendar

<p><b>JUNE 6th</b>  <b>Unit I</b>            Introduction to Pharmacology***            Basic Concepts &amp; Processes***            Nursing Process in Drug Therapy***            Physiology of the CNS (<i>on your own</i>) ***            Opioid Analgesics and Opioid Antagonists            Analgesic, Antipyretic, Anti-Inflammatory, &amp;            Related Drugs            Antianxiety &amp; Sedative-Hypnotic Drugs            Antipsychotic Drugs            Antidepressants and Mood Stabilizers            Antiseizure Drugs            Antiparkinson Drugs            Skeletal Muscle Relaxants</p>	<p>Chapters 1, 2, 4, 5, 6, 7  <b>Skip chapter 3</b></p> <p>Chapters 8, 9, 10, 11, 12, 13</p> <p><b>Skip chapters 14 &amp; 15 (review on your own as needed – not tested on exams)</b></p>
<p>Study for Unit Exam</p>	<p>Unit 1 – See exam review &amp; discussions</p>
<p><b>JUNE 12-13 UNIT 1 EXAM</b></p>	<p>See Blackboard for exam availability.</p>
<p><b>JUNE 13th</b>  <b>Unit II</b>            Physiology of the ANS (<i>on your own</i>) ***            Adrenergic Drugs            Antiadrenergic Drugs            Cholinergic Drugs            Anticholinergic Drugs            Corticosteroids            Thyroid and Antithyroid Drugs            Hormones That Regulate Calcium and Bone Metabolism            Antidiabetic Drugs</p>	<p>Chapters 16, 17, 18, 19, 20, 23, 24, 25, 26  <b>Skip chapters 21 &amp; 22</b></p> <p><b>Sunday, June 19<sup>th</sup> –</b>  <i>Happy Father's Day!</i></p>
<p>Study for Unit Exam</p>	<p>Unit 2 – See exam review &amp; discussions</p>
<p><b>June 18 - 19 UNIT 2 EXAM</b></p>	<p>See Blackboard for exam availability.</p>

<p><b>JUNE 20th</b>  <b>Unit III</b>  General Characteristics of Antimicrobial Drugs  Beta-Lactam Antibacterials: Penicillins, Cephalosporins, and Other Drugs  Aminoglycosides and Fluoroquinolones  Tetracyclines, Sulfonamides, and Urinary Agents  Macrolides, Ketolides, and Miscellaneous Antibacterials  Drugs for Tuberculosis and <i>M. avium</i> Complex  Antiviral Drugs  Antifungal Drugs  Physiology of the Respiratory System (on your own)***  Drugs for Asthma and other Bronchoconstrictive Disorders  Antihistamines and Allergic Disorders  Nasal Decongestants, Antitussives, and Cold Remedies</p>	<p>Chapters 29, 30, 31, 32, 33, 34  <b>Skip chapters 27 &amp; 28</b></p> <p>Chapters 35, 36, 43, 44, 45, 46  <b>Skip chapters 37 - 42</b></p>
<p>Study for Exam</p>	<p>Unit 3 – See exam review &amp; discussions</p>
<p><b>JUNE 25 - 26 UNIT 3 EXAM</b></p>	<p>See Blackboard for exam availability.</p>
<p><b>JUNE 27<sup>th</sup></b>  <b>Unit IV</b>  Physiology of the Cardiovascular System (<i>on your own</i>) ***  Drug Therapy for Heart Failure  Antidysrhythmic Drugs  Antianginal Drugs  Antihypertensive Drugs  Diuretics  Drugs That Affect Blood Coagulation  Drugs for Dyslipidemia  (Review Digestive System on your own as needed)***  Drugs Used for Peptic Ulcer and Acid Reflux Disorders  Laxatives and Cathartics  Antidiarrheals  Antiemetics</p> <p><b>Unit Exam Review</b></p>	<p>Chapters 47, 48, 49, 50, 52, 53, 54  <b>Skip chapter 51</b></p> <p>Chapters 55, 59, 60, 61, 62  <b>Skip chapters 56 – 58, &amp; 63-65</b></p> <p><b>Monday, July 4<sup>th</sup> –</b>  <b>** Happy Independence Day! **</b></p>
<p>July 2 &amp; 3 Unit 4 Exam  Review for Final Exam</p>	<p>Unit 3 – See exam review &amp; discussions  See Blackboard for exam availability.</p>
<p><b>THURSDAY JULY 7<sup>th</sup></b></p>	<p><b>FINAL EXAM TBA (on campus)</b></p>