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ARKANSAS TECH UNIVERSITY

DEPARTMENT OF NURSING



PHARMACOLOGY II

NUR 3802

Spring 2019

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ARKANSAS TECH UNIVERSITY  
DEPARTMENT OF NURSING

**COURSE:** NUR 3802

**TITLE:** PHARMACOLOGY II

**CREDIT HOURS:** TWO (2) HOURS

**CONTACT HOURS:** TWO HOURS PER WEEK

**PLACEMENT:** JUNIOR YEAR

**COURSE FACULTY:**

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**INSTRUCTIONAL RESOURCES:**

**Required Textbooks:**

Frandsen, G., & Pennington, S. (2018) Abrams' Clinical Drug Therapy:  
Rationales for Nursing Practice, 11<sup>th</sup> Edition.

**Recommended:**

Accompanying Student Guide

**COURSE/CATALOG DESCRIPTION:**

This course focuses on the relationships between the action of drugs, their effects and the contraindications for their administration. The relationship between specific patient needs and the type of drugs that would be effective to meet those needs will be analyzed. The nursing care related to each type of drug and the rationales for the care will be included.

## **Justification/Rationale for the Course**

By the completion of this course the student will progress toward student learning outcomes 3, and 5.

This upper division professional nursing course provides opportunities for the student to apply knowledge and skills from the general education component and from nursing courses to the care of individuals and families.

## **Course Objectives:**

On successful completion of this course, the nursing student will be able to:

1. Understand the role of pharmacokinetics and pharmacodynamics in medication administration.
2. Utilize the nursing process in medication administration.
3. Discuss nursing implications associated with medication administration.
4. Identify patient education needs pertinent to medications.
5. Discuss side effects, adverse effects and precautionary measures to be taken with various medications.
6. Explore the legal and ethical issues associated with medication administration.

## **Disability Statement:**

It is the policy of Arkansas Tech University to accommodate students with disabilities, pursuant to Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Amendments Act of 2008. If you anticipate a barrier while enrolled in this course that is in relation to a disability, please contact your instructor privately to discuss your needs and concerns. You are not required to disclose the specific nature of your disability but you should be able to discuss the impact the disability has upon your academic experience. Additionally, you should contact Disability Services in Doc Bryan Students Services, Suite 171, (479) 968- 0302/TTY (479) 964-3290, to begin the accommodation process.

## CONDUCT OF THE COURSE:

### Teacher Role:

Demonstrator, Evaluator, Facilitator, Resource Person, Role Model, Communicator, and Supporter.

### Student Role:

Learner, Teacher, Advocate, Care Giver, and Communicator.

### Teaching-Learning Strategies:

Lecture and discussion, simulation, charts, diagrams, and audiovisual materials, and critical thinking activities.

### Evaluation:

#### 1. Grading Scale

A = 90 - 100  
B = 80 - 89  
C = 75 - 79  
D = 68 - 74  
F = 67 and below

2. A grade of "C" or above must be achieved in every nursing course in order to progress in the Nursing Program. There will be no rounding of grades. All tests and other assignments will be carried to the hundredth.
3. A semester grade of "I" or "Incomplete" will be given to those students whose work is incomplete because of illness or other circumstances beyond the student's control. This grade will be assigned at the discretion of the instructor according to the amount of time missed, the ability of the student to complete the necessary assignments, and the quality of the student's previous work. (See Student Handbook)
4. Failure to meet course requirements will result in an "Incomplete" grade for the course.

**Evaluation: (continued)**

- 5. Examinations will be taken at designated times. If a student cannot take the examination at the scheduled time, he/she is responsible for contacting the instructor making arrangements to make up the examination. **Make-up examinations will be essay or objective in nature at the discretion of the instructor and will be scheduled on the first day the student returns to class.**
  
- 6. Students with special needs or disabilities will inform the instructor at the beginning of the course. Any testing conducted at the testing center will be according to class test date schedule. No exceptions.
  
- 7. The Kaplan Pharmacology proctored test will be given at the end of the course before the final and counts as 5% of final grade:

Percentile Ranking	Course Grade
90-99th	98
80-89	95
70-79	90
60-69	86
50-59	82
40-49	74
30-39	66
20-29	58
10-19	50
Below 10	40

Written Examinations:

Four Unit Tests.....	65%
Final.....	20%
Quizzes.....	10%
Kaplan.....	<u>5%</u>
	100%

Professional Activities.....Maximum of 2 points from SNA

## **Policies**

### **Class Attendance:**

1. Regular class attendance is considered essential if the student is to receive maximum benefit from the course. The student is responsible for attending all classes as scheduled and on time. Control of class attendance is vested in the teacher. Please refer to Tardy and Attendance Policy in Student Handbook for detailed information.
2. Students consistently tardy to class may be subject to class dismissal at discretion of the instructor.
3. Only officially invited guests are to attend nursing classes.
4. If you miss an in-class quiz due to absence you will NOT be allowed to take it later.

### **Dress and Behavior:**

1. The nursing student is expected to dress appropriately while attending class.
2. Smoking is not allowed in any classroom.
3. Disruptive behavior will not be tolerated, including cell phone use or texting.
4. No recording devices in class without permission from the instructor, including video and/or social media.
5. No wearing of hats, caps or hoods during class or when testing.
6. No reproduction of test questions at any time. During test reviews, there will be no photographing of exam questions, recording of the test review nor taking notes of exam questions. Violations will be subject to grade reduction or dismissal from the course.
7. No bathroom breaks during testing.
8. Asking questions during testing is strongly discouraged.

### **Cell Phone Policy**

1. There is a **NO cell phone policy for all upper division testing/test review**. This includes paper/pencil testing, test review, cooperative testing, and computer testing. If you are discovered with having a cell phone on your person, this will be considered a violation of the Academic Honesty Policy. If we discover that you have your cell phone with you during a unit exam/cooperative testing or unit exam review **you will receive a 0 for the test grade.**

## Academic Honesty

Students are expected to be honest and truthful in both classroom and practicum experiences. They are expected to adhere to the Code of Ethics and uphold current standards of care. Students are referred to the Arkansas Tech University Student Handbook for more specific regulations regarding academic honesty.

Students are expected to:

- a. Perform their assigned tasks in the practicum experiences. Students should have the permission of the clinical instructor before using assistance from the staff.
- b. Notify the instructor immediately of any clinical error made so that steps can be taken to prevent harm to the patient.
- c. Present written work that is theirs alone.
- d. Correctly document any materials from a textbook, pamphlet, journal, etc., that is used for an assignment.
- e. Be honest and truthful when writing clinical logs and giving verbal or written reports regarding patient care or the student's clinical experiences or assignments.
- f. Only use authorized devices or materials for an examination and not copy from other students' papers.
- g. Document material correctly. Plagiarism is defined as stealing and presenting as one's own ideas or words of another, or not documenting material correctly. Student papers may be evaluated by [turnitin.com](https://turnitin.com) which can detect plagiarism. For the first occurrence of academic dishonesty, the student will receive an F. If there is a second occurrence, the student will be dismissed from the program. Students are referred to the ATU catalog and handbook for policies regarding plagiarism.

## **NUR 3802 PHARMACOLOGY II**

### **Learning Objectives, Chapter 4, Pharmacology and the Care of the Infant and Pediatric Patient**

#### **OBJECTIVES**

After studying this chapter, you should be able to:

1. Identify the characteristics of pediatric pharmacotherapy in children from birth to 18 years of age.
2. Describe the evolution of pediatric pharmacotherapy and the purpose of federal legislation in the development of current practice standards.
3. Describe methods for determining accurate pediatric dosing.
4. Explain differences in pharmacodynamic variables between children and adults.
5. Explain pharmacokinetic differences between children and adults.
6. Describe nursing interventions that include caregivers to help ensure safe and effective medication administration to children.

#### **LEARNING ACTIVITIES**

**Required Reading:**

Frandsen & Pennington Chapter 4

**Before Class:**

Study Guide Chapter 4



## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 6, Pharmacology and the Pregnant or Lactating Woman

#### OBJECTIVES

The student will:

1. Describe the etiology of infertility.
2. Describe the drugs used for infertility.
3. Identify the pregnancy-associated changes that affect drug pharmacokinetics.
4. Analyze the effect of teratogens on the fetus during development.
5. Identify the effects of herbal and dietary supplements on the mother and fetus during pregnancy.
6. Identify pharmacological strategies to manage pregnancy-associated symptoms.
7. Identify the prototype drugs that alter uterine motility and describe these drugs.
8. Identify the prototype drugs used during labor and delivery and describe these drugs.
9. Discuss the use of drugs and herbs during lactation, including their effect on the infant.
10. Implement the nursing process in the care of the women of childbearing age.

#### LEARNING ACTIVITIES

**Required Reading:**

Frandsen & Pennington Chapter 6

**Before Class:**

Study Guide Ch. 6

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 52, Drug Therapy for Seizure Disorders and Spasticity

#### OBJECTIVES

The student will:

1. Identify types of seizures as well as the potential causes and pathophysiology of seizures.
2. Identify factors that influence the choice of antiepileptic medications in treating seizure disorders.
3. Identify the prototypes and describe the actions, uses, adverse effects, contraindications, and nursing implications for antiepileptic drugs in all classes.
4. Describe strategies for prevention and treatment of status epilepticus.
5. Implement the nursing process in the care of patients undergoing drug therapy for seizure disorders.
6. Discuss the common symptoms and disorders for which skeletal muscle relaxants are used.
7. Identify the prototypes and describe the actions, uses, adverse effects, contraindications, and nursing implications for the skeletal muscle relaxants.
8. Implement the nursing process in the care of patients undergoing drug therapy for muscle spasms and spasticity.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington chapter 52

##### **Before Class:**

Study Guide Ch. 52

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 46, Drug Therapy for Myasthenia Gravis and Alzheimer's Disease

#### OBJECTIVES

The student will:

1. Understand the pathophysiology and major manifestations of myasthenia gravis.
2. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for indirect-acting cholinergic drugs used in myasthenia gravis.
3. Understand the pathophysiology and major manifestations of Alzheimer's disease.
4. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for reversible indirect-acting cholinergic drugs used in Alzheimer's disease.
5. Understand the etiology, pathophysiology, and clinical manifestations of urinary retention.
6. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for direct-acting cholinergic drugs.
7. Describe the pharmacologic care of the patient with toxicity of irreversible anticholinesterase agents.
8. Be able to implement the nursing process in the care of patients undergoing cholinergic drug therapy for myasthenia gravis, Alzheimer's disease, and urinary retention.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 46

##### **Before Class:**

Study Guide: Chapter 46

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 47, Drug Therapy for Parkinson's Disease and Anticholinergics

#### OBJECTIVES

The student will:

1. Describe major characteristics and manifestations of Parkinson's disease.
2. Understand the pathophysiology of Parkinson's disease.
3. Describe the types of commonly used antiparkinson drugs.
4. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the dopamine receptor agonists.
5. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the catechol-*O*-methyltransferase (COMT) inhibitors.
6. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for a COMT inhibitor and decarboxylase inhibitor/dopamine precursor.
7. Implement the nursing process in the care of patients undergoing drug therapy for Parkinson's disease.
8. Describe the general characteristics of anticholinergic drugs.
9. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for belladonna alkaloids and derivatives.
10. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for centrally acting anticholinergic drugs.
11. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for anticholinergic medications used for gastrointestinal and urinary disorders.
12. Implement the nursing process in the administration of anticholinergic agents.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 47

##### **Before Class:**

Study Guide: Chapter 47

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 56, Drug Therapy to Stimulate the Central Nervous System

#### OBJECTIVES

The student will:

1. Understand the etiology, pathophysiology, and clinical manifestations of attention deficit hyperactivity disorder.
2. Understand the etiology, pathophysiology, and clinical manifestations of narcolepsy.
3. Describe general characteristics of central nervous system stimulants.
4. Identify the prototypes and discuss the action, use, adverse effects, contraindications, and nursing implications for the stimulants used in the treatment of attention deficit hyperactivity disorder and narcolepsy.
5. Identify sources and effects of caffeine.
6. Implement the nursing process in the care of patients who take central nervous stimulants.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 56

##### **Before Class:**

Study Guide Ch. 56

## NUR 3802 PHARMACOLOGY II

### Learning Objective, Chapter 57, Drug Therapy for Substance Abuse

#### OBJECTIVES

The student will:

1. Describe the etiology, pathophysiology, and clinical manifestations of substance abuse.
2. Identify the central nervous system (CNS) depressants of abuse.
3. Identify the prototypes and describe the action, use, adverse effects, contraindications, and nursing implications for the treatment of alcohol withdrawal and for the maintenance of sobriety.
4. Identify commonly abused CNS stimulants.
5. Identify commonly abused psychoactive medications.
6. Implement the nursing process for patients who may be abusing CNS depressants, CNS stimulants, or other psychoactive substances.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 57

##### **Before Class:**

Study Guide Ch. 57

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 7, Drug Therapy for Coagulation Disorders

#### OBJECTIVES

The student will:

1. Describe important elements in the physiology of hemostasis and thrombosis.
2. Discuss possible consequences of blood clotting disorders.
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 process implications.
4. Discuss antiplatelet agents in terms of indications for use and effects on blood coagulation.
5. Discuss direct thrombin inhibitors in terms of indications and contraindications for use, routes of administration, and major adverse effects.
6. Describe thrombolytic agents in terms of indications and contraindications for use, routes of administration, and major adverse effects.
7. Identify the prototype drug for each drug class.
8. Describe systemic hemostatic agents for treating overdoses of anticoagulant and thrombolytic drugs.
9. Understand how to use the nursing process in the care of patients receiving anticoagulant, antiplatelet, and thrombolytic agents.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 7

##### **Before Class:**

Study Guide Ch. 7

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 8, Drug Therapy for Dyslipidemia

#### OBJECTIVES

The student will:

1. Recognize the role of dyslipidemia in metabolic syndrome.
2. Identify sources and functions of cholesterol and triglycerides.
3. Educate patients about nonpharmacologic measures to prevent or reduce dyslipidemia.
4. Identify the prototype drug from each drug class used to treat dyslipidemia.
5. Describe the classes of dyslipidemic drugs in terms of their mechanism of action, indications for use, major adverse effects, and nursing implications.

Apply the nursing process in the care of patients with dyslipidemia

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 8

##### **Before Class:**

Study Guide Ch. 8



## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 40, Drug Therapy for Hyperthyroidism and Hypothyroidism

#### OBJECTIVES

The student will:

1. Understand the physiologic effects of thyroid hormone.
2. Describe the etiology, pathophysiology, and clinical manifestations of hyperthyroidism.
3. Describe the etiology, pathophysiology, and clinical manifestations of hypothyroidism.
4. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of the drugs administered for the treatment of hyperthyroidism.
5. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of the drugs administered for the treatment of hypothyroidism.
6. Implement the nursing process in the care of the patient receiving medications for the treatment of hyperthyroidism or hypothyroidism.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 40

##### **Before Class:**

Study Guide Ch. 40

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 41, Drug Therapy for Pituitary and Hypothalamic Dysfunction

#### OBJECTIVES

1. Describe the functions of the anterior and posterior pituitary hormones as well as the hypothalamic hormones.
2. Identify the pathophysiology and clinical manifestations of central precocious puberty, acromegaly, growth deficiency in children, and diabetes insipidus.
3. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of the anterior pituitary hormone used to treat growth hormone deficiency in children.
4. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of the posterior pituitary hormone used to treat diabetes insipidus.
5. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of the hypothalamic hormone drugs used to treat precocious puberty.
6. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of the hypothalamic hormone drugs used to treat acromegaly.
7. Implement the nursing process in the care of the patient receiving specific pituitary and hypothalamic hormones.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 41

##### **Before Class:**

Study Guide Ch. 41

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 42, Drug Therapy to Regulate Calcium and Bone Metabolism

#### OBJECTIVES

The Student Will:

1. Examine the roles of parathyroid hormone, calcitonin, and vitamin D in regulating calcium metabolism.
2. Evaluate the use of calcium and vitamin D supplements, as well as calcitonin, in the treatment of osteoporosis.
3. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of the bisphosphonates used in the treatment of osteoporosis.
4. Outline appropriate management strategies of hypercalcemia as a medical emergency.
5. Implement the nursing process in the care of the patient receiving drug therapy to regulate calcium and bone metabolism.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 42

##### **Before Class:**

Study Guide Ch. 42

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 42, Drug Therapy to Regulate Calcium and Bone Metabolism

#### OBJECTIVES

The Student Will:

6. Examine the roles of parathyroid hormone, calcitonin, and vitamin D in regulating calcium metabolism.
7. Evaluate the use of calcium and vitamin D supplements, as well as calcitonin, in the treatment of osteoporosis.
8. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of the bisphosphonates used in the treatment of osteoporosis.
9. Outline appropriate management strategies of hypercalcemia as a medical emergency.
10. Implement the nursing process in the care of the patient receiving drug therapy to regulate calcium and bone metabolism.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 42

##### **Before Class:**

Study Guide Ch. 42

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 43, Drug Therapy for Addison's Disease and Cushing's Disease

#### OBJECTIVES

The Student Will:

1. Understand the etiology and pathophysiology of adrenal cortex disorders.
2. Identify the major manifestations of Addison's disease and Cushing's disease.
3. Explain how corticotropin (ACTH) is used in the diagnosis of adrenocortical insufficiency.
4. Explain how cosyntropin (Cortrosyn) is used in the diagnosis of adrenocortical insufficiency.
5. Identify the prototypes and describe the action, use, adverse effects, contraindications, and nursing implications for the drugs used in the treatment of Addison's disease.
6. Identify the prototypes and describe the action, use, adverse effects, contraindications, and nursing implications for the drugs used in the treatment of Cushing's disease.
7. Implement the nursing process in the care of the patient with Addison's disease or Cushing's disease.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 43

##### **Before Class:**

Study Guide Ch. 43

## NUR 3802 PHARMACOLOGY II

### Learning Objectives, Chapter 10, Drug Therapy: Immunizations & Chapter 11, Drug Therapy to Suppress Immunity

#### OBJECTIVES

The Student Will:

1. Describe the types of immunity and the agents that produce them.
2. Identify immunizations recommended for children and adolescents.
3. Identify immunizations recommended for adults.
4. Identify authoritative sources for immunization information.
5. Be able to teach parents (and their children) about the importance of immunizations to public health.
6. Be able to teach people about recommended immunizations and record keeping.
7. Describe the allergic and immune disorders as well as organ transplantation in terms of etiology, pathophysiology, and clinical manifestations.
8. Discuss characteristics and uses of major immunosuppressant drugs in autoimmune disorders and organ transplantation.
9. Describe the cytotoxic immunosuppressant agents in terms of prototype, action, use, adverse effects, contraindications, and nursing implications.
10. Discuss the conventional antirejection agents in terms of prototype, action, use, adverse effects, contraindications, and nursing implications.
11. Describe the adjuvant drugs in terms of prototypes, indications and contraindications for use, major adverse effects, and administration.
12. Understand how to use the nursing process in the care of patients receiving immunosuppressant drugs.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 10 & 11

##### **Before Class:**

Study Guide Ch. 10 & 11

# NUR 3802 PHARMACOLOGY II

## Learning Objectives, Chapter 9, Drug Therapy for Hematopoietic Disorders and to Enhance Immunity

### OBJECTIVES

The Student Will:

1. Briefly describe hematopoietic and immune functions.
2. Identify common clinical manifestations of inadequate erythropoiesis and diminished host defense mechanisms.
3. Discuss characteristics of hematopoietic drugs in terms of the prototype, mechanism of action, indications for use, adverse effects, principles of therapy, and nursing implications.
4. Describe the characteristics of colony-stimulating factors in terms of the prototype, mechanism of action, indications for use, adverse effects, principles of therapy, and nursing implications.
5. Discuss interferons in terms of the prototype, mechanism of action, indications for use, adverse effects, principles of therapy, and nursing implications.
6. Implement the nursing process in the care of patients who take drugs to enhance hematopoietic and immune system function.

### LEARNING ACTIVITIES

#### **Required Reading:**

Frandsen & Pennington Chapter 9

#### **Before Class:**

Study Guide Ch. 9

# NUR 3802 PHARMACOLOGY II

## Learning Objectives Chapter 12, Drug Therapy for the Treatment of Cancer

### OBJECTIVES

The Student Will:

1. Outline the etiology of cancer development.
2. Describe the major types of antineoplastic drugs in terms of mechanism of action, indications for use, and the nursing process.
3. Discuss adverse effects of cytotoxic antineoplastic drugs and their prevention or management.
4. Be able to teach patients about the administration of some anticancer drugs.
5. Understand how to implement the nursing process in the care of patients undergoing drug therapy for cancer, including how to teach and promote efforts to prevent cancer.

### LEARNING ACTIVITIES

#### **Required Reading:**

Frandsen & Pennington Chapter 12

#### **Before Class:**

Study Guide Ch. 12



# NUR 3802 PHARMACOLOGY II

## Learning Objectives Chapter 22, Drug Therapy for Fungal Infections

### OBJECTIVES

The Student Will:

1. Describe the characteristics of fungi and fungal infections.
2. Discuss antibacterial drug therapy and immunosuppression as risk factors for development of fungal infections.
3. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for polyenes.
4. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for azoles.
5. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for echinocandins.
6. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the pyrimidine analog.
7. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the miscellaneous antifungal agents.
8. Understand how to implement the nursing process in the care of patients undergoing drug therapy for fungal infections.

### LEARNING ACTIVITIES

#### **Required Reading:**

Frandsen & Pennington Chapter 22

#### **Before Class:**

Study Guide Ch. 22

## NUR 3802 PHARMACOLOGY II

### Learning Objectives Chapter 23, Drug Therapy for Parasitic Infections

#### OBJECTIVES

The Student Will:

1. Describe the etiology, pathophysiology, and clinical manifestations of parasitic infections.
2. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the amebicides.
3. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the antimalarial drugs.
4. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the anthelmintic drugs.
5. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the scabicides and pediculicides.
6. Implement the nursing process in the care of the patient being treated with antiparasitic agents.

#### LEARNING ACTIVITIES

##### **Required Reading:**

Frandsen & Pennington Chapter 23

##### **Before Class:**

Study Guide Ch. 23

# NUR 3802 PHARMACOLOGY II

## Learning Objectives Chapter 21, Drug Therapy for Viral Infections

### OBJECTIVES

The Student Will:

1. Identify the characteristics of viruses and common viral infections.
2. Identify the major clinical manifestations of common viral infections.
3. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for antiviral agents administered for herpes simplex and varicella-zoster virus.
4. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for antiviral agents administered for cytomegalovirus.
5. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications of drugs administered for respiratory syncytial virus.
6. Identify the prototypes and describe their action, use, adverse effects, contraindications, and nursing implications for administration in influenza.
7. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the nucleoside analog antiviral agents administered for hepatitis.
8. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the nucleoside reverse transcriptase inhibitors administered for human immunodeficiency virus (HIV).
9. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the nonnucleoside reverse transcriptase inhibitors administered for HIV.
10. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the protease inhibitors administered for HIV.
11. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the integrase strand transfer inhibitors administered for HIV.
12. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for fusion protein inhibitors administered for HIV.
13. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for CCR5 antagonists administered for HIV.
14. Implement the nursing process in the care of the patient undergoing drug therapy for viral infections.

### LEARNING ACTIVITIES

**Required Reading:**

Frandsen & Pennington Chapter 21

**Before Class:**

Study Guide Ch. 21

## NUR 3802 PHARMACOLOGY II

### Learning Objectives Chapter 53, Drug Therapy to Reduce Anxiety and Produce Hypnosis Chapter 54, Drug Therapy for Depression and Mood Stabilization

#### OBJECTIVES

The Student Will:

1. Discuss the pathophysiology and clinical manifestations of anxiety.
2. Discuss the pathophysiology and clinical manifestations of sleep and insomnia.
3. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the benzodiazepines.
4. Discuss the various nonbenzodiazepines used to reduce anxiety and produce hypnosis in terms of their action, use, contraindications, adverse effects, and nursing implications.
5. Implement the nursing process in the care of the patient being treated with benzodiazepines.
6. Discuss the etiology and pathophysiology of depression and bipolar disorder.
7. Describe the major features of various mood disorders.
8. Compare and contrast the different categories of antidepressants: tricyclic antidepressants, selective serotonin reuptake inhibitors, mixed serotonin–norepinephrine reuptake inhibitors, monoamine oxidase inhibitors, and other atypical antidepressants.
9. Discuss the drugs used to treat depression in terms of prototype, action, indications for use, adverse effects, and nursing implications.
10. Discuss the drugs used to treat bipolar disorder in terms of prototype, action, indications for use, adverse effects, and nursing implications.
11. Implement the nursing process in the care of patients undergoing drug therapy for mood disorders.

#### LEARNING ACTIVITIES

**Required Reading:**

Frandsen & Pennington Chapter 53 & 54

**Before Class:**

Study Guide Ch. 53 & 54

## NUR 3802 PHARMACOLOGY II

### Learning Objectives Chapter 55, Drug Therapy for Psychotic Disorders

#### OBJECTIVES

The Student Will:

1. Discuss common manifestations of psychotic disorders, including schizophrenia.
2. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the phenothiazines.
3. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the typical antipsychotics.
4. Identify the prototype and describe the action, use, adverse effects, contraindications, and nursing implications for the atypical antipsychotics.
5. Compare characteristics of the “atypical” antipsychotics with those of the “typical” antipsychotics.
6. Implement the nursing process in the care of the patient being treated with antipsychotics.

#### LEARNING ACTIVITIES

**Required Reading:**

Frandsen & Pennington Chapter 55

**Before Class:**

Study Guide Ch. 55

## NUR 3802 PHARMACOLOGY II

### Learning Objectives Chapter 44, Drug Therapy for Women's Health Chapter 45, Drug Therapy for Men's Health

#### OBJECTIVES

The Student Will:

1. Understand the mechanisms of action of endogenous estrogens and progesterone.
2. Describe the fundamental workings of the menstrual cycle.
3. Identify the prototype drug for the estrogens, progestins, and estrogen–progestin combinations.
4. Describe the estrogens in terms of their of action, use, contraindications, adverse effects, and nursing implications.
5. Describe the progestins in terms of their action, use, contraindications, adverse effects, and nursing implications.
6. Describe the estrogen–progestin combinations in terms of their action, use, contraindications, adverse effects, and nursing implications.
7. Evaluate the benefits and risks associated with postmenopausal hormone replacement therapy.
8. Apply the nursing process to patients taking estrogens, progestins, and estrogen–progestin combinations.
9. Discuss male reproductive problems in terms of etiology, pathophysiology, and clinical manifestations.
10. Describe the androgens in terms of prototype, mechanism of action, indications for use, major adverse effects, and nursing implications.
11. Identify potential consequences of abusing androgens and anabolic steroids.
12. Discuss the phosphodiesterase type 5 inhibitors in terms of prototype, mechanism of action, indications for use, major adverse effects, and nursing implications.
13. Describe the 5-alpha reductase inhibitors in terms of prototype, mechanism of action, indications for use, major adverse effects, and nursing implications.
14. Describe the alpha-adrenergic blockers in terms of prototype, mechanism of action, indications for use, major adverse effects, and nursing implications.
15. Implement the nursing process for men who have reproductive disorders.

#### LEARNING ACTIVITIES

**Required Reading:**

Frandsen & Pennington Chapter 44 & 45

**Before Class:**

Study Guide Ch. 44 & 45

## NUR 3802 PHARMACOLOGY II

### Learning Objectives Chapter 33, Nutritional Support Products, Vitamins, and Mineral Supplements Chapter 34, Drug Therapy for Weight Management

#### OBJECTIVES

The Student Will:

1. Discuss the need for vitamin and mineral supplements.
2. Describe the use of vitamins and minerals in specific groups of patients.
3. Identify fat-soluble vitamins used to treat deficiencies, including the nursing implications associated with their administration.
4. Identify water-soluble vitamins used to treat deficiencies, including the nursing implications associated with their administration.
5. Identify minerals used to treat deficiencies, including the nursing implications associated with their administration.
6. Discuss the chelating agents used to remove excess copper, iron, and lead from body tissues.
7. Recognize the benefit of nutritional supplements, including the nursing implications associated with their administration.
8. Apply nursing process skills to prevent, recognize, or treat nutritional imbalances, which may involve monitoring laboratory reports that indicate nutritional status.
9. Identify the various factors associated with obesity.
10. Describe the clinical manifestations of obesity.
11. Identify the prototype drug from each drug class used to manage obesity.
12. Describe the anorexiant used in weight management in terms of their action, use, contraindications, adverse effects, and nursing implications.
13. Describe the lipase inhibitors used in weight management in terms of their action, use, contraindications, adverse effects, and nursing implications.
14. Understand how to apply the nursing process in the care of patients who are overweight or obese.

#### LEARNING ACTIVITIES

**Required Reading:**

Frandsen & Pennington Chapter 33 & 34

**Before Class:**

Study Guide Ch. 33 & 34