ODESSA COLLEGE ASSOCIATE DEGREE NURSING PROGRAM
SYLLABUS RNSG 1201
SPRING – 2013

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 LEVEL: Introductory

COURSE DESCRIPTION: Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of drug classifications. Content includes the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. This course lends itself to either a blocked or integrated approach. (ICOs 1, 2, 3, 4, 5, 6)

END-OF-COURSE OUTCOMES: Identify the roles and responsibilities of the professional nurse in administering pharmacological agents; and explain the safe utilization of medications.

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

Member of the Profession:

1. State the nurse's legal scope of practice involving pharmacotherapeutics, including those specified in the Nursing Practice Act. (PO 3, 2)
2. Describe the professional attributes of nursing care for clients receiving drug therapy. (PO 3)

Provider of Patient-Centered Care:

3. Define terms, concepts, and basic processes associated with drug therapy. (PO 2, 3)
4. Recognize health data of patients as it applies to drug administration and evaluation of side effects and actions.(PO 2, 3, 6)

5. Describe the pathophysiology of selected conditions for which pharmacotherapy is commonly used.(PO 2, 3)
6. Identify patient-related and drug-related factors that influence drug effects. (PO 1, 7)
7. 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 2)

Patient Safety Advocate:

8. Identify measures to promote quality and a safe environment for patients, self, and others. (PO 3, 2)

Member of the Healthcare Team:

9. Recognize the interdisciplinary relationships between the nurse and other members of the health care team related to planning and delivery of drug therapy. (PO 1)

TEACHING/LEARNING METHODS: Lecture, classroom discussion and online discussion boards, power points, worksheets, quizzes, and hyperlinks.

EVALUATION AND GRADING: This is a Nursing Course. 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 (6)	10% each	60%
Assignments/Quizzes		10%
Comprehensive Final Exam (includes unit 7)		30%
TOTAL		**100%**

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

Assignments will be in class or online (blackboard) discussions, quizzes, and/or other activities. **Face-to-face** discussions or quizzes will be graded based upon your individual performance on these assignments. **Online** discussions will consist of responses to instructor questions and responses to other students; online *assignments are due by midnight Sunday prior to each unit exam. Work turned in after midnight on Monday will receive a* ***zero***.

Missed assignments cannot be made up unless prior arrangements are made with the instructor. Further instructions will be posted on Blackboard.
>Assignments will constitute 10% of your grade. Weekly grades/feedback will be provided to you by the instructor by Monday following exams and assignment deadlines unless otherwise indicated.

Grading: The minimum passing grade is a 75% which is consistent with all Nursing / RNSG courses. 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.

The Odessa College Student Success Coaches will help you stay focused and on track to complete your educational goals. If an instructor sees that you might need additional help or success

coaching, he or she may submit a Retention Alert or a Starfish Alert. A Student Success Coach will contact you to work toward a solution.

Academic Alerts: Academic alerts via email and/or hard copy 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. The instructor is available to help you both in and out of class.***

Note to Students: Check the **syllabus**, course calendar, email and announcements ***often (at least every other day)*** for important information and dates. Use *"Unit Objectives" (see below)* to obtain required chapter information. Important information is summarized in Boxes and Tables in the text, Instructor provided Notes, and in Power Points. "Units" are divided into Weekly Modules. Module notes are available on Blackboard. **Use the disk that comes with your Karch textbook to review, including the quizzes from chapter material to help you practice the types of questions your tests will contain.**

Essential to success on exams: Studying the drugs by classification and prototype, Assignments, Quizzes, Discussions and Reviews. ALL students will be allowed to bring a single 3x5 card with notes front and back to all exams including the final. Students are responsible for attaining all pertinent information required for this course. Online students should do the same to get used to this before taking the final.

Online Students: Remember, "Online" does not mean self-paced so ***deadlines for readings, other assignments and exams are NOT optional. Prior to taking the first exam you will need to download the Respondus Lockdown Browser on your computer (it is already on OC computers). You will need this for each exam. Instructions for download appear on Blackboard.***

REQUIRED TEXTBOOKS:

Karch, A.M. (2011). Focus on nursing pharmacology. 5th edition. Lippincott Williams & Wilkins: Philadelphia.

Deglin, J. & Vallerand, A. (2012). *Davis Drug Guide for Nurses* (13th Ed.). Davis: Philadelphia.

RECOMMENDED RESOURCES:

Mosby's Medical Dictionary, Taber's Medical Dictionary, or other reputable medical dictionary. You may also find Merck Manual online to be helpful. The student is responsible for obtaining information about terms, diseases and conditions treated by drug classifications covered within this course. The instructor is responsible for providing information about these resources to the student.

UNIT LEARNING OBJECTIVES:

Unit I Introduction to Nursing Pharmacology (Chapters 1-4, p. ch.5, & ch.6)

Weekly Module 1

Chapter 1 Introduction to Drugs

1. Define the word pharmacology.
2. Outline the steps involved in developing and approving a new drug in the United States.
3. Describe the federal controls on drugs that have abuse potential.
4. Differentiate between generic and brand-name drugs, over-the-counter and prescription drugs.
5. Explain the benefits and risks associated with the use of over-the-counter drugs.

Chapter 2 Drugs and the Body

1. Describe how body cells respond to the presence of drugs capable of altering their function.
2. Outline the process of dynamic equilibrium that determines the concentration of a drug in the body.
3. Explain the meaning of half-life of a drug.
4. List at least six factors that can influence the effectiveness of drugs in the body.
5. Define drug-drug, drug-food, drug-alternative therapy, and drug-laboratory test interactions.

Weekly Module 2

Chapter 3 Toxic Effects of Drugs

1. Define the term adverse drug reaction and explain the clinical significance of this reaction.
2. List four types of allergic responses to drug therapy.
3. Discuss five common examples of drug-induced tissue damage.
4. Define the terms poison and antidote.
5. Outline important factors to consider when applying the nursing process to drug poisoning.

Chapter 4 The Nursing Process in Drug Therapy and Patient Safety

1. List the responsibilities of the nurse in drug therapy.
2. Explain what is involved in each step of the nursing process as it relates to drug therapy.
3. Describe key points important for the assessment of a patient receiving drug therapy.
4. Outline the key points to assess and consider before administering a drug, combining knowledge about the drug with knowledge of the patient and environment.
5. Describe the role of the nurse and the patient in preventing medication errors.

Skip Chapter 5

Chapter 6 Challenges to Effective Drug Therapy

1. Discuss the impact of the media, the Internet, and advertising on drug sales and prescriptions.
2. Explain the growing use of over-the-counter (OTC) drugs and its impact on patient safety.
3. Discuss the lack of controls on herbal or alternative therapies and its impact on patient safety.
4. Define the off-label use of a drug.
5. Describe safe measures being taken to protect the public in cases of bioterrorism.

UNIT I EXAM

Unit II Chemotherapeutic Agents & Drugs Acting on the Immune System (Chapters 7-11, & 15-16)

Weekly Module 3

Chapter 7 Introduction to Cell Physiology

1. Identify the parts of the human cell.
2. Explain the unique properties of the cell membrane.
3. Describe three processes used by the cell to move things across the cell membrane.
4. Outline the cell cycle (View related video clip on the CD-ROM in front of the textbook).

Chapter 8 Anti-Infective Agents

1. Explain selective toxicity and discuss its importance in anti-infective therapies.
2. Differentiate between broad-spectrum and narrow spectrum drugs.
3. Define bacterial resistance to antibiotics and discuss the emergence of resistant strains.
4. Explain three ways to minimize bacterial resistance.
5. Describe three common adverse reactions associated with the use of anti-infective agents.

Chapter 9 Antibiotics

1. Explain how an antibiotic is selected for use in a particular clinical situation.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for each class of antibiotics.
3. Discuss use of antibiotics across the lifespan.
4. Compare prototype drugs for each class of antibiotics with other drugs in that class.
5. Outline nursing considerations for patients receiving each class of antibiotic.

Weekly Module 4

Chapter 10 Antiviral Agents

1. Discuss problems with treating viral infections in humans and use of antiviral agents across the lifespan.
2. Describe characteristics of common viruses and the resultant clinical presentations of common viral infections.
3. Describe the pharmacokinetics, therapeutic actions, indications, contraindications, adverse reactions, and important drug-drug interactions for each type of antiviral discussed.
4. Compare prototype drugs for each class of antiviral with other drugs in that group.
5. Outline the nursing considerations for patients receiving each class of antiviral agent.

Chapter 11 Antifungal Agents

1. Describe the characteristics of a fungus and a fungal infection.
2. Discuss the pharmacokinetics, therapeutic actions, indications, contraindications, adverse reactions, and important drug-drug interactions for systemic and topical antifungals.
3. Compare the prototype drugs for systemic and topical antifungals with other drugs in each class.
4. Discuss impact of using antifungals across the lifespan.
5. Outline the nursing considerations for patients receiving a systemic or topical antifungal.

Skip Chapters 12 – 14

Chapter 15 Introduction to the Immune Response and Inflammation

1. List four natural body defenses against infection.
2. Describe the cells associated with the body's fight against infection and their basic functions.
3. Outline the sequence of events in the inflammatory response.
4. Correlate the events in the inflammatory response with the clinical picture of inflammation.

Chapter 16 Anti-Inflammatory, Antiarthritis, and Related Agents

1. Describe the sites of action of the various anti-inflammatory agents.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions associated with each class of anti-inflammatory agents and acetaminophen.
3. Discuss the use of anti-inflammatory and related agents (acetaminophen) across the lifespan.
4. Compare the prototype drugs for each class of anti-inflammatory drugs with other drugs in that class and compare them with acetaminophen.
5. Outline the nursing considerations and teaching needs for patients receiving each class of anti-inflammatory agents and for patients receiving acetaminophen.

UNIT II EXAM

Skip Chapters 17 - 18

Unit III Drugs Acting on the Central and Peripheral Nervous Systems (Chapters 19-26)

Weekly Module 5

Chapter 19 Introduction to Nerves and the Nervous System

1. Review the functions of the parts of a neuron.
2. Describe action potential, include the electrolytes involved.
3. Explain what a neurotransmitter is and describe its origins and functions at the synapse.
4. Review the function of the parts of the brain, the pituitary gland, spinal cord, and reticular activating system.
5. Discuss what is known about learning and the impact of emotion on the learning process.

Chapter 20 Anxiolytic and Hypnotic Agents

1. Define the states affected by anxiolytic or hypnotic agents.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for each class of anxiolytic and hypnotic agent.
3. Discuss the use of anxiolytic or hypnotic agents across the lifespan.
4. Compare the prototype drugs for each class of anxiolytic or hypnotic drug with the other drugs in that class.
5. Outline nursing considerations and teaching needs for patients receiving each class of anxiolytic or hypnotic agents.

Chapter 21 Antidepressant Agent

1. Describe the biogenic theory of depression.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for each class of antidepressant.
3. Discuss the use of antidepressants across the lifespan.
4. Compare the prototype drugs for each class of antidepressant drugs with drugs in that and other classes of antidepressants.
5. Outline nursing considerations and teaching needs for patients receiving each class of antidepressant.

Chapter 22 Psychotherapeutic Agents

1. Define psychotherapeutic agent and list conditions these agents are used to treat.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for each class of psychotherapeutic agent.
3. Discuss the use of psychotherapeutic agents across the lifespan.
4. Compare the prototype drugs for each class of psychotherapeutic agents with drugs in that and other classes of psychotherapeutic agents.
5. Outline nursing considerations and teaching needs for patients receiving each class of psychotherapeutic agents.

Weekly Module 6

Chapter 23 Anti-seizure Agents

1. Define the terms generalized seizure, tonic-clonic seizure, absence seizure, partial seizure, and status epilepticus.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for each class of anti-seizure agents.
3. Discuss the use of antiepileptic drugs across the lifespan.

4. Compare the prototype drugs for each class of antiepileptic drug with the other drugs in that class and with drugs from the other classes.
5. Outline nursing considerations and teaching needs for patients receiving each class of antiepileptic agents.

Chapter 24 Antiparkinsonism Agents

1. Describe the current theory of the cause of Parkinson disease and correlate this with the clinical presentation of the disease.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for antiparkinsonism agents.
3. Discuss the use of antiparkinsonism agents across the lifespan.
4. Compare the prototype drugs for each class of antiparkinsonism agents with the other drugs in that class and with drugs from the other classes.
5. Outline nursing considerations and teaching needs for patients receiving each class of antiparkinsonism agents.

Chapter 25 Muscle Relaxants

1. Describe a spinal reflex and discuss the pathophysiology of muscle spasm and muscle spasticity.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for centrally-acting and direct-acting muscle relaxants.
3. Discuss the use of muscle relaxants across the lifespan.
4. Compare and contrast the prototype drugs baclofen and dantrolene with other muscle relaxants in their classes.
5. Outline nursing considerations and teaching needs for patients receiving muscle relaxants as adjunct to anesthesia.

Chapter 26 Narcotics, Narcotic Antagonists and Antimigraine Agents

1. Outline the gate theory of pain and explain therapeutic ways to block pain using the gate theory.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for narcotics and antimigraine agents.
3. Discuss the use of the different classes of narcotics, narcotic antigonists, and antimigraine agents across the lifespan.
4. Compare and contrast the prototype drugs morphine, pentazocine, naloxone, ergotamine, and sumatriptan with other drugs in their respective classes.
5. Outline nursing considerations, including important teaching points, for patients receiving a narcotic, a narcotic antagonist, or an antimigraine drug.

UNIT III EXAM

Skip Chapters 27 & 28

Unit IV Drugs Acting on the Autonomic Nervous System (Chapters 29-33)

Weekly Module 7

Chapter 29 Introduction to the Autonomic Nervous System

1. Describe how the autonomic nervous system differs anatomically from the rest of the nervous system.
2. Outline a sympathetic response and the clinical manifestation of this response.

3. Describe the actions that follow the stimulation of alpha- and beta-receptors found within the sympathetic nervous system.
4. Outline the events that occur with stimulation of the parasympathetic nervous system.
5. Define the terms muscarinic receptor and nicotinic receptor, giving an example of each.

Chapter 30 Adrenergic Agonists

1. Describe two ways that sympathomimetic drugs act to produce effects at adrenergic receptors.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for adrenergic agonists.
3. Discuss the use of adrenergic agents across the lifespan.
4. Compare the prototype drugs dopamine, phelylephrine, and isoproterenol with other adrenergic agonists.
5. Outline the nursing considerations, including important teaching points, for patients receiving an adrenergenic agent.

Weekly Module 8

Chapter 31 Adrenergic Blocking Antagonists

1. Describe the effects of adrenergenic blocking agents on adrenergic receptors, correlating these effects with their clinical effects.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for adrenergic blocking agents.
3. Discuss the use of adrenergic blocking agents across the lifespan.
4. Compare the prototype drugs labetalol, phentolamine, doxazosin, propranolol, and atenolol with other adrenergic blocking agents. (Identify beta-blockers by name.)
5. Outline the nursing considerations, including important teaching points, for patients receiving an adrenergenic blocking agent.

Chapter 32 Cholinergic Agonists

1. Describe the effects of cholinergic receptors, correlating these effects with the clinical effects of cholinergic agonists.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for the direct- and indirect-acting cholinergic agonists.
3. Discuss the use of cholinergic agonists across the lifespan.
4. Compare the prototype drugs bethanechol, donepezil, and pyridostigmine with other cholinergic agonists.
5. Outline the nursing considerations, including important teaching points, for patients receiving a cholinergic agonist.

Chapter 33 Anticholergic Agents

1. Define anticholinergic agents.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for anticholinergic agents.
3. Discuss the use of anticholinergic agents across the lifespan.
4. Compare the prototype drug atropine with other anticholinergic agents.
5. Outline the nursing considerations, including important teaching points, for patients receiving anticholinergic agents.

UNIT IV EXAM

Unit V Drugs Action on the Endocrine System AND Drugs Acting on the Renal System (Chapters 34, 36-38, & 50-52)

Weekly Module 9

Chapter 34 Introduction to the Endrocrine System

1. Label a diagram of the traditional endocrine system and the hormones produced by each.
2. Describe two theories of hormone action.
3. Discuss the role of the hypothalamus as the master gland of the endocrine system, including influences on the actions of the hypothalamus.
4. Outline a negative feedback system within the endocrine system and explain the ways that this system controls hormone levels in the body.

Skip Chapter 35

Chapter 36 Adrenocortical Agents

1. Explain the control of the synthesis and secretion, and physiological effects of the adrenocortical agents.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for adrenocortical agents.
3. Discuss the use of adrenocortical agents across the lifespan.
4. Compare the prototype drugs prednisone and fludrocortisone with other adrenocortical agents.
5. Outline the nursing considerations, including important teaching points, for patients receiving an adrenocortical agent.

Chapter 37 Thyroid and Parathyroid Agents

1. Explain the control of the synthesis and secretion of thyroid hormones and parathyroid hormones, applying this to alterations in the control process (e.g., using thyroid hormones to treat obesity, Paget disease, etc.).
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for thyroid and parathyroid agents. Discuss the use of thyroid and parathyroid drugs across the lifespan.
3. Compare thyroid and parathyroid prototype drugs with agents in their class.
4. Outline the nursing considerations, including important teaching points, for patients receiving drugs used to affect thyroid or parathyroid function.

Chapter 38 Agents to Control Blood Glucose Levels

1. Describe the pathophysiology of diabetes mellitus, including alterations in metabolic pathways and changes to basement membranes.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for insulin and other antidiabetic and glucose-elevating agents.
3. Discuss the use of antidiabetic and glucose-elevating agents across the lifespan.
4. Compare the prototype drugs insulin, chlorpropamide, glyburide, and metformin with other antidiabetic agents in their class.
5. Outline the nursing considerations, including important teaching points, for patients receiving an antidiabetic and glucose-elevating agent.

Skip Chapters 39 – 41

Weekly Module 10

Chapter 50 Introduction to the Renal System

1. Review that anatomy of the kidney including the structure of the nephron.

2. Explain the basic processes of the kidney.
3. Explain the control of calcium, sodium, potassium, and chloride in the nephron.
4. Describe the renin-angiotensin-aldosterone system.
5. Discuss the roles of the kidney in acid-base balance, calcium regulation, and red blood cell production. Review these roles in relation to renal failure.

Chapter 51 Diuretic Agents

1. Define the term diuretic and list five classes of diuretics.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for various classes of diuretic drugs.
3. Discuss the use of diuretic agents across the lifespan.
4. Compare the prototype drugs of each class of diuretic drugs with other agents in their class.
5. Outline the nursing considerations, including important teaching points, for patients receiving diuretic agents.

Chapter 52 Drugs Affecting the Urinary Tract and the Bladder

1. Describe four common problems associated with the urinary tract, including the clinical manifestations of these problems.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for various classes of drugs affecting the urinary tract and bladder.
3. Discuss the use of drugs affecting the urinary tract and bladder across the lifespan.
4. Compare the prototype drugs norfloxacin, oxybutynin, and doxazosin with other agents in their class.
5. Outline the nursing considerations, including important teaching points, for patients receiving drugs affecting the urinary tract and bladder.

UNIT V EXAM

Unit VI Drugs Acting on the Cardiovascular System (Chapters 42 - 48)

Weekly Module 11

Chapter 42 Introduction to the Cardiovascular System

1. Label a diagram of the heart and the conduction system of the heart.
2. Describe the flow of blood during the cardiac cycle, including flow to the cardiac muscle.
3. Outline the conduction system of the heart and review the normal ECG pattern.
4. Discuss four normal controls of blood pressure.
5. Describe the capillary fluid shift, including factors that influence the movement of fluid in clinical situations.

Chapter 43 Drugs Affecting Blood Pressure (Our focus is on blood pressure lowering agents.)

1. Outline the normal controls of blood pressure and explain how the various drugs used to treat hypertension or hypotension affect these controls.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for drugs affecting blood pressure.
3. Discuss the use of drugs that affect blood pressure across the lifespan.
4. Compare the prototype drugs captopril, losartan, diltiazem, nitroprusside, and mecamylamine with other agents in their class and with other agents used to affect blood pressure.
5. Outline the nursing considerations, including important teaching points, for patients receiving drugs used to affect blood pressure.

Chapter 44 Cardiotonic Agents

1. Describe the pathophysiologic process of heart failure and the resultant clinical signs.
2. Discuss the body's compensatory mechanisms that occur in response to heart failure.
3. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for cardiotonic agents.
4. Discuss the use of cardiotonic agents across the lifespan.
5. Compare and contrast the prototype drugs digoxin and inamrinone, and digoxin immune Fab.
6. Outline the nursing considerations, including important teaching points, for patients receiving cardiotonic agents.

Weekly Module 12

Chapter 45 Antiarrythmic Agents

1. Discuss cardiac arrhythmias and how they affect cardiac output.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for antiarrhythmic agents.
3. Discuss the use of antiarrhythmic agents across the lifespan.
4. Compare and contrast the prototype drugs lidocaine, propranolol, Sotalol, and diltiazem with other agents in their class and with other classes of antiarrhythmics.
5. Outline the nursing considerations, including important teaching points, for patients receiving antiarrhythmic agents.

Chapter 46 Antianginal Agents

1. Describe coronary artery disease, including identified risk factors and clinical presentation.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for the nitrates, beta blockers, and calcium channel blockers and other agents used to treat angina.
3. Discuss the use of antianginal agents across the lifespan.
4. Compare and contrast the prototype drugs nitroglycerin, metoprolol, and diltiazem with other agents used to treat angina.
5. Outline the nursing considerations, including important teaching points, for patients receiving drugs used to treat angina.

Chapter 47 Lipid-Lowering Agents

1. Outline mechanisms of fat metabolism in the body and discuss the role of hyperlipidemia as a risk factor for coronary artery disease.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for agents used to lower lipid levels.
3. Discuss the use of drugs that lower lipids across the lifespan.
4. Compare the various drugs used to lower lipid levels.
5. Outline the nursing considerations, including important teaching points, for patients receiving drugs used to lower lipid levels.

Chapter 48 Drugs Affecting Blood Coagulation

1. Outline the mechanisms by which blood clots dissolve in the body and review actions of drugs use to affect blood clotting.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for drugs affecting blood coagulation.
3. Discuss the use of drugs that affect blood coagulation across the lifespan.

4. Compare and contrast the prototype drugs aspirin, heparin, urokinase, and aminocaproic acid with other agents use to affect blood coagulation.
5. Outline the nursing considerations, including important teaching points, for patients receiving drugs used to affect blood coagulation.

Skip Chapter 49

UNIT VI EXAM

Unit VII Drugs Acting on the Respiratory System AND Drugs Acting on the Gastrointestinal System (Chapters 53-55 & 56 - 59)

*** **The contents of the last seven chapters will be tested on the Final Exam.*****

Weekly Module 13

Chapter 53 Introduction to the Respiratory System

1. Review the major structures of the respiratory system and the role of each in respiration.
2. List examples of clinical problems that can arise with alterations in the respiratory membrane.
3. Differentiate between the common conditions that affect the upper respiratory system.
4. Identify three conditions involving the lower respiratory tract, including clinical presentations of these conditions.
5. Discuss the process involved in obstructive respiratory diseases, including signs and symptoms of these diseases.

Chapter 54 Drugs Acting on the Upper Respiratory Tract

1. Outline underlying physiological events that occur with upper respiratory disorders.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for drugs acting on the upper respiratory tract.
3. Discuss the use of drugs that act on the upper respiratory tract across the lifespan.
4. Compare and contrast the prototype drugs with other agents in their class and with other classes of drugs that act on the upper respiratory tract.
5. Outline the nursing considerations, including important teaching points, for patients receiving drugs acting on the upper respiratory tract.

Chapter 55 Drugs Acting on the Lower Respiratory Tract

1. Describe the underlying pathophysiology involved in obstructive pulmonary disease include presenting signs and symptoms.
2. Describe pharmacokinetics, therapeutic actions, indications, contra indications, common adverse reactions, and important drug-drug interactions for drugs used to treat lower respiratory tract disorders.
3. Discuss the use of drugs used to treat obstructive respiratory disorders across the lifespan.
4. Compare and contrast the prototype drugs used to treat obstructive pulmonary disorders with other agents in their class and with other classes of drugs used to treat obstructive pulmonary disorders.
5. Outline the nursing considerations, including important teaching points, for patients receiving drugs used to treat obstructive pulmonary disorders.

Weekly Module 14

Chapter 56 Introduction to the Gastrointestinal System

1. Review the parts of the gastrointestinal (GI) tract, including secretions, absorption, digestion, and type of motility that occurs in each part.
2. Discuss the nervous system control of the GI tract, including influences of the autonomic nervous system on GI activity.
3. List three of the local GI reflexes and describe the clinical application of each.
4. Review steps involved in swallowing including two factors that can influence this reflex.
5. Review the vomiting reflex, addressing three factors that can stimulate the reflex.

Chapter 57 Drugs Affecting Gastrointestinal Secretions

1. Describe current theories on the pathophysiological process responsible for the signs and symptoms of peptic ulcer disease.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for drugs used to affect gastrointestinal (GI) secretions.
3. Discuss the use of drugs used to affect GI secretions across the lifespan.
4. Compare the prototype drugs used to treat obstructive pulmonary disorders with other agents in their class and with other classes of drugs used to affect GI secretions.
5. Outline the nursing considerations, including important teaching points, for patients receiving drugs used to affect GI secretions.

Chapter 58 Drugs Affecting Gastrointestinal Motility

1. Describe the underlying processes in diarrhea and constipation and correlate them with the types of drugs used to treat these conditions.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for laxatives and antidiarrheal drugs.
3. Discuss the use of laxatives and antidiarrheal agents across the lifespan.
4. Compare the prototype laxatives and antidiarrheals with other agents in their class and with other classes of laxatives and antidiarrheals.
5. Outline the nursing considerations, including important teaching points, for patients receiving laxatives and antidiarrheal agents.

Chapter 59 Antiemetic Agents

1. Review the vomiting reflex, including factors that stimulate it and mechanisms for measures used to block it.
2. Describe pharmacokinetics, therapeutic actions, indications, contraindications, common adverse reactions, and important drug-drug interactions for each of the classes of antiemetic agents.
3. Discuss the use of antiemetic agents across the lifespan.
4. Compare the prototype antiemetics with other agents in their class and with other classes of antiemetics.
5. Outline the nursing considerations, including important teaching points, for patients receiving antiemetics.

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 (standard for all RNSG courses).
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 what **you** put into it.
4. **EXAMS:** *The student is responsible for any material covered through audio-visual media, independent study, required readings, and discussions.* Respondus Lockdown Browser may be required. The link to download the Respondus browser will be posted on Blackboard. In the case of contradictory information, and *unless otherwise directed,* the course textbooks are the authority to be used.
    - ***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 true-false or fill-in-the-blank and will cover the same material as the All Makeup Exams will be proctored and must be taken in a College Testing Center without the use of a book and only notes that will fit on a single 3x5 card. corresponding unit exam.
    - **Students are responsible for making sure they have working computers and internet connections prior to taking any exams.** If your exam does not submit properly you will be given the opportunity to take a Makeup Exam ONLY if you have attempted the exam prior to the due date
5. 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. Announcements may be sent via email as well.
6. All students: Blackboard is used as a communication tool for this course. Course materials and assignments will be posted on Blackboard. You will need to check it frequently for announcements, any documents you may need, or information that you may need. Students can use this Blackboard for communication with the instructor as well.

ATTENDANCE POLICY: All students are expected to attend all classes and will be held accountable for all material presented or assigned in this course in determining course grades. Attendance policy will follow the same guidelines as listed in the college catalog. This policy states that any student who misses as much as 20 percent of scheduled class time in any semester should review his or her standing in the class with the instructor and determine whether to continue in class or withdraw.

On-Campus students: There will be a sign in sheet for each class day. For safety reasons, according to OC safety policy, the door will be closed and locked 5 minutes after class begins.

Online students: **Attendance** will be "taken" by using the discussion board or other assignments via Blackboard or email (logging in). *The Starfish system will automatically track whether or not students "attend" by logging in to the course. Students should be logging in to the course at least every one to two days.* Attendance is expected per the above policy and the 20 percent guideline applies.

Professionalism: Nurses and nursing students are expected to conduct themselves in a professional manner. You will be held to those expectations as a student nurse AND in this course. Therefore you

are expected to be respectful of others and to notify your instructor whenever you will be unable to attend class. You should do so prior to the start of class and you are expected to be on time.

Exams: There will be Six Unit Exams and a Comprehensive Final which includes the Seventh Unit of study. Students will be given approximately70 minutes to take a unit exam. Questions may be multiple choice, fill in the blank, matching, or true/false. There are 6 Unit Tests, worth 10% each, a total of 60% and the final exam is worth 30% of your course grade. Students will be allowed 2 hours to complete the final exam. *All students will be allowed to bring a single 3 x 5 card with notes front and back to the final exam*. Students are allowed to review exam questions after each unit exam. To review an exam, the student must make an appointment with the instructor within one week of the exam unless prior arrangements are made with the instructor. If exam questions are challenged, students must submit their challenge in writing. There will be no review or challenge of questions after the final exam.

All exams will be taken online through Blackboard EXCEPT for the Final Exam which will be taken in your regular classroom or an assigned computer lab on campus depending upon your class section.

On-Campus students will take the final exam in the classroom. You must have a large, red and white Scantron: ParScore sheet, Form No. F-288-PAR-L. You may mark on your test booklet. Make sure you mark your scantron correctly. Once you turn in your exam you will not be allowed to change anything. You will be allowed to bring a single 3 x 5 card as stated above for all exams.

All students: 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. Students will have a time period specified by the instructor in which to take unit exams as indicated on the course calendar.

PLEASE READ THE FOLLOWING ANNOUNCEMENTS AND EXPECTATIONS:

This course Clinical Introduction/RNSG 1160/Fall 2012 has been identified as a course by Career, Technical, and Workforce Education as one in which teaching and learning strategies adopted by AVID will be implemented. As a student in the Nursing program, you will be expected to develop an understanding of the strategies, to model the strategies, to maintain fidelity of implementation, and to examine how these strategies may impact your effectiveness as a professional in your chosen area of occupation, either through coursework or practicum experience as outlined by the course instructor.

***Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please contact Becky Rivera-Weiss in the Office of Disability Services at 432-335-6861 to request assistance and accommodations.

Expectations for Engagement – Online Learning

To help make the web-based learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the online learning environment. Students and instructors are welcome to exceed these requirements.

Reasonable Expectations of Engagement for Instructors

1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
    - provided my contact information at the beginning of the syllabus;
    - respond to all messages within 24 hours if received Monday through Thursday and within 48 hours if received Friday through Sunday; and,

- notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.

2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will
    - provide clear information about grading policies and assignment requirements in the course syllabus, and
    - communicate any changes to assignments and/or to the course calendar to students as quickly as possible.

3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
    - post grades for discussion postings within one week of the discussion thread closing.
    - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

Reasonable Expectations of Engagement for Students

1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
    - line up alternative computer and internet access in case my primary computer crashes or my internet services is unavailable;
    - recognize that the college provides free wi-fi and computer labs during regular campus hours to help me with accessing my course; and,
    - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my equipment or service is unreliable.

2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to
    - getting "kicked off" of the system during tests or quizzes;
    - having trouble submitting assignments; and
    - dealing with a traumatic personal event.

3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
    - seek out help from my instructor and/or from tutors;
    - ask questions if I don't understand; and,
    - access my course several times during the week to keep up with assignments and announcements.

Expectations for Engagement – Face to Face Learning

To help make the learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the learning environment. Students and instructors are welcome to exceed these requirements.

Reasonable Expectations of Engagement for Instructors

1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
    - provided my contact information at the beginning of the syllabus;

- respond to all messages in a timely manner through telephone, email, or next classroom contact; and,
- notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.

2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will
    - provide clear information about grading policies and assignment requirements in the course syllabus, and
    - communicate any changes to assignments and/or to the course calendar to students as quickly as possible.

3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
    - return classroom activities and homework within one week of the due date and
    - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

Reasonable Expectations of Engagement for Students

1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
    - attend the course regularly and line up alternative transportation in case my primary means of transportation is unavailable;
    - recognize that the college provides free wi-fi, computer labs, and library resources during regular campus hours to help me with completing my assignments; and,
    - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my personal computer equipment or internet service is unreliable.

2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to,
    - missing class when a major test is planned or a major assignment is due;
    - having trouble submitting assignments;
    - dealing with a traumatic personal event; and,
    - having my work or childcare schedule changed so that my classroom attendance is affected.

3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
    - seek out help from my instructor and/or from tutors;
    - ask questions if I don't understand; and,
    - attend class regularly to keep up with assignments and announcements.

The SEI process for face-to-face and online courses is scheduled for the week of April 28-May 4.

Refer to the Course Calendar below for the schedule of units, assignments and exam dates.

Course Calendar

Unit I ***(Module 1)*** **Jan 23 – 29** Orientation: Introduction to Drugs** Drugs and the Body**	*First day of this class: Wed, Jan 23* Chapters 1, 2
(*Module 2*) Jan 30 - Feb 5 Toxic Effects of Drugs** The Nursing Process in Drug Therapy and Patient Safety** Challenges to Effective Drug Therapy**	 Chapters 3, 4, 6 ***Skip Chapter 5*** **Census Day – If you must drop, do so by this date.** **(Census Day W. Feb 6th)**
UNIT I EXAM – ONLINE for all students	Assignments Due:
Due Tu. Feb 5th – midnight (open 2/1– 2/5)	Feb 5th at midnight (see policies)
Unit II (***Module 3)*** **Feb 6 – 12** Introduction to Cell Physiology** (A&P Review) Anti-Infective Agents Antibiotics	 Chapters 7, 8, 9
(***Module 4***) **Feb 13 – 19** Antiviral Agents Antifungal Agents Introduction to the Immune Response and Inflammation** Anti-Inflammatory, Antiarthritis, and Related Agents	 Chapters 10, 11, 15, 16 ***Skip chapters 12– 14***
UNIT 2 EXAM – ONLINE for all students	Assignments Due:
Due Tu. Feb 19th – midnight (open 2/15 – 2/19)	Feb 19th at midnight (see policies)
Unit III ***(Module 5)*** **Feb 20 – 26** Introduction to Nerves and the Nervous System** Anxiolytic and Hypnotic Agents Antidepressant Agents Psychotherapeutic Agents	***Skip chapter 18*** Chapters 19, 20, 21, 22
(Module 6) **Feb 27 – Mar 5** Anti-seizure Agents Antiparkinsonism Agents Muscle Relaxants Narcotics, Narcotic Antagonists and Antimigraine Agents	 Chapters 23, 24, 25, 26
UNIT 3 EXAM – ONLINE for all students	Assignments Due:
Due Tu. March 5th – midnight (open 3/1 – 3/5)	March 5th at midnight (see policies)
Unit IV ***(Module 7)*** **Mar 6 – 10, 18 – 19** Introduction to the Autonomic Nervous System** Adrenergic Agonists	***Skip chapters 27 & 28*** Chapters 29, 30 **SPRING BREAK!! March 11 – 17**
(Module 8) Mar 20 – 26 Adrenergic Blocking Antagonists Cholinergic Agonists Anticholinergic Agents	 Chapters 31, 32, 33
UNIT 4 EXAM – ONLINE for all students	Assignments Due:
Due March 26th – midnight (open 3/22 – 3/26)	March 26th at midnight (see policies)
Unit V **(*Module 9)*** **Mar 27 – Apr 2** Adrenocortical Agents Thyroid and Parathyroid Agents Agents to Control Blood Glucose Levels	***Skip chapters 34 & 35*** Chapters 36, 37, 38

(*Module 10*) Apr 3 – 9 Introduction to the Renal System ** Diuretic Agents Drugs Affecting the Urinary Tract and the Bladder	Chapters 50, 51, 52
UNIT 5 EXAM – ONLINE for all students	Assignments Due:
Due April 9th – midnight (open 4/5 – 4/9)	April 9th at midnight (see policies)
Unit VI **(*Module 11*) Apr 10 – 16** Physiology of the Cardiovascular System ** Drug Affecting Blood Pressure Cardiotonic Agents	***Skip chapters 39–41*** Chapters 42, 43, 44 **Last Day to Drop or Withdraw with a "W" – Wed,**
(*Module 12)* Apr 17 – 23 Antiarrhythmic Agents Antianginal Agents Lipid-Lowering Agents Drugs Affection Blood Coagulation	Chapters 45, 46, 47, 48 ***Skip chapter 49***
UNIT 6 EXAM – ONLINE for all students	Assignments Due:
Due April 23rd – midnight (open 4/19 – 4/23)	April 9th at midnight (see policies)
Unit VII **(*Module 13)* Apr 24- 30** Introduction to the Respiratory System** Drugs Acting on the Upper Respiratory Tract Drugs Acting on the Lower Respiratory Tract	Chapters 53, 54, 55 **The Last Unit will be tested on the Final Exam.**
(*Module 14*) May 1 – 7 Introduction to the Gastrointestinal System** Drugs Affecting Gastrointestinal Secretions Drugs Affecting Gastrointestinal Motility Antiemetic Agents ***May 7 – 14th – No Class: Study for Final Exam***	Chapter 56, 57, 58, 59 Assignments due by Friday, midnight, May 7th **Last Official OC Class Day May 11th** **End of Semester May 17th**
FINAL EXAM – On Campus for all students	Online Students:
5:30 – On Campus Class, Wed, May 15 CT 217	CT building – Times TBA on campus

**No specific drug classes for these chapters