

**McLennan**  
C O M M U N I T Y  
**COLLEGE**

WACO, TEXAS

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**COURSE SYLLABUS**  
**AND**  
**INSTRUCTOR PLAN**

**Pharmacology and the Administration of Medications**

**MDCA 1448.01**

**Alyssa Van Vleet**

**NOTE: This is a 16-week course.**

**COVID 19 Notice:**

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website on any changes to these guidelines.

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**Course Description:**

Instruction in concepts and application of pharmacological principles, focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversions, calculations of drug problems, and medico-legal responsibilities of the medical assistant.

**Prerequisites and/or Corequisites:**

PHRA 1309 or Program Director approval

Semester hours 4 (2 lec 4 lab)

**Course Notes and Instructor Recommendations:**

This course is focused on the different classifications of medications, administering medications, side effects, etc. Therefore, it is of the utmost importance that you not only come prepared to class with your book everyday, but study the material that you are given as well. A nursing drug reference book is strongly suggested but not required.

**Instructor Information:**

Instructor Name: Alyssa Van Vleet

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Office Phone Number: 254-299-8319

Office Location: HP Bldg. Rm. 129

Office/Teacher Conference Hours: Monday/Wednesday: 2:00 PM-4:00 PM.

Tuesday/Thursday: 1:00 PM-3:00 PM

Friday: 8:00 AM-10:00 AM

Other Instruction Information:

**\*\*\*INSTRUCTOR NOTE:\*\*\***

When contacting your professor by email for this course, you must follow these rules:

- Write using formal English only (as if to the president of the company where you work). This means no slang, or being “lazy” with your wording. You are in college, preparing for your future, please communicate like it!
- Use your MCC student email address
- I check my email several times a day and try to respond as quickly as possible. However, I still have my own schedule and may not be able to respond instantly.
- I do not respond to emails after 9 PM. If you need to contact me, please do it before then.

**Required Text & Materials:**

Title: : Principles of Pharmacology for Medical Assisting

Author: Jane Rice

Edition: 6<sup>th</sup>

Publisher: Cengage

ISBN: 9781305859326

**MCC Bookstore Website:** <http://www.mclennan.edu/bookstore/>

**Methods of Teaching and Learning:**

Face to face lecture, group discussion, lab exercises, written reports, exams, quizzes, simulators, and/or tutorial software.

**Course Objectives and/or Competencies:**

Units 1 through 28

**Unit 1: Mathematics and Dosage Calculations**

- Define the terms listed in the vocabulary
- Express Arabic numerals as Roman numerals
- Express Roman numerals as Arabic numerals
- Express a fraction as a simple, compound, complex, proper, or improper fraction
- Express fractions as equivalents
- Determine the relative values of fractions
- Express improper fractions as mixed numbers
- Add, subtract, multiply, and divide fractions and mixed numbers
- Work the practice problems and review problems correctly
- Successfully complete the Self-Assessment.

**Unit 2: Decimal Fractions**

- Define the terms listed in the vocabulary
- Read and write decimals correctly
- Define and use the powers of 10
- Express a common fraction as a decimal fraction
- Express a decimal fraction as a common fraction
- Add, subtract, multiply, and divide decimals
- Express common fractions and decimal fractions as percentages, and percentages as common fractions and decimal fractions
- Answer the questions in the learning exercise correctly

- Work the practice problems and review problems correctly
- Successfully complete the Self-Assessment

### **Unit 3: Ratio and Proportion**

- Define the terms listed in the vocabulary
- Express a ratio as a quotient, as a fraction, and as a decimal
- Name the four terms of a proportion
- Solve for x and prove your answers
- Work the practice problems and review problems correctly
- Successfully complete the Self-Assessment

### **Unit 4: The Metric System**

- Define the terms listed in the vocabulary
- List 10 guidelines you will use as you work with the metric system
- Name the seven common prefixes used in the metric system
- Name the fundamental units of the metric system
- State why you place a zero before the decimal point
- Write the metric equivalents for length, volume, mass, and weight
- Write the abbreviations for the metric equivalents of length, volume, mass, and weight
- Name the metric equivalents that are most frequently used in the medical field
- Use the proportional method to convert from one metric unit to another
- Use the moving the decimal method to convert from one metric unit to another
- Calculate dosage according to kilogram of body weight
- Answer the questions in the learning exercise correctly
- Work the practice problems and review problems correctly
- Successfully complete the Self-Assessment

### **Unit 5: Calculating Adult Dosages: Oral and Parenteral Forms**

- Define the terms listed in the vocabulary
- Describe the oral and parenteral routes of drug administration
- Name two measures used to determine the amount of medication to be administered and give an example of each measure
- List six medications that are measured in units
- Calculate adult dosages by the proportional or formula method
- Work the practice problems and review problems correctly
- Successfully complete the Self-Assessment

### **Unit 6: Calculating Children's Dosages**

- Define the terms listed in the vocabulary
- State the guidelines for administering medications to a pediatric patient
- Calculate children's dosages according to kilogram of body weight
- Work the practice problems and review problems correctly

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- Successfully complete the Self-Assessment

### **Unit 7: Drug Sources, Schedules, and Dosages**

- Define the terms listed in the vocabulary
- Define pharmacology
- State the five medical uses for drugs
- Give the three names assigned to a drug
- List the five main sources for drugs, giving examples from each source
- State the importance of the Federal Food, Drug, and Cosmetic Act
- Explain the significance of the Controlled Substances Act (CSA)
- Define the five controlled substances schedules, and give examples of drugs listed in each
- Explain storage and recordkeeping for controlled substances
- Make use of the drug references/resources described in this unit
- Define dosage
- List the factors that affect drug dosage
- Define the terms used in describing various types of dosages
- Answer the review questions correctly

### **Unit 8: Forms of Drugs and How They Act**

- Define the terms listed in the vocabulary
- List the forms in which drugs are prepared, and give examples of these preparations
- List the routes used for drug administration
- Classify drugs according to preparation and therapeutic action
- Define selected classifications of drugs and give examples of each
- List the three general ways that drugs may be grouped
- Define the actions of drugs according to the descriptive terms listed in this unit
- Describe the factors that affect drug action
- Describe the undesirable actions of drugs
- Answer the review questions correctly

### **Unit 9: The Medication Order**

- Define the terms listed in the vocabulary
- Describe the various types of medication orders
- State who may administer medications
- Describe the nine parts of a prescription.
- State the two main classes of medicines according to federal law
- Describe and give the benefits of e-prescription
- Describe what happens to a prescription after a pharmacist fills it
- List eight steps for safeguarding the prescription
- List your responsibilities with regard to a patient's request for a prescription refill
- List five ways in which qualifies people may protect themselves when taking a verbal order

- List seven guidelines for understanding the medication order
- Understand medication labels (prescription and nonprescription)
- Read and write the common medical aggravations given in this unit
- Answer the review questions correctly

#### **Unit 10: Medication Administration Essentials**

- Define the terms listed in the vocabulary
- Describe the legal implications for a person who prepares and administers medications
- State the “seven rights” of proper drug administration
- List the essential medication guidelines
- Describe the universal precautions
- Describe the standard precautions
- List the guides that should be followed and precautions to be taken for the safe storage of medications in the physician’s office
- List the emergency medications, supplies, and equipment that must be readily available
- Give the ethical considerations for working around drugs
- List the five actions that may constitute a medication error
- List the five steps to take in case a medication error occurs
- Answer the review questions correctly

#### **Unit 11: Administration of Nonparenteral Medications**

- Define the terms listed in the vocabulary
- List several advantages and disadvantages of the oral route of drug administration
- Describe the measuring devices most commonly used when administering oral medications
- Administer oral medications
- State the guidelines that should be followed whenever it is necessary to crush a solid medication
- Preform an eye instillation
- Perform an ear instillation
- Describe the administration of nasal medications
- Describe a transdermal system
- Describe inhalation and give three uses of inhalation therapy
- State the implications for patient care when an inhaler is prescribed
- List the signs and symptoms of hypoxemia
- List the symptoms of oxygen toxicity
- Describe the methods used for oxygen delivery
- Describe oxygen safety precautions
- Describe the administration of drugs by local application
- Answer the review questions correctly

#### **Unit 12: Parenteral Equipment and Supplies**

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- Define the terms listed in the vocabulary
  - Describe the syringes that are most frequently used for administering parenteral medications
  - Describe the component parts of a syringe
  - Name the parts of a syringe that must be kept sterile during the preparation and administration of a parenteral medication
  - Classify syringes as disposable, as nondisposable, or as a combination of these two types
  - Give the advantages of using a disposable syringe
  - Explain how to prevent needlestick injuries in health care settings
  - Describe the Needlestick Safety and Prevention Act
  - Describe the various safety design devices
  - Give the National Institute for Occupational Safety and Health's (NIOSH) recommendations for health care workers on how to protect themselves and their coworkers
  - Correctly read the calibrated scales of a 3-mL, 5-mL, tuberculin, and U-100 insulin syringe
  - Describe the component parts of a needle
  - Select an appropriate-sized needle and syringe for the following types of injections: intramuscular, subcutaneous, and intradermal
  - Name the diseases commonly transmitted by a contaminated syringe needle
  - Dispose of used needles and syringes safely
  - Demonstrate the procedure for handling a sterile syringe-needle unit, loading and unloading a Tubex injector, removing medication from a vial, removing medication from an ampule, and reconstituting a powder medication for administration
  - Answer the review questions correctly

### **Unit 13: Administration of Parenteral Medications**

- Define the terms listed in the vocabulary
- Give three advantages of the parenteral routes of drug administration
- Give eight disadvantages (possible dangers and complications) associated with the administration of parenteral medications
- List the basic guidelines for administering an injection
- Explain why it is important to do a patient assessment prior to the administration of an injection
- Select the correct sites for a subcutaneous, an intramuscular, and an intradermal injection
- Mark the correct site for an injection
- Prepare a patient for an injection
- Demonstrate the proper procedure to be used when giving a subcutaneous, an intramuscular, an intradermal, and a "Z"-track intramuscular injection
- Give the special considerations to be observed when administering insulin
- Describe intravenous (IV) therapy and state some advantages and disadvantages of IV therapy
- Answer the review questions correctly

### **Unit 14: Allergy: An Overview**

- Define the terms listed in the vocabulary
- Describe the reaction between allergens and IgE antibodies
- List the most common allergens that may cause allergy
- State the classic symptoms of allergy
- List factors other than allergens that may trigger symptoms of allergy
- Describe allergic rhinitis (hay fever)
- List the most common causes of hay fever in the United States according to the American Academy of Allergy and Immunology
- Describe how physicians determine the diagnosis of allergy
- State the importance of the patient history
- Describe the scratch (epicutaneous) or prick, patch, intradermal, laboratory, nasal smear, and sinus X-ray diagnostic allergy tests
- Describe to patients with allergies the treatment regimen that may be prescribed, including the avoidance of allergens, drug therapy, and immunotherapy
- Describe the medical assistant's responsibilities with regard to the administration of allergenic extracts
- Answer the review questions correctly

#### **Unit 15: Antibiotic Agents**

- Define the terms listed in the vocabulary
- Describe infection
- List the danger signs of a serious infection
- Describe ways people may minimize their risk of developing a serious infection
- State why infections are generally more serious in older adults
- List possible reasons why children who attend a day care center are more likely to contract ear infections, pneumonia, and meningitis
- Complete the critical thinking questions and activities presented in this unit
- List the characteristics of an effective antibiotic
- Describe four adverse reactions that may occur with the administration of an antibiotic
- Explain how the overuse of antibiotics has helped cause drug-resistant strains of bacteria
- State the actions, uses, contraindications, adverse reactions, dosages, and routes for selected antibiotics
- Give the implications for patient care with regard to selected antibiotics
- Complete the Spot check on major antibiotic groupings
- Describe the antiseptics and disinfectants
- State the substance, strength, action, and comments for selected antiseptics and disinfectants
- Answer the review questions correctly

#### **Unit 16: Antifungal, Antiviral, and Immunizing Agents**

- Define the terms listed in the vocabulary



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- State the actions, uses, contraindications, adverse reactions, dosages, routes, and implications for patient care of selected antifungal and antiviral agents
  - Describe the four general classes of antiretroviral agents
  - Describe highly active antiretroviral therapy (HAART)
  - Describe zidovudine's role in the reduction of perinatal transmission of HIV
  - Describe the treatment regimen for AIDS in the older adult
  - Complete the critical thinking questions and activities presented in this unit
  - Differentiate between active and passive immunization
  - State the general recommendations of immunization
  - Describe the conditions when a live, attenuated virus vaccine should not be given
  - Define vaccine, toxoid, immune globulin, specific immune globulin, and antitoxin
  - State who should be immunized against vaccine-preventable diseases
  - Become familiar with the immunization schedule given in this unit and influenza A
  - Complete the Spot check on immunizations
  - Answer the review questions correctly

#### **Unit 17: Antineoplastic Agents**

- Define the terms listed in the vocabulary
- List the signs and symptoms of breast cancer
- List the symptoms of benign prostatic hyperplasia (BPH)
- Describe prostate cancer
- List the possible symptoms of prostate cancer
- List the guidelines for care of the older adult with cancer
- List the cancer screening test or procedure that an individual 50 or older should have
- Give the suggested ways that one may communicate with a child about a parent's serious illness
- Complete the critical thinking questions and activities presented in this unit
- State when chemotherapy is the treatment of choice for cancer
- List the normal cells that have the greatest sensitivity to destruction from antineoplastic agents
- State the aim of chemotherapy
- State who should prepare and administer antineoplastic agents
- Describe examples of adverse reactions associated with antineoplastic agents
- List and give the normal ranges of certain laboratory tests that are performed to establish a patient's baseline data before initiation of chemotherapy
- Explain the care of chemotherapy patients
- Describe the classifications of antineoplastic agents
- Describe other forms of treatment for cancer
- Complete the Spot check on the classifications of antineoplastic agents
- Answer the review questions correctly

### **Unit 18: Vitamins, Minerals and Herbals**

- Define the terms listed in the vocabulary
- Describe how many health problems could be prevented by proper nutrition
- Describe the five major food groups
- Give four examples of when a body may require additional nutrients
- Describe “5 A Day for Better Health” as recommended by the National Institutes of Health and the Centers for Disease control and Prevention
- Select fruits and vegetables by color
- Describe factors that may affect an older adult’s dietary regimen
- Describe the surgeon general’s call to action to prevent and decrease obesity in children and adolescents
- State what is being done to promote physical activity and healthy weight in children and adolescents
- Complete the critical thinking questions and activities presented in this unit
- Differentiate between fat-soluble and water-soluble vitamins
- Give the functions, food sources, USRDA, and indications of deficiency of selected vitamins and minerals
- State the symptoms of hypervitaminosis for vitamins A, D, and E
- Describe the importance of cations and anions in electrolyte balance
- Describe selected herbal preparations, possible uses, side effects/adverse reactions, and drug interactions as described in Table 18-4
- Answer the review questions correctly

### **Unit 19: Psychotropic Agents**

- Define the terms listed in the vocabulary
- Describe the four classifications of psychotropic drugs
- Define stress
- State five diseases or conditions that may be implicated in stress
- Describe symptoms of anxiety
- List possible stressors for older adults
- Explain how stress, anxiety, or depression could affect a child
- Complete the critical thinking questions and activities presented in this unit
- State the actions, uses, contraindications, adverse reactions, dosages, routes, and implications for patient care of selected antianxiety, antidepressive, antipsychotic, and antimanic agents
- List the symptoms of marked elevation of blood pressure
- List the foods and beverages a person should avoid when taking monoamine oxidase inhibitors
- Complete the Spot Check on psychotropic agents
- Answer the review questions correctly

### **Unit 20: Substance Abuse**

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- Define the terms listed in the vocabulary
  - Describe problems that are associated with substance abuse
  - List the effects that alcohol has as a multisystem toxin and a central nervous system depressant
  - Be aware of some drugs that interact with alcohol
  - Complete the critical thinking questions and activities presented in this unit
  - Describe nicotine, club drugs, and inhalants as substances being abused
  - State the effects that amphetamines have upon the body
  - Describe methamphetamine and how it affects the body
  - Describe cocaine as a central nervous system stimulant and how it is used as an abused substance
  - State how barbiturates are abused, and explain their effects upon the body
  - Describe how narcotic analgesics are abused, and explain their effects upon the body
  - Describe marijuana as an abused substance
  - Describe how phencyclidine (PCP) is an abused substance, and its illegal use
  - State the lysergic acid diethylamide (LSD) is a hallucinogenic agent, and describe its effects upon the body
  - Describe prescription drug abuse and addiction
  - State the medical assistant's role in recognizing substance abuse and the action to take when substance abuse is suspected
  - List the warning signs of substance abuse in the workplace
  - Complete the Spot check on interactions of selected drugs and alcohol
  - Answer the review questions correctly

#### **Unit 21: Medications Used for Musculoskeletal System**

- Define the terms listed in the vocabulary
- Describe the benefits and injuries associated with exercise
- List the normal aging changes that can predispose older adults to falls
- Explain why musculoskeletal injuries can be common in childhood
- List ways that may be used to help prevent sports injuries during childhood
- Complete the critical thinking questions and activities presented in this unit
- State the actions, uses, contraindications, warnings, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for corticosteroids
- State the usual anti-inflammatory dose, and adverse reactions of selected nonsteroidal antiinflammatory agents
- Describe disease-modifying antirheumatic drugs
- Describe COX-2 inhibitors and give examples
- Describe antitumor necrosis factor drugs
- State the actions, uses, contraindications, adverse reactions, dosage and route, implications for patient care, and patient teaching, and special considerations for etanercept (Enbrel)

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- State the actions, uses, contraindications, adverse reactions, dosage and route, implications for patient care, and patient teaching, and special considerations for selected medications used to treat osteoporosis
  - Describe agents that are used to treat gout
  - State the actions, uses, types, usual dosage, adverse reactions, and implications for patient care, patient teaching, and special considerations for selected skeletal-muscle relaxants
  - State the actions, uses, type, usual dosage, and adverse reactions of selected neuromuscular blocking agents

### **Unit 22: Medications Used for Gastrointestinal System Disorders**

- Define the terms listed in the vocabulary
- Describe the digestive process
- State the treatment regimen for an ulcer associated with the *Helicobacter pylori* bacteria
- List the changes that occur in gastrointestinal functioning of older adults
- State the signs and symptoms of gastrointestinal disorders in children
- Complete the critical thinking questions and activities presented in this unit
- State the actions, uses, contraindications, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for selected antiulcer agents
- State the usage, classifications, actions, usual dosage, and onset of action, patient teaching, and special considerations for laxatives
- State the usual dosage and adverse reactions, and special considerations for antidiarrheal agents
- State the usual dosage and adverse reactions of selected anthelmintics
- State the usual dosage and adverse reactions of selected antiprotozoal agents
- State the usage, contraindications, and dosage of apomorphine HCl and ipecac syrup
- Complete the Spot check on selected drugs used to treat ulcers
- Answer the review questions correctly

### **Unit 23: Medications Used for Cardiovascular System Disorders**

- Define the terms listed in the vocabulary
- State the function of the cardiovascular system
- List the warning signs of a heart attack
- List the established risk factors for heart disease
- Explain why age is directly related to the development of heart disease
- Explain why age complicates the treatment regimen for older adults
- Describe two causes of congenital heart disease
- Complete the critical thinking questions and activities presented in this unit
- Describe three ways that drugs may affect heart action
- Explain the action of digitalis products
- State the usual initial or digitalizing dose, the usual maintenance dose, and adverse reactions of selected digitalis products

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- State the actions, uses, contraindications, warnings, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for digitalis preparations, antihypertensive agents, anticoagulants, antiplatelet drugs, hematinic agents, agents used in treating megaloblastic anemia, and antihyperlipidemic agents
  - Describe hemostatic agents and their uses
  - Complete the Spot Check on selected drugs that are used to treat cardiovascular system disorders
  - Answer the review questions correctly

#### **Unit 24: Medications That Affect the Respiratory System**

- Define the terms listed in the vocabulary
- Describe respiration
- Describe the causes of respiratory conditions and/or diseases
- Describe the various drug classifications that are used for respiratory system conditions and diseases
- Identify selected drugs according to each described classification
- Understand the actions, uses, contraindications, warnings, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for selected drugs that affect the respiratory system
- Describe tuberculosis, listing the symptoms, diagnosis, and treatment regimen
- Explain why there may be an increased risk of developing tuberculosis in older adults
- Explain why a child may be at greater risk of contracting tuberculosis
- Complete the critical thinking questions and activities presented in this unit
- Complete the spot Check on recommended children's dosages for selected antituberculosis drugs
- Answer the review questions correctly

#### **Unit 25: Diuretics and Medications Used for Urinary System Disorders**

- Define the terms listed in the vocabulary
- State two vital functions of the kidneys
- State the actions, uses, contraindications, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for thiazide, loop, potassium-sparing, osmotic, and carbonic anhydrase inhibitor diuretics, sulfonamides, and urinary tract antiseptics
- Describe the symptoms, diagnosis, and treatment regimen for cystitis
- Describe interstitial cystitis
- Describe the effect of the aging process on the kidneys
- Explain why it is important to assess an older adult's voiding history and medication history
- State the signs of nephrotoxicity
- Describe the signs and symptoms of a urinary tract infection in children
- Explain the treatment regimen for a child with a urinary tract infection

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- Complete the critical thinking questions and activities presented in this unit
  - Complete the Spot Check on selected drugs used to treat urinary tract infections
  - State the action, usual dosage, and adverse reactions of selected drugs used for urologic disorders
  - Identify selected agents that discolor urine
  - Answer the review questions correctly

#### **Unit 26: Medications Used in the Treatment of Endocrine Disorders**

- Define the terms listed in the vocabulary
- Give the location and functions of the primary endocrine glands
- State the actions, uses, contraindications, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for thyroid hormones, antithyroid hormones, insulin, and oral hypoglycemic agents
- Describe diabetes mellitus
- Contrast the signs and symptoms of hypoglycemia and hyperglycemia
- Describe some risk factors associated with older adults developing diabetes
- Explain why drug therapy may present special problems for older adults
- Explain why the management of diabetes mellitus during childhood is most difficult
- Describe some of the factors associated with the management of diabetes in children
- Complete the critical thinking questions and activities presented in the unit
- List the types of insulin preparations according to rapid-acting, short-acting, intermediate-acting, and long-acting
- State why hyperglycemic agents are used and give examples
- Complete the Spot Check on insulin

#### **Unit 27: Medications That Affect the Nervous System**

- Define the terms listed in the vocabulary
- Describe the nervous system
- Define pain
- Explain the special considerations for older adults with pain
- Give some indications of pain in neonates, infants, and older children
- Explain various techniques for assessing pain in children
- Complete the critical thinking questions and activities presented in this unit
- State the actions, uses, contraindications, warnings, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for narcotic analgesics, barbiturates, anti-parkinsonian drugs, and anticonvulsants
- State the actions, usual dosage, and adverse reactions of selected analgesicantipyretics and a narcotic antagonist (naloxone hydrochloride)
- Complete the Spot Check on selected medications used to treat pain

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- State the schedule, duration, usual sedative dose, and usual hypnotic dose of selected barbiturates
  - Give examples of benzodiazepines that are effective sedative-hypnotics drugs
  - State the schedule, usual sedative dose, and usual hypnotic dose of selected non-barbiturate sedative-hypnotic drugs
  - Describe Alzheimer's disease (AD)
  - Describe anesthetic drugs as local or general acting
  - State three uses of ophthalmic drugs
  - State the classification, usual dosage, and adverse reactions of selected drugs used to treat glaucoma

### **Unit 28: Medications That Affect the Reproductive System**

- Define the terms listed in the vocabulary
- State the actions, uses, contraindications, warnings, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for estrogens
- State the actions, uses, contraindications, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for progesterone
- Give the benefits and risks of hormone replacement therapy
- List several alternative treatment options for hormone replacement therapy
- Describe how oral contraceptives, when used as directed, prevent the occurrence of pregnancy
- List the adverse reactions of oral contraceptives
- List the conditions in which taking an oral contraceptive could be dangerous
- State the actions, uses, contraindications, adverse reactions, dosage and route, implications for patient care, patient teaching, and special considerations for testosterone
- Describe erectile dysfunction
- State the actions, uses, contraindications, cautions, adverse reactions, dosage and route, patient teaching for Viagra (sildenafil citrate)
- Describe the drugs that may be used during labor and delivery
- State the uses, usual dosage, and adverse reactions of selected uterine stimulants
- Give the signs and symptoms of specific sexually transmitted diseases (STDs)

### **Course Outline or Schedule:**

#### **Week 1:**

##### **Monday**

- Syllabus review/ introduction of research project

##### **Wednesday**

- Review dosage calculations

**Week 2:**

Monday

- Lecture Chapter 4: The Metric System

Wednesday

- Lecture Chapter 5: Calculating Adult Dosages (Oral and Parenteral Forms) & Chapter 6: Calculating Children's Dosages

**Week 3:**

Monday

- Labor Day

Wednesday

- **Exam #1: Ch 4-6** and begin Chapter 7: Drug Sources, Schedules and Dosages

**Week 4:**

Monday

- Finish Chapter 7 and lecture Chapter 8: Forms of Drugs and How They Act

Wednesday

- Chapter 9: The Medication Order and Chapter 10: Medication Administration Essentials

**Week 5:**

Monday

- Lecture Chapter 11: Administration of Nonparenteral Medications

Wednesday

- **Exam # 2: Ch.7-11** and lecture Chapter 12: Parenteral Equipment

**Week 6:**

Monday

- Practice Chapter 12 procedures and Lecture Chapter 13: Administration of Parenteral Medications

Wednesday

- Lecture Chapter 14: Allergy: An Overview and Chapter 15: Antibiotic Agents

**Week 7:**

Monday

- **Exam #3: Ch. 12-15** and lecture Chapter 16: Antifungal, Antiviral, and Immunizing Agents



Wednesday

- Lecture Chapter 17: Antineoplastic Agents and Chapter 18: Vitamins, Minerals and Herbals

**Week 8:**

Monday

- Chapter 19: Psychotropic Agents

Wednesday

- **Exam #4: Ch. 16-19** and begin lecture Chapter 20: Substance Abuse

**Week 9:**

Monday

- Finish Chapter 20 and lecture Chapter 21: Medications Used for Musculoskeletal System Disorders

Wednesday

- Chapter 22: Medications Used for Gastrointestinal System Disorders

**Week 10:**

Monday

- Lecture over Chapter 23: Medications Used for Cardiovascular System Disorders

Wednesday

- **Exam #5: Ch. 20-23** and lecture Chapter 24: Medications that Affect the Respiratory System

**Week 11:**

Monday

- Finish Chapter 24 and begin lecture for Chapter 25: Diuretics and Medications Used for the Urinary System Disorders

Wednesday

- Finish Chapter 25 and lecture Chapter 26: Medications Used in Treatment of Endocrine Disorders

**Week 12:**

Monday

- Lecture Chapter 27: Medications that Affect the Nervous System and Chapter 28: Medications that Affect the Reproductive System

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Wednesday

- Practice procedures

**Week 13:**

Monday

- Exam #6: Ch. 24-28

Wednesday

- Dosage calculations

**Week 14:**

Monday

- Practice procedures

Wednesday

- Thanksgiving Holiday

**Week 15:**

Monday

- Review for Final Exam/Presentation of research projects

Wednesday

- Review for Final Exam/Presentation of research projects

**Week 16:**

Monday

- Final Exam

**Course Grading Information:**

Exams	25%
Quizzes	10%
Research assignment	20%
Lab participation/Homework	20%
Final exam	25%

**Exams:**

There will be a total of 6 exams and 1 final exam.

**Quizzes:**

Quizzes will be given at random throughout the semester. Should the student be absent on a day that a quiz was given, they will get a 0 for the quiz grade as they are not allowed to be made-up. So, a little hint, do your best to be present everyday!

**Research assignment:**

A research paper is required for this class over a medication that has been removed from the market by the FDA (Food and Drug Administration). The paper will be from 5-7 pages in length and must follow MLA format.

**Lab Participation and Homework :**

During class, students will be graded on participation which includes (but not limited to): being actively involved in the lectures including expression of opinions (always respectful) and questions on classroom lectures and listening attentively. Points will be deducted should the student cause distraction, being on their phone, repeatedly showing up late to class, falling asleep, etc.

Homework when assigned, will be due the next class day. You will need to submit it via Brightspace BEFORE the due date to receive credit.

**You must maintain a 70% or higher to pass any MDCA course. Lab/class participation is defined as active involvement in any and all class activities.**

**\*\*\*Instructor Note\*\*\***

Cheating or plagiarism will not be tolerated in any form. First offence will result in a grade of zero on the said work/exam. Second offence will result in expulsion from the program.

**Late Work, Attendance, and Make Up Work Policies:**

- Exam dates are on the tentative schedule. Should you miss an exam, it is up to YOU to meet with me to schedule a make-up exam. If a make-up exam is given, it must be within one week of the scheduled exam. Graded exams must be returned to the instructor during the class period in which it was returned to the students.
- Your research project is eligible for a make-up with a 20 point penalty.
- Attendance will be checked 5 minutes after class begins. Should you be absent, I request that you send me an email, letting me know that you will not be present.
- Absence from 25 percent of scheduled lecture and/or laboratory meetings (8 days) will be taken as evidence that a student does not intend to complete the course, and the student

will be withdrawn from the course with a grade of W. If the student's 25 percent absences are reached after the official drop date, the instructor may assign a W, if the student is passing and requests to be withdrawn. However, if a student who is not passing reaches the 25 percent point after the official drop date, the student will receive an F. Each absence will count toward attendance requirements in each course.

- Rescheduling of class days may occur due to unforeseen events, I.E., inclement weather. In this event students will be notified by all means available.

### **Student Behavioral Expectations or Conduct Policy:**

Proper student behavior during class is expected. This includes respect for your fellow classmates, your professor, dress codes, language, attitude and respect for the field in which you are entering. Any deviation from these expectations will be dealt with according to the general conduct policy stated in the Highlanders guide. During class, you are expected to participate in the lecture/lab. Cell phones are to be placed on silent and put away. If you need to answer a call, please excuse yourself into the hall to answer. Sleeping in class will not be tolerated. If you are caught sleeping, points will be deducted from your participation grade. During exams, you are required to remove all watches and place them along with your phone, books, notes, etc. away in your backpack. Consequences for failure to comply with all class rules/guidelines stated in this syllabus as well as other rules stated in the MCC Student Handbook will have the following consequences:

- (1) The student will be asked to comply with the rules (penalties will stand as stated).
- (2) If the student fails to comply, the student will be asked to leave the room for the remainder of the class for that day.
- (3) Subsequent incidents will result in a conference with the program director, the campus disciplinary specialist, and/or the dean of workforce education for further disciplinary actions which could include being dropped from the course. It is the student's responsibility to make up any missed work by the original deadline for the work missed due to a disciplinary action.

### **[Click Here for the MCC Attendance/Absences Policy](https://www.mclennan.edu/highlander-guide/policies.html)**

**(<https://www.mclennan.edu/highlander-guide/policies.html>)**

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

**\*\*\*INSTRUCTOR NOTE:\*\*\***

Please understand that I care for each of my students, especially when it comes to their safety and well-being. If during the course of our discussions an issue arises in which I feel warrants a referral for Title IX or to our success coaches, I will not hesitate to make the referral. I will do my best to notify you in advance of the referral and will stand by your side as part of your circle of care for as long as you and the college will allow. Should these circumstances arise, please understand that the referral is not disciplinary, but rather an opportunity to intervene early and identify all resources that can help you find academic and personal success.

# McLennan

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## ACADEMIC RESOURCES/POLICIES

### **Student Support/Resources:**

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <http://www.mclennan.edu/campus-resource-guide/>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing [SuccessCoach@mclennan.edu](mailto:SuccessCoach@mclennan.edu). Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

### **MCC Foundation Emergency Grant Fund:**

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html> to find out more about the emergency grant. The application can be found at [https://www.mclennan.edu/foundation/docs/Emergency\\_Grant\\_Application.pdf](https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf).

### **Minimum Technical Skills:**

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

### **Backup Plan for Technology:**

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

### **Minimum System Requirements to Utilize MCC's D2L|Brightspace:**

Go to <https://www.mclennan.edu/center-for-teaching-and-learning/Faculty%20and%20Staff%20Commons/requirements.html> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

**Email Policy:**

McLennan Community College would like to remind you of the policy (<http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

**Instructional Uses of Email:**

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

**Email on Mobile Devices:**

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email [Helpdesk@mclennan.edu](mailto:Helpdesk@mclennan.edu) for help.

**Forwarding Emails:**

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

**MCC Academic Integrity Statement:**

Go to [www.mclennan.edu/academic-integrity](http://www.mclennan.edu/academic-integrity) for information about academic integrity, dishonesty, and cheating.

**Accommodations/ADA Statement:**

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit [www.mclennan.edu/disability](http://www.mclennan.edu/disability).

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

[disabilities@mclennan.edu](mailto:disabilities@mclennan.edu)

254-299-8122

Room 319, Student Services Center

**Title IX:**

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at [titleix@mclennan.edu](mailto:titleix@mclennan.edu) or by calling Dr. Drew Canham (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <http://www.lighthouse-services.com/mclennan/>.

Go to McLennan's Title IX webpage at [www.mclennan.edu/titleix/](http://www.mclennan.edu/titleix/). It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

**Disclaimer:**

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.