

MDCA 1348
Pharmacology & Administration of Medications
Western Texas College

I. Basic Course Information

- A. Course Description: Instruction in concepts and application of pharmacological principles. Focuses on drug classifications, principles and procedures of medication administration, mathematical systems and conversion, calculations of drug problems, and medico-legal responsibilities of the medical assistant.
- B. Prerequisites: None

II. Student Learning Outcomes

- A. Prepare, administer, and document oral and percutaneous medications; calculate drug dosages for administration by standard routes for adult and pediatric patients; demonstrate inventory handling and storage; and adhere to governmental health care guidelines and biohazard protocols.

III. Online Testing Requirements

- A. The midterm and final exam must be proctored by an approved testing organization. (Ask your instructor for more details.)
- B. Students are not allowed to use their book or notes of any kind while taking their proctored tests and exams.

IV. Major Course Requirements: The grade for this course will be determined as follows:

- A. Exams: 30%
- B. Quizzes: 15%
- C. Homework: 15%
- D. Skills Check Off 15%
- E. Project 25%
- F. Grading scale:
 - A= (90-100%)
 - B= (80-89%)
 - C= (70-79%)
 - D= (60-69%)

- G. Students must earn a grade "C" or higher to successfully complete this course.
- H. Students must attain a "C" or higher to remain in the program.

V. Information on Books and Other Course Materials

- A. Title: Principles of Pharmacology for Medical Assisting
- B. Author: Jane Rice
- C. Edition: 6th
- D. Publisher: Delmar/Cengage Learning
- E. ISBN-13: 978-1-305-58932-6

VI. Other Policies, Procedures and important dates: Please refer to the WTC Course Catalog for the following:

- A. Campus Calendar
- B. Final exam schedule
- C. How to drop a class
- D. Withdrawal information
- E. Student Conduct/Academic Integrity
- F. Class Attendance
- G. Students with disabilities

VII. Course Sequence & Content

Week	Topic
Week 1	<p>Course Overview</p> <p>Chapter 1: Numbers and Fractions</p> <p>Chapter 2: Decimal Fractions Assignment- pg 34 self-assessment</p>
Week 2	<p>Chapter 3: Ratio and Proportion</p> <p>Chapter 4: The Metric System</p> <p>Assignment- pg 50-51 self-assessment</p>
Week 3	<p>Chapter 5: Calculating Adult Dosages</p> <p>Chapter 6: Calculating Children's Dosages</p> <p>Assignment: pg 58 & pg 65 self assessment</p>
Week 4	<p>Quiz 1 [Chapters 1-6]</p> <p>Chapter 7: Drug Sources, Schedules, and Dosages</p> <p>Chapter 8: Forms of Drugs and How They Act</p>

	Assignment- pg 84-85, Review Questions
Week 5	<p>Chapter 9: The Medication Order</p> <p>Chapter 10: Medication Administration Essentials</p> <p>Assignment- pg 98-99 Review Questions, Abbreviation Exercise, Understanding a Medication Label Exercise</p> <p>Discussion- Discuss the difference of universal precautions vs. Standard precautions</p>
Week 6	<p>Class Presentation on 5 rights of Medication Administration</p> <p>Chapter 11: Administration of Non parenteral Medications</p> <p>Chapter 12: Parenteral Equipment and Supplies</p> <p>Discussion: Discuss what a needle stick injury is, include statistics of number of needlesticks annually and results of needle sticks in the healthcare industry.</p> <p>Quiz 2 [Chapters 7-12]</p>
Week 7	<p>Chapter 13: Administration of Parenteral Medications</p> <p>Chapter 14: Allergy Overview</p> <p>Chapter 15: Antibiotic Agents</p> <p>Skill Check off on Administration of Medications Assignment- pg 174-176 Review Questions, pg 205-208 Review Questions</p>
Week 8	Midterm
Week 9	<p>Chapter 16: Antifungal, Antiviral, and Immunizing Agents</p> <p>Chapter 17: Antineoplastic Agents</p> <p>Chapter 18: Vitamins and Minerals</p>

	<p>Skills Check-Off Administration of Parental Medications</p> <p>Quiz 3 [Chapters 13-18] Assignment: Complete Class Cards for Antibiotic Medications</p>
Week 10	Spring Break
Week 11	<p>Chapter 19: Psychotropic Agents</p> <p>Chapter 20: Substance Abuse</p> <p>Discussion: Using pages 337-346, Discuss at least three of the most commonly addictive drugs, Ethics in Substance Abuse, Signs/Recognition of Substance Abuse</p> <p>Assignment: Complete class cards for Antifungal, Antiviral and Immunizing Agents Medications</p> <p>Chapter 21: Medications Used for Musculoskeletal System Disorders</p> <p>Chapter 22: Medications Used for Gastrointestinal System Disorders</p> <p>Assignment: Complete class cards for Psychotropic, Musculoskeletal and Gastrointestinal Agents</p>
Week 12	<p>Chapter 23: Medications Used for Cardiovascular System Disorders</p> <p>Chapter 24: Medications That Affect the Respiratory System</p> <p>Quiz4 [Chapters 19-24]</p> <p>Assignment: Complete class cards for Cardiovascular, Respiratory Systems</p>
Week 13	<p>Chapter 25: Diuretics and Medications Used for Urinary System Disorders</p> <p>Chapter 26: Medications Used in Treatment of Endocrine Disorders</p> <p>Assignment: Complete class cards for Diuretics, Urinary and Endocrine System</p>

Week 14	Chapter 27: Medications That Affect the Nervous System Chapter 28: Medications That Affect the Reproductive System Complete class cards for Nervous and Reproductive System Quiz 5 [Chapters 25-28] Medication Knowledge Maps Due- Group Project
Week 15	Course Review
Week 16	Final Exam

Disclaimer: Sequence & Content is subject to change at the instructor's discretion.