



Western Technical College

31509308 Pharm for Allied Health

Course Outcome Summary

Course Information

Description	Introduces students to medication classification and basic pharmacology principles. Students apply basic pharmacodynamics to identify common medications and calculate dosages in preparation for medication administration.
Career Cluster	Health Science
Instructional Level	Technical Diploma Courses
Total Credits	2
Total Hours	72

Pre/Corequisites

Prerequisite	10501101 Medical Terminology
Prerequisite	31509302 Human Body in Health & Disease
Prerequisite	31509304 Medical Asst Clin Procedures 1

Textbooks

Essentials of Pharmacology for Health Professions. 9th Edition. Copyright 2023. Woodrow, Ruth, Bruce J. Colbert, and David M. Smith. Publisher: Cengage Learning. **ISBN-13:** 978-0-357-61830-1. Required.

Medical Assistant Review: Passing the CMA, RMA, and CCMA Exams with CONNECT. 7th Edition. Copyright 2021. Moini, Jahangir. Publisher: McGraw-Hill Publishing Company. **ISBN-13:** 978-1-266-36501-0. Required.

Learner Supplies

Calculator - \$10.00. **Vendor:** To be discussed in class. Required.

Program Outcomes

1. Provide patient care in accordance with regulations, policies, laws, and patient rights

Course Competencies

1. Practice drug safety

Assessment Strategies

- 1.1. in an oral or written response to scenarios and/or questions
- 1.2. in a written exam

Criteria

- 1.1. response references applicable drug laws and standards
- 1.2. response follows established drug safety procedures
- 1.3. response defines Drug Controlled Substance Schedule
- 1.4. response demonstrates the "Rights of Medication Administration"

Learning Objectives

- 1.a. Linked external target standards are the learning objectives.

2. Utilize drug references

Assessment Strategies

- 2.1. oral or written response to scenarios and/or questions
- 2.2. using drug references

Criteria

- 2.1. you identify the classifications of medications including: indications for use, desired effects, side effects, and adverse reactions (I.C.11.a-d.)
- 2.2. you identify the drug interactions and route of administration
- 2.3. you identify any specific instructions
- 2.4. you identify the generic and trade names
- 2.5. you identify the dose range

Learning Objectives

- 2.a. Linked external target standards are the learning objectives.

3. Explain pharmacology principles

Assessment Strategies

- 3.1. in an oral or written response to scenarios and/or questions

Criteria

- 3.1. response differentiates between drug actions and drug effects
- 3.2. response differentiates between systemic effects and local effects
- 3.3. response differentiates between loading dose and maintenance dose
- 3.4. response differentiates between toxic dose and lethal dose
- 3.5. response describes various undesirable drug effects

Learning Objectives

- 3.a. Linked external target standards are the learning objectives.

4. Interpret prescriptions

Assessment Strategies

- 4.1. through interpretation of verbal and written prescription samples

Criteria

- 4.1. prescription interpretation of prescription sample provides accurate medication name
- 4.2. prescription interpretation of prescription sample provides accurate medication dosage
- 4.3. prescription interpretation of prescription sample provides accurate medication route

- 4.4. prescription interpretation of prescription sample provides accurate medication time of administration
- 4.5. prescription interpretation includes correct identification of abbreviations

Learning Objectives

- 4.a. Linked external target standards are the learning objectives.

5. Apply mathematical computations to solve equations relating to medication administration

Assessment Strategies

- 5.1. by completing dosage calculations
- 5.2. with a calculator

Criteria

- 5.1. you demonstrate knowledge of basic math computations
- 5.2. you apply mathematical computations to solve equations
- 5.3. you define basic units of measurement in: the metric system and the household system
- 5.4. you convert among measurement systems
- 5.5. you identify abbreviations and symbols used in calculating medication dosages
- 5.6. you calculate proper dosages of medication for administration

Learning Objectives

- 5.a. Linked external target standards are the learning objectives.

6. Relate the role of supplements in pharmacology

Assessment Strategies

- 6.1. oral or written response to scenarios and/or questions

Criteria

- 6.1. you determine the rationale for vitamins and alternative treatments
- 6.2. you identify the classifications of medications (supplements) including: indications for use, desired effects, side effects, and adverse reactions
- 6.3. you define the function of dietary supplements

Learning Objectives

- 6.a. Linked external target standards are the learning objectives.

7. Apply pharmacology principles to medications for the nervous system

Assessment Strategies

- 7.1. in an oral or written response to scenarios and/or questions

Criteria

- 7.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions
- 7.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

- 7.a. Linked external target standards are the learning objectives.

8. Apply pharmacology principles to medications for the musculoskeletal system

Assessment Strategies

- 8.1. in an oral or written response to scenarios and/or questions

Criteria

- 8.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions
- 8.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

- 8.a. Linked external target standards are the learning objectives.

9. Apply pharmacology principles to medications for the cardiovascular system

Assessment Strategies

9.1. in an oral or written response to scenarios and/or questions

Criteria

- 9.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions
- 9.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

9.a. Linked external target standards are the learning objectives.

10. Apply pharmacology principles to medications for the respiratory system

Assessment Strategies

10.1. in an oral or written response to scenarios and/or questions

Criteria

- 10.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions
- 10.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

10.a. Linked external target standards are the learning objectives.

11. Apply pharmacology principles to medications for the urinary system

Assessment Strategies

11.1. in an oral or written response to scenarios and/or questions

Criteria

- 11.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions
- 11.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

11.a. Linked external target standards are the learning objectives.

12. Apply pharmacology principles to medications for the gastrointestinal system

Assessment Strategies

12.1. in an oral or written response to scenarios and/or questions

Criteria

- 12.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions
- 12.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

12.a. Linked external target standards are the learning objectives.

13. Apply pharmacology principles to medications for the integumentary system

Assessment Strategies

13.1. in an oral or written response to scenarios and/or questions

Criteria

- 13.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions
- 13.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

13.a. Linked external target standards are the learning objectives.

14. Apply pharmacology principles to medications for the sensory system

Assessment Strategies

14.1. in an oral or written response to scenarios and/or questions

Criteria

14.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions

14.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

14.a. Linked external target standards are the learning objectives.

15. Apply pharmacology principles to the medications for the hematologic, lymphatic, and immune systems

Assessment Strategies

15.1. in an oral or written response to scenarios and/or questions

Criteria

15.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions

15.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

15.a. Linked external target standards are the learning objectives.

16. Apply pharmacology principles to medications for the endocrine system

Assessment Strategies

16.1. in an oral or written response to scenarios and/or questions

Criteria

16.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions

16.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

16.a. Linked external target standards are the learning objectives.

17. Apply pharmacology principles to medications for the reproductive system

Assessment Strategies

17.1. in an oral or written response to scenarios and/or questions

Criteria

17.1. you identify the classifications of medications, including desired effects, side effects and adverse reactions

17.2. you describe the relationship between anatomy and physiology of all body systems and medications used for treatment of each

Learning Objectives

17.a. Linked external target standards are the learning objectives.