PHARMACEUTICAL TERMINOLOGY
Course Syllabus

Course Number: THRP-0421  
OHLAP Credit: No
OCAS Code: None
Course Length: 15 Hours
Career Cluster: Health Science
Career Pathway: Therapeutic Services
Career Major(s): Pharmacy Technician, Advanced Pharmacy Technician

Pre-requisite(s):
This course is an in-depth study of pharmaceutical terminology and its applications to the health care industry. Course content focuses on identification of word parts, proper pronunciation and enunciation of medical terms, spelling of medical terms, and application of each medical term to the anatomy and physiology of the body. Correct pronunciation of drug names, which include brand, generic and chemical will also be studied.

Textbooks:
- Pharmacy Calculations for Technicians 5th Edition, text with Study Partner CD
- Certification Exam Review 3rd Edition, text with Study Partner CD
- Pharmacy Practice for Technicians 5th Edition, text with Study Partner CD
- Pharmacy Labs for Technicians, Second Edition, text with NRx Simulation CD
- Blackboard

Course Objectives:

A. Identify, Define, and Discuss Word Parts and the Word Building Rules Associated with Pharmaceutical Terminology.¹
   1. List the three basic component parts of a word.¹
   2. Accurately define the terms word root, prefix, combining vowel and combining form.¹
   3. Correctly state the rule for joining prefixes to a word root.¹
   4. Correctly state the rule for attaching a suffix to a word root.¹
   5. Demonstrate the ability to apply the word building rules by accurately completing exercises.¹

B. Define, Compare, and Contrast the Meanings for Common Prefixes.¹
   1. Define a prefix and state the rule for using prefixes in words.¹
   2. Correctly identify prefixes that deal with numbers, color, measurements and negatives.¹
   3. Correctly identify prefixes that deal with position and direction.¹
   4. Correctly identify prefixes.¹
   5. Demonstrate the ability to create new words using prefixes by completing the appropriate exercises.¹

C. Define, Compare and Contrast the Meaning for Common Suffixes and Discuss Situations When Suffixes Alter the Grammatical Classification of a Word (noun,
adjective, prefix).  
1. Define a suffix and state the rule for using suffixes in words.  
2. Correctly identify suffixes that make a word a noun.  
3. Correctly identify suffixes that make a word an adjective.  
4. Correctly identify suffixes that deal with instruments and diagnostic and surgical procedures.  
5. Identify and define suffixes that deal with specialties and specialists.  

D. Pronounce, Enunciate, Spell and Define the Terms Most Commonly Associated with the Human Body from an Overall Perspective and Discuss Application of General Medical Terms to the Anatomy and Physiology of the Body. 
1. List the five body cavities of the human body.  
2. List the organs contained within the five body cavities.  
3. Define terms relating to the body as a whole.  
4. Identify body regions.  
5. Identify terms relating to the structural organization of the body.  
6. Identify terms relating to the body as a whole.  
7. Create medical terms relating to the body as a whole.  

E. Describe the Administration of Pharmacologic Agents. 
1. Know the components of the prescription, including the accepted standard abbreviations.  
2. Understand the five rights of correct drug administration.  
3. Recognize common dosage forms.  
4. Know the routes of administration.  

F. Correctly Interpret Prescriptions.  
1. Write prescriptions using standard prescription abbreviations.  
2. Read prescriptions that use standard prescription abbreviations.  

G. Understand the Naming Scheme Used to Identify Various Drug Classes.  

1. Match correct brand to generic.  
2. Match correct generic to brand.  
3. Spell brand name.  
4. Spell generic name.  
5. Spell chemical name.  
6. Pronounce brand name.  
7. Pronounce generic name.  
8. Pronounce chemical name.  

I. Use Correct Pharmaceutical Abbreviations.  
1. List commonly used abbreviations and symbols.  
2. Units for systems of measurements  
3. Dosage forms  
   a. Routes administration  
   b. Time or frequency  
   c. Controlled release medications  
   d. Commonly abbreviated medications  

J. Pharmaceutical Dosage Forms  
1. Explain the different interpretations of “dosage form” by the patient, by members of the health care team, and by pharmacists.  
2. Name four formulation aids used in the preparation of a given dosage form.  
3. Describe the advantages and disadvantages of the major classes of pharmaceutical dosage forms.  
   a. Liquids  
   b. Solid  
   c. Aerosols  
4. Differentiate the characteristics of a solution and a suspension.
5. Describe the characteristics of the categories of liquid dosage forms.  
a. Solutions  
b. Emulsions  
c. Suspensions  

6. List five desirable qualities for an external suspension.  

7. Describe situations where ointment may be preferred over cream preparations.  

8. Name and define four solid dosage forms currently in use.  

9. Explain the differences between compressed tablets, sublingual or buccal tablets, and multiple compressed tablets.  

10. Explain the differences between the various solid dosage forms.  

a. Tablets  
b. Capsules  
c. Lozenges  
d. Powders  
e. Granules  

11. Outline five advantages of the transdermal patch.  

K. Pharmaceutical Routes Of Administration  
1. List six routes of administration by which drugs may enter or be applied to the body.  

2. Identify special considerations for each route of administration.  

a. Oral  
b. Parenteral  
c. Topical  
d. Transdermal  
e. Rectal  
f. Vaginal  
g. Otic  
h. Ophthalmic  
i. Nasal  
j. Inhalation  

3. List five parenteral routes of administration.  

4. Explain the difference between the topical and transdermal routes.  

5. Describe how medication should be labeled to ensure correct route of administration.  

a. Take  
b. Give  
c. Apply  
d. Insert  
e. Place or instill  
f. Inhale  

1 ODCTE Objective 
All unmarked objectives are TTC instructor developed.

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.
**Grading Procedures:**
1. Students are graded on theory and lab practice and performance.
2. Each course must be passed with seventy (70%) percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.
4. Career Major grades established during coursework are a major criteria in successfully obtaining certification.

**Description of Classroom, Laboratories, and Equipment:**
Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

**Available Certifications/College Credit:**
The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

**College Credit Eligibility:**
The student must maintain a grade point average of 2.0 or better.