U200-221: Introduction to Pharmacology

Course Format: Online

Course Author: Dr. Hephzibah J. Kumpaty

Course Credits: 3

Prerequisites: Grade of C or greater in Human Biology (U200-115), or General Chemistry with Lab (U500-101), or equivalent.

Course Description: This course introduces basic concepts of pharmacology and terms used and provides a framework to understand drugs and their administration. Unit I is a basic but comprehensive review of pharmacologic principles, introducing students to the subject of drugs, their sources, and uses in treating disease. Drug calculations are simplified into two step-by-step processes, so students become. Students study medication preparation, steps in calculating dosages, supplies, and specific information on each route of administration through textual and video components.

In unit II, students examine drug classifications through descriptions and characteristics of common drugs, their purposes, side effects, precautions or contraindications, and interactions. In addition, patient education is highlighted for each classification of drugs to bring an awareness of the importance to health care professionals to assist in patient teaching and answer questions about the medications they take.

Required Course Materials

1. Cengage Mindtap for Bruce J. Colbert and Ruth Woodrow. *Essentials of Pharmacology for Health Professions, Eighth Edition*. Cengage Learning, 2019. ISBN-13 9781337395922

   a. Assignments for this course will be completed using an online homework platform called Mindtap. There are directions to access Mindtap in the **eTextbook: Essentials of Pharmacology for Health Professions** module of the course. From there, you can purchase and/or set up your Mindtap account access from Cengage. This is a required part of the class. The link below will also provide helpful information on course set-up, getting started, etc.

Optional/Recommended Course Materials

1. Study Guide to Accompany *Essentials of Pharmacology for Health Professions, Eighth Edition*. Cengage Learning, 2019. ISBN-13 9781337395908
2. Student Companion Site accessed via CengageBrain
   a. PowerPoints
   b. Videos
3. If you want to purchase an optional hard copy of the textbook, Bruce J. Colbert and Ruth Woodrow. Essentials of Pharmacology for Health Professions, Eighth Edition. Cengage Learning, 2019, please use ISBN-13 9781337395892.

Hardware Requirements

You will need a modern computer and a fast Internet connection capable of streaming or downloading video. Recommended equipment includes a webcam, speakers, and a microphone.

Cengage Resources: (Getting Started Video, Quick Start Guides, Support Contact Info)**:** https://www.cengage.com/coursepages/UWW_Student

- Once you have registered and enrolled in Mindtap, you can log in at any time to complete or review your class assignments.
- During sign up - and throughout the term - if you have any technical problems or grading issues, contact: cengage.com/support on-line help or call 1-800-354-9706.
- To optimize your Cengage digital learning experience, please keep your internet browser up to date and minimize the use of RAM-intensive programs/websites while browsing Cengage

Course Learning Objectives

After completing Unit I (modules 1 and 2) of this course, students should be able to:

- Describe major drug classifications and differentiate among the various types of drug names with

- Define drug standards and legislation and discuss the legal responsibilities of the health care practitioner when dispensing

- Evaluate the standard and online pharmacological references in use

- Gain knowledge of the sources of drugs and examine their pharmacokinetic processes.

- Compare and contrast various drug forms, routes of delivery, for safe and appropriate

- Compute basic drug dosages calculations for a range of groups using the three systems of measurements and propose strategies to reduce medication

- Propose special precautions that should be taken when administrating medications for various demographics, and, for older

- Identify the primary routes of poisoning and explain the procedures, therapies, and preventive measures involved in patient care and education.

After completing Unit II (modules 3 and 4) of this course, students should be able to demonstrate knowledge of specific medications in the major drug classifications, which may include the following:

- Identify commonly used medications, and compare and contrast them

- Summarize the sources, mechanism of action, and indications for a specific drug

- State the appropriate dosages for several

- Describe the side effects, precautions, contraindications, and interactions for specific medications with

- Evaluate the factors that influence the absorption and effectiveness of

- Assess the unique features of a medication that are important for a patient

- Develop safety instructions for both the health care practitioner and the patient in administrating and taking

- Analyze the physiological effects of prolonged drug use, and discuss the responsibilities of a health care practitioner in addressing and treating drug

Course Overview

Module #	Module Topic	Evaluated Activities
Chapter 1	Consumer Safety and Drug Regulations	• Putting It All Together • Final Test
Chapter 2	Drug Names and References	• Putting It All Together • Final Test
Chapter 3	Sources and Bodily Effects of Drugs	• Get Started • Putting It All Together • Final Test
Chapter 4	Medication Preparations and Supplies	• Get Started • Learning Lab • Final Test
Chapter 5	Abbreviations and Systems of Measurement	• Putting It All Together • Final Test
Chapter 6	Safe Dosage Calculations	• Learning Lab • Final Test
Chapter 7	Responsibilities and Principles of Drug Administration	• Get Started • Learning Lab • Final Test
Chapter 10	Poison Control	• Putting It All Together • Final Test
Chapter 11	Vitamins, Minerals, and Herbs	• Get Started • Putting In All Together • Final Test
Chapter 12	Skin Medications	• Get Started • Learning Lab • Final Test
Chapter 13	Autonomic Nervous System Drugs	• Get Started • Putting It All Together • Final Test

Chapter 14	Antineoplastic Drugs	• Get Started • Putting It All Together • Final Test
Chapter 18	Eye and Ear Medications	• Get Started • Putting It All Together • Final Test
Chapter 19	Analgesics, Sedatives, and Hypnotics	• Get Started • Putting It All Together • Final Test
Chapter 20	Psychotropic Medications, Alcohol, and Drug Abuse	• Get Started • Putting It All Together • Final Test
Chapter 24	Reproductive System Drugs	• Get Started

Evaluation Methods

Your final grade will be based on your performance on the following:

Provide a suggested table for how the assignments in the package could be graded and weighed.

Assessment Type	Weight as a Percentage
Videos	10%
Assignments (Putting it all together/Learning Labs)	30 %
Final tests (end of chapter)	50%
Final Exam	10%
Total	100%

Assignments/Learning Labs

There will be a total of 15 assignments, all multiple choice questions, administered through Mindtap. These assignments are labelled as "putting it all together" or Learning labs. Each assignment is worth 100 points. The assignments are weighted 30% of the course grade. The lowest assignment/learning lab score will be automatically dropped. They will be based upon the chapter content, lecture slides, videos and upon the concepts and facts illustrated by the reading materials.

Final Tests (End-of-Chapter)

There will be a total of 15 end of the chapter final tests administered through Mindtap. Each assignment is worth 100 points. These tests are weighted at 50% of the course grade. The lowest final test score will be automatically dropped.

Videos

You are required to watch videos through Mindtap where necessary. Check tentative schedule below or the schedule in Canvas under each module. Videos are weighted at 10% of the course grade.

Final Exam

There will be a final cumulative exam from **Part 1 only which includes content from modules 1 and 2** worth 10% of the course grade. The format for final exam is multiple choice test through Mindtap.

Grading Scale

The following grading scale is used to evaluate all course requirements and determine your final grade:

A = 93–100	B = 83–87.9	C = 70–77.9	D = 60–69.9
AB = 88–92.9	BC = 78–82.9		F = Below 60

Pass/Fail Option

Students who enroll in an Independent Learning (IL) course under the pass/fail option will receive a final grade of S in place of a final grade equivalent to an A, AB, B, BC, or C and a final grade of U in place of a final grade equivalent to a D or F.