

HEOC-101: PHARMACOLOGY

Effective Term

Fall 2026

CC Approval

10/03/2025

AS Approval

10/09/2025

BOT Approval

10/16/2025

COCI Approval

03/03/2026

SECTION A - Course Data Elements

CB04 Credit Status

Credit - Degree Applicable

Discipline

Minimum Qualifications	And/Or
Health Care Ancillaries (Any Degree and Professional Experience)	

Subject Code

HEOC - Health Occupations

Course Number

101

Department

Health Occupations

Division

Health Occupations (HEOC)

Full Course Title

Pharmacology

Short Title

Pharmacology

CB03 TOP Code

1260.00 - *Health Professions, Transfer Core Curriculum

CIP Code

51.0000

CB08 Basic Skills Status

NBS - Not Basic Skills

CB09 SAM Code

C - Clearly Occupational

Rationale

Move course from "emergency only" to permanent online/hybrid.

SECTION B - Course Description

Catalog Course Description

This course introduces students to the general principles and application of pharmacology. Topics include drug classifications, indications, side effects, and interactions. Drug dosage calculations will be reviewed.

SECTION C - Conditions on Enrollment

Open Entry/Open Exit

No

Repeatability

Not Repeatable

Grading Options

Letter Grade Only

Allow Audit

Yes

Requisites

SECTION D - Course Standards

Is this course variable unit?

No

Units

3.00

Lecture Hours

54.00

Outside of Class Hours

108

Total Contact Hours

54

Total Student Hours

162

Distance Education Approval

Is this course offered through Distance Education?

Yes

Online Delivery Methods

DE Modalities	Permanent or Emergency Only?
Entirely Online	Permanent
Hybrid	Permanent

SECTION E - Course Content

Student Learning Outcomes

Upon satisfactory completion of the course, students will be able to:

1. At the completion of this Pharmacology course, the student will be able understand and apply the principles of pharmacology.

Course Objectives

Upon satisfactory completion of the course, students will be able to:	
1.	Analyze basic principles of pharmacology.
2.	Identify the purpose, side effects, and interactions of specific drug classifications.
3.	Calculate drug dosages.
4.	Describe indications for medication administration routes.
5.	Discuss legal issues related to medication administration.
6.	Demonstrate an understanding of the effect of medications on body systems.

Course Content

1. Introduction to pharmacology
2. Drug classifications
 - a. Drug resources
3. Abbreviations and symbols
4. Biological factors affecting drug action
5. Routes of drug administration
6. Forms of medications
7. Legal aspects of drug administration
8. Introduction to drug dosage calculations
9. Responsibilities and Principles of Drug Administration
10. Medications affecting body systems:
 - a. Nervous system
 - b. Respiratory system and antihistamines
 - c. Musculoskeletal system and anti-inflammatory
 - d. Cardiovascular system
 - e. Urinary system
 - f. Digestive system
 - g. Reproductive system
 - h. Endocrine system
11. Special drugs:
 - a. Vitamins, minerals, herbs
 - b. Anti-infectives
 - c. Eye medications
 - d. Analgesics, sedatives, hypnotics
 - e. Anti-neoplastics

Methods of Instruction

Methods of Instruction

Types	Examples of learning activities
Lecture	Discuss and review the interactions and classes of drugs for specific therapeutic and disease processes.

Online Adaptation

Types	Examples of learning activities
Activity	Directed study and online assignment submission.
Discussion	Monitored discussion and chatroom.
Lecture	Recorded lecture provided via Canvas and/or Virtual environment.

Instructor-Initiated Online Contact Types

Announcements/Bulletin Boards
 Chat Rooms
 Discussion Boards
 E-mail Communication
 Telephone Conversations
 Video or Teleconferencing

Student-Initiated Online Contact Types

Chat Rooms
Discussions
Group Work

Course design is accessible

Yes

Methods of Evaluation**Methods of Evaluation**

Types	Examples of classroom assessments
Exams/Tests	Midterm and Final For example, the midterm, which may include 50-60 multiple choice and 5 short answer questions, covering the first half of the course, using an online timed exam.
Quizzes	Quizzes which may include multiple choice and short answer questions.
Other	Drug cards to be completed for each of the eight body systems. For example, students will complete a drug card for each body system covered. An example of the drug cards should include the generic and trade name of the drug, classification of the drug, forms in which the drug is available, drug actions, indications, side effects, routes of administration, dosage range, and special instructions for giving the medication. The cards will be graded on thoroughness and accuracy of the information.

Assignments**Reading Assignments**

Selected readings from textbook.

For example, selected readings may include Chapter 16: Gastrointestinal Drugs, pages 249-270, in "Essential of Pharmacology for health occupations, 5th edition."

For example, selected readings may include Chapter 9: Administration by the parenteral route, pages 109-139, in "Essential of Pharmacology for health occupations, 5th edition."

Writing Assignments

Students are to write a response to the following: The online environment is sometimes thought to be "disconnected" from other classmates and even course faculty. Please tell us about yourself. Briefly explaining what inspired you to choose to take pharmacology course and what your interest and goals are in the medical field. Lastly, tell us what you do to relax or have fun!

Problem Solving

For example, students will complete drug dosage calculations.

SECTION F - Textbooks and Instructional Materials**Material Type**

Textbook

Author

Woodrow, R.

Title

Essentials of pharmacology for health occupations

Edition/Version

5th

Publisher

Albany, New York: Delmar

Year

2007

Material Type

Textbook

Author

Ogden, Sheila

Title

Calculating of Drug Dosages

Edition/Version

12th

Publisher

Mosby

Year

2020

Material Type

Other required materials/supplies

Description

1. Student Handbook
2. HEOC 101 Pharmacology Syllabus (available online)

SECTION G - Diversity, Equity and Inclusivity

How does your course and/or course outline of record reflect strategies for accommodating and engaging diverse student populations, advancing equitable outcomes, and fostering inclusion for all students?

Allows equitable opportunity for study of pharmacology standards via no required prerequisites for all students interested in this field of study.

Course Codes (Admin Only)**CB00 State ID**

CCC000244518

CB10 Cooperative Work Experience Status

N - Is Not Part of a Cooperative Work Experience Education Program

CB11 Course Classification Status

Y - Credit Course

CB13 Special Class Status

N - The Course is Not an Approved Special Class

CB23 Funding Agency Category

Y - Not Applicable (Funding Not Used)

CB24 Program Course Status

Program Applicable

Allow Pass/No Pass

No

Only Pass/No Pass

No