

Pharmacology ACE

8 Modules + 1 Final Exam Module / Credit-by-Course / 3 Credits

Course Description:

The goal of Pharmacology is to understand how different pharmacotherapeutic agents play a role treating various diseases and disorders, while keeping knowledge of anatomy, physiology, and specific patient needs in mind. In this course, the basic concepts of drug safety, nomenclature, classification, legislation, administration, and mechanisms of action for commonly used drugs will be discussed. Proper applications for each of the main drug classes will be explored in depth, as well as specific examples of each. Avenues of pharmacological research regarding antibody treatment and chemotherapy usage in cancer treatment will also be described.

Course Objectives:

After completing this course, you will be able to:

- Apply basic pharmacology concepts, including drug safety, nomenclature, classification, and legislation.
- Recognize definitions of various terms associated with drug effects.
- Calculate and distinguish dosing and drug administration differences between pediatric, adult, and elderly patients.
- Identify basic anatomy and physiology of each organ system and the key organs involved.
- Compare and contrast the various routes of drug administration and recognize examples of each.
- Interpret the various types of drug interactions and the factors that cause these interactions.
- Apply your knowledge to determine which drugs are used to treat specific disorders/diseases across various body systems.
- Identify specific mechanisms of action for commonly used drugs.
- Distinguish important contraindications and risks for commonly used drugs.
- Recognize current avenues of drug research, including chemotherapy and antibody usage for immunosuppression.

E-Book:

Title: Pharmacology: An Introduction, Edition: 8, Author: Henry Hitner

Open Educational Resources (OER's)

If you are struggling with a term or concept, you can utilize the links below to search for the concept or term to find additional resources and explanations.

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Pharmacology Nursing - Open Education Resources (OER) - LibGuides at Mt. San Jacinto College (msjc.edu) (<https://libguides.msjc.edu/c.php?g=791138&p;=5683430>)

Medicines by Design (nih.gov)

(<https://www.nigms.nih.gov/education/Booklets/medicines-by-design/Pages/Home.aspx>)

Nursing Pharmacology Open Book resource (<https://open.umn.edu/opentextbooks/textbooks/875>)

Closed Captioning

Lecture videos and extra resource videos have automatic closed captioning. These captions are generated by computer algorithms. To utilize closed captioning, you can click on the CC button at the bottom of a video.

Accommodating Student Disabilities

Gateway Education is committed to the belief that every individual should have an equal opportunity in education. Gateway Education seeks to assure access by providing accommodations to individuals with a disability as defined under the Americans with Disabilities Act of 1990 (ADA) and the ADA Amendments Act of 2008 (ADAAA). Accommodation includes, but is not limited to: aids or modification to courses, materials, or testing; and other services that allow better access by individuals with disabilities.

Individuals requesting accommodation should submit a request in writing or in an alternative format appropriate for their limitations. The request should include documentation of the disability, including information with recommendations of appropriate accommodation. Once eligibility has been established, accommodations must be requested on a course-by-course basis.

Requests can sent to the student services department at help@gatewayeducation.com