COURSE SYLLABUS

LAST REVIEW Spring 2021

COURSE TITLE General Pharmacology

COURSE NUMBER BIOL-0116

DIVISION Math, Science, Business & Technology

DEPARTMENT Biology

CIP CODE 24.0101

CREDIT HOURS 3

CONTACT HOURS/WEEK Class: 3

PREREQUISITES None

COURSE PLACEMENT None

COURSE DESCRIPTION

The General Pharmacology course provides students with a concise introduction to pharmacology. The mechanisms of action, sites of action, and side effects of drugs will be presented. Emphasis will be placed on toxic signs, adverse drug reactions, and any special management issues relevant to the various classes of drugs.

TEXTBOOKS

http://kckccbookstore.com/

METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE

- Foundations of Clinical Pharmacology
- II. Drugs That Affect the Neurological System
- III. Drugs That Affect the Respiratory System
- IV. Drugs That Affect the Cardiovascular System
- V. Drugs That Affect the Gastrointestinal and Urinary System
- VI. Drugs That Affect the Endocrine and Reproductive System
- VII. Drugs That Affect the Immune System
- VIII. Drugs That Affect Other Body Systems

COURSE LEARNING OUTCOMES AND COMPETENCIES

Upon successful completion of this course, the student will:

- A. The student will be able to explain the general concepts and principles of pharmacology.
 - 1. The student will be able to define key terminology specific to the basic principles of pharmacology.
 - 2. The student will be able to name and describe the major classes of drugs.
- B. The student will be able to discuss the types of drug reactions that may occur.
 - 3. The student will be able to describe actions of the major classes of drugs.
- C. The student will be able to discuss the various types of drug reactions produced in the body.
 - 4. The student will be able to discuss the activity of the central nervous system, the peripheral nervous system, the sympathetic and parasympathetic nervous systems.
 - 5. The student will be able to name and describe the major classes of drugs affecting the neurological system.
 - 6. The student will be able to name and describe the major classes of drugs affecting the respiratory system.
 - 7. The student will be able to name and describe the major classes of drugs affecting the cardiovascular system.
 - 8. The student will be able to name and describe the major classes of drugs affecting the gastrointestinal system.
 - 9. The student will be able to name and describe the major classes of drugs affecting the urinary system.
 - 10. The student will be able to name and describe the major classes of drugs affecting the endocrine system.
 - 11. The student will be able to name and describe the major classes of drugs affecting the reproductive system.
 - 12. The student will be able to name and describe the major classes of drugs affecting the immune system.
 - 13. The student will be able to name and describe the major classes of drugs affecting the musculoskeletal system.
- D. The student will be able to identify factors that influence drug action.
 - 14. The student will be able to describe various side effects of drugs.
 - 15. The student will be able to identify factors that may affect drug response.
 - 16. The student will be able to discuss the use of the major classes of drugs.

- E. The student will be able to discuss the use and interactions associated with each class of drugs.
 - 17. The student will be able to discuss common symptoms/disorders for which each pharmacological agent is used.
 - 18. The student will be able to recall key points to know about using each pharmacological agent.
 - 19. The student will be able to identify and discuss the mechanisms that produce unwanted drug reactions.
 - 20. The student will be able to select authoritative sources of drug information.
 - 21. The student will be able to explain how the half-life of a drug influences the time required to attain a steady state concentration in the body.
 - 22. The student will be able to identify factors that may result in altered drug effects in special populations.
 - 23. The student will be able to identify those at risk for drug toxicities.
 - 24. The student will be able to identify the pharmacokinetic phase of drug action.
 - 25. The student will be able to identify the pharmacodynamic phase of drug action.

ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook

https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

College Catalog

https://www.kckcc.edu/academics/catalog/index.html

College Policies and Statements

https://www.kckcc.edu/about/policies-statements/index.html

Accessibility and Accommodations

https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.