# RARITAN VALLEY COMMUNITY COLLEGE ACADEMIC COURSE OUTLINE

## **HLTH 109 PHARMACOLOGY**

#### I. Basic Course Information

A. Course Number and Title: HLTH 109 Pharmacology

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Spring Year:2020

D. Effective Term: Fall 2020

E. Sponsoring Department: Health Science Education

F. Semester Credit Hours: 2

G. Weekly Contact Hours: Lecture: 2

Laboratory: 0

Out of class student work per week: 4

H. Prerequisites/Corequisites: HLTH 150 Medical Terminology, BIOL 120 Human Biology **or** BIOL 124 & BIOL 125 Human Anatomy & Physiology I & II

I. Laboratory Fees: None

J. Name and Telephone Number or E-Mail Address of Department Chair and Divisional Dean at time of approval: Beryl Stetson, chairperson, <a href="mailto:Beryl-Stetson@raritanval.edu">Beryl Stetson@raritanval.edu</a>
Sarah Imbriglio@raritanval.edu

## **II. Catalog Description**

**Pre-requisites:** HLTH 150 Medical Terminology, BIOL120 Human Biology **or** BIOL 124 & BIOL 125 Human Anatomy & Physiology I & II

This course is an introduction to pharmacology, including terminology, drug category, use, side effects, contraindications, and interactions. Common dosage ranges and routes of administration will also be examined. A general understanding of the actions and reasons for use of various groups of pharmacologic agents is introduced. Medications are discussed according to major drug classifications and body systems.

## **III. Statement of Course Need**

- **A.** This course fulfills the "knowledge cluster content and competency" required by the American Health Information Management Association (AHIMA) and its accrediting body, the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).
- **B.** No lab component
- **C.** This course generally transfers as a program requirement in health information technology.

# IV. Place of Course in College Curriculum

- A. Free Elective
- B. This course does not serve as a General Education course.
- C. This course meets a program requirement for the Health Information Technology A.A.S. degree program and the Health Information Technology Medical Coding Certificate program and Medical Assistant Certificate.
- D. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, <a href="www.njtransfer.org">www.njtransfer.org</a>; b) for all other colleges and universities, go to the individual websites.

## V. Outline of Course Content

- A. Introduction to pharmacology
- B. The drug cycle
- C. Drug effects
- D. Drug forms and Routes
- E. Drug testing and Marketing
- F. Musculoskeletal drugs
- G. Analgesic drugs
- H. Psychiatric drugs
- I. Anti-infective drugs
- J. Antifungal drugs
- K. Chemotherapy drugs
- L. Cardiovascular drugs
- M. Anticoagulant/Thrombolytic drugs
- N. Pulmonary drugs
- O. Gastrointestinal drugs
- P. Endocrine drugs
- Q. Antidiabetic drugs
- R. Obstetric/Gynecologic drugs
- S. Neurological drugs

## **VI. General Education and Course Learning Outcomes**

## A. General Education Learning Outcomes:

## At the completion of the course, students will be able to:

- 1. Describe the components of the drug cycle, absorption, distribution, metabolism, and excretion. (GE-1)
- 2. Identify medications within commonly prescribed drug/pharmaceutical categories. (GE-1)
- 3. Describe the therapeutic action of commonly prescribed drugs within a given category. (GE-1)
- 4. Identify the diseases a generic or proprietary prescribed drug is used to treat. (GE-1)
- 5. Identify several generic and proprietary drugs used to treat s specific disease. (GE-1)
- 6. Spell correctly commonly prescribed generic and proprietary drug for each medication category discussed. (GE-1, 3)
- 7. Demonstrate research techniques for obtaining drug information from drug references and other sources. (GE-1, 3)
- 8. Analyze healthcare records and correlate symptoms, diagnoses, and tests performed with drugs administered. (GE-1, 3)

## **B.** Course Learning Outcomes:

## At the completion of the course, students will be able to:

- 1. Define terms related to pharmacology.
- 2. Describe how drugs administered via the following routes are absorbed: topical, oral, inhalation, rectal/vaginal, injection.
- 3. Describe how the liver metabolizes drugs.
- 4. Describe how the kidneys excrete drugs.
- 5. Differentiate between a local and systemic drug effect.
- 6. Define these terms: therapeutic effect, side effect, adverse effect, and target organ.
- 7. Describe the physiologic response of an allergic drug reaction.
- 8. Define the terms: receptor, agonist, antagonist, synergism, and antagonism.
- 9. Name multiple forms in which drugs are manufactured.
- 10. Name several routes of drug administration.
- 11. Describe the advantages and disadvantages of oral administration of a drug.
- 12. Describe the chemical, generic, and trade or brand name of drugs.
- 13. Describe therapeutic effects and actions of defined drugs.

## **C.** Assessment Instruments

- 1. Online discussion/forums
- 2. Content papers

## VII. Grade Determinants

- A. Online discussion/forums
- B. Content papers

Given the goals and outcomes described above, LIST the primary formats, modes, and methods for teaching and learning that may be used in the course:

- A. Online course
- B. Internet research
- C. Independent study

## **VIII. Texts and Materials**

- A. Recommended Textbook:

  <u>Understanding Pharmacology for Health Professionals,</u> Susan M. Turley,
  Prentice Hall, Fifth Edition, 2016, ISBN 0-13-3911268
- B. Other computer-based sources

## The following statement should be included in the outline:

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

## IX. Resources

- A. Computer with internet access
- B. Medical dictionary