

## Course Outcomes Guide (COG)

**Course Title:** PHR 110 Pharmacology and Therapeutics I

**Date:** Spring, 2017

**Course Team:** Jennifer Suminski, CPhT, RDH, MS

### Expected Learning Outcomes

1. Demonstrate an understanding of terminology associated with the fundamentals of pharmacology;
2. Identify the basic interactions of chemicals on living organisms relating to major body systems; additionally, bacterial infections, fungal infections, and viral infections and associated therapeutic agents;
3. Understand the pharmacologic and pharmacokinetic indications of prescription drugs, as well as over-the-counter drugs on the human body, and their use in disease states and conditions;
4. Explain key factors associated with pharmacokinetic such as first pass effect and the importance of the blood-brain barrier, routes of drug elimination, elimination half-life, and the importance of bioavailability to generic drug substitutions;
5. Explain the drug-receptor theory as well as compare and contrast agonists, antagonists, and partial agonist;
6. Explain drug-drug interactions, drug to food interactions, drug to disease contraindications and medication errors;
7. Demonstrate knowledge of basic concepts of pharmacokinetics including the 6 stages of drug kinetics;
8. Understand the use and side effects of prescription and non-prescription medications used to treat common disease states;
9. Identify the routes of administration (oral, parenteral, topical, transdermal and transmucosal, nasal and inhalation, sublingual, and buccal, rectal, vaginal, optic, ocular, etc.);
10. Explain the importance and wellness promotion and disease prevention practices, such as use of health screenings, health practices and environmental factors that impact health; and adverse effects of alcohol, tobacco, illegal and legal drugs;
11. Identify the various factors that might affect drug activity, such as age, body weight, gender, race, pregnancy, time of administration, rate of metabolism, hypersensitivity, disease states and preexisting conditions, and drug interactions;
12. Demonstrate an understanding of basic principles of patient assessment;
13. Demonstrate an understanding of drug therapy in special patient populations; and
14. Demonstrate proficiency in identifying the Brand and Generic names of the top 200 drugs along with the indications and prime side effects and precautions associated with these drugs.

**Assessment** (How do or will students demonstrate achievement of each outcome? Please attach a copy of your assessment electronically.)

Outcomes are measured through thirteen (13) written assignments, eleven (11) quizzes and one (1) comprehensive examination.

**Validation** (What methods have you used or will you use to validate your assessment?)

Assessments are validated automatically by online educational programs designed by the publishers of the course textbook. The instructor designs these assessments using items supplied by the textbook publisher. Completion of course with an average overall grade of “C” or greater.

**Results** (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

Number of Students in Section	4
Number of Students Completing Final Comprehensive Examination	4
% Withdrawn	0
Average % Score on Section Examinations/Quizzes	85.89%
Average % Score on Comprehensive Examination	87%
Average % Score on Assignments	96.3%
Course Grade Distribution	A = 3
	B = 1
	C = 0
Average Course Grade	89.75%
% Student Success	100%

**Follow-up** (How have you used or how will you use the data to improve student learning?)

Assessments are continually edited to align item with course content and student learning outcomes.

**Budget Justification** (What resources are necessary to improve student learning?)

None.