

## Course Outcomes Guide (COG)

**Course:** PHR-110 Pharmacology and Therapeutics

**Date:** Spring, 2018

**Course Team:** Christina Nguyen, PharmD

### 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 agonists, antagonists, and partial agonist;
6. Explain drug-drug interactions, drug-food interactions, drug-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 (parenteral and enteral);
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 several 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:** Assessments include homework assignments and projects (25% of overall grade), weekly quizzes (30% of overall grade), chapter examinations (20% of overall grade) and one cumulative final examination (25% of overall grade). Students are required to achieve an overall grade of 75% or better.

**Validation:** This is didactic course, in which the overall grade is determined by the completion of course assessments with a goal of 100% of students achieving an average of 70% or higher. By completing this course, students will achieve the objectives as mandated by the accreditation standards for the American Society of Health Systems Pharmacist (ASHP).

**Results:** These results are based, on two students who were enrolled in the course during the spring, 2018 semester.

Assessments	Course Average
Quizzes	55.86%
Assignments & Projects	91.57%
Chapter Exams	73.00%
Cumulative Final Examination	65.96%
Overall Course Grade	70.75%

**Follow-up:** Adjustments will continually be made to link concepts with the practical aspects of pharmacy settings and the role of a pharmacy technician. In addition, adjustments will be made to include real-life scenarios and mock patient's profile to provide better understanding of the drugs.

**Budget Justification:** No changes are needed at this point.