



Your competence will be assessed as you complete the AUV1 objective assessment for this course of study as a part of your Health Professions degree program. This course of study represents one competency units and may take up to two weeks to complete.

Introduction

Overview

In 2006, the Institute of Medicine released a report that cited medication errors as the most common medical errors, costing billions of dollars and harming up to 1.5 million people every year. Medication errors often result from nurses failing to follow proper procedures before administering a medication.

Nurses and other members of the healthcare team need to be vigilant about following proper procedure and need to have a solid knowledge of pharmacology. Medication administration may seem simple on the surface, but within busy healthcare environments, other issues may come into play that can affect the safety of medication administration. You will become competent in the fundamentals of pharmacology as a result of this course of study.

Outcomes and Evaluation

There are 5 competencies covered by this course of study; they are listed in the "[Competencies for Pharmacology \(AUV1/AAC1\)](#)" page.

Nursing Dispositions Statement

Please review the [Statement of Nursing Dispositions](#).

You will complete the following assessments as you work through the course of study.

Pre-Assessment

You will complete the following pre-assessment:

- AUV1

Objective Assessment

You will complete the following objective assessment:

- AUV1

For specific information about this assessment, select this course under the "Course Details" section of your AAP.

Preparing for Success

The information in this section is provided to help you become ready to complete this course of study. As you proceed, you will need to be organized in your studies in order to gain competency in the indicated areas and prepare yourself to pass the final assessments.



Your Learning Resources

Enroll in or order the learning resources for this course as early as possible so as to give them time to arrive and give you enough time to become familiar with them.

Enroll in Learning Resources

You will need to enroll in or subscribe to additional learning resources as a part of this course of study.

You may already have enrolled in these resources for other courses. Please check the "Learning Resources" tab and verify that you have access to the following learning resources. If you do not currently have access, please enroll or renew your enrollment at this time.

Note: For instructions on how to enroll in or subscribe to learning resources through the "Learning Resources" tab, please see the ["Acquiring Your Learning Resources"](#) page.

MyNursingLab

MyNursingLab is an online, interactive learning environment containing the following e-textbooks:

- Adams, M., Holland, L., Jr., & Bostwick, P. (2008). *Pharmacology for nurses: A pathophysiologic approach* (2nd ed.). NJ: Pearson. ISBN-13: 9780131756656.
- Olsen, J., Giangrasso, A., Shrimpton, D., & Dillon, P. (2007). *Medical dosage calculations* (9th ed.). NJ: Pearson. ISBN-13: 9780132384704

Access: Pharmacology_0709: CRSCDRU-414686 and Nursing Resources: Medical Dosage Calculation- NEW EDITION September 2011: CRSCD5H-251900

Note: Due to recent upgrades, some browser updates may be required in order to utilize MyNursingLab. If you have browser issues when attempting to log in, see the "Browser Tune-Up" section of the [MyNursingLab System Requirements](#) page.

MyNursingLab Pretest and Plan of Study

As you work through this course of study, it will direct you to specific chapters to work through in the [MyNursingLab Pharmacology](#) course. Be sure to engage in the activities, audio glossary, readings, videos, animations, and skills labs. Do the assignment for this activity and take the pretest. Remember, this is a pretest, and you are not expected to know all of the answers at this time. Your results in this pretest will develop a plan of study suited just for you.

1. Once you have answered all of the questions, you will get a score and overview of each question.
2. Click "Return to Study Plan." You will be taken to your individualized study plan.
3. You can now begin to work through each reading assignment and activity in your study plan. This includes a review of concepts and skills. Be sure that you read and practice each skill.
4. As you work through the activities and skills, all of your grades are submitted into the



MyNursingLab program.

Note: If you do not need to cover certain areas in your plan of study but still want to study them, you can go to "Chapter and Resources" and access "Study Resources." Everything for each objective is there for you.

Pharmacology for Nurses Companion Website

You should access the **companion website for Pharmacology for Nurses**. This provides additional case studies and NCLEX questions that will help you determine whether you are developing competency. On this site you will also find "Drug Guides," "Preventing Medication Errors," and "MediaLink Applications" to support your learning.

3-2-1 Calc Online

This course will help you develop the skills necessary to safely prepare and administer medications.

Begin by taking the pretest. This will help you determine what you need to focus on. When you have worked through all of the activities, you will take the posttest. This score will be submitted to the Assessment Department and will show as a "Pass" on your AAP. You must score 80% or higher to pass.

Additional Preparation

There are many different learning tools available to you within your course of study in addition to the learning resources discussed above. Take the time to familiarize yourself with them and determine how best to fit them into your learning process.

Message Boards, Learning Communities, Study Notes, FAQs

Message boards, learning communities, study notes, and FAQs are available in every course of study.

Use the "[Additional Learning Tools](#)" document to review these tools.

Course Mentor Assistance

Course mentors are available to help you. Their job is to aid understanding in areas where you need to improve and to guide you to learning resources. Request their help as needed when preparing for assessments.

Course mentors cannot provide reviews of entire assessments. If you fail assessment attempts, review the provided feedback first, then ask the course mentor specific questions about what you can do to meet the competency standard. Request course mentor assistance as necessary in preparing for second attempts at objective assessments or performance task revisions. Mentors cannot guarantee you pass as they do not evaluate assessments; however, they can provide the assistance and advice necessary to help you succeed.

Nursing Standards

You will be able to access Nursing Professional Standards as they apply to your program



through the WGU Library. Please access these documents at the following website:

- [WGU Library Nursing E-Reserves](#)

Medication Calculation

Accuracy in dosage calculations is paramount to safe medication administration. Not only do nurses need to understand how to calculate dosages, they need to accurately determine correct and safe medication dosages and recognize when an ordered dose is incorrect. It is just as important that nurses know where to turn for resources if they feel uncertain about a medication dosage. In this section, you will learn how to calculate doses of oral medications in solid and liquid form, and you will be introduced to situations that utilize body weight or body surface area (BSA) to calculate dosages.

Competencies covered by this subject

724.1.5 - Preparation for Administration of Medications

The graduate employs accurate dosage calculations and appropriate use of technology to effectively, appropriately, and safely administer drugs and maintain the quality of medication therapy.

Calculating Doses

Some medications have a one-size-fits-all dosage that only varies when given to children. The humorous adage "take two aspirin and call me in the morning" is an example. Typically adults take two aspirin for pain, which is 10 grains or 650 mg. However, many drugs are titrated based on one or more of the following: the patient's age or weight, lab results, the purpose of the drug, or the patient's health status. Nurses not only make many important calculations but they must be comfortable in verifying that calculations are correct before they administer a drug.

3-2-1 Calc Online Course

Your first step is to enroll in the 3-2-1 Calc online course (AUV1 on your Degree Plan). This online course will guide you through the preparation, calculation, and administration of medication. In it you will practice drawing medication into a virtual syringe and preparing medications for a patient. You will also test your calculation knowledge.

You must pass the 3-2-1 Calc posttest with 80% or higher in order to go to the learning lab for medication administration. There are two posttests listed, but you are only required to pass one of the posttests with 80% or higher.

Please do not click on the "Schedule Now" button on your Degree Plan, as that will be denied since the exam is not one given by the Assessment Department. Once you have successfully completed the posttest, notify the course mentor via e-mail. The course mentor will notify the Assessment Department of your "Pass."

Basic Math Skills Review

Take the pretest in 3-2-1 Calc. What is your self-evaluation of your basic math skills? Assess your readiness to calculate and administer medication to patients by reviewing the results of your Cengage course quizzes. Review any areas of deficiency (e.g., conversion, dimensional analysis, preparing solutions) by doing the exercises in your *Medical Dosage Calculations*



textbook. Work through the practice sets at the end of the chapters. Continue to work through the online course sections to ensure that you have developed full competency. You must pass each section with 80% or higher.

Final Steps

Congratulations on completing the activities in this course of study! This section will guide you through the assessment process.

Assessment Information

The activities in this course of study have prepared you to complete the AUV1 objective assessment. If you have not already completed the assessment, you will do so now.

Accessing Objective Assessments

Complete the following objective assessment:

- AUV1

For directions on how to receive access to objective assessments, see the "[Accessing Objective and Outside Vendor Assessments](#)" page.

Feedback

WGU values your input! If you have comments, concerns, or suggestions for improvement of this course, please submit your feedback using the following form:

- [Course Feedback](#)

ADA Requirements

Please review the [University ADA Policy](#).