

Syllabus for  
**NUR 112 — Called to Care: Dosage Calculation**  
1 Credit Hour  
Fall 2015

**I. COURSE DESCRIPTION**

Introduction to calculating medication dosages for the professional nurse. Course includes reviewing basic math concepts involved in ratio/proportion equations, identifying current medication abbreviations and notation rules, understanding common equivalency and metric conversions, reading medication labels, measuring amounts in syringes, and solving basic dosage calculations for a one time dose when given a drug order and drug label.

Prerequisites: Acceptance as nursing major.

**II. COURSE GOALS**

The purpose of this course is to enable the student to do the following:

- A. Review basic math and perform entry-level dosage calculation used in professional nursing

**III. STUDENT LEARNING OUTCOMES FOR THIS COURSE**

As a result of successfully completing this course, the student will be able to do the following:

- 1.0 Achieve a minimum score of 90% on a test of basic dosage calculations.
  - 3.1 Understanding the new abbreviations and notation rules involved in nursing
  - 3.2 Accurately solve common equivalency and metric conversions
  - 3.3 Accurately calculate dosages for one time doses for oral medications and parenteral medications by ready drug labels
  - 3.4 Accurately mark a syringe or identify quantity of solution in a syringe

**3.0 TEXTBOOKS AND OTHER LEARNING RESOURCES**

- A. Required Materials

Dosage Calculations: A Ratio-Proportion Approach, 4th Edition

Gloria D. Pickar, RN, EdD

Amy Pickar Abernethy, MD Duke University

ISBN-10: 1285429451 | ISBN-13: 9781285429458

2. Other

Students are expected to use multiple resources, including technology such as electronic computer databases to find materials related to course content.

- B. Optional Materials

- 1. Textbooks
  - None
- 2. Other

None

#### IV. POLICIES AND PROCEDURES

##### A. University Policies and Procedures

1. Attendance at each class or laboratory is mandatory at Oral Roberts University. Excessive absences can reduce a student's grade or deny credit for the course.
2. Students taking a late exam because of an unauthorized absence are charged a late exam fee.
3. Students and faculty at Oral Roberts University must adhere to all laws addressing the ethical use of others' materials, whether it is in the form of print, video, multimedia, or computer software. Plagiarism and other forms of cheating involve both lying and stealing and are violations of ORU's Honor Code: "I will not cheat or plagiarize; I will do my own academic work and will not inappropriately collaborate with other students on assignments." Plagiarism is usually defined as copying someone else's ideas, words, or sentence structure and submitting them as one's own. Other forms of academic dishonesty include (but are not limited to) the following:
  - a. Submitting another's work as one's own or colluding with someone else and submitting that work as though it were his or hers.
  - b. Failing to meet group assignment or project requirements while claiming to have done so;
  - c. Failing to cite sources used in a paper;
  - d. Creating results for experiments, observations, interviews, or projects that were not done;
  - e. Receiving or giving unauthorized help on assignments.By submitting an assignment in any form, the student gives permission for the assignment to be checked for plagiarism, either by submitting the work for electronic verification or by other means. Penalties for any of the above infractions may result in disciplinary action including failing the assignment or failing the course or expulsion from the University, as determined by department and University guidelines.
4. Final exams cannot be given before their scheduled times. Students need to check the final exam schedule before planning return flights or other events at the end of the semester.
5. Students are to be in compliance with university, college, and departmental policies regarding the Whole Person Assessment requirements. Students should consult the Whole Person Assessment handbooks for requirements regarding general education and the students' majors.
  - a. The penalty for not submitting electronically or for incorrectly submitting an artifact is a zero for that assignment.
  - b. By submitting an assignment, the student gives permission for the assignment to be assessed electronically.

##### B. College of Nursing Policies and Procedures

1. The *ORU AVCON Student Handbook* contains a complete list of College of Nursing policies.
2. Attendance
  - a. The last day for students to add nursing classes is the first Monday following the University's date for the beginning of classes.
  - b. Students are expected to punctually attend all scheduled learning

- experiences.
- c. The Dean of the College of Nursing may request administrative excuses for absences from courses or Chapel when scheduling conflicts exist with scheduled learning experiences within the College of Nursing.
- d. Students are to discuss administratively excused absences with the course coordinator and confirm plans for meeting course objectives as soon as possible but within a minimum of 48-business hours prior to the scheduled class.
- e. Makeup of modular posttests is arranged only in the case of an excused class absence. Students ***must speak personally*** to the course coordinator ***prior to*** the test period if they are unable to take a scheduled exam. Absences are excused only for cases of documented illness or other crisis situations. Students must pay a \$15 fee, payable to student accounts, for a late exam.
- 3. Clinical Policies  
NUR 112 is not a clinical course. Therefore, clinical policies are not applicable.
- 4. Evaluation Procedures
  - a. Students are required to submit all assignments for course completion. Due dates of assignments are specified in the syllabus addendum. Submitting assignments in a timely manner or making arrangements in case of emergency demonstrates the student's professional accountability and responsibility. Assignments submitted **late** will have points deducted as follows:
    - 1 business day: 10%
    - 2 business days: 20%
    - 3 business days: 30%
    - 4 business days: A grade of zero will be given.
  - b. Whole Person Assessment requirements: no e portfolio artifacts for NUR 112  
The College of Nursing, under a University-led initiative, has an electronic portfolio system (ePortfolio) to evaluate students' achievement of academic outcomes. Therefore, all nursing majors are required to prepare an electronic portfolio. Each student is responsible for submitting ePortfolio artifacts as described in course syllabi.

C. Course Policies and Procedures

- 1. Evaluation Procedures
  - a. All evaluation is based on the stated objectives.
  - b. Grades are calculated on the percentage of the total points:
 

(1) Attendance and in class participation	20%
Midterm Exam	30%
Final Exam	50%
  - c. Students must achieve no less than 90% on dosage calculation final exams in order to pass the course. Students who do not achieve these scores will receive a grade of F in the course.

### **Dosage Calculation (1 credit)**

<b>Week</b>	<b>Topic</b>
1	Orientation to Math Refresher Math
2	Chapter 1: Fractions and Decimals Chapter 2: Ratio/proportions
3	Chapter 3: Systems of Measurement Chapter 4: Equivalency conversions
4	Chapter 5: Time (Military time) and Temperature (Celsius )
5	Chapter 6: Equipment in drug administration Chapter 7: Medical abbreviations/notation
6	Chapter 8: Understanding Drug Labels
7	Chapter 10: Oral medications
8	<b>Midterm Exam</b>
9	<b>Spring/Fall Break</b>
10	Chapter 9: Preventing Medication Errors
11	Chapter 11: Parenteral Medications
12	Ratio and Proportion practice
13	Syringes
14	<b>Review for Final Exam</b>
15	Dead Week—no class
16	<b>Final Exam</b>

**Course Inventory for ORU's Student Learning Outcomes**  
**NUR 112—Called to Care: Dosage Calculation**  
**Spring 2015**

This course contributes to the ORU student learning outcomes as indicated below:

**Significant Contribution** – Addresses the outcome directly and includes targeted assessment.

**Moderate Contribution** – Addresses the outcome directly or indirectly and includes some assessment.

**Minimal Contribution** – Addresses the outcome indirectly and includes little or no assessment.

**No Contribution** – Does not address the outcome.

The Student Learning Glossary at <http://ir.oru.edu/doc/glossary.pdf> defines each outcome and each of the proficiencies/capacities.

	<b>OUTCOMES &amp; Proficiencies/Capacities</b>	<b>Significant Contribution</b>	<b>Moderate Contribution</b>	<b>Minimal Contribution</b>	<b>No Contribution</b>
--	--	-------------------------------------	----------------------------------	---------------------------------	----------------------------

<b>1</b>	<b>Outcome #1—Spiritually Alive Proficiencies/Capacities</b>				
1A	Biblical knowledge				<b>X</b>
1B	Sensitivity to the Holy Spirit				<b>X</b>
1C	Evangelistic capability				<b>X</b>
1D	Ethical behavior		<b>X</b>		

<b>2</b>	<b>Outcome #2—Intellectually Alert Proficiencies/Capacities</b>				
2A	Critical thinking		<b>X</b>		
2B	Information literacy		<b>X</b>		
2C	Global and historical perspectives		<b>X</b>		
2D	Aesthetic appreciation				<b>X</b>
2E	Intellectual creativity				<b>X</b>

<b>3</b>	<b>Outcome #3—Physically Disciplined Proficiencies/Capacities</b>				
3A	Healthy lifestyle				<b>X</b>
3B	Physically disciplined lifestyle				<b>X</b>

<b>4</b>	<b>Outcome #4—Socially Adept Proficiencies/Capacities</b>				
4A	Communication skills		<b>X</b>		
4B	Interpersonal skills			<b>X</b>	
4C	Appreciation of cultural & linguistic differences			<b>X</b>	
4D	Responsible citizenship		<b>X</b>		
4E	Leadership capacity			<b>X</b>	