

**Covenant School of Nursing**  
**Instructional Module1 Learning Guide**  
**Topic: Introduction to Medication Math**

**Learning Goals/Outcomes**

Upon completion of this lesson, you will be able to:

- Calculate medication doses utilizing one of the following methods: basic formula method, ratio and proportion method, fractional equation method, or dimensional analysis method
- Convert values between and among systems used in medication administration: the metric system and “household” measurements, including weights and measurements within those systems
- Calculate drug dosages based on weight
- Interpret, perform, and transcribe answers to calculations based on the content of drug labels, drug orders, the "7 + Rights", and industry accepted abbreviations
- Apply the Joint Commission (JC) and Institute of Safe Medication Practice (ISMP) principles to the communication about and administration of medications, including, but not limited to, the current JC “Do Not Use” list of abbreviations

**Ire-Class Preparation**

Required:

- Review PPT slides

**Complete**

- The online activity listed in Learning Activities.
- **An average score of 80% on each quiz included in this activity is required by the listed due date in**  
**Failure to complete the assignment may result in an absence – review your syllabus.**

Additional Resources:

- [www.ISMP.org](http://www.ISMP.org) & [www.JointCommission.org](http://www.JointCommission.org) – for both websites, search calculation topics
- Med Math practice assignments as required during the module

**Learning Activities**

Classroom Activities:

- Content presentation via PowerPoint
- Math practice problems with active Q & A as scheduled

Laboratory/Clinical:

- Non-graded CPE involving Simulation Medication Administration

Online:

- Go to My Evolve  
Select Drug Calculations Online  
Next select Course Content  
Select and complete the following modules according to the attachment  
Module 1: Systems Used for Drug Administration  
Module 2: Conversions within Metric & Household Systems  
Module 6: Methods of Calculation

**Evaluation Methods**

- Medication Math Assignments

<ul style="list-style-type: none"> <li>Medication Math Exams (4)</li> </ul>	
<b>Texas DECs</b>	<b>QSEN Competencies</b>
<b>Knowledge:</b> IA:1-3; IB: 1,2; IIA: 1; IID: 1,4; IIF:1-3; IIIA: 1-6; IIID: 17; IVB: 1-2  <b>Clinical Judgments &amp; Behaviors:</b> 1A 1-3; IB 2,5,6; IIA 1; IID 1,2; IIF: 1-6; IIIA: 2-5; IIID: 1-3; IVB: 1-3	Patient Centered Care; Teamwork & Collaboration; EBP; Safety
<b>IM Student Learning Outcomes</b>	<b>NCLEX Test Plan</b>
1, 2, 3, 5, 7, 8	<b>Safe &amp; Effective Care:</b> Management of Care <b>Health Promotion &amp; Maintenance</b> <b>Physiological Integrity:</b> Pharmacological Therapies, Reduction of Risk
<b>Concepts</b>	<b>Faculty</b>
Clinical Judgment; Patient Education; Professionalism; Evidenced-Based Practice; Health Policy; Safety	<i>D. Dutton, MSN, RNC-OB</i>
<b>Date originated: 6-15</b>	<b>Revision Dates: 4-16; 6-16;7-16;1-1; 4-17; 9-17;12-17;2-18; 1-19; 4-19; 7-19; 8-19: 4-20</b>

*Instructional Module 1 Learning Guide  
Math*

*Topic: Introduction to Medication*

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*CSON Learning Guide (adopted 5-2015 by Faculty vote) - adapted from Smith, R. M. Conquering the Content. San Francisco: Jossey-Bass, 2008.*