

**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 mathematical formulas
- Convert values between and among the metric system and “household” measurements
- Calculate drug dosages
- Interpret, perform, and transcribe answers to calculations based on the content of drug labels
- Apply the Joint Commission (TJC) and Institute of Safe Medication Practice (ISMP) principles to the communication about and administration of medications

**Pre-Class Preparation**

Required:

- Review PPT slides

**Complete**

- The online assignments listed in Learning Activities have a course due date that is documented in the Lesson information - HESI Recommended Due Dates. It is recommended that you complete the activities prior to class for an introduction to the lecture.
- **An average score of 80% on each quiz in this assignment is required. Failure to complete the assignments by the due date will 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 Packet – due by as

**Learning Activities**

Classroom Activities:

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

Laboratory/Clinical:

- Simulation Medication Administration Labs
- Mock CPE involving Simulation Medication Administration

Online:

- Go to My Evolve  
Select Drug Calculations Online  
Next select Course Content  
Review the module and complete the quiz – must have an average of 80%  
Module 1: Systems Used for Drug Administration  
Module 2: Conversions within Metric & Household Systems  
Module 6: Methods of Calculation

**Evaluation Methods**

- Simulation Performances per Rubric
- Medication Math Exams (4)

<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: 1; 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; 04/17/19; 8/28/19;            02/09/2021</b>

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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.*