

**Eastern WV Community & Technical College  
Master Course Record**

<b>Course Prefix and Number:</b> NU 132	
<b>Course Title:</b> Drug and Dosage Calculations I	
<b>Recommended Transcript Title</b> (if over 40 characters)	
<b>Date Approved/Revised:</b> 10/16/13; 4/27/21	
<b>Credit Hours:</b> 1	
<b>Contact hours per week (Based on 15-week term):</b>	
<b>Lecture:</b> 1	
<b>Lab:</b>	
<b>Prerequisite:</b> (Include any exam or placement scores) Admission to the Nursing Program	
<b>Corequisite:</b> NU 133 and NU 134	
<b>Pre/Corequisite:</b> BIO 124 and BIO 124L	
<b>Grading Mode:</b> Letter	
<b>Catalog Description:</b> This course is designed to enhance the nursing student's ability to read, interpret, and solve dosage calculation problems. Critical thinking skills are applied to medication situations to emphasize the importance of accuracy and the avoidance of medication errors. Students are expected to be prepared when coming to class.	
<b>Course Outcomes: (See Competency Verb list for suggested language)</b>	
<b>Concept:</b>	<b>Outcomes:</b>
Human Flourishing	1) Recognize individual needs and variances in medication administration and calculations. 2) Identify the role of drug therapy in relation to health promotion, disease prevention and management across the lifespan.
Nursing Judgment	3) Recognize the principles of medication administration safety. 4) Identify the elements of accurate documentation of medication administration. 5) Correctly calculate basic drug dosages. 6) Identify and prevent common medication errors.
Professional Identity	7) Describe the role of the nurse in medication administration. 8) Recognize the professional responsibility in the interpretation, calculation and administration of medications
Spirit of Inquiry	9) Understand and question how developmental stages may affect drug administration.

	<p>10) Recognize the importance of continued learning to maintain clinical excellence in the profession of nursing.</p> <p>11) Describe appropriate resources to update personal knowledge of medications.</p>	
<p><b>Implementation Cycle:</b> Fall</p>		
<p><b>Role in College Curriculum: (Check all that apply)</b></p> <p><input type="checkbox"/> <b>General Education Core (Specify category)</b></p> <p><input checked="" type="checkbox"/> <b>Technical Core A.A.S. Nursing</b></p> <p><input type="checkbox"/> <b>Restricted Elective (Specify Program)</b></p> <p><input type="checkbox"/> <b>General Elective</b></p> <p><input type="checkbox"/> <b>Workforce Education</b></p> <p><input type="checkbox"/> <b>Other (Please specify)</b></p>		
<p><b>Course Fee:</b> Yes</p>		
<p><b>Instructor's Qualifications:</b> MS in Nursing OR BSN enrolled in graduate program in Nursing</p>		
<p><b>Expanded Course Description</b> (provides details regarding major course concepts, target audience, delivery format, etc.) Topics will include: A thorough review of ratio and proportion and dimensional analysis, fractions, decimals and percent; conversion of measures within the same system of measurement and between different systems of measurement; and calculating safe drug dosages and intravenous fluid administration.</p>		
<p><b>Concept:</b></p>	<p><b>Outcomes:</b></p>	<p><b>Skills:</b></p>
<p><b>Human Flourishing</b></p>	<p>1) Recognize individual needs and variances in medication administration and calculations.</p> <p>2) Identify the role of drug therapy in relation to health promotion, disease prevention and management across the lifespan.</p>	<p>Recognize the importance of patient education with medication administration.</p>
<p><b>Nursing Judgment</b></p>	<p>3) Recognize the principles of medication administration safety.</p> <p>4) Identify the elements of accurate documentation of medication administration.</p> <p>5) Correctly calculate basic drug dosages.</p> <p>6) Identify and prevent common medication errors.</p>	<p>Perform arithmetic operations with whole numbers, fractions, and decimals.</p> <p>Convert between fractions, decimals, and percent.</p> <p>Identify the terms on the medication label to be used in calculation of dosages.</p> <p>Calculate drug dosages for oral and injectable medications.</p>

		<p>Define the terms associated with IV therapy (peripheral line, central line, primary line, secondary line, saline/heparin locks, IV piggyback (IVPB), and IV push).</p> <p>Calculate intravenous infusion rates of volume per unit of time.</p> <p>Convert between units of weight: pounds and kilograms, pounds and ounces to kilograms.</p>
<b>Professional Identity</b>	<p>7) Describe the role of the nurse in medication administration.</p> <p>8) Recognize the professional responsibility in the interpretation, calculation and administration of medications.</p>	<p>Recognize and understand the Six Rights of Medication Administration.</p> <p>Read and understand the medication order as written or verbalized by the provider.</p>
<b>Spirit of Inquiry</b>	<p>9) Understand and question how developmental stages may affect drug administration.</p> <p>10) Recognize the importance of continued learning to maintain clinical excellence in the profession of nursing.</p> <p>11) Describe appropriate resources to update personal knowledge of medications.</p>	<p>Set up and solve problems utilizing the ratio and proportion and/or dimensional analysis methodology.</p> <p>Recognize drug information sources available.</p>

**Prepared by:** Debra Backus, Academic Program Director for General Education/Instruction and Eleanor Berg, Nursing Program Director    October 14, 2013

**Revised by:** Alicia VanMeter, Nursing Instructor, MSN, FNP-BC    March 19, 2021

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Name, Title	Date
Approved Per LOT Minutes	
Curtis Hakala	April 27, 2021
Dean of Teaching and Learning	Date