

**Eastern West Virginia Community and Technical College  
COURSE ASSESSMENT REPORT**

<b>Course Title and Number:</b> AH 115 Drug Dosage Calculations	<b>Academic Term and Year of Assessment Activity (Ex: Fall, 2014)</b> Fall, 2017
<b>Report Submitted By: Sandria Glasscock, RN</b>	<b>Number of Students Assessed: 7</b>
<b>Date Report Submitted: 12/12/2017</b>	<b>Number of Sections Included: 1</b>
<b>Course Delivery Format (list all modalities used in sections assessed. Ex: web based, VDL, traditional section, hybrid course, etc.):</b> Traditional-1 lecture hour per week 15 week instruction <b>Prerequisite:</b> MTH 100 or higher, OR minimum acceptable test scores for placement college level math. <b>Grading Mode:</b> letter grade	

<b>Course Role in the Curriculum</b>
<b>Provide a description of the role the course serves in the curriculum (i.e. general education requirement, program technical core, restricted elective, etc.). Note all as appropriate.</b>
This course is designed to assist pre-nursing students with drug dosages and calculations. The course incorporates household, apothecary, metric measurements and various routes of administration including IV therapy and titration. Calculating intake and output is included in the course. The course is part of the fulfillment of the general education for Math.

<b>Assessment Methods</b>
<b>Provide a description of the assessment process used. Include description of instrument and performance standards in description. Note all methods.</b>
Take home exercises were assigned weekly as preparation for class discussion and review of calculation concept. Quizzes were given to assess students' knowledge of drug calculations. Four comprehensive tests were given. Quizzes and classroom participation counted as 60% of the grade, and the tests were worth the remaining 40%.

<b>Assessment Results</b>				
<b>Provide a summary of results including tables/charts. Incorporate information from previous assessments as appropriate. Append additional pages if necessary. If appending, include notation in box to "See attached".</b>				
Students who passed the comprehensive tests with an 80% or above on the first attempt.				
<table border="1"> <tr> <td>Mid Term</td> <td align="center">88.8%</td> </tr> <tr> <td>Final</td> <td align="center">88.8%</td> </tr> </table>	Mid Term	88.8%	Final	88.8%
Mid Term	88.8%			
Final	88.8%			
Percentage of Matched Course Objectives				
<table border="1"> <tr> <td>Fall 2017</td> <td align="center">88.8%</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	Fall 2017	88.8%		
Fall 2017	88.8%			

Percentage of students who passed the course with an 90% or higher	
Fall 2017	71.4%
80% or higher	88.8%

Students were given a pretest to determine their readiness to tackle the course objectives. The results showed that reviewing metric measurements and basic math skills including multiplication of fractions and decimals was necessary. Frequent reminders were needed throughout the course of the necessity to memorize and utilize units of measurement and conversion.

Because the class is only 50 minutes each week, the students were encouraged to communicate questions to me during the week when working on the weekly exercises. Each student has a different learning curve, and the individual out of class assistance helped address these differences to help them reach their optimal potential.

<b>Course Level Assessment Summary of Outcomes, Indicators and Results</b> <b>Course Title and Number: AH 115</b> <b>Number of students in assessment sample = 7</b> <b>Number of Sections in Assessment = 1</b> <b>Add additional rows to table if necessary</b>				
Learning Outcomes (Insert learning outcomes assessed during this cycle)	Indicator (Insert indicators used for each outcome: exam question, scoring rubric, etc. Be specific)	Percent of Correct Responses	Percent of Incorrect Responses	Performance Standard Met (75%)* (yes or no)
Calculating Nasogastric Tube Feedings Dilution	The physician orders 250 mL of a ¼ strength tube feeding q 6 h for a patient with an NG tube. The formula can contains 250 mL How much water will the nurse add to make the ¼ strength tube feeding? Answer: 750 mL of water will be added but only 250 mLs will be administered	100%	0%	Yes
Various routes of administration including IV therapy.	AT 2300 the patient had 850 mL left in the IV bag. The IV was infusing at 50 ml / hr. at 0200 the IV infiltrated and was restarted 2 hrs later. The physician increased the IV rate to 75 mL/ hr at 0400. Calculate the patient's total parenteral intake starting at 2300 and ending at 0700.  Answer: 375 mL	88.8%	11.2%	Yes
Calculating intake and output is included in the	At 0700 the nurse started an IV of 1 L LR and set the infusion pump at 75 mL per hr. The patient was put on	88.8%	11.2%	Yes

<p>course. The course is worth one credit hour.</p>	<p>strict I&amp;O. The patient was started on medication 20 mg IVPB in 50 mL NS, at 0800 and 2000. For breakfast, the patient took 1 8 oz cup of coffee and a 6 oz bowl of cream of wheat. He was NPO except for ice chips for the rest of the shift. The patient took 6 oz of ice chips and voided 425 mL. Calculate the patient's total I &amp; O for the 0700-1500 shift.</p> <p>Answer: I-1160 and O-425</p>			
<p>Reading Medication Labels and computing dosages and determining method of administration</p>	<p>The physician orders cefazolin sodium 0.25 g IM q 8 h. The pharmacy sends a 1 g vial of sterile cefazolin powder with the following mixing instructions: For IM use, add 2.5 mL sterile water for injection and shake. Provides a volume of 3.0 ml (330 mg/mL)</p> <p>How much diluent will be added to the cefazolin sodium powder? _____</p> <p>What type of diluent will be added? _____</p> <p>What is the dosage strength of the mixed medication? _____</p> <p>How many mL of the medication will the nurse give to the patient? _____</p> <p>What size needle is used for administration?</p> <p>Answer: Diluent added- 2.5 mL</p>	<p>88.8%</p>	<p>11.2%</p>	<p>Yes</p>

	Diluent type-sterile water Strength-330 mg/ml mLs given-0.757 mL (rounded-0.76) needle size-22g & 1 ½ inch			
<b>Household, apothecary, metric measurements</b>	A patient with tuberculosis is ordered 1.2 gm of PZA daily. The caplets are labeled as 400 mg. What do you administer?_  Answer: 3	88.8%	11.2%	Yes

\* Please note if using a different minimum performance standard.

<b>Conclusions</b>
<b>Provide a brief summary of conclusions derived based on analysis of data. Append additional pages if necessary. If appending, include notation in box to “See attached”.</b>
88.4% of the students in the current cohort passed the comprehensive final with a 80% or higher which is acceptable as the first of two courses in Drug and Dosage Calculations. All of these students hoped to apply for the Nursing Program. One student did not accomplish the goal, and would not be recommended to continue into the Nursing program.

<b>Previous Assessment Reports and Results</b>
<b>Date of Previous Assessment: 8/9/2011</b>
<b>List of Outcomes Not Met: None</b>
<b>Summary of Actions Taken to Address Unmet Learning Outcomes: Append additional pages if necessary. If appending, include notation in box to “See attached”.</b> One student was not capable of scoring an acceptable grade, and would not be recommended to continue into the Nursing program.

<b>Action Plan and Date for Reassessment</b>
<b>Identify action plan for improvement or maintaining current performance levels including outcomes identified for re-assessment, curriculum revision, LOT proposal, new or revised course activities to reinforce learning outcomes, etc. Append additional pages if necessary. If appending, include notation in box to “See attached”.</b>
Will include questions to include converting Celsius to Fahrenheit, division and multiplication of fractions, conversion of fractions and decimals and information required on a medication vial. These have been listed and included in file for use when the course is taught again in fall, 2018.

<b>Assessment Committee Recommendation/Approval (To be posted by Assessment Committee Chair)</b>
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Approved as presented

Approved with recommendations for future reports (Explanation Required)

It was felt that the submission of a single multiple choice question to represent the assessment of course learning outcomes in the Summary of Outcomes section was insufficient without further context. Therefore, the authors of reports will be invited to present their report to the Committee, so that any questions regarding the report might be addressed at this time.

Resubmission Required. Reason for Resubmission:

**Date: 12/15/2017**