

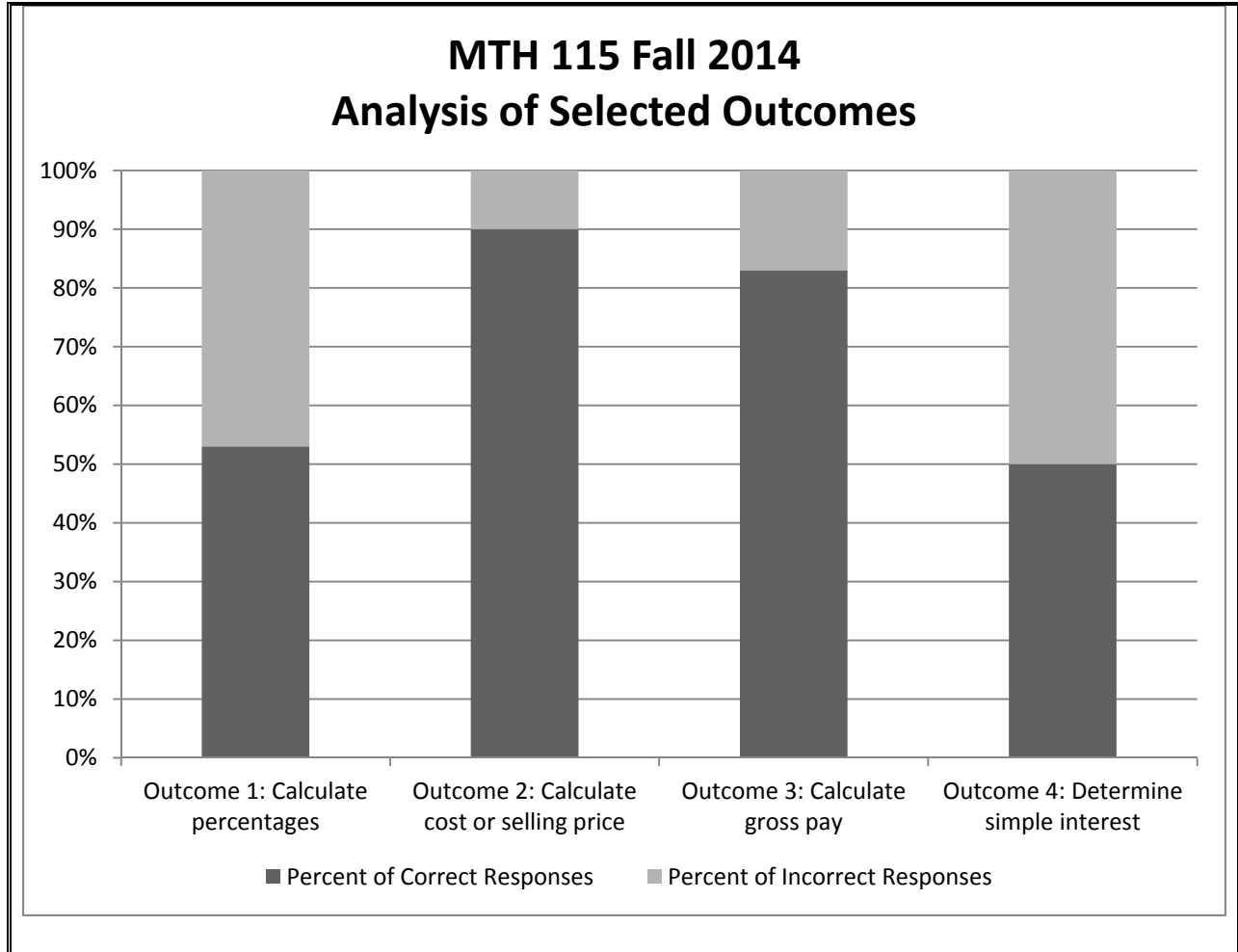
**Eastern West Virginia Community and Technical College  
COURSE ASSESSMENT REPORT**

<b>Course Title and Number:</b> MTH 115 Business Math	<b>Academic Term and Year of Assessment Activity (Ex: Fall, 2014)</b> Fall 2014
<b>Report Submitted By:</b> Andrea Williams with input from Bradley Goldizen, section instructor	<b>Number of Students Assessed:</b> 10
<b>Date Report Submitted:</b>	<b>Number of Sections Included:</b> 1
<b>Course Delivery Format (list all modalities used in sections assessed. Ex: web based, VDL, traditional section, hybrid course, etc.):</b> Traditional section	

<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>
MTH 115 Business Math serves as a non-transferable college-level math course for select degrees and certificates and a technical core or restricted elective for several other degrees and certificates.

<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>
Final exam questions are used as a basis for this assessment. The final consisted of 30 short-answer questions graded by the instructor. Multiple questions may be included in one outcome for analysis. A minimum satisfactory percent of correct responses for each outcome is 75%. Those failing to meet the standard are reviewed on a question-by-question basis.

<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>
Four outcomes were analyzed, and two out of the four met the 75% correct criterion. No comparison can be made to previous assessments as this is the first time this course has been assessed. More details about the outcomes and the assessed questions are included in the action plan.



<b>Course Level Assessment Summary of Outcomes, Indicators and Results</b> <b>Course Title and Number: MTH 115 – Business Math – Fall 2014</b> <b>Number of students in assessment sample = 10</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)
Outcome 1: Calculate percentages	Bill works as an electrician earning \$750.00 a week. He rents an apartment for \$350.00 per month and has utility bills of \$150.00 per month. Bill's car payment and auto insurance are \$375.00/month. His monthly income tax is \$1000.00/month. What percentage of Bill's grossly income is paid in taxes?	53	47	No

	<p>Fred wants to purchase a car. After noticing a sign advertising a trade discount rate of 10%, he visits Roth Auto Sales where he discovers a Firebird that is listed at \$12,500.00. How much is the amount of the trade discount?</p> <p>Adam owns a retail sporting goods store. He purchases a tent from a wholesaler at \$35.00 and marks it up by \$15.00. He buys a fishing pole from the wholesaler at \$11.00 and offers it for sale at \$21.00. He buys a box of shotgun shells for \$10.00 and offers it for sale with a markup of 25% on cost. What percent markup is on the fishing pole?</p>			
<p>Outcome 2: Calculate cost or selling price of an item</p>	<p>Fred wants to purchase a car. After noticing a sign advertising a trade discount rate of 10%, he visits Roth Auto Sales where he discovers a Firebird that is listed at \$12,500.00. What is the net price of the car?</p> <p>Adam owns a retail sporting goods store. He purchases a tent from a wholesaler at \$35.00 and marks it up by \$15.00. He buys a fishing pole from the wholesaler at \$11.00 and offers it for sale at \$21.00. He buys a box of shotgun shells for \$10.00 and offers it for sale with a markup of 25% on cost. What is his selling price for the tent?</p> <p>Adam owns a retail sporting goods store. He purchases a tent from a wholesaler at \$35.00 and marks it up by \$15.00. He buys a fishing pole from the wholesaler at \$11.00 and offers it for sale at \$21.00. He buys a box of shotgun shells for \$10.00 and offers it for sale with a markup of 25% on cost. Calculate the selling price of the box of shotgun shells.</p>	90	10	Yes
<p>Outcome 3: Calculate gross pay</p>	<p>Bill works as an electrician earning \$750.00 a week. He rents an apartment for \$350.00 per month and</p>	83	17	Yes

	<p>has utility bills of \$150.00 per month. Bill's car payment and auto insurance are \$375.00/month. His monthly income tax is \$1000.00/month. How much is Bill's gross annual income?</p> <p>Susan works in a manufacturing facility that produces widgets. If her hourly rate is \$10.00 per hour and she works 60 hours, what is her gross pay for the week?</p> <p>Joey works in a sewing factory and produces shirts. Her pay is based on the number of shirts she produces per day. Her pay is based on a differential pay schedule. For the first 100 shirts, she gets paid \$1.25 per shirt, for the next 100 shirts she gets paid \$1.50. For any shirts above 200, she gets paid \$2.00 each. This week she produced 250 shirts. How much pay does she gross for the week?</p> <p>Mary works on a salary plus commission. Her monthly salary is \$2,500.00. She gets a 15% commission for all sales over \$50,000.00. Last month, her net sales were \$75,000.00. Calculate Mary's gross monthly pay.</p>			
<p>Outcome 4: Determine simple interest</p>	<p>Jane borrows \$25,000.00 from the bank for twenty-four months at 10% simple interest. What is the maturity value at the end of the eighteen months?</p>	<p>50</p>	<p>50</p>	<p>No</p>

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

<p><b>Conclusions</b></p> <p><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></p>
<p>Based on the responses to the above questions and the final exam scores, overall the students seem to have a solid understanding of the course material with the exception of a few specific areas that need to be addressed (as discussed in the action plan below). Low scoring outcomes will be emphasized in upcoming sections of the course and reevaluated on future assessments.</p>

**Previous Assessment Reports and Results**

**Date of Previous Assessment:** N/A

**List of Outcomes Not Met:** N/A

**Summary of Actions Taken to Address Unmet Learning Outcomes:** Append additional pages if necessary. If appending, include notation in box to “See attached”.

**Action Plan and Date for Reassessment**

**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”.**

Outcome 1: Calculate percentages

This outcome was tested with three different questions, one of which required students to calculate an amount from a percentage and the other two required students to calculate a percentage from an amount. All of the students answered the first type correctly but few did well with the second type. It may be beneficial to include more examples of these questions in class and for homework, and be sure to include several during final exam review.

Outcome 2: Calculate cost or selling price

The students did very well with all the questions under this outcome. No adjustment in instruction is recommended at this time.

Outcome 3: Calculate gross pay

The students did very well with all the questions under this outcome. No adjustment in instruction is recommended at this time.

Outcome 4: Determine simple interest

The question for this outcome included extraneous information that several students incorrectly integrated into their solution. All of the students recognized that this problem required use of the simple interest formula (which is another outcome of this course) but some did not substitute the correct numbers in the formula because of the extra information. Ensure that students encounter this type of problem in class and/or on the homework prior to the exam. Consider including a more straight-forward question to test this outcome on the final exam.

Student success in this course and mastery of outcomes will continue to be closely monitored due to ongoing changes in the developmental math courses. At this point, students are required to have MTH 92 as a prerequisite to taking this course, but effective Fall 2015, students will be able to take MTH 100 (equivalent to MTH 92) as a co-requisite to MTH 115. Discussion has also taken place with both faculty and students as to whether it would be beneficial to have some algebra prior to taking this course, so there are different options to explore if necessary to improve results.

Proposed date for the next assessment is Fall 2016.

**Assessment Committee Recommendation/Approval  
(To be posted by Assessment Committee Chair)**

Approved as presented

**Date: March 25, 2015**

**LOT Recommendation/Approval  
(To be posted by Assessment Committee Chair)**

☒ Approved as presented

**Date: April 20, 2015**