Eastern West Virginia Community and Technical College
COURSE ASSESSMENT REPORT

Course Title and Number: **MTH 121 College Math for General Education**	**Academic Term and Year of Assessment Activity: Spring 2013**
Report Submitted By: Andrea Williams with summaries by Marie Van Meter	**Number of Students Assessed: 9**
Date Report Submitted: May 16, 2013	**Number of Sections Included: 1**
Course Delivery Format (list all modalities used in sections assessed. Ex: web based, VDL, traditional section, hybrid course, etc.): Traditional section with an online component (Pearson's MyMathLab)	

Course Role in the Curriculum **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.**
Math 121 is a college level general education elective. It serves as the mathematics requirement for most certificate and two-year degree students who need no further math for their program..

Assessment Methods **Provide a description of the assessment process used. Include description of instrument and performance standards in description. Note all methods.**
The assessment is an analysis of questions taken from the comprehensive final exam. A departmental scoring rubric was used, but for assessment purposes, only completely correct responses with work shown are regarded as correct. The final was in two parts on separate days. Nine students took the first part, but one was a no-show for the second part.

Assessment Results **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".**
Math 121 was last assessed for the Spring 2009 term. Mrs. Williams volunteered to compile the data for her section (Spring 2013). She will assume the full-time faculty position this fall and will be in a better position to compare to past results in future assessments. Four questions were analyzed. Only one met the 75% correct criterion this time, but most lacked only one step or had minor computational errors. With just 9 (or 8) final exams to review and knowing that some groups of students are weaker than others, any conclusions reached are tentative. Suggested remedial strategies are given with each less-than-desirable result.

Course Level Assessment Summary of Outcomes, Indicators and Results MTH 121 College Mathematics for General Education Number of students in assessment sample = 9 Number of Sections in Assessment = 1 Add additional rows to table if necessary				
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: Convert US system to metric system	***Final Exam Question:*** **Convert 64 oz to grams.** *Assessment:* 4/9 = 44% of the students got this problem correct. One student used the correct conversion (1 oz = 28 grams) but divided when she should have multiplied. The most common mistake, however, was not even recognizing the correct conversion to use. *Plan for improvement:* When covering this topic in class, do more examples and assign a wider variety of homework problems so the students get more practice finding the correct conversion in the table and then setting the problem up correctly.	44%	56%	No
Outcome 2: Solve simple interest problems	***Final Exam Question:*** **Allan borrowed $9400 from his father to buy a car. He repaid him after 6 months with interest of 2.5% per year. Find the total amount he repaid.** *Assessment:* 5/9 = 56% of the students got this problem correct. Of the students that did not get the problem correct, half correctly found the interest amount, but made a simple copying error or computation error when finding the total amount. The other half	56%	44%	No

	either did not show work or did not attempt the problem. *Plan for improvement:* Since over 70% of the class understood how to solve this problem, no adjustment in instruction is necessary, other than reminding the students to always go back and check their work.			
Outcome 3: Solve "and" probability problems.	***Final Exam Question:*** **Each of the numbers 1-20 is written on a ball and placed in a bag. If two balls are selected, without replacement, from the bag, determine the probability that both numbers are greater than 12.** *Assessment:* 3/8 = 38% of the students got this problem correct. One student recognized that she needed to use the fractions 8/20 and 7/19 but did not know what operation to apply to them. *Plan for improvement:* As soon as we get beyond the very basics, probability seems to be a confusing topic for many students. Allowing an extra day in the schedule to spend on the probability chapter reviewing and doing extra practice problems may help. For this particular objective, students need extra practice just at recognizing whether a problem is an "and" or an "or" problem (or neither) and identifying what operation they need to use for that particular type of problem.	38%	62%	No
Outcome 4: Compute mean, mode, and median for data.	***Final Exam Questions:*** **Use the set of data 59, 60, 59, 78, 32, 62, 81, 50, 59 to determine the mean, mode, and median.** *Assessment:* 7/8 = 88% of the	88%	12%	Yes

	students answered all three of these problems correctly, and the eighth student only gave the incorrect mode while getting the mean and median correct. *Plan for improvement:* Since 88% of the class understood how to find these answers, no adjustment in instruction is necessary.			

* Please note if using a different minimum performance standard.

Conclusions and Action Plan **Provide a brief summary of conclusions derived based on analysis of data. Identify action plan for improvement or maintaining current performance levels. Append additional pages if necessary. If appending, include notation in box to "See attached".**
Plans for improvements in instruction are incorporated in the chart above. They include more instructional time and drill on weak areas and greater emphasis in checking work. There also needs to be greater attention to *precision* and *perseverance*, two standards emphasized in the Common Core Standards adopted by many state education departments for public schools. Since Math 121 was also offered online this spring, it is possible that the online class attracted the stronger students, leaving the face-to-face section with less able students**. It is suggested that a departmental final exam be used when more than one section of Math 121 is taught, even if the methods of delivery differ.** One variable that may confound comparison of these results with future ones is that the revised State of WV Developmental Math learning objectives and lowered prerequisites for this course will require some revision of content.

Effective Date for Changes or Curriculum Proposal Submission to LOT (if recommended)	**Proposed Date for Reassessment**
	Spring 2015

Assessment Committee Approval (To be posted by Assessment Committee Chair)	**LOT Review (To be posted by Assessment Committee Chair)**
Date: June 12, 2013	**Date: June 17, 2013**