

Course Title & Number: MAT*H121 Business Math

Competency Area: **QUANTITATIVE REASONING** (Goal: Students will learn to recognize, understand, and use the quantitative elements they encounter in various aspects of their lives. Students will develop a habit of mind that uses quantitative skills to solve problems and make informed decisions.)

Faculty submitting the Learning Outcomes: Jane Wampler, Harry Burt, Ruth Urbina-Lilback, Katie Lozo

Date: 3/7/13

[Instructions: Please match the Learning Outcomes in the left hand column to those of the course you are submitting for Gen Ed approval. List the corresponding course outcomes in the right hand column to indicate a match.]

BOR TAP's Learning Outcomes	Corresponding Outcomes for Course Named Above
1. Represent mathematical and quantitative information symbolically, graphically, numerically, and verbally.	B16. Interpret tables and graphs.
2. Apply quantitative methods to investigate routine and novel problems. This includes calculations/procedures, mathematical and/or statistical modeling, prediction, and evaluation.	B. Applications of Business Mathematics — 1. Reconcile checking account records. 2. Calculate wages and payroll. 3. Calculate discounts and determine best time to pay discounted bills. 4. Determine markups, markdowns, and rates. 5. Solve simple interest problems. 6. Determine finance charges and annual percentage rate on installment loans. 7. Find interest and balances on credit card accounts. 8. Determine compound interest, effective rates, and present value. 9. Solve problems involving annuities, sinking funds, and stocks and bonds. 10. Solve problems involving mortgages. 11. Calculate inventory values. 12. Construct a depreciation schedule. 13. Calculate income taxes, sales taxes, and property taxes. 14. Determine insurance premiums. 15. Determine measures of central tendency.

<p>3. Interpret mathematical and quantitative information and draw logical inferences from representations such as formulas, equations, graphs, tables, and schematics.</p>	<p>B. Applications of Business Mathematics -</p> <ol style="list-style-type: none"> 3. Calculate discounts and determine best time to pay discounted bills. 4. Determine markups, markdowns, and rates. 5. Solve simple interest problems. 6. Determine finance charges and annual percentage rate on installment loans. 7. Find interest and balances on credit card accounts. 8. Determine compound interest, effective rates, and present value. 9. Solve problems involving annuities, sinking funds, and stocks and bonds. 10. Solve problems involving mortgages. 11. Calculate inventory values. 12. Construct a depreciation schedule. 13. Calculate income taxes, sales taxes, and property taxes. 14. Determine insurance premiums. 15. Determine measures of central tendency. 16. Interpret tables and graphs.
<p>4. Evaluate the results obtained from quantitative methods for accuracy and/or reasonableness.</p>	<p>Evaluate the results obtained from quantitative methods for accuracy and/or reasonableness.</p>
	<p><i>Additional Outcomes</i></p> <p>A. Basic Arithmetic and Algebra —</p> <ol style="list-style-type: none"> 1. Perform operations of addition, subtraction, multiplication, division, and exponentiation on rational numbers. 2. Convert between fractions, decimals and percents. 3. Convert within the metric system and between metric and English units. 4. Evaluate algebraic expressions utilizing rules for order of operations. 5. Solve linear equations