



# COURSE OUTLINE

## MTH125

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Prepared: Mathematics Department    Approved: Sherri Smith

<b>Course Code: Title</b>	MTH125: BUSINESS MATHEMATICS								
<b>Program Number: Name</b>	:								
<b>Department:</b>	MATHEMATICS								
<b>Semester/Term:</b>	18W								
<b>Course Description:</b>	Students will study business math concepts such as statistics, graphing, percentage applications, currency exchange, simple and compound interest, annuities, income/expense statements, balance sheets and cash flow. Students will use these concepts in applications using spreadsheet software.								
<b>Total Credits:</b>	3								
<b>Hours/Week:</b>	3								
<b>Total Hours:</b>	45								
<b>Substitutes:</b>	OEL629								
<b>Essential Employability Skills (EES):</b>	#3. Execute mathematical operations accurately. #4. Apply a systematic approach to solve problems. #5. Use a variety of thinking skills to anticipate and solve problems. #10. Manage the use of time and other resources to complete projects.								
<b>Course Evaluation:</b>	Passing Grade: 50%, D								
<b>Evaluation Process and Grading System:</b>	<table><tr><th>Evaluation Type</th><th>Evaluation Weight</th></tr><tr><td>Assignments</td><td>40%</td></tr><tr><td>MyMathTest Components</td><td>20%</td></tr><tr><td>Tests (4)</td><td>40%</td></tr></table>	Evaluation Type	Evaluation Weight	Assignments	40%	MyMathTest Components	20%	Tests (4)	40%
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<b>Course Outcomes and Learning Objectives:</b>	<b>Course Outcome 1.</b>  Perform basic operations.  <b>Learning Objectives 1.</b>								



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- Understand and apply the mathematical order of operations.
- Read and write decimal numbers.
- Round decimal numbers.
- Add, subtract, multiply and divide decimal numbers.
- Determine equivalent fractions.
- Determine common denominators.
- Add, subtract, multiply and divide fractional numbers.
- Convert fractions to decimals.
- Calculate the exponent of whole numbers.
- Estimate and approximate results.

### Course Outcome 2.

Solve problems by applying fractions, decimals, and percents.

### Learning Objectives 2.

- Convert decimal numbers to percentages and vice versa.
- Convert fractional numbers to percentages and vice versa.
- Determine percentages using a formula.
- Determine percentage increases and decreases using a formula.
- Solve problems involving sales tax, currency conversions, commissions, cash discounts, and trade discounts.

### Course Outcome 3.

Use spreadsheet software, efficiently and effectively, to perform calculations and manipulate data.

### Learning Objectives 3.

- Use the common components of Excel spreadsheets.
- Employ methods that allow changes in data to be made without have to adjust actual formulas.
- Use Excel to automate the concepts discussed in outcomes 1 and 2 above.



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### Course Outcome 4.

Apply spreadsheet (Excel) concepts to solve business problems.

### Learning Objectives 4.

- Construct and interpret line graphs, bar graphs, and pie charts using Excel.
  - Solve problems involving simple interest calculations, including finding interest, principal, or time, future values, and present values.
  - Calculate loan repayment schedules.
  - Determine future values and present values with compound interest.
  - Determine future value, present value, periodic rent (payment), and term of a simple annuity.
  - Calculate an amortization schedule for a simple annuity.
  - Calculate and interpret simple descriptive statistics including mean, median, mode, and standard deviation.
- Perform using Excel a linear regression.

**Date:**

Thursday, August 31, 2017

Please refer to the course outline addendum on the Learning Management System for further information.