



COURSE OUTLINE

MTH117

1

Prepared: Mathematics Department Approved: Sherri Smith

Course Code: Title	MTH117: BUSINESS MATHEMATICS
Program Number: Name	2086: OFFICE ADMIN-EXEC
Department:	MATHEMATICS
Semester/Term:	17F
Course Description:	<p>The student will study fractions, decimals, percentages, ratio and proportion, and the metric system and conversion of units, applying each of these to business problems. The course concludes with an introduction to statistics, including preparing and interpreting graphs.</p> <p>Administrative support staff employees are required to demonstrate basic math competencies both in their jobs and in their personal lives. Tasks ranging from spreadsheet creation and analysis through to calculation of invoices require a strong foundation in mathematical principles.</p>
Total Credits:	2
Hours/Week:	2
Total Hours:	30
Substitutes:	MTH104, MTH107, MTH111, MTH114, MTH135, OEL629
This course is a pre-requisite for:	CPE400, OAD302
Vocational Learning Outcomes (VLO's): Please refer to program web page for a complete listing of program outcomes where applicable.	<p>#1. Conduct oneself professionally and adhere to relevant legislation, standards and codes of ethics.</p> <p>#2. Manage the scheduling, coordination and organization of administrative tasks and workflow within specific deadlines and according to set priorities.</p> <p>#3. Coordinate the collection, analysis, distribution and response to communications in the workplace to facilitate the flow of information.</p> <p>#6. Produce financial documents and reports by identifying and compiling relevant information and using accounting software.</p> <p>#8. Use interpersonal, leadership and client service skills to respond to diversity and to support the vision and mission of the organization.</p> <p>#9. Research, analyze and summarize information on resources and services and prepare summary reports with recommendations.</p>



COURSE OUTLINE

MTH117

2

Prepared: Mathematics Department Approved: Sherri Smith

Essential Employability Skills (EES):

- #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.
- #7. Analyze, evaluate, and apply relevant information from a variety of sources.
- #9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.
- #10. Manage the use of time and other resources to complete projects.
- #11. Take responsibility for ones own actions, decisions, and consequences.

Course Evaluation:

Passing Grade: 50%, D

Other Course Evaluation & Assessment Requirements:

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Assigned Work	20%
Tests	80%

Books and Required Resources:

ON LINE ACCESS TO MYMATHLAB
Publisher: Pearson
ISBN: 9780321199911
My MathLab – Access code may be purchased at the Bookstore

Course Outcomes and Learning Objectives:

Course Outcome 1.

Perform operations with whole numbers, decimals, and fractions, with and without the use of a calculator, and apply these operations in problem solving situations.

Learning Objectives 1.

- Define whole numbers.
- Round whole numbers.



COURSE OUTLINE

MTH117

3

Prepared: Mathematics Department Approved: Sherri Smith

- Estimate an answer.
- Add, subtract, multiply, and divide whole numbers.
- Find indicator words in application problems.
- Use the four steps for solving application problems.
- Read and write decimals.
- Round decimals.
- Add and subtract decimals.
- Multiply and divide decimals.
- Recognize types of fractions.
- Convert mixed numbers to improper fractions and improper fractions to mixed numbers.
- Write a fraction in lowest terms
- Use the rules for divisibility.
- Add and subtract like and unlike fractions.
- Find the least common denominator.
- Rewrite fractions with a common denominator.
- Add and subtract mixed numbers.
- Multiply and divide fractions and mixed numbers.
- Convert decimals to fractions and fractions to decimals.

Course Outcome 2.

Apply concepts of percentage to solve problems.

Learning Objectives 2.

- Write a decimal and fraction as a percent and a percent as a decimal and fraction.
- Write a fractional percent as a decimal.
- Know the three quantities of a percent problem.
- Use the basic percent formula to solve for part, base, and rate.
- Recognize the terms associated with base, rate, and part.
- Find the percent of change.
- Identify an increase or a decrease problem.
- Solve application problems.

Course Outcome 3.

Apply the concepts of simple and compound interest to solve problems.



COURSE OUTLINE

MTH117

4

Prepared: Mathematics Department Approved: Sherri Smith

Learning Objectives 3.

- Solve for simple interest.
- Calculate maturity value.
- Determine the number of days in a loan or investment period.
- Define the basic terms used with notes.
- Find the due date of a note.
- Find the principal, rate, and time using the simple interest formula.
- Decide on a period of compounding.
- Use the formulas and tables to find compound amount and compound interest.
- Define the terms future value and present value.
- Use tables to calculate present value.

Course Outcome 4.

Use and convert units of measure.

Learning Objectives 4.

- Use the International System of Units (SI).
- Evaluate and use the SI prefixes.
- Convert from one SI (metric) unit to another.
- Convert a quantity from a metric unit to a British unit or vice versa using a table of conversion.
- Convert international currency amounts to Canadian dollars, or vice versa.
- Use units of measure in applied situations.

Course Outcome 5.

Present and interpret quantitative information using descriptive statistics techniques.

Learning Objectives 5.

- Construct and analyze a frequency distribution.
- Construct and analyze bar, line, and circle graphs.
- Find the mean, median and mode of a list of numbers.



COURSE OUTLINE

MTH117

5

Prepared: Mathematics Department Approved: Sherri Smith

- Calculate a weighted mean.

Date:

Thursday, August 31, 2017

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