

## COURSE OUTLINE: BCO101 - BUSINESS MATH

Prepared: Mathematics Department Approved: Karen Hudson, Dean, Community Services and Interdisciplinary Studies

Course Code: TitleBCO101: BUSINESS MATHProgram Number: Name2035: BUSINESS FUNDAMENTAL 2030: BUSINESS FUNDAMENTAL Fundamental Participation Properties, percentages and the percentage formula, discounts, markups and markdowns, payroll scenarios, break-even analysis, and simple interest.Total Credits:4Hours/Week:44Corequisites:There are no pre-requisites for this course.Corequisites:There are no pre-requisites for this course.Corequisites:BCO105, ECN120Vocational Learning Outcomes (VLO3)2033 - BUSINESS VLO 4 Apply basic research skills to support business decision making. VLO 4 Apply basic research skills to support business decision making. VLO 4 Apply basic research skills to support business decision making. VLO 4 Apply basic research skills to support business decision making. VLO 4 Apply basic research skills to support business decision making. VLO 5 Perform basic accounting procedures and financial calculations to support the operations of an organization.Essential Employability Khils (CED) addressed in this course:EES 3 Execute mathematical operations accurately. EES 4 Apply as systematic approach to solve problems. EES 1 Manage the use of time and other resources to complete projects.Course Evaluation:Passing Grade: 50%, D A minimum program GPA of 2.0 or higher where program specific standards exist is required						
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	for graduation.						
Books and Required Resources:	Contemporary Business Mathematics with Canadian Applications by Hummelbrunner Publisher: Pearson Education Canada Edition: 13th ISBN: 9780137878604 25W - can only order via https://shorturl.at/26R6X (Pearson`s site) eTextbook only, NOT MyL Calculator - Sharp EL-516XG (available in the bookstore)						
Course Outcomes and	Course Outcome 1	Learning Objectives for Course Outcome 1					
Learning Objectives:	1. Apply knowledge of basic math skills as they relate to general business applications.	<ul> <li>1.1 Simplify arithmetic expressions using the basic order of operations.</li> <li>1.2 Determine equivalent fractions and convert fractions to decimals.</li> <li>1.3 Perform calculations using fractions, decimals and percentages.</li> <li>1.4 Through problem solving, compute simple arithmetic and weighted averages.</li> <li>1.5 Determine gross earnings for employees remunerated by the payment of salaries, hourly wages or commissions.</li> <li>1.6 Through problem solving, compute Goods and Services Tax, Harmonized Sales tax, sales taxes and real property taxes.</li> </ul>					
	Course Outcome 2	Learning Objectives for Course Outcome 2					
	2. Review Algebraic concepts and operations and apply them to solving a variety of first-degree equations in one variable.	<ul> <li>2.1 Review integers and their operations.</li> <li>2.2 Define variables, algebraic expressions, monomials, binomials, polynomials, and like terms.</li> <li>2.3 Add, subtract, multiply, and divide algebraic expressions.</li> <li>2.4 Simplify powers with integral and rational exponents.</li> <li>2.5 Simplify algebraic expressions by extracting common factors and applying rules of exponents.</li> <li>2.6 Define logarithms using a variety of bases.</li> <li>2.7 Solve a variety of linear equations in one variable includin those with fractions.</li> <li>2.8 Rearrange a formula or equation to isolate a particular variable.</li> <li>2.9 Solve word problems that lead to a linear equation in one unknown.</li> </ul>					
	Course Outcome 3	Learning Objectives for Course Outcome 3					
	3. Review percentages, ratios and proportions and use these concepts in a variety of business applications.	<ul> <li>3.1 Set up and manipulate ratios.</li> <li>3.2 Set up and solve proportions.</li> <li>3.3 Use proportions to allocate or prorate an amount on a proportionate basis.</li> <li>3.4 Use percentages as ratios in proportional statements.</li> <li>3.5 Use proportions to solve business problems involving increases or decreases, markup, markdown, and discounts.</li> <li>3.6 Use proportions in currency conversions.</li> </ul>					

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	Course Outcome 4	ortions to index numbers. bersonal income tax and property tax. Course Outcome 4		
	4. Use the Cartesian coordinate system to model business applications involving the linear relations in two variables.	<ul> <li>4.1 Review the Cartesian coordinate system.</li> <li>4.2 Solve linear equations in two variables.</li> <li>4.3 Graph special linear equations.</li> <li>4.4 Define intercepts and slope of linear relations.</li> <li>4.5 Determine the slope of a line passing through any two points using their coordinates.</li> <li>4.6 Determine the equation of a line given its slope and one point.</li> <li>4.7 Use a system of two linear relations to determine the break even point in business applications, apply to cost-volume-profit using graphical and algebraic solution strategies.</li> <li>4.8 Model simple interest as a linear relation to visualize investment earnings.</li> </ul>		in two variables. quations. slope of linear relations. f a line passing through any two tes. n of a line given its slope and one near relations to determine the break plications, apply to cost-volume-profit raic solution strategies.
Evaluation Process and Grading System:	Evaluation Type		Evaluation Weight	
	Assignments/Quizzes/Participation		30%	
	Tests		70%	
Date:	October 22, 2024			

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

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Addendum: