

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. | | | | | | |
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| 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. | 1.1 Simplify arithmetic expressions using the basic order of operations. 1.2 Determine equivalent fractions and convert fractions to decimals. 1.3 Perform calculations using fractions, decimals and percentages. 1.4 Through problem solving, compute simple arithmetic and weighted averages. 1.5 Determine gross earnings for employees remunerated by the payment of salaries, hourly wages or commissions. 1.6 Through problem solving, compute Goods and Services Tax, Harmonized Sales tax, sales taxes and real property taxes. | | | | | |
| | 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. | 2.1 Review integers and their operations. 2.2 Define variables, algebraic expressions, monomials, binomials, polynomials, and like terms. 2.3 Add, subtract, multiply, and divide algebraic expressions. 2.4 Simplify powers with integral and rational exponents. 2.5 Simplify algebraic expressions by extracting common factors and applying rules of exponents. 2.6 Define logarithms using a variety of bases. 2.7 Solve a variety of linear equations in one variable includin those with fractions. 2.8 Rearrange a formula or equation to isolate a particular variable. 2.9 Solve word problems that lead to a linear equation in one unknown. | | | | | |
| | 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. | 3.1 Set up and manipulate ratios. 3.2 Set up and solve proportions. 3.3 Use proportions to allocate or prorate an amount on a proportionate basis. 3.4 Use percentages as ratios in proportional statements. 3.5 Use proportions to solve business problems involving increases or decreases, markup, markdown, and discounts. 3.6 Use proportions in currency conversions. | | | | | |

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| | Course Outcome 4 | ortions to index numbers. bersonal income tax and property tax. Course Outcome 4 | | |
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| | 4. Use the Cartesian coordinate system to model business applications involving the linear relations in two variables. | 4.1 Review the Cartesian coordinate system. 4.2 Solve linear equations in two variables. 4.3 Graph special linear equations. 4.4 Define intercepts and slope of linear relations. 4.5 Determine the slope of a line passing through any two points using their coordinates. 4.6 Determine the equation of a line given its slope and one point. 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. 4.8 Model simple interest as a linear relation to visualize investment earnings. | | 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: