

Certificate in Business Studies & Internet Technology (301) – Business Maths

Prerequisites: None	Corequisites: A pass or higher in Certificate in
	Information Systems or equivalence

Aim: Applying the basic concepts and usage of basic business, consumer and practical maths. The course begins with more simple maths including decimals, place value, addition, subtraction, multiplication, division, percents and percentages, fractions, decimals, estimation, and rounding. It continues with the different ways people earn money, including income and wages, taxes, bank savings and current accounts, investments, and more consumer maths skills. Students will practice reading and understanding earnings statements, time card sheets, income, insurance, deductions and other topics including; (i) PAYING TAXES - learn what are taxes, why do we pay taxes, and what taxes are used for; (ii) Current Accounts - account deposits and withdrawals, managing, balancing and reconciling (iii) SAVINGS ACCOUNTS - a basic understanding of banking and interest rates is a fundamental money skill. It is important to learn about bank savings accounts, banks, and interest rates; (iv) SPENDING MONEY - consumer maths, include discounts, needs and wants, receipts, estimation, comparison shopping, invoices, and more; (v) INVESTING - all about investing money and money management from basic investing and financial concepts. Including stocks, the stock market, interest, income statements, buying stocks, calculating shares purchased, percentage change in share price, how to read a stock table and security pricing; (vi) BUDGETING – business budgets to basic personal budget concepts. Business Maths build basic math proficiency useful for common business and industry practices. It provides the foundation of arithmetic, mathematics and measurements used in common business and industry practices. Business Maths present maths skills and knowledge students can apply to solve financial problems. Finance plays a major role in our lives--car loans, mortgage payments, retirement plans, real estate investment and knowing how to calculate the cost of borrowing or the return on investment is important to us all. The course provides step-by-step guidance through sample problems and solutions related to banking, credit, basic finance and investment. Students will also gain an understanding of financial instruments and terminology used in business finance such as compound interest, annuities and promissory notes. The course serves as a good foundation for further studies in either computing or business. Business Maths is crucial to everyday office work. In fact, business math is necessary to expanding a business and is mandatory to all programs. Mastering business maths can help your career opportunities and likelihood of job promotion. However, Maths is challenging most people, hence can be applied to everything – be it computing or business studies environment. Business Maths is used by all commercial enterprises to record and manage business operations. Commercial organizations use mathematics in accounting, inventory management, marketing, sales forecasting, and financial analysis.

Required Materials: Recommended Learning	Supplementary Materials: Lecture notes and	
Resources.	tutor extra reading recommendations.	
Special Requirements: None		
Intended Learning Outcomes:	Assessment Criteria:	
1. Provide a firm foundation in basic	1.1 Be able to read whole numbers	
principles of mathematics and recap on whole	1.2 Be able to add whole numbers	
numbers, fractions and decimals.	1.3 Be able to subtract whole numbers	
	1.4 Be able to do whole number division	
	1.5 Be able to identify types of fractions	
	1.6 Demonstrate adding and subtracting	
	fractions	
	1.7 Demonstrate multiplying and dividing	
	fractions	
	1.8 Be able to read and write decimals	
	1.9 Be able to add and subtract decimals	

	1.10	Be able to divide decimals by whole numbers
2. Demonstrate banking terms, illustrate the process of solving various forms of equations and	2.1 2.2 2.3	Describe different account types Describe various bank transactions Identify elements of a cheque
percentage problems.	2.4 2.5	Explain the different bank charges Be able to solve equations using multiplication, division, addition and subtraction
	2.6	Be able to solve equations using more than one operation
	2.7	Be able to write whole numbers, fractions and decimals as a percent
3. Explain the differences between cash discount and trade discount. Demonstrate solving	3.1	Be able to evaluate trade discount and net price
trade and cash discounts, markup/markdown and payroll system.	3.2	Explain discount period and credit periods
	3.3	Be able to calculate cost, markup and selling price
	3.4	Compute percent of markup based on cost
	3.5 3.6	Be able to compute gross and net pay Describe employers payroll charges and
	3.7	taxes Describe employees' payroll charges and taxes
4. Describe banking terminology; differentiate simple and compound interest rates, promissory notes and future/present values.	4.1	Be able to explain interest, simple interest, principal, rate and time key terms
promissory notes and rather prosent values.	4.2	Be able to use the simple interest formula
	4.3 4.4	Identify promissory note terms Be able to compare and contrast simple interest and compound interest
	4.5	Describe annuities and sinking funds
5. Demonstrate financial credit analysis techniques and analyse the effect of credit on consumers.	5.1 5.2	Discuss various credit terms Be able to estimate annual percentage rate (APR)
Consumers.	5.3	Describe mortgage payments
	5.4	Be able to calculate monthly mortgage payments and total interest on a
	5.5	mortgage Describe different types of mortgages available
6. Demonstrate financial statements,	6.1	Describe balance sheet terms
depreciation and inventory. Discuss different business taxes, insurances and share trading.	6.2	Be able to prepare a balance sheet Explain the purpose of income statement
susmess takes, insurances and share trading.	6.4	Be able to prepare an income statement
	6.5	Be able to analyse and interpret financial
	6.6	reports Describe depreciation
	6.7	Analyse different depreciating methods
	6.8	Explain inventory key terms
	6.9	Describe different methods of finding closing stock value
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	6.10	Be able to calculate different business
	0.10	taxes, sales/value added taxes, duty,
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		PAYE, government levies etc
	6.11	Describe the importance of insurance
		cover
	6.12	Analyse different types of insurance
		policies
	6.13	Describe the stock exchange
	6.14	Be able to explain stock listings
	6.15	Describe shares, bonds and mutual funds
7. Demonstrate statistical probabilities used	7.1	Describe key statistical terms
in business and describe the importance of	7.2	Analyse how statistics plays a big role in
business statistics.		society and business
	7.3	Be able to draw and interpret graphs
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Recommended Learning Resources: Business Maths

Text Books	 Practical Business Math Procedures by Jeffrey Slater ISBN-10: 0073377538 Basic Business Mathematics by Eugene Don and Joel Lerner ISBN-10: 0071611584 Practical Business Math: An Applications Approach by Michael D. Tuttle ISBN-10: 0130256676
Study Manuals	BCE produced study packs
CD ROM	Power-point slides
Software	None