LONDON CAPITAL COMPUTER COLLEGE

Certificate in Computer Fundamentals (105) – Business Maths

Prerequisites: Basic computing knowledge	**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 Resources.	**Supplementary Materials:** Lecture notes and tutor extra reading recommendations.
Special Requirements: None	
Intended Learning Outcomes: 1. Provide a firm foundation in basic principles of mathematics and recap on whole numbers, fractions and decimals.	**Assessment Criteria:** 1.1 Be able to read whole numbers 1.2 Be able to add whole numbers 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 percentage problems.	2.1 Describe different account types 2.2 Describe various bank transactions 2.3 Identify elements of a cheque 2.4 Explain the different bank charges 2.5 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 trade and cash discounts, markup/markdown and payroll system.	3.1 Be able to evaluate trade discount and net price 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 Be able to compute gross and net pay 3.6 Describe employers payroll charges and taxes 3.7 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 4.2 Be able to use the simple interest formula 4.3 Identify promissory note terms 4.4 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 Discuss various credit terms 5.2 Be able to estimate annual percentage rate (APR) 5.3 Describe mortgage payments 5.4 Be able to calculate monthly mortgage payments and total interest on a mortgage 5.5 Describe different types of mortgages available
6. Demonstrate financial statements, depreciation and inventory. Discuss different business taxes, insurances and share trading.	6.1 Describe balance sheet terms 6.2 Be able to prepare a balance sheet 6.3 Explain the purpose of income statement 6.4 Be able to prepare an income statement 6.5 Be able to analyse and interpret financial reports 6.6 Describe depreciation 6.7 Analyse different depreciating methods 6.8 Explain inventory key terms 6.9 Describe different methods of finding closing stock value 6.10 Be able to calculate different business

	taxes, sales/value added taxes, duty, 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 in business and describe the importance of business statistics.	7.1 Describe key statistical terms 7.2 Analyse how statistics plays a big role in society and business 7.3 Be able to draw and interpret graphs
Methods of Evaluation: A 2-hour written examination paper with Section A and Section B. Section A has 40 multiple choice questions. Section B has three essay questions, each carrying 20 marks. Candidates are required to answer all questions. Candidates also undertake project/coursework in Business Maths with a weighting of 100%.	

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