

Grande Prairie Regional College  
Department of Business Administration

Winter 2002

## Business Mathematics and Statistics

BA1050 3(3-1)

### Basic Course Information

**Instructor:** Sukhvir Sandhu      Office No. E401      539-2438  
Email: Ssandhu@gprc.ab.ca

**Office Hours:** Mon. 2:30 - 4:00,  
Wed. 10:30 - 11:30, or make an appointment.

**Prerequisite:** Math 20 or Math 33

**Text:** Mathematics of Finance with Canadian Applications, 4<sup>th</sup> Edition, S.A. Hummelbrunner, Prentice Hall.

This text will be used extensively in the course. All students should have a textbook.

**Calculator:** Sharp Business Financial (EL 733A)

**Course Description:** Emphasizes a range of mathematical calculations used in business. Introduction to simple interest, compound interest, annuities, amortization, sinking funds, statistical methods and probability theory. Practical applications will be emphasized in the course.

**Course Objectives:** To provide students with a knowledge of managerial mathematics, and introductory statistics.

**Transferability:** In conjunction with BA 2060, the course provides an exemption in CGA and CMA Quantitative Methods.

**Grading:**

Mid-term Exam	30%
Final Exam	30%
Each Quiz	10%

### Tentative Class Schedule

Dates	Topics	Text	Due
Jan 3	Introduction		
Jan 4, 8, & 10	Simple Interest :F.V., PV, Prt	Ch. 1	
Jan 11, 15, & 17	Simple Interest Application: Promissory notes, Discount method, Treasury bills, Lines of credit	Ch. 2	
Jan 18, 22, & 24	Compound Interest: F.V., PV	Ch. 3	Q 1 (18)
Jan 25, 29, & 31	Compound Interest: Discounting Fractional Conversion Periods	Ch. 3 Ch. 4	
Feb 1, 5, & 7	Equivalent rates, Continuous Compounding	Ch. 4	Q 2 (7)
Feb 8, 12, & 14	Ordinary simple and General Annuities F.V., PV	Ch. 5	
Feb 15, 19, & 21	Review Ch 1- 5 & Midterm Exam		MT (30%)
March 5, 7, & 8	Annuities Due, F.V. & PV, Deferred Annuities Perpetuities	Ch. 6	
March 12, 14, & 15	Annuities: Finding R, n, and i	Ch. 7	
March 19, 21, & 22	Periodic Payments, Amortization of Loans Mortgages, Interest Rates	Ch. 7 Ch. 8	Q 3 (21)
March 26, 28, & Apr 2	Calculation of Final Payment Bond Valuation	Ch. 8 Ch. 9	
Apr 4, 5, & 9	Statistics: Sampling, Frequency table, Center & Spread of Distribution	Notes	Q 4 (9)
Apr 11, & 12	Probability: Compound Events, Conditional Probability, Bayes Theory	Notes	
Apr 15 - 30	Final Exam Scheduled by Registrar Chapter 6 - End of the course		Final (30%)