

# BUSINESS MATHEMATICS AND STATISTICS

BA 1050 3(3-1)

## Basic Course Information

Instructor: Kathleen D. Frei  
Room C413  
539-2007

Office Hours: Mon. 12:00 - 1:30  
Wed. 11:30 - 1:00

Email: [Frei@gprc.ab.ca](mailto:Frei@gprc.ab.ca)

Prerequisite: Math 20 or Math 33

Text:  
Mathematics of Finance with  
Canadian Applications, 3<sup>rd</sup> Edition,  
S.A. Hummelbrunner, Prentice Hall.

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

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

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. Introduces  
students to managerial economics with  
emphasis on demand, supply, production and  
costs. 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.

### Tentative Class Schedule

Dates	Topic	Text	Due
Jan 4	Introduction		
Jan 8, 9, & 11	Simple Interest: F.V., PV, & Prt	Ch 1	
Jan 15, 16, & 18	Promissory notes, Discount method, treasury bills, lines of credit	Ch 2	
Jan 22, 23, & 25	Compound Interest: F.V., PV	Ch 3	Q 1 (22)
Jan 29, 30 & Feb 1	Compound Interest: Discounting Fractional Conversion Periods	Ch 3 Ch 4	
Feb 5, 6, & 8	Equivalent rates, Continuous Compounding	Ch 4	Q 2 (8)
Feb 12, 13, & 15	Ordinary Simple & General Annuities F.V., PV,	Ch 5	
Feb 20, & 22	Review Ch 1 - 5 & Midterm Exam		MT (30%)
Mar 5, 6, & 8	Annuities Due, F.V. & PV, Deferred Annuities Perpetuities	Ch 6	
Mar 12, 13, & 14	Annuities: Finding R, n, or i,	Ch 7	
Mar 19, 20, & 22	Periodic payments, Amortization of Loans Mortgages, Interest Rates	Ch 7 Ch 8	Q 3 (20)
Mar 26, 27, & 29	Calculation of Final Payment Bond Valuation	Ch 8 Ch 9	
Apr 2, 3, & 5	Statistics: Sampling, Frequency tables, Center & spread of Distribution,	Notes	Q 4 (5)
Apr 9, 10 & 12	Probability: Compound Events, Conditional Probability, Independence, Bayes Theory	Notes	
Apr 16 - 30	Final Exam Scheduled by Registrar Chapter 6 - end of the course		Final (30%)