

SEP. 13 2002

Grande Prairie Regional College

Department of Business Administration

Business Mathematics and Statistics

BA 1050 3(3-1)

Course Outline Fall 2002 Section C2

- Instructor:** Curt Farrell
- Office Particulars:** C413
Tel.: 539-2007
E-mail: cfarrell@gprc.ab.ca
- Office Hours:** Monday, 10:00 - 12:00 a.m. & Wednesday, 10:00 - 11:00 a.m.
Appointments are usually the best idea.
- Required Text:** S. A. Hummelbrunner. Mathematics of Finance with Canadian Applications (Fourth Edition). Toronto: Prentice Hall (2001).

This text provides the bulk of material you will study for this course and will be used extensively. I may also provide you with handouts, articles, case studies, or other materials. These are to be read and prepared, as you would a textbook chapter.

Course Description

This course emphasizes a range of mathematical calculations used in business. We will cover topics such as simple interest, compound interest, annuities, amortization, sinking funds, statistical methods, and probability theory. Practical applications will be emphasized in this course.

Course Objectives

To provide students with a knowledge of managerial mathematics and introductory statistics.

Course Format

BA 1050 consists of 210 minutes of weekly instruction Tuesday and Thursday, 10:00 - 11:20 a.m. and Friday, 10:00 - 10:50 a.m. The classes will include a combination of lectures, discussions, videos, and group work. Individual participation is strongly encouraged and recommended.

Prerequisite

Math 20 or Math 33

Transferability

In conjunction with BA 2060 (Statistics for Business), this course provides an exemption for CGA and CMA Quantitative Methods.

Course Evaluation

Grading Components

The following components will determine your final grade:

| | |
|-------------------------|-----|
| Class Participation | 10% |
| Quizzes and Assignments | 30% |
| Mid Term Exam | 30% |
| Final Exam | 30% |

Class Participation

To get the most out of this class, regular attendance and active participation is required. In addition, your classmates' learning can be improved by your constructive participation in class. I will monitor both your attendance and your active and constructive contribution to the class' learning. Your participation mark, worth 10% of your final grade, will reflect these components.

Quizzes and Assignments

Throughout the course, students will be required to complete a number of quizzes and assignments in order for their progress to be monitored. Quizzes will take approximately 20 minutes to complete, and will be written at the beginning of the next class following completion of the specified material. Some of these Quizzes will be unannounced, surprise Quizzes. The assignments are due at the beginning of the class on the date specified. Students arriving late for class will miss the opportunity to write the quiz or hand in the assignment. As adult students with other responsibilities, you might encounter situations that prevent you from attending a scheduled class. If you must miss a class, particularly one on which a quiz is written or an assignment is due, you must negotiate your situation with me **prior** to your absence. Please note, that simply leaving me a telephone message, or sending me an e-mail, **does not** qualify as negotiation. Exceptions may be made for properly documented absences (medical notes). These quizzes and assignments represent 30% of your final grade.

Mid Term Exam (Oct. 24)

The Mid Term Exam will test your application of all course material covered up to and including the class prior to the exam. You will be expected to demonstrate your knowledge of both the mathematical formulas and their application. Accordingly, this Exam will be comprised of both short and long answer questions. This Exam represents 30% of your final grade.

Final Exam (Dec. 9 to 18)

The Final Exam will test your application of all course material covered throughout the entire course. There will, however, be greater emphasis on material covered after the Mid Term Exam. This Exam will be very similar in format, to the Mid Term Exam. We will be notified of the exact date for the Final Exam, by the Registrar's Office. This Exam represents 30% of your final grade.

Tentative Class Schedule for BA 1050 - C2

| <u>Dates</u> | <u>Topics</u> |
|---------------------|---|
| Sept. 5, 6 | Introduction |
| Sept. 10, 12, 13 | Simple Interest: Future Value, Present Value, Prt |
| Sept. 17, 19, 20 | Promissory Notes, Simple Discount |
| Sept. 24, 26, 27 | Compound Interest: Future Value, Present Value |
| Oct. 1, 3, 4 | Compound Interest: Finding the Interest Rate & the Time |
| Oct. 8, 10, 11 | Equivalent Rates, Continuous Compounding |
| Oct. 15, 17, 18 | Simple & General Annuities: Future Value, Present Value |
| Oct. 22, 24, 25 | Review Course Material, Mid Term Exam |
| Oct. 29, 31, Nov. 1 | Annuities Due: Future Value, Present Value, Perpetuities |
| Nov. 5, 7, 8 | Annuities: Interest Rate, Payment Amount, Number of Payments |
| Nov. 12, 14, 15 | Calculation of Final Payment, Bond Valuation |
| Nov. 19, 21, 22 | Statistics: Random Sampling, Randomized Experiments, Center and Spread of Distribution |
| Nov. 26, 28, 29 | Relative Frequency, Frequency Tables, Linear Transformations |
| Dec. 3, 5, 6 | Probability: Probability Models, Compound Events, Conditional Probability, Independence, Bayes Theory |
| Dec. 9 to 18 | Final Exam: Date to be Announced |

Important Notice

The Instructor reserves the right to adjust, change, or cancel, any of these Dates and Topics, at any time, without prior notice, in order to accommodate the needs of the class.