# Grande Prairie Regional College

## School of Business

### Department: Business Administration and Commerce

COURSE OUTLINE – WINTER 2006

BA1050 3(3 – 0 – 1)UT

## Business Mathematics and Statistics

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|---|---|---|---|
| **Instructor** | Sukhvir Sandhu | **Phone** | 539 - 2334 (office)<br>539 - 9787 (Home) |
| **Office** | E 401 | **E-mail** | SSandhu@gprc.ab.ca |
| **Office Hours** | M & W: 1:30 – 3:00 pm or by appointment | | |

## Prerequisite(s):

MA 20 or Math 33

## Required Text/Resource Materials:

S.A. Hummelbrunner.  **Contemporary Business Mathematics with Canadian Applications (Fifth Edition).**  Toronto: Prentice hall (2001)
**THE TEXT WILL BE USED EXTESIVELY.**
Financial calculator, **preferably the Sharp EL-733A.  No programmable calculators will be allowed in exams.**

## Description

This course emphasizes a wide range of practical applications and mathematical calculations that are commonly used in business world.  Topics will include simple interest, compound interest, future and present values, annuities, amortization, and bond valuation.  It also emphasizes on statistical methods, and probability theory.

## Credit /Contact Hours:

This is a 3 credit course with 3 lectures per week.  A lot of class-participation is expected.  A total of 60 hours are assigned for this course.  Students are expected to attend all lectures.

## Delivery Modes:

For each topic listed, there will be a classroom lecture/ discussion and a demonstration of related mathematical procedures.   I will assign relevant textbook readings and problems, review key topic points regularly.  Assignments and class tests will be scheduled to test your knowledge, understanding, and application of the material.

Regular classroom attendance is expected.  Please do not be late.  You should **study** each assigned reading both before and after it is discussed in class; apply your understanding by class participation and solving the required problems; ask questions in the class; come and see me during my office hours or make an appointment to clear up any misunderstandings or uncertainties about material covered in the class; and demonstrate your mastery of the subject matter whenever you get the chance – tests, assignments, and class participation.

Strong understanding of the concepts in this course requires a great commitment of time and team-work.  Plan your schedule accordingly.  Do not fall behind in the assigned readings and problems because it is difficult to catch up.

## Transferability:

In conjunction with BA 2060 (Statistics for Business), this course provides an exemption for CGA and CMA Quantitative Methods.  As well it transfers to Math 244 at Athabasca University.
Athabasca University; Canadian University College; King's University College; Augustana University College.

## Objectives:

To understand the information that Business Mathematics generates, and how the information can be used in students' business careers.

To create an awareness of different types of terminology that is used in the field of business.

To prepare the students so that they can excel and compete in the field of business.

To increase the student's knowledge and skills in the solution of practical financial and mathematical problems encountered in the business community.

## Grading Criteria:

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|---|---|
| Assignments and Quizzes | 25% |
| Mid-Term # 1 | 20% |
| Mid-Term # 2 | 20% |
| Final Exam | 30% |
| Class participation/attendance | 5% |

## Class Participation:

5% of the final grade will be attributed to participation and attendance in class. In order to get the most out of this class, regular attendance and active participation is encouraged.

*There will be unit quizzes given following the completion of each chapter as well as two mid-term examinations both worth 25% of the final grade. The first mid-term will be held tentatively during the week of January 30th – February 3rd, and the second mid-term will be tentatively held during the week of March 20 – 24th. The final exam, worth 30% of the final grade, will be scheduled during examination week by the registrar's office.

## Assignment, Quiz, Test and Exam Policies:

1. Quizzes and exams will be written as scheduled.
2. Absence from the quizzes and exams can be considered only in emergency conditions. Notify the instructor as soon as you realize the need of the absence.
3. Final examination will be scheduled by the Registrar during the period of the 3rd last week of April, 2006. **Do not plan any activities during this period.**

**Grades will be assigned on the Letter Grading System.**

**Department of Business Administration and Commerce**

**Grading Conversion Chart**

| Alpha Grade | 4-point Equivalent | Percentage Guidelines | Designation |
|:-----------:|:------------------:|:---------------------:|:-----------:|
| A⁺ | 4 | 90 – 100 | EXCELLENT |
| A | 4 | 85 – 89 | EXCELLENT |
| A⁻ | 3.7 | 80 – 84 | FIRST CLASS STANDING |
| B⁺ | 3.3 | 76 – 79 | FIRST CLASS STANDING |
| B | 3 | 73 – 75 | GOOD |
| B⁻ | 2.7 | 70 – 72 | GOOD |
| C⁺ | 2.3 | 67 – 69 | SATISFACTORY |
| C | 2 | 64 – 66 | SATISFACTORY |
| C⁻ | 1.7 | 60 – 63 | SATISFACTORY |
| D⁺ | 1.3 | 55 – 59 | MINIMAL PASS |
| D | 1 | 50 – 54 | MINIMAL PASS |
| F | 0 | 0 – 49 | FAIL |

## Course Outline:

There will be a **quiz** after most chapters, unless told otherwise.

- Simple Interest          (Chapter 1)
- Simple Interest Applications          (Chapter 2)
- **Mid-Term #1          (during January 30th – February 3)**
- Compound Interest  (Chapter 3)
- Compound Interest – further topics (Chapter 4)
- Ordinary Simple Annuities (Chapter 5)
- Annuities Due, Deferred Annuities, ad Perpetuities  (Chapter 7)
- Ordinary General Annuities (Chapter 6)
- **Mid – Term # 2          (during March 20 – 24)**
- Amortization of Loans          (Chapter 8)
- Bond Valuation          (Chapter 9)
- Basic Statistics and Probability (if time permits)
- **Final Exam          (TBA during April 17-21**

**\* The instructor reserves the right to change, or cancel, any of these dates and topics.**