JAN 10 2003
J. Nutting

GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF ADMINISTRATIVE STUDIES
COURSE OUTLINE

BA 1050 - BUSINESS MATHEMATICS AND STATISTICS 3(3-1)
2002 - 2003

TEXT: Mathematics of Finance with Canadian Applications, S . A . Hummelbrunner, Prentice Hall. 4th Edition.

PREREQUISITE: Math 20 or Math 33

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, introductory statistics and managerial economics. In conjunction with BA 2060 the course provides an exemption in CGA and CMA Quantitative Methods.

GRADING:

Mid-term Exam	30%
Final Exam	40%
Assignment	10%
Random in-class assignments	20% (2% each)

COURSE CONTENT:

1.0 Simple interest and simple discount
- a) Interest
- b) Simple Discount
- c) Promissory notes

2.0 Compound interest
- a) Finding the compound amount
- b) Finding the present value
- c) Equivalent rates
- d) Continuous compounding
- e) Finding the interest rate
- f) Finding the time
- g) Equations of value

3.0 Simple Annuities
- a) Present value
- b) Amount
- c) Annuity due
- d) Periodic payments
- e) Number of payments
- f) Finding the interest rate

4.0 General Annuities
- a) Introduction
- b) Present value
- c) Amount
- d) General annuity payment
- e) Interest rate
- f) Mortgages

5.0 The Nature of Statistics
- a) Random sampling
- b) Randomized experiments
- c) Observational studies

6.0 Descriptive Statistics
- a) Frequency tables
- b) Centre of distribution
- c) Spread of a distribution
- d) Statistics by computer
- e) Linear transformations
- f) Relative frequencies

7.0 Probability
- a) Introduction
- b) Probability models
- c) Compound events
- d) Conditional probability
- e) Independence
- f) Bayes Theory