



MATHEMATICS OF FINANCE

MTH 114-4

**COURSE NAME**

**COURSE NUMBER**

**TOTAL CREDIT HOURS: 64**

**PREREQUISITE(S): MTH 111-5**

**I. PHILOSOPHY/GOALS:**

The development of the students' knowledge and skill in computation of financial problems relating to business and the skill in using interest formulas and forming accurate answers, which is essential to this course.

**II. STUDENT PERFORMANCE OBJECTIVES:**

The basic objectives are that the student develop an understanding of the methods studied, knowledge of the facts presented and an ability to use these in the solution of problems. To accomplish these objectives, exercises are assigned. Test questions will be of near equal difficulty to questions assigned in the exercises. The level of competency demanded is the level required to obtain an overall passing average on the tests. The material to be covered is listed below.

**III. TOPICS TO BE COVERED:**

1. Simple Interest and Promissory Notes
2. Compound Interest
3. Simple Annuities
4. General Annuities
5. Amortization and Sinking Funds
6. Bond Valuation

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<u>TOPIC NO.</u>	<u>PERIODS</u>	<u>TOPIC DESCRIPTION</u>	<u>REFERENCES</u>
1	12	Simple interest, graphical presentations promissory notes, simple and bank discount	p. 236-295
2	14	Compound interest - amount and present value, discounting promissory notes, special problems	p. 298-379
3	18	Ordinary simple annuities Annuities due Deferred annuities Perpetuities	p. 380-481
4	14	General annuities-deferred General annuities-present value Amortization and sinking funds	p. 482-590
5	6	Bond valuation - purchase price Premium and discount book value yield rate	p. 591-636

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**IV. EVALUATION METHODS:**

The final mark will be based on four unit tests, each representing 25% of the final mark.

Grading: A+ = 90-100%  
A = 80-89%  
B = 65-79%  
C = 55-64%

A passing grade will be based on a minimum grading of 55%. Students obtaining a grade of 45-54% may be allowed to write a rewrite test. However, only students who have attended at least 80% of the math classes will be considered for a rewrite test.

**V. REQUIRED STUDENT RESOURCES:**

TEXTBOOK: Contemporary Business Math; S.A. Hummelbrunner  
- 3rd Edition (Prentice-Hall)

Calculator: Exponent Key

**VI. SPECIAL NOTES:**

Students with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.