# SAULT COLLEGE OF APPLIED ARTS \& TECHNOLOGY <br> SAULT STE. MARIE, ONTARIO 

COURSE OUTLINE

| Course Title: | MATHEMATICS |
| :--- | :--- |
| Code No.: | MTH 111-5 |
| Program: | BUSINESS |
| Semester: | ONE |
| Date: | JULY 1983 |
| Author: | W.O. MAKI AND J. GLOWACKI |



MATHEMATICS MTH 111-5

## PHILOSOPHY/GOALS:

The objectives of this course are to develop speed and accuracy in basic arithmetic, master the skills of basic algebra and be able to solve many of the Math problems encountered inthe business world. This course also provides the basic knowledge of algebra necessary to successfully complete the Math of Finance and statistics courses given in later semesters.

## METHOD OF ASSESSMENT (GRADING METHOD):

Periodic test during the semester as well as any anannounced surprise tests are suggested to determine student competency. A final exam would be optional. A comprehensive supplemental exam may be given at semester end if this is department or college policy.

TEXTBOOK (S) :
CONTEMPORARY BUSINESS MATH; S.A. Hummelbrunner (Prentice-Hall)

## OBJECTIVES:

The basic objective is for the student to develop an understanding of the methods studied, knowledge of the facts presented and an ability to use these in the solution of problems. For this purpose, exercises are assigned. Tests will reflect the sort of work contained in other assignments. 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 on the following page

| Periods | BUSINESS MATHEMATICS - MTH 111-5 |  |
| :---: | :---: | :---: |
|  | Topic Description | References |
| 6 | Review of Arithmetic | p. 1-39 |
|  | Addition and subtraction, multiplication and division Operations with fractions, mixed fractions, decimal fractions, basic problems |  |
| 8 | Review of Basic Algebra | p. 41-70 |
|  | Fundamental operations and laws with signed numbers <br> Simplification of algebraic <br> expressions <br> Factoring and Exponents |  |
| 6 | Linear Equations in one variable and word problems | p. 75-90 |
| 8 | Ratios, Proportion and Percent | p. 93-136 |
|  | Percents to fractions and decimals Basic percent problems Rate percent, increase and decrease Applications |  |
| 8 | Linear Systems | p. 139-179 |
|  | Linear equations and inequations and their graphs Solution by addition and subtraction 3 unknowns and their solutions Problem solving |  |
| 10 | Additional Algebraic Topics | p. 180-210 |
|  | Laws of exponents Quadratic equations solving by formula Arithmetic and Geometric progressions Natural and common logarithms |  |
| 8 | Commercial Discount | p. 282-325 |
|  | Mark-up and mark-down Cash discount |  |

