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

## COURSE OUTLINE

## MATHEMATICS

## COURSE TITLE:

CODE NO.:
MTH 111-5
SEMESTER:

PROGRAM:

MJ> THOR:

DATE:
AUGUST 1992
JUNE 1991

APPROVED :

$\operatorname{LREg}_{\text {DATE }}$ P' $^{\prime}$

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TOTAL CREDIT HOURS: 80
PREREQUISITE (S) : NONE

## I. 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 in the 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.

## 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. Review of Arithmetic
2. Review of Algebra
3. Ratio, Proportion and Percent
4. Linear Systems - Graphic \& Linear Solutions
5. Discounts and Markup

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## LEARNING ACTIVITIES:

TOPIC
CHAPTER 1:
Review of Arithmetic
Addition and subtraction, multiplication and division Operations with fractions, mixed fractions, decimal fractions, basic problems

CHAPTER 2:
Review of Basic Algebra
Fundamental operations and laws with signed numbers
Simplification of algebraic expressions
Factoring and Exponents
CHAPTER 2:
Linear Equations in one variable and word problems

CHAPTER 3:
Ratios, Proportion and Percent
Percents to fractions and decimals Basic percent problems Rate percent, increase and decrease Applications

CHAPTER 4:
Linear Systems
Linear equations and inequations and their graphs
Solution by addition and subtraction 3 unknowns and their solutions Problem solving

CHAPTER 6:
Commercial Discount
Mark-up and mark-down
Cash discount

## REQUIRED

 RESOURCES:EXERCISES
p. 1-14

Ex. 1.1-1.2
p. 27-44

Ex. 2.1-2.3
p. 49-66

Ex. 2.5-2.7
p. 68-110

Ex. 3.1-3.6
p. 112-152

Ex. 4.1-4.6
p. 191-232

Ex. 6.1-6.4

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## V. EVALUATION METHODS: (INCLUDES ASSIGNMENTS, ATTENDANCE REQUIREMENTS ETC.)

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

GRADING:

$$
\begin{aligned}
& \mathrm{A}+=90-100 \% \\
& \mathrm{~A}=80-89 \% \\
& \mathrm{~B}=65-79 \% \\
& \mathrm{C}=55-64 \% \\
& \mathrm{R}=0-54 \%
\end{aligned}
$$

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.

## VI. REQUIRED STUDENT RESOURCES:

Textbook: Contemporary Business Math; S.A. Hummelbrunner 2nd Edition (Prentice-Hall)

Calculator: Basic Functions

## VII. 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.

