# SAULT COLLEGE of Applied Arts and Technology Sault Ste. Marie

# COURSE OUTLINE

MATHEMATICS MTH 111-5

revised <u>^ne</u>, 1981 by J. Glowacki

# MATHEMATICS

# MTH 111-5

<u>TEXT</u>: A Survey of Basic Mathematics - 4th Edition - Sparks (McGraw-Hill REFERENCE TEXTS:

Essential Business Mathematics - 5th Edition - Snyder (McGraw-Hil Business Mathematics - McCready (Wadsworth) Contemporary Business Mathematics - Bello (Saunders) Basic Mathematics for Business Analysis - Curry & Pearson (Irwin)

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### NOTES:

The objectives of this course are to develop speed and accuracy in basic arithmetic, master the basic skills of algebra and to be able to solve many of the mathematic problems encountered in business.

A comprehensive basic knowledge of algebra is desirable for the Mathematics for Finance and Statistics courses which are given in later semesters.

Throughout the text, the problems in each exercise vary in their degree of difficulty. This retains the interest and is a challenge to the student who has previously completed two or three courses in algebra.

#### ; MATHEMATICS

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#### TOPICAL OBJECTIVES

THE STUDENT SHOULD BE ABLE TO:

- 1. Quickly and accurately perform fundamental arithmetic operations involving integers, decimals and fractions.
- '2. Convert percentages to decimals and fractions.
- 3. Rapidly multiply or divide problems involving powers of 10.
- 4. Solve problems involving rate, base and percentage.
- 5. Convert decimal numbers to other bases.
- 6. Add, subtract and multiply in binary and octal.
- 7. Solve algebraic problems which require the use of laws of fundamental operations.
- 8. Factor algebraic expressions by recognizing the type it resembles.
- 9. Solve linear and quadratic equations algebraically and graphically. \*
- 10. Rearrange a formula so that any one of the variables could be the unic quantity.
- 11. Solve basic exponential problems.
- 12. Solve numeric and literal ratio and proportional problems.
- 13. Calculate single, series and cash discounts.
- 14. Calculate the break even point graphically and algebraically.
- 15. Calculate'stock turnover and sales ratios.