# SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

	Course Title:	MATHEMATICS
	Code No.:	MTH 099-3
0	Program:	FORESTRY AND GENERAL ARTS & SCIENCE
	Semester:	ONE
	Date:	JANUARY, 1986
	<b>f</b> Author:	W. O. MAKI

New:

Revision:

**APPROVED:** 

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Date fas/ffc

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- 2 -

# CALENDAR DESCRIPTION

#### MATHEMATICS

Course Name

MTH 099-3

Course Number

#### PHILOSOPHY/GOALS:

The objectives of this course include the review of basic arithmetic and the basic operations on algebraic expressions and the solutions to systems of linear equations.

A survey of plane and solid geometry will enable the student to determine areas, volumes and weights for a variety of forms including cylinders, cones and pyramids.

# METHOD OF ASSESSMENT (GRADING METHOD):

Periodic tests and daily assignments based on material in course outline will be given during the semester. A final exam and a make-up test will be at the discretion of the instructor.

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

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

A passing grade will be based on a minimum grading of 55%. Students obtaining grading of 45-54% may be allowed to complete a supplementary examination. However, only students having satisfactory attendance records will be considered for the supplementary examination.

### TEXTBOOK(S):

"Essentials of Mathematics"; Fourth Edition, (Person)

## **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.

- 3 -MTH 099-3

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCES
	10	<u>Review of Basic Arithmetic</u> Whole numbers, fractions, decimal fractions, percentages, using a calculator	Ch. 1, 2, 3, 4 only
	26	Review of Elementary Algebra Simplification (bracket removal) Basic Operations (monomial) Special products and factoring Operations involving algebraic expression and fractions (polynomials) Solutions and properties of linear equat Applied Word Problems Formulae Manipulation	
		Estimations, Dimensional Analysis and Metrication Approximate numbers and rounding off procedures - scientific notation Dimensional analysis for conversion between English and/or SI Units The Metric System	Person Ch. 32 pp. 500-510 pp. 494-499
		<u>Plane Geometry</u> Definitions and theorems involving triangles and rectangles Definitions and theorems of the circle, practical problems Basic constructions if time permits	Person Ch. 25, 27 Heywood pp. 415-427
	23	<u>Solid Mensuration</u> Mensuration of plane figures Mensuration of solid figures, cubes, cylinders, pyramids, cones, spheres, paraboloids, applications and formulae	Person Ch. 28-31

TOTAL HOURS 72