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

COURSE OUTLINE

| Course Title: | MATHEMATICS |
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| Code No.: | MTH 113-4 |
| Program: | FORESTRY \& GEOLOGY TECHNICIANS |
| Semester: | QNE |
| Date: | JUNE 1983 |
| Author: | D. TROWBRIDGE |

New: Revision:

APPROVED:

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## PHILOSOPHY/GOALS:

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

A survey of plane \& 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 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.

## 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.

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PERIODS TOPIC DESCRIPTION
REFERENCES
2 Using Electronic Calculators
Ch. }2
p. 284-288
6 Estimations, Dimensional Analysis and Metrication"
Approximate numbers and rounding off
Person
Ch. 32 procedures - scientific notation
Dimensional analysis for
conversion between English and/or SI units
p. 494-499
The Metric System
\(7 \quad\) Plane Geometry
Definitions and theorems involving
Person
triangles and rectangles
Ch. 25, 27
Definitions and theorems of the circle,
Heywood
practical problems
Basic constructions if time permits
23 Solid Mensuration
Person
Mensuration of plane figures
Ch. 28-31
Mensuration of solid figures, cubes, cylinders, pyramids, cones and spheres; applications and formulae
24 Review of Elementary Algebra
Person
Simplification (bracket removal)
Ch. 6-12
Basic Operations (monomial)
Special products and factoring
Operations involving algebraic expressions
and fractions (polynomials)
Solutions and properties of linear equations
Applied Word Problems
Formulae Manipulation
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