SAULT STE. MARIE, ONTARIO

Revised July '85 (in program y (M^JUUAO)
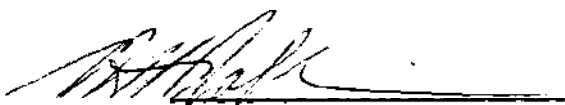
COURSE OUTLINE

Course Title: MATHEMATICS

Code No.:   MTH 113-3

Program: FORESTRY & GEOLOGY TECHNICIANS

Semester: ONE

Date: JUNE, 1984

Author: J. McGAULEY

New: Revision:

APPROVED: _____

Chairperson   Date   ^

CALENDAR DESCRIPTION

MATHEMATICS	MTH 113-3
Course Name	Course Number

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 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.

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.

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCES

Using Electronic Calculators

Ch. 24
pp. 284-288

Estimations, Dimensional Analysis
and Metrication

Approximate numbers and rounding off
 procedures - scientific notation

Person
Ch. 32

Dimensional analysis for conversion
 between English and/or SI units

pp. 500-510
pp. 494-499

The Metric System

Plane Geometry

Definitions and **theorems involving**
 triangles **and rectangles**

**Person
Ch. 25, 27**

Definitions and **theorems of the circle,**
 practical **problems**

Heywood
pp. 415-427

Basic constructions if time permits

23 **Solid Mensuration**

Mensuration of plane figures

Person

**Mensuration of solid figures, cubes,
 cylinders, pyramids, cones, spheres,
 paraboloids, applications and formulae**

Ch. 28-31

24 Review of Elementary Algebra

Simplification (bracket removal)

Person

Basic Operations (monomial)

Ch. 6-12

Special products and factoring
Operations involving algebraic expressions
 and fractions (polynomials)
Solutions and properties of linear equations
Applied Word Problems
Formulae Manipulation

TOTAL HOURS   62