DOC. NO. 44:

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: MATHEMATICS

Code No.: MTH 099-4

Program: FORESTRY

Semester: ONE

Date: JUNE, 1989

Author: K. R. PELEW

New: Revision: X

APPROVED:

Chairperson Date /

CALENDAR DESCRIPTION

MATHEMATICS	MTH 099-4 FORESTRY
COURSE NAME	COURSE NUMBER

PHILOSOPHY/GOALS;

The objectives of this course are to increase the student's speed, accuracy and skill in performing basic arithmetic calculations and operations on algebraic expressions, as well as the solution of practical problems involving linear equations.

A survey of plane and solid geometry will enable the student to identify a variety of figures encountered, and to determine their perimeters, areas, volumes and weights appropriately in both English and SI units.

METHOD OF ASSESSMENT (GRADING METHOD):

Periodic tests and daily assignments based on material in the 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 the results of the tests and assignments given in each of the five topics. Each topic will represent 20% of the final mark.

Grading: A+ = 90-100%
A = 80- 89%
B = 65- 79%
C = 55- 64%

A passing grade will be based on a minimum grading of 55%.
For further details read the Mathematics department's publication, "To the Mathematics Student", which is attached.

TEXTBOQK(S);

"Essentials of Mathematics"; Fifth 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 to reinforce concepts learned, and to show the relevance of these concepts to the student's needs in facilitating computations in the forestry course. Tests will reflect the sort of work contained in.the 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
1	5	Review of Basic Arithmethic	Person
		Whole numbers, fractions, decimal fractions, percentages, without the use of a calculator.	Ch. 1,2,3, and 4 p. 3-74
2	15	Estimations, Dimensional Analysis and Metrication	
		Approximate numbers and rounding off procedures - scientific notation	Ch. 18 P.349-354
		Dimensional analysis for conversion between English and/or SI units	Ch. 6 P. 84-102
		The Metric System	
3	18	Plane Geometry	
		Definitions and theorems involving triangles and other polygons	Person Ch. 26-29
		Definitions and theorems of the circle, practical problems	P.497-548 Heywood
		Basic constructions if time permits	p.415-427
4	20	Solid Mensuration	
		Mensuration of plane figures	Person
		Mensuration of solid figures - cubes, cylinders, pyramids, cones, spheres, paraboloids - applications and formulae	Ch. 30-33 p.549-584
5	14	Review of Elementary Algebra	
		Simplification (bracket removal)	Person
		Basic Operations (monomial)	Ch. 8-13
		Special products and factoring	p.123-234
		Operations involving algebraic expressions and fractions (polynomials)	
		Solutions and properties of linear equations	
		Applied Word Problems	
		Formulae Manipulation	

TOTAL HOURS 72