Doc. 80

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title:	MATHEMATICS
Code No.:	MTH 126-4
Program:	FORESTRY TECHNICIAN
Semester:	TWO
Date:	JUNE, 1989
Author:	K. PELEW

New: Revision:

APPROVED: ^Ss
Chairperson Da€e ' _____

CALENDAR DESCRIPTION

MATHEMATICS	MTH 126-4
Course Name	Course Number

PREREQUISITE; MTH 113-4

PHILOSOPHY/GOALS;

When the student has successfully completed this course he will have demonstrated an acceptable ability to pass tests based upon the course contents as listed elsewhere. If, after completing the course, the student takes further courses (or employment) in which he is required to apply tnis material he should then, through practice, be able to develop a good command of this subject matter.

METHOD OF ASSESSMENT (GRADING METHOD);

The students will be assessed by tests. These tests will include periodic tests based upon blocks of subject matter and may, at the instructor's discretion include unannounced surprise tests on current work and/or final test on the whole course. A letter grade will be based upon a student's weighted average of his test results. See also the mathematics department's annual publication "To the Mathematics Student" which is presented to the students early in each academic year.

TEXTBOOK;

"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. 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 pages.

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
1	16	REVIEW SPECIAL PRODUCTS AND FACTORING Fractions, Fractional Equations & Formulae Literal equations and formulae Word problems	Person Ch. 13 p.209-234 Ch. 14&1E p.235-28j
2	6	Systems of Linear Equations Algebraic methods of solution Systems of two or more unknowns Word problems Determinants (optional)	Person Ch. 16 p.284-313
3	6	Graphs, Graphical Solutions, Straight Lines Rectangular co-ordinate system Graph of a linear equation Graphical solution of two simultaneous equations Slope of a line (optional) Graphs of other functions (optional)	Person Ch. 17 p.314-330
4	6	Ratio and Proportion Ratio Proportion Variation-direct, inverse, joint solutions of variational problems	Person Ch. 25 p. 475-494
5	9	Review of Basic Trigonometry Plane figures, angles, triangles Right triangles, definition of trig. Ratios Solving right triangles Applications Functions of Angles of any size	Person Ch. 37,38, 39 & 40 p.645-689
6	6	Oblique Triangles Sine Law Cosine Law	Person Ch. 45 p.743-754
7	6	Exponents Powers and Roots Multiplication, Division Laws of exponents (zero, negative, fractional) Scientific notation Roots of Numbers	Person Ch. 18 p.331-355

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
U	5	Quadratic Equations	Person
		Incomplete (pure) quadratics	Ch. 20
		Solutions of the general quadratic by factoring and the quadratic formula only.	p.376-396
		Applications - word problems	
		Graphical methods-The Circle, Parabola	Ch. 23 p.448-464

60 PERIODS