

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

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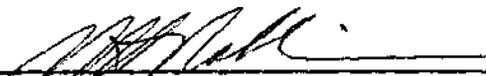
COURSE OUTLINE

Course Title MATHEMATICS
Code No. : MTH 126-4
Program: FORESTRY AND GEOLOGY TECHNICIANS
Semester: TWO
Date: JUNE, 1983
Author: D. TROWBRIDGE

New:

Revision:

APPROVED



Chairperson


Date 10.11.83

MATHEMATICS
Course Name

MTH 126-4
uourse Number

Prerequisite: MTH 113-4

PHILOSOPHY/GOALS:

When the student has successfully completed this course he will have an understanding of the material listed elsewhere. The intention is to give the student sufficient background to solve work related problems and to prepare him for future courses.

METHOD OF ASSESSMENT (GRADING MEHTOD):

Periodic testing during the semester on topics listed in course outline. A final exam and a rewrite exam 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 in other assignments. The level required to obtain an overall passing average on the tests. The material to be covered is listed on the following page(s)-

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TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
		<u>Fractional Equations and Formulae</u> Equations with fractions Literal equations and formulae Word problems	Person Chp. 13
		<u>Systems of Linear Equations</u> Algebraic methods of solution Systems of two or more unknowns Word Problems Determinants (optional)	Person Chp. 14
		<u>Graphs, Graphical Solutions, Straight Lines</u> 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. 15
	12	<u>Exponents and Radicals</u> Power and Roots Laws of Exponents (zero, negative, fractional) Scientific Notation (emphasize Bor Forestry) Square Roots Roots and Radicals (simplifying) Operations on Radicals (omit for Forestry)	Person Ch. 16, 17
	10	<u>Quadratic Equations</u> Incomplete (pure) Quadratics Solutions of the General Quadratic by Factoring and the Quadratic Formula only. Applications - Word Problems Radical Equations (optional) Graphical Methods Extraneous Roots (optional) Imaginary Numbers (optional)	Person RK 341--348 RK 345 RK 300-302
		<u>Logarithms</u> The Meaning of Notation of Logarithms Use of Table-Interpolation Computation by Logarithms (products, quotients, powers and roots) Logarithmic and Exponential Equation Change of Base Natural Logarithms - Conversion formula only.	Person Ch, 33-35

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
		<u>Ratio and Proportion</u> Ratio Proportion Variation-Direct, Inverse, Joint Solutions of Variational Problems	Person Ch. 23
		<u>Review of Basic Trigonometry</u> Plane Figures, Angles, Triangles Right Triangles, Definition of Trig. Ratios Solving Right Triangles Applications	Person Ch. 36, 38
		<u>Oblique Triangles</u> Sine Law Cosine Law (may be replaed with * below) Law of Tangents* (optional)	Person Ch. 44
10		<u>Areas of Triangles (4 situations)</u> Logarithmic Solutions (optional)	Person Ch. 26
TOTAL HRS.	62	End of Semester	