SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title:	MATHEMATICS
Code No.:	MTH 254-4
Program:	CIVIL/CONSTRUCTION TECHNICIANS
Semester:	III
Date:	OCTOBER, 1985
Author:	W. MAKI

New: Revision: X

APPROVED: Chairperson Date

CALENDAR DESCRIPTION

MATHEMATICS — COURSE NAME

MTH 254-4 CIVIL — COURSE NUMBER

PHILOSOPHY/GOALS:

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

METHOD OF ASSESSMENT (GRADING METHOD);

The students will be assessed by written tests, including major periodic tests based upon large blocks of the subject matter and some unannounced short quizzes on current work, the latter being given at the discretion of the instructor. A final test on the whole course may also be included. A letter grade will be based upon a student's weighted average of all his test results. See also the mathematics department's annual publication "TO THE MATHEMATICS STUDENT" for further details. This publication is made available to the students early in each academic year.

TEXTBOOK(S);

Basic Tech. Mathematics with Calculus - A.J. Washington

Analytic Geometry - College Manuscript (optional)

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 ui these in the solution of problems. For this purpose, exercises are assigned. Tests will reflect the sort of work contained in the assignment; The level of competency demanded is the level required to obtain an overa passing average on the tests. The material to be covered is listed on th following page.

PERIODS	TOPIC DESCRIPTION
6	Algebra Review Special products, factoring exponents, radicals, formulas, simultaneous equations
9	Analytic Geometry -_ Straight Line Rectangular Co-ordinates Distance between points on rect. system Slope Angle between two lines Straight line equations Distance from a point to a line
10	Analytic Geometry -_ Conic Sections Introduction - section through a cone The Circle - equations and graphs - tangent to a circle The Ellipse - equations and graphs General second degree equations Calculating point(s) of intersection of two curves
12	Empirical Equations Linear empirical equations Non-linear empirical equations
17	Annuities Accumulated value of an amount and an annuity Present value of an amount and an annuity Use of amortization tables