SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title	MATHEMATICS
Code No,:	MTH 551-4
Program:	COMPUTER,ELECTRICAL,ELECTRONICS & MECHANICAL TECHNOLOGY
Semester:	III
Date:	JUNE, 1989
Author;	J. REAL

New: X Revision:

APPROVED Chairperson D^^ ^

MATHEMATICS	MTH 551-4 COMPUTER, ELECTRICAL, ELECTRONICS, SEMESTER]
COURSE NAME	COURSE NUMBER

PHILOSOPHY/GOALS;

Vlhen the student has successfully completed this course he/she will have demonstrated an acceptable understanding of the course material as listed elsewhere.

The student should then be able to apply this knowledge in his/her studies of other courses in the program where there are applications of these mathematical concepts.

Upon graduation, the student should be able to develop a good command of this subject matter through additional practice.

METHOD OF ASSESSMENT (GRADING METHOD):

Grades reported on your transcript are based on a weighted average of test scores, on the following basis:

90% - 100%	A+
80% - 89%	A
65% - 79%	B
55% - 64%	C
0% - 54%	R or X

The method of calculating a weighted average is described in your student handbook.

All tests are scheduled in advance. Hence attendance is mandatory. Unexcused absence from a test will result in a mark of zero for that test. If a student is prevented from writing a test by illness, the student must phone the instructor (759-6774) before 9:00 AM on the day of the test and leave a message for the instructor stating the reason for absence. Upon return to classes, the student must see the instructor immediatley to arrange a time and place for a make-up test. The student must have a doctor's certificate or a note from the college nurse.

There will be no rewrites (make-up tests) or supplemental exams during the semester or at the end of the semester.

TEXTBOOK

Washington, "Basic Technical Mathematics with Calculus" - Fourth Edition.

MTH 551-4

COMPUTER, ELECTRICAL, ELECTRONICS & MECHANICAL TECHNOLOGY

SEMESTER III

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	ASSIGNMENT	REFERENCE
1	11	ANALYTIC GEOMETRY		Ch. 20
		Straight line	Ex. 1,2	
		Circle	Ex, 3	
		Parabola	Ex. 4	
		Ellipse	Ex, 5	
		Hyperbola	Ex, 6	
		Offset curves	Ex. 7,8	
2	12	DERIVATIVES OF ALGEBRAIC FUNCTIONS		Ch. 22
		Limits	Ex. 1	
		Slope of tangent to a curve	Ex. 2	
		The derivative, delta process	Ex- 3	
		The meaning of a derivative	Ex. 4	
		Derivatives of polynomials	Ex. 5	
		Products & Quotients	Ex. 6	
		Power (Chain) rule	Ex- 7	
		Implicit functions	Ex. 8	
		Review exercise	Ex. 9	
	10	APPLICATIONS OF DERIVATIVES		Ch. 2 3
		Tangents and Normals	Ex. 1	
		Curvilinear motion	Ex. 3	
		Related rates	Ex. 4	
		Curve sketching	Ex. 5,6	
		Applied maximum & minimum probs.	Ex. 7	
		Review exercise	Ex. 8	
	10	INTEGRATION		Ch. 24
		Differentials	Ex. 1	
		Antiderivatives	Ex. 2	
		Indefinite integral	Ex. 3	
		Area under curve	Ex- 4	
		Definite integral	Ex- 5	