

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: MATHEMATICS

Code No.: MTH 367-3

Program: ELECTRICAL/ELECTRONIC TECHNOLOGY; COMPUTER TECHNOLOGY

Semesters: V

Date: JULY, 1987

Author: J. REAL

New: Revision: X

APPROVED:- *jSf\aije^0f:son* **<^M-** *r/P?* **^f'/**

MATHEMATICS

MTH 367-3

COURSE NAME

COURSE NUMBER

PHILOSOPHY/GOALS;

When 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);

Graded:

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

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

The method of calculating a weighted average is described in your student hand-book.

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 (949-2050) before the time of the test and leave a message for the instructor, at his extension stating the reason for absence. Upon return to classes, the student must see the instructor immediately 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(S):

TECHNICAL CALCULUS WITH ANALYTIC GEOMETRY - A.J. Washington

MTH 370-3

TOPIC NO.	NO. OF PERIODS	TOPIC DESCRIPTION	ASSIGNMENTS	REFEREN
1	15	Methods of Integration		Ch. 8
		Review integration of trigonometric, exponential, logarithmic, and inverse functions-		
		Integration by parts	p-330	
		Algebraic substitutions.	p.335	
		Trigonometric substitutions	p.339	
		Partial fractions	p.343,349	
		Use of integration tables	p.353	
2	15	<u>First Order Differential Equations</u>		
		Solutions of differential equations	p.480	
		Separation of Variables	p.484	
		Integrable combinaitons	p.487	
		Linear equations. Exact and integrating factor	p.490	
		Homogeneous equations	Blakeley	
		Applications	P.496	
		Applications - A C circuits	Blakeley	
3	15	<u>Second Order Differential Equations</u>		
		Linear equations - homogeneous	p. 505	
		Repeated and complex roots of auxiliary equation	p.510	
		Non-homogeneous equations	p.514	
		Applications	p-521	
		Applications - A C circuits	Blakely	