

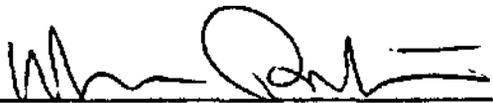
SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: MATHEMATICS
Code No.: MTH 367-4
Program: ELECTRICAL/ELECTRONIC TECHNOLOGY; COMPUTER TECHNOLOGY
Semester:
Date: JULY, 1988
Author: J. REAL

New Revision:

APPROVED: 
Chairperson

Date *tj*

MATHEMATICS

MTH 367-4

COURSE NAME

COQRSE NUMBER

PHILOSOPHY/GOALS;

When the student has successfully completed this course h6/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:

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

85 - 100%	A+
75 - 84%	A
65 - 74%	B
55 - 64%	C
0 - 54%	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 mus phone the instructor (759-6774) 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 th semester or at the end of the semester.

TEXTBOOK:

TECHNICAL CALCULUS WITH ANALYTIC GEOMETRY - A.J. Washington

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TOPIC NO	NO. OF PERIODS	TOPIC DESCRIPTION	ASSIGNMENTS	
	15	Methods of Integration		
		Review integration of trigonometric exponential, logarithmic, and inverse functions		
		Integration by parts	330	
		Algebraic substitutions	335	
		Trigonometric substitutions	339	
		Partial fractions	343, 349	
		Use of integration tables	353	
	12	Power Series-		Ch
		Maclaurin series	p. 452	
		Applications of Maclaurin series	p. 458, 462	
		Fourier series	p. 474	
		Review exercise	p. 475	
	15	<u>First Order Differential Equations</u>		
		Solutions of differential equations	p.480	
		Separation of Variables	p.484	
		Integrable combinations	p.487	
		Linear equations. Exact and integrating factor	p.490	
		Applications	p,496	
	15	<u>Second Order Differential Equation</u>		Ch
		Linear equations - homogeneous	p.505	
		Repeated and complex roots of auxiliary equation	p, 510	
		Non-homogeneous equations	p,514	
		Applications	p.521	

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TOPIC NO.	NO. OF PERIODS	TOPIC DESCRIPTION	ASSIGNMENTS	REFEREN(
5	8	<u>Laplace Transforms-</u> Finding transform by definition, table of transforms (partial fractions) Solving differential equations Review exercise	p. 539 p. 542 p. 543	Ch. 1'