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SAULT COLLEGE OP APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title:	MATHEMATICS
Code No.:	MTH 367-3
Program;	ELECTRICAL TECHNOLOGY (YEAR 3)
Semester	V
Dates	JANUARY, 1986
Author:	K. CLARKE

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New: Revision:

APPROVED ^fairperion Date I/^

MATHEMATICS	MTH 367-3..ELTY
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 oj other courses in the program where these are applications of these mathematic 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):

The student will be assessed by written tests only. There will be periodic topic tests at times mutually agreed upon (usually) by students and instructt A letter grade will be assigned for the student*s progress report based upon weighted average of the student's test results.

See also the Mathematics Department's annual publication "To The Mathematical Student" which is presented to the students early in each academic year.

TEXTBOOK(S):

CALCULUS FOR ENGINEERING TECHNOLOGY; W. R. Bla'keley

ELECTRICAL AND ELECTRONIC TECHNOLOGY

TOPIC NO.	PERIODS	TOPIC DESCRIPTION
	15	Methods of Integration Substitution, partial fractions, trigonometric identities, trigonometric and hyperbolic substitution, integration by parts, table of integrals.
	11	Differential Equations (First Order) Solution by direct integration, method of superposition, transients in RL and RC circuits, separation of variables, exact equations, use of integrating factors, homogeneous equations, linear equations. Omit any items requiring partial derivatives.
	15	Differential Equations (Second Order) Direct integration and intuitive methods, general second order equation with constant coefficients, equations of the form $a \frac{d^2y}{dx^2} + b \frac{dy}{dx}$ and $c\ y = k$ or $f(x)$ the RLC circuit, other techniques. Omit any items requiring partial derivatives.