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

## COURSE OUTLINE

MATHEMATICS
Course Title:
MTH 385-3

## Code No.:

ELECTRICAL/ELECTRONIC TECHNOLOGY; COMPUTER TECHNOLOGY
Program:
VI
Semester:
JULY, 1987
Date:

APPROVED

New
Revision:

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J. REAL

Author

## PHILSOPHY/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 these 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 test scores, on the following basis:

| $90-100 \%$ | A+ |
| ---: | :--- | :--- |
| $80-89 \%$ | A |
| $65-79 \%$ | B |
| $55-64 \%$ | $C$ |
| $0-54 \%$ | $R$ or |

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);
Washington - Technical Calculus with Analytic Geometry

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Laplace Transforms
Finding transform by definition, table of transforms (partial fractions). p. 539
Solving differential
equations
p. 542

Review
p. 543

Power Series
Properties of series p. 447
Maclaurin series. p. 452
Applications of Maclaurin series p. 458,462
Fourier series p. 474
Review p* 475
Statistics
Descriptive statistics. Frequency distributions, mean, median, mode, quantiles, standard deviation, variance, standardized variable*

Probabili ty theo ry.
Conditional probability, independent and dependent events, mutually exclusive events, permutations, combinations, probability distributions.

Inferential statistics* Binomial distribution, normal distribution, sampling theory, estimation theory with confidence intervals*

Ch. 16

Hand-out

