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

COURSE OUTLINE

## MATHEMATICS

Course Title:
MTH 151-3
Code No.:
MACHINISTS
Program:
ONE
Semester:

Date:
JULY, 1987

Author:
J. REAL

New
Revision:

APPROVED :

## CALENDAR DESCRIPTION

MATHEMATICS
COURSE NAME

MTH 151-3
COURSE NUMBER

## PHILOSOPHY/GOALS;

In this course emphasis will be placed on teaching mathematics at a level that will facilitate computation in the machine shop trade. Some theoretical concepts and topics in algebra and geometry will be covered, but quickly reinforced with practical problems to make it more relevant to the students' needs. Wherever possible, problems will relate to strengthen concepts taught by their subject instructor.

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 - $54 \% \quad \mathrm{R}$ 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.

MTH 151
CREDITS
A credit for this course may be allowed on presentation of proof of standing in the grade 12 advance level mathematics course.

TEXTBOOK (S)
Hoffman, Edward, G-, Practical Problems in Mathematics for Machinists
OBJECTIVES:
The basic objective is for the student to develop an understanding of the methods studied, knowledge of the facts presented an an ability to use these in the solution of problems. For this purpose, exercises are assigned. Tests will reflect the sort of work contained in other assignments. The level of competency demanded is the level required to obtain an overall passing average on the tests. The material to be covered is listed on the following pages.

| Topic No. | No. of Periods | Topic Description | Assignments | Ref. |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 7 | Arithmetic |  | p.1-48 |
|  |  | Whole numbers Common fraetions Decimal fractions | Units 1-14 |  |
| 2 | 12 | Heasurements |  | p.49-94 |
|  |  | Direct measure <br> Computed measure <br> Introduction to trigonometry | Units 15-27 |  |
| 3 | 5 | Business Hath |  | p.95-116 |
|  |  | Percentage and finance Graphs | Units 28-32 |  |
| 4 | 9 | Applications |  | p.114-15 |
|  |  | Shop formulas Ratio and proportion Powers and roots | Units 33-42 |  |
| 5 | 9 | Trigonometry and Geometry |  | p.156-20: |
|  |  | Geometric forms and constructions <br> Trigonometry applieations | Units 43-52 |  |

