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

## COURSE OUTLINE

MATHEMATICS

Course Title:

MTH 151-3

Code No.

MACHINISTS

Program:

ONE

Semester:

JUNE 1989

Date:

J. GLOWACKI

Author

New:

Revision:

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APPROVED:

Chairperson

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#### CALENDAR DESCRIPTION

MATHEMATICS MTH 151-3

COURSE NAME COURSE NUMBER

### PHILQSOPHy/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.

## METHQD OF ASSESSMENT;

Periodic tests and daily assignments based on material in the course outline will be given during the semester. A final exam and a make-up test will be at the discretion of the instructor.

The final mark will be based on four unit tests, each representing 25% of the final mark.

Grading: A+ = 90-100% A = 80-89% B = 65-79% C = 45-54%D = 0-44%

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A passing grade will be based on a minimum grading of 55%

#### TEXTBOOK:

Hoffman, Edward, G», Practical Problems in Mathematics for Machinists

| Topic<br>No. | No, of<br>Periods | Topic Description  | Assignments | Ref,      |
|--------------|-------------------|--|-------------|-----------|
| 1            | 7                 | Arithmetic   |             | p.1-48    |
|              |                   | Whole numbers<br>Cominon fraetions<br>Decimal fraetions            | Units 1-14  |           |
| 2            | 12                | Measurements   |             | p.49-94   |
|              |                   | Direct measure<br>Computed measure<br>Introduction to trigonometry | Units 15-27 |           |
| 3            | 5                 | Business Math  |             | p.95-116  |
|              |                   | Percentage and finance<br>Graphs                                   | Units 28-32 |           |
| 4            | 9                 | Applications   |             | p.114-155 |
|              |                   | Shop formulas<br>Ratio and proportion<br>Powers and roots          | Units 33-42 |           |
| 5            | 9                 | Trigonometry and Geanetry  |             | p.156-203 |
|              |                   | Geometric forms and<br>construetions<br>Trigonometry applications  | Units 43-52 |           |