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

COURSE OUTLINE "....

MATHEMATICS

Course Title:

MTH 122-4

Code No;:

COMPUTER PROGRAMMER

Program:'

TWO

Semester:

JANUARY 1988

Date:

J. GLOWACKI

Author:"""

New:

"Revision:

APPROVED:

Chaird rcon

*M&A*^*k. gm*∼

Date

### CALENDAR DESCRIPTION

MATHEMATICS MTH 122-4

COURSE NAME COURSE NUMBER

## PHILOSOPHY/GOALS:

This course presents the mathematics needed in computer programming. Concepts taught will also assist in other computer courses. Emphasis is placed on how to interpret a problem and to develop a solution algorithm. The computer will be used to obtain output for specified problems.

#### METHOD OF ASSESSMENT (GRADING METHOD:

Periodic tests and daily assignments based on material in course outline will be given during the semester. A final make-up test at the end of the semester will be given 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 = 55-64%

A passing grade will be based on a minimum grading of 55%. Students obtaining a grade of 40-54% may be allowed to write a make-up test. However, only students who have attended at least 80% of the math classes will be considered for a make-up test.

#### TEXTBOOK(S):

Kay, Christine B., MATHEMATICS FOR COMPUTER PROGRAMMERS,

## -2-MATHEMATICS MTH 122-4

# COURSE OUTLINE

TOPIC NO.	PERIODS	TOPIC DESCRIPTION -	REFI	ERENCE
1	11	NUMBER SYSTEMS - sets and Venn diagrams - integer and real number sets - format arithmetic	Pg.	1-52
2	10	ALGORITHMS - input, process and output - repeating steps and decisions	Pg.	53-79
3	12	ALGEBRAIC APPLICATIONS FOR PROGRAMMING - order of operations - inequalities - exponents - equation solving	Pg.	96-136
4	10	ADVANCED ALGEBRA CONCEPTS - arithmetic and geometric sequences - matrices	Pg.	202-245
5	7	BINARY SYSTEMS - number base concepts - binary, octal and hexadecimal	Pg.	246-292
6	4	MATHEMATICAL LOGIC	Pg.	304-321