SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

MATHEMATICS
MTH 251-4
ELECTRICAL AND ELECTRONIC TECHNICIANS
THREE
JUNE 1985
K. G. CLARKE

New: Revision: X

CALENDAR DESCRIPTION

ELECTRICAL & ELECTRONIC TECHNICIANS

MATHEMATICS	MTH 251-4
COURSE NAME	COURSE NUMBER

PHILOSOPHY/GOALS:

When the student has successfully completed this course, he will have demonstrated an acceptable ability to pass tests based upon the course conte as listed elsewhere. If, after completing the course, the student takes further courses (or employment) in which he is required to apply this materi he should then, through practice, be able to develop a good command of this subject matter.

METHOD OF ASSESSMENT (GRADING METHOD);

The students will be assess by tests. These tests will include periodic tes based upon blocks of subject matter and may, at the instructor's discretion include unannounced surprise tests on current work and/or a final test on th whole course. A letter grade will be based upon a student's weighted averag of his test results. See also the mathematics department's annual publicati "To the Mathematics Student" which is presented to students early in each academic year.

TEXTBOOK(S):

Person: Essentials of Mathematics, 4th Edition

OBJECTIVES:

The basic objective is for the student to develop an understanding of the methods studied, knowledge of the facts presented and an ability to use thes in the solution of problems. For this purpose exercises are assigned. Test will reflect the sort of work contained in the assignments. The level of competency demanded is the level required to obtain an overall passing avera on the tests. The material to be covered is listed on the following page(s)

MTH251-4...ELECTRICAL AND ELECTRONIC TECHNICIANS

TOPIC NO.	PERIODS	TOPIC DESCRIPTION
1	15	Number Systems and Boolean Algebra Binary, octal, hexadecimal Change of base, algebra of elements Addition and multiplication tables Definition of elements and operators Truth tables, derivation of simple identities: Negation - the not operator Applications to logic and switching circuits
2	8	Straight Line, Equations &^ Graphs Review distance between points, slope of the line, inclination, equation of a line
3	7	Analytic Geometry-Conic Sections Equations and graphs of conies (brief coverage)
4	10	Introduction to Differential Calculus Functional notation, limiting value, differentiation by delta method, derivatives of polynomials