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

CQUESE OUTLINE

MATHEMATICS
Course Ti 11 e $i$.-
MTH 108-4
CodeNo»i

WATER RESOURCES
Progr $3 \mathrm{~m} \bullet$

ONE
Semestert

AUGUST 1983
Dstet

Author I

Revision

## APPROVED :

MATHEMATICS
Course Name

Course Number

## BUILOSQEUX/GQALS:

When the student has successfully completed this course he will have demonstrated $3 n$ acceptable ability to pass tests based upon the course contents as listed elsewhere* If after completing the course? the student takes further courses (or employment) in which he is reauired to apply this material he should then* through practice? be able to develop a good coinin and of this sub Je c t mat ter,

MEIUQD QE ASSESSMENT. iGBADING MEIUQD1*
The students will be assessed by tests* These tests will include periodic tests 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 the whole course. A letter grade will be based upon a student's weighted average of his test results* See also the mathematics department's annual publication "To The Mathematics Student* which is presented to the students early in each academic year*

IEXIBODLUSI*
Washington - "Basic Technical Mathematics with Calculus"

## 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 these in the solution of problems* For this purpose exercises are assigned* Tests will reflect the sort of work contained in the assignments* The level of competency demanded is the level reauired to obtain $3 n$ overall passing average on the tests* The material to be covered is listed on the following page*

# MATHEMATICS FOR <br> FIRST SEMESTER <br> WATER RESOURCES 

No* of
Eejciatis lobic DescriEtion

6

PRACTICAL CALCULATING
Conversion of units? estimating* approximate numbers* scientific notation* calculators

GEOMETRY AND MENSURATION
Pritcipies of geometry as reauired
for the followingworkJ
P th 3 gores $n$ theorem
M nsuration of plane figures? ctangle * sausre
rallelogram* trapezoid*
rele? regulsr hexagon.
nsuration of solid shapes*
bes? pr-isms* cylinders* rsmio's* cones*spheres* trunc3ted pyramids and cones*

ALGEBRA REVIEW ONE
F ui'id a men 131 s » Zeros? Exponents* Roots and Rsdic3ls> Addition* Subtraction* Multiplication and Division of Algebraic Expressions* Elementary Eaustions end their application* Manipulation of foi $\mathrm{i}^{1} \mathrm{mu} 13 \mathrm{~s}$ *

Algebra Review two
Functions and Graphs
Solutions of Systems of two or three Linear Equations
Special Products and Factoring
Algebraic Fractions (Determinants may be omitted)

