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SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: MATHEMATICS

Code No. MTH 120-4 (FORMERLY MTH 108-4)

Program: WATER RESOURCES *'fitIf Vf*vr*

Semester: ONE

Date: JUNE, 1985

Author: W. MACQUARRIE

New:

Revision:

APPROVED:



 Chairperson

Date

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CALENDAR DESCRIPTION

MATHEMATICS

MTH 120-4

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 contents as listed elsewhere. If after completing the course, the student takes further courses (or employment) in which he is required to apply this material 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 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.

TEXTBOOK(S);

Person - "Essentials of Mathematics", Wiley

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 required to obtain an overall passing average on the tests. The material to be covered is listed on the following page.

MTH 120-4
WATER RESOURCES

TOPIC NO.	NO. OF PERIODS	TOPIC DESCRIPTION	REFERENCES
1	6	<u>PRACTICAL CALCULATING</u> Conversion of units, estimating, approximate numbers, scientific notation, calculators	Ch. 16 - Section 10 Ch. 54 & 3
2	20	<u>GEOMETRY AND MENSURATION</u> Principles of geometry as required for the following work: Pythagorean theorem Mensuration of plane figures: triangle, rectangle, square, parallelogram, trapezoid, circle, regular hexagon Mensuration of solid shapes: cubes, prisms, cylinders, pyramids, cones, spheres, truncated pyramids and cones	Ch. 24-31
3	30	<u>ALGEBRA REVIEW ONE</u> Fundamentals, zeros, exponents, roots and radicals, additions, subtraction, multiplication and division of algebraic expressions, elementary equations and their application Special products and factoring Algebraic fractions Fractional equations and formula manipulation	Ch. 6-9, 10-13