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

## COURSE OUTLINE

MATHEMATICS
Course Title:
MTH 099-3
Code No.:

FORESTRY AND GENERAL ARTS \& SCIENCE
^0 Program:

ONE
Semester:

JANUARY, 1986
Date:
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W. O. MAKI

Author:


# MATHEMATICS 

MTH 099-3
Course Name
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## PHILOSOPHY/GOALS:

The objectives of this course include the review of basic arithmetic and the basic operations on algebraic expressions and the solutions to systems of linear equations.

A survey of plane and solid geometry will enable the student to determine areas, volumes and weights for a variety of forms including cylinders, cones and pyramids.

METHOD OF ASSESSMENT (GRADING METHOD) :
Periodic tests and daily assignments based on material in 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, one from each topic, each representing 25\% of the final mark.

Grading: $A=80-100 \%$
$B=65-79 \%$
$C=55-64 \%$
A passing grade will be based on a minimum grading of $55 \%$. Students obtaining grading of 45-54\% may be allowed to complete a supplementary examination. However, only students having satisfactory attendance records will be considered for the supplementary examination.

TEXTBOOK (S) :
"Essentials of Mathematics"; Fourth Edition, (Person)
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 other 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.

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MTH 099-3

TOPIC NO. PERIODS TOPIC DESCRIPTION REFERENCES

| 10 | ```Review of Basic Arithmetic Whole numbers, fractions, decimal fractions, percentages, using a calculator``` | $\begin{aligned} & \text { Ch. 1, 2, } \\ & 4 \text { only } \end{aligned}$ |
| :---: | :---: | :---: |
| 26 | Review of Elementary Algebra |  |
|  | Simplification (bracket removal) | Person |
|  | Basic Operations (monomial) | Ch. 6-11 |
|  |  |  |
|  | Operations involving algebraic expressions and fractions (polynomials) |  |
|  | Solutions and properties of linear equations |  |
|  | Applied Word Problems |  |
|  | Formulae Manipulation |  |
|  | Estimations, Dimensional Analysis |  |
|  | and Metrication |  |
|  | Approximate numbers and rounding off procedures - scientific notation | Person |
|  |  | Ch. 32 |
|  | Dimensional analysis for conversionbetween English and/or SI Units | pp. 500-510 |
|  |  | pp. 494-499 |
|  | The Metric System |  |
|  | Plane Geometry |  |
|  | Definitions and theorems involving triangles and rectangles | Person |
|  |  | Ch. 25, 27 |
|  | Definitions and theorems of the circle, practical problems | Heywood <br> pp. 415-427 |
|  | Basic constructions if time permits |  |
| 23 | Solid Mensuration |  |
|  | Mensuration of plane figures | Person |
|  | Mensuration of solid figures, cubes, cylinders, pyramids, cones, spheres, paraboloids, applications and formulae | Ch. 28-31 |

