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

COURSE OUTLINE

MATHEMATICS
Course Title:
MTH 09 9-4
Code No.:
FORESTRY

## Program:

ONE

## Semester:

JUNE, 1987
Date:
K. R. PELEW

Author:



## CALENDAR DESCRIPTION

MATHEMATICS
MTH 099-4 FORESTRY
COURSE NAME
COURSE NUMBER

## PHILOSOPHY/GOALS;

The objectives of this course are to increase the student's speed, accuracy and skill in performing basic arithmetic calculations and operations on algebraic expressions, as well as the solution of practical problems involving linear equations.

A survey of plane and solid geometry will enable the student to identify a variety of figures encountered, and to determine their perimeters, areas, volumes and weights appropriately in both English and SI units.

METHOD OF ASSESSMENT (GRADING METHOD);
Periodic tests and daily assignments based on material in the 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 the results of the tests and assignments given in each of the five topics. Each topic will represent 20\% 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 $55 \%$. For further details read the Mathematics department's publication, "To the Mathematics Student", which is attached.

## 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 to reinforce concepts learned, and to show the relevance of these concepts to the student's needs in facilitating computations in the forestry course. 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.

Estimations, Dimensional Analysis and Metrication

| Approximate numbers and rounding off | Person |
| :---: | :--- |
| procedures - scientific notation | Ch. 32 |
| Dimensional analysis for conversion | P.494-510 |
| between English and/or SI units |  |
| The Metric System |  |

Plane Geometry
Definitions and theorems involving triangles and other polygons

Person
Definitions and theorems of the circle, practical problems
Basic constructions if time permits
Ch. 24-21
P.415-46C

Heywood
p. 415-421

Review of Basic Arithmetic
Whole numbers, fractions, decimal
Person fractions, percentages, without the use of a calculator. Ch. 1, 2, 4 onl p.3-69

26
Review of Elementary Algebra
Simplification (bracket removal)
Person
Basic Operations (monomial) Ch. 6-11
Special products and factoring p.81-180
Operations involving algebraic expressions and fractions (polynomials)
Solutions and properties of linear equations
Applied Word Problems
Formulae Manipulation

| Solid Mensuration | Person |
| :--- | :--- |
| Mensuration oqT plane figures | Ch. 28-3 |
| Mensuration of solid figures - cubes, | p.461-49 |
| cylinders, pyramids, cones, spheres, |  |
| paraboloids - applications and formulae |  |
|  |  |
|  |  |
| Review of Basic Arithmetic  <br> Whole numbers, fractions, decimal Person <br> fractions, percentages, without Ch. 1,2 <br> the use of a calculator. 4 onl |  |

GRADES
Each Mathematics grade is based upon a weighted average of test scores on the following basis:

| $80 \%-89 \%$ | A |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $65 \%-79 \%$ | B |  |  |  |
| $55 \%-64 \%$ | C |  |  |  |
| $45 \%-54 \%$ | I, X, OR R (See \#5 \& 6) |  |  |  |
| $0 \%-44 \%$ | $R$ |  |  |  |
|  |  |  |  |  |

First semester students who are proceeding into second semester Electrical, Electronic or Mechanical Technician Programs may have a different set of grade requirements which will be defined in class.

The method of calculating your weighted average will be defined by your instructor. Since grades are based upon averages, it follows that good marks in some tests can compensate for a failing mark in another test. If there are extenuating circumstances, an instructor can make an exception and assign an "I" or "X" grade even if the average is below 45\%.

TESTS
While regular tests will normally be scheduled and announced beforehand, there can be an unannounced test on current work at any time. Such tests, at the discretion of the instructor, can be used for up to $30 \%$ of the overall mark.

At the discretion of the instructor, there can be a final test which can be used for up to $30 \%$ of the overall mark. Anything included in the work of the semester is fair game on such a final test.

## ABSENCE FROM CLASS

If you are absent from class, it is your responsibility to find out from another student what work was covered and assigned and to complete this work before the next class. Your absence indicates your acceptance of this responsibility.

TO THE MATHEMATICS STUDENT..continued

## 4. TEST ABSENCE

Unexcused absence from a scheduled test will result in a zero mark. Absence may be excused on compassionate grounds such as verified illness or bereavement. On return from an excused absence, you should ask your instructor about writing a make-up test.

If your instructor uses short unannounced tests, the following will apply. Unexcused absence from such a test will result in a zero mark. If absence from such a test is excused, then, at your request, the marks for that test will be excluded from the calculation of your course average.
5. MAKE-UP PERIOD (IF APPLICABLE)

An "X" grade may be assigned at the end of the regular semester if your have achieved an overall average between $45 \%-54 \%$ and your attendance and effort on the course have been satisfactory. Satisfactory attendance and effort will include writing all the topic tests and attending at least 80\% of the scheduled classes. If you are assigned an "X" grade, you may convert it to a "C" grade by passing a make-up test on the whole course. This test will be available only at the time specified by your instructor. At the end of the regular term, it is the student's responsibility to obtain his/her results from his/her instructor and, in the event of an "X" grade, to inquire when the make-up test will be available. At the discretion of the instructor, a topic make-up test may be used instead of an overall test in special circumstances. No student will be permitted more than one such topic make-up test.
${ }^{6}$ * " $^{\mathrm{R}}$ " AND "X" GRADES - AT THE END OF THE SEMESTER
If an "X" grade is not cleared by the specified date, it will become an "R" grade. Except for extenuating circumstances, an "X" grade in Math will not carry on into the next semester.
7. 231 GRADES DURING THE SEMESTER

A student with a failing grade and poor attendance (less than 80\% attendance) may be given an "R" at any time during the semester.

