SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: MATHEMATICS

Code No.: MTH-426

Program: MECHANICAL TECHNOLOGY

Semester: TWO

Date: JUNE 1987

Author: J. REAL

New   X   Revision:
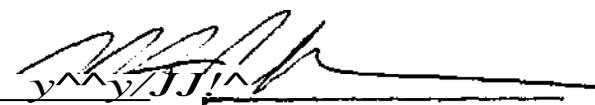
APPROVED: ____X_____ _____
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MATHEMATICS *   MTH 4 26

Course Name   Course Number

PHILOSOPHY/GOALS

This course is a continuation from MTH 413 as a pre-calculus course,
including more algebra, trigonomety, logarithms and analytic geometry
topics. It is intended that the emphasis should be relevant to specific
applications in the calculus work that follows.

METHOD 0£ ASSESSMENT (GRADING METHOD):

GRADES:

Grades reported on your transcript are based on a weighted average of tes
scores/ on the following basis:

    90 - 100% A+
    80 " 89% A
    65 - 79% B
    55 - 64% C
     0 - 54% R or X

The method of calculating a weighted average is described in your student
hand-book.

All tests are scheduled in advance. Hence attendance is mandatory.
Unexcused absence from a test will result in a mark of zero for that test
If a student is prevented from writing a test by illness, the student mus
phone the instructor (949-2050) before the time of the test and leave a
message for the instructor, at his extension, stating the reason for
absence. Upon return to classes, the student must see the instructor
immediately to arrange a time and place for a make-up test. The student
must have a doctor's certificate or a note from the college nurse.

TRANSFERS

Students who fail the technology math course (MTH 426) will receive an "1
grade in that course at semester end (unless given an "X" grade extensioi
because of extenuating circumstances). Those who are elegible may regis
in the next semester's technician course (MTH 254). If they pass this
course they will also be given a credit (CR) in the previous semester's
technician math course (MTH 220). The "R" grade in the technology math
course (MTH 426) will remain as part of the record on their transcript.

CREDITS

A credit for this course may be allowed on presentation of proof of
standing in the Functions and Relations and Algebra courses of the Ontar
Grade 13 program.

TOPIC NO.	NO. OF PERIODS	TOPIC DESCRIPTION	ASSIGNMENTS	REPERENCI
			Exercise	Chapter
1	6	**Quadratic Equations**		6
		Solution by factoring	1	
		Completing the square	2	
		The quadratic formula	3	
		Graphs of quadratic functions	4	
		Review exercise	5	
2	5	**Trigonometric Function of Any Angle**		7
		Signs of trig functions	1,2	
		Radian measure	3	
		Angular measurements	4	
		Review exercise	5	
3	6	**Oblique Triangles**		8
		Vectors	1-4	
		Sine law	5	
		Cosine law	6	
		Review exercise	7	
4	3	**Graphs of Trigonometric Functions**		9
		Sine and cosine graphs	1-3	
		Graphs of other functions	4	
5	3	**Exponential and Logarithmic Functions**		12
		Definition of a logarithm	1	
		Graphs of exponential and logarithmic functions	2	
		Rules foe logarithms	3	
		Common and natural logarithms	4-6	
		Exponential and log equations	7	
		Review exercise	9	
6	6	**Additional Trigonometric Topics**		19
		Fundamental trig, identities	1	
		Sum and difference formulae	2	
		Double angle formulae	3	
		Trigonometric equations	5	
		Inverse trig, functions	6,7	
		Review exercise	8	

TOPIC NO.	NO. OF PERIODS	TOPIC DESCRIPTION	ASSIGNMENTS	REFERENCi
			Exercise	Chapter
	11	**Plane Analytic Geometry**		20
		Length of line, slope	1	
		Equation of straight line	2	
		The circle	3	
		The parabola	4	
		The ellipse	5	
		The hyperbola	6	
		Offset curves	7,8	
		Review exercise	11	