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SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title	MATHEMATICS
Code No.:	MTH 613-4
Program:	AVIATION
Semester:	
Date:	DECEMBER, 1983
Author:	J. SUFADY

New: Revision

APPROVED _____ 4 Mc.e--r&O&O /9r3

Chaii^person Date

AVIATION
MTH 613-4
MATHEMATICS

CALENDAR DESCRIPTION

MATHEMATICS	MTH 613-4
COURSE NAME	COURSE NUMBER

PHILOSOPHY/GOALS:

Students studying mathematics at this level are those individuals where a certain degree of originality, a sense of logic and an ability to learn independently are required of them in their major subject area. This course serves to exercise these three requirements and to also give them a theoretical knowledge for their academic subjects.

METHOD OF ASSESSMENT (GRADING METHOD):

!• Three to four tests per semester.

2. Final Grade is a weighted average of these tests.

3, A failing grade at the end of the semester can be upgraded by writing a two-hour comprehensive examination.

TEXTBOOK(S):

Washington, Allan J., Technical Calculas with Analytic Geometry

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{s):

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Topic No.	Periods	Topic Description	Reference
1	12	Plane Analytic Geometry - Straight line equations, concepts of slope, function notation, completing the square graphs of parabolas, the Binomial Theorem	1-53
2	14	The Derivative - Introduction to limits; slope of tangent to a curve, derivatives of polynomials, product and quotient rule-	54-107
3	14	Applications of the Derivative - Curvilinear motion rate problems, curve sketching, maximum/minimum problems.	108-139
4	12	Integration - Differentials - Inverse differentiation - Indefinite integration - Area under a curve - Definite integral - Volume calculation by integration	140-172