

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

COURSE OUTLINE

Course Title: PHYSICS
Code No.: PHY 125-3
Program: AVIATION FLIGHT TECHNOLOGY
) ONE
Semester: AUGUST 1987
Date: J. MCGAULEY
Author:

New

Revision:

APPROVED:



Chairperson

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Date

CALENDAR DESCRIPTION

PHYSICS

PHY 125-3 (AVIATION)

COURSE NAME

COURSE NUMBER

PHILOSOPHY/GOALS:

This course will help the student to develop a better understanding of physics through problem solving. Topics include mechanics, heat and wave motion.

METHOD OF ASSESSMENT (GRADING METHOD):

Grades:

The student's final mark for this course will be based on the following:

Topic tests	70%
Final exam	30%

Grades reported on your transcript are based on a weighted average of test 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 handbook.

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. A student may be prevented from attending a test by illness or bereavement. Upon return to classes, the student must see the instructor at the end of the first physics class attended to arrange a time and place for a make up test. In addition, if the absence is due to illness, the student must present a note from the student's doctor or from the College nurse.

TEXTBOOK(S):

Harris and Hemmerling: Introductory Applied Physics, Fourth Edition.

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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 below:

TOPIC	PERIODS	TOPIC DESCRIPTION	REFERENCE
1		<u>Introduction</u> -mathematics in physics -metric system -significant figures	1.1 to 1.18 2.2 to 2.13
	20	<u>Mechanics</u> -force and motion -work energy and power	Chapters 4 & 5
	10	<u>Heat</u> -temperature and the effects of heat -heat and change of state -heat transfer	Chapter 13 14.1 to 14.8 Chapter 15
	10	<u>Wave Motion and Sound</u> -simple harmonic motion -sound waves -application of sound waves	18.1 to 18.8 (omit 18.5) 18.11 to 18.14 Chapters 19-20