

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: AIRCRAFT SYSTEMS

Code No.: AVT 270-3

Program: AVIATION TECHNOLOGY (FLIGHT) PROGRAM

Semester: IV

Date: JANUARY 1985

Author: B. GOVETT

New: _____ Revision: X

APPROVED: *B.P. Crozetta*
CHAIRPERSON DATE

AIRCRAFT SYSTEMS

AVT 270-3

Course Name

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PHILOSOPHY/GOALS:

The primary objective of this course is to give students a thorough knowledge of all systems in the multi-engine aircraft on which they receive their advanced training. Therefore, students will be required to know the systems of the Twin Comanche in addition to the Twin Otter aircraft.

METHOD OF ASSESSMENT (GRADING METHOD):

The student will be assessed by tests on block subject matter with a mid-term final specifically on the Twin Comanche Aircraft and an end of semester final specifically on the Twin Otter Aircraft. Grades will be assessed as indicated with College Calendar as A, B, C, X, or R with the Grade Point Average used to indicate total points gained.

Results of AVT 270-3 are submitted to the aviation co-ordinator, totalled and averaged.

A - 90 - 100%
B - 80 - 89%
C - 70 - 79%
X - below 70% at mid-term
R - below 70% at final grading

A grade of less than 70% will be considered a failure as will incompleting assignments.

TEXTBOOK(S):

Twin Comanche Owners Handbook - by Piper

Twin Otter DHC-6 Pilot Training Manual - by DeHavilland

REFERENCE TEXT(S):

PA 30/39 Service Manual by Piper

Twin Otter DHC-6 Pilot Training Manual - Transparencies & Slide Series

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
PA 30 TWIN COMANCHE			
1	1	Introduction to the PA 30 Aircraft	Aircraft Piper Twin Comanche Manual, Piper PA 30 Service Manual
2	1	Operating speeds and limitations	
3	1	Emergency Procedures	
4	1	Pre-flight examination and flying controls	
5	1	Hydraulic system and Landing gear and brake system	
6	1	Power plant and review	
7	1	Fuel system and instruments	
8	1	Electrical systems, heating & Ventilating system and Accessories	
9	1	Automatic Pilot	
10	1	Final PA 30 Aircraft operators Exam Mid-Semester	
DHC-6 TWIN OTTER			
11	1	Introduction to the Twin Otter Aircraft (Slide Series)	DHC-6 Twin Otter Pilot Training Manual & Slide & Transparencies Series
12	1	General - Review Questions	
13	1	Flight Controls - Review Questions	
14	1	Fuel System - Review Questions	
15	1	Hydraulic System - Review Questions	
16	1	Pneumatic System - Review Questions	

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
17	1	Ice & Rain Protection Lighting System Landing Gear Flight Instruments Review Questions	
18	1	Electrical System - Review Questions	
19	2	Test on Enunciator, Caution Lights Test on Airspeed limitations Test on Switches, Overhead consol Review Questions	
20	1	Final Exam DHC-6 Systems, Controls Dimensions, Weights & C/G Limits	
