

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ON

COURSE OUTLINE

COURSE TITLE: INSTRUMENT PROCEDURES AND FLIGHT OPERATIONS  
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CODE NO: AVT235-2 SEMESTER: VII  
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PROGRAM: AVIATION TECHNOLOGY  
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AUTHOR: R. MASCOTTO  
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DATE: JANUARY 3, 1994  
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PREVIOUS OUTLINE DATED: OCTOBER 31, 1988  
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APPROVED: L. Mascotto  
Dean, School of Engineering Tech.

94-01-31  
Date

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TOTAL CREDIT HOURS: 32

**PREREQUISITE(S):**

Successfully completed AVT226.

**I. PHILOSOPHY/GOALS:**

To add to the material covered in AVT226; to provide the knowledge to pass the MOT Instrument Rating Examination. In addition, material will be introduced which is beyond the MOT requirements to better prepare them for employment in a greater variety of aviation positions.

**II. STUDENT PERFORMANCE OBJECTIVES:**

Upon successful completion of this course the student will:

Write the MOT Instrument Rating Examination. Have a working knowledge of Grid Navigation. Identify and resolve Jet Transport second Segment Climb Obstruction Problems. Be able to function in a multi-crew cockpit in normal and emergency flight conditions.

**III. TOPICS TO BE COVERED:**

IFR Rules and Procedures  
Navigation Systems and Flight Operations

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**LEARNING ACTIVITIES**

<u>Topic</u>	<u>Periods</u>	
1	1	Aircraft Instruments
2	9	IFR Rules and Procedures Rules of Thumb
3	1	Radar Vectors; DME ARC APP; Point to Point
4	2	<b>MID TERM Examination</b>
5	2	Grid Navigation
6	2	2nd Segment Climb - Jet Transport
7	2	CMNPS - MNPS - SCA Tracks - NAR Routes - NAT System - ATS - NTS - "T" RNAV Routes
8	1	FMS - Flight Management System
9	1	MLS - Microwave Landing System
10	1	R-NAV
11	2	INS - Inertial Navigation System
12	2	GPS - Global Positioning System LORAN-C
13	1	ICAO Flight Plan
14	1	CP and Radius of Action
15	2	HSI, RMI, Flight director - EFIS
16	2	<b>FINAL EXAMINATION</b>

**REQUIRED RESOURCES**

IPM
IPM, AIP, CAP, CFS
Handouts
Handouts
CFS
AIP
Handouts
Handouts
Handouts
Handouts, Sim
Handouts
Film - VCR
AIP
Handouts, Sim, A/C visit

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**V. EVALUATION METHODS: (INCLUDES ASSIGNMENTS, ATTENDANCE REQUIREMENTS ETC.)**

The student will be assessed by tests following the delivery of each topic. The weighting of each test may vary depending on the importance and hours of instruction. Tests are totalled and reduced to a percentage for final semester grade.

A+	93% - 100%
A	87% - 92%
B	80% - 86%
C	70% - 79%
I	Below 70% (applies only to mid-term)
R	Below 70% (applies to final)

Students may request a deferment of a test for compassionate reasons. Compassionate Grounds for deferment will include but not be limited to death of an immediate family member, personal illness, or recent diagnosis of a serious illness of a family member. Rewrites will not be permitted after the fact for compassionate reasons.

An overall G.P.A. of 2.8 is considered minimum acceptable achievement level in the second and third year of the program. Students with a lower G.P.A. will be counselled.

"R" grades in any subject at the end of a semester will result in termination from the program. Rewrites in aviation subjects are not permitted.

Attendance is mandatory for all Aviation classes unless approval is granted in advance.

Although attitude, cooperation, etc., are not graded, students may be terminated based on their performance in this area. These attributes are also considered in the selection of the Air Canada Award and other scholarships.

Dates of tests will be announced at least 1 week in advance.

**VI. REQUIRED STUDENT RESOURCES**

As per book list.

**VII. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY:**

Book Section (title, publisher, edition, date, library call number if applicable - see attached example)

Periodical Section (Magazines, Articles)

Audiovisual Section (Videotape, Filmstrips, Transparencies)

**VIII. SPECIAL NOTES**

Students with special needs (eg. physical limitation, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of the students.