

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY  
SAULT STE MARIE, ON



COURSE OUTLINE

Course Title: Aeronautics 4

Code No.: AVT-200-4

Semester: Four (4)

Program: Aviation Technology (flight)

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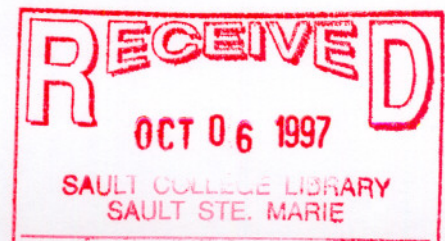
Date: September, 1997 Previous Outline Date:

Approved: K. DeRosario Oct. 3/97  
Dean Date

Total Credits: 4 Prerequisite(s): AVT 110

Length of Course: 16 weeks Total Credit Hours: 64 periods

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For additional information, please contact Kitty DeRosario, Dean, School of Trades  
& Technology, (705) 759-2554, Ext. 642.



**I. COURSE DESCRIPTION:**

To teach the theory and practice of Aviation Technology, with emphasis in study for the completion of the Commercial Pilots Licence Standard.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

(Generic Skills Learning Outcomes placement on the course outline will be determined and communicated at a later date.)

Upon successful completion of this course the student will demonstrate the ability to:

- 1) understand the theory and use of various radio navigation aids and the procedures required to track specific bearings to and from these navigation aids/waypoints

Potential Elements of the Performance:

VOR theory and tracking, ADF theory and tracking, the Bendix/King KLN 89b GPS, other types of navigation aids, review of general navigation

- 2) understand the advanced theory of meteorology

Potential Elements of the Performance:

Moisture in the atmosphere, Heating of the atmosphere, Cooling of the atmosphere, Stable and Unstable air, Atmospheric pressure and circulation, Air masses and fronts, Structure of fronts, formation of clouds and precipitation, Icing, Visibility, Boundary layer winds and turbulence

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE  
(Continued)**

- 3) understand the air law required of the commercial pilot

Potential Elements of the Performance:

CARs parts I, III, IV, VI, VII

- 4) understand the principals and operation of airframes, engines, systems and flight instruments

Potential Elements of the Performance:

Airframes, Engines and systems, Flight Instruments

**III. TOPICS:**

- 1) Navigation
- 2) Meteorology
- 3) Air Law
- 4) General Knowledge

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

From the Ground up - A. F. MacDondald

Study and Reference Guide for Commercial Pilots, Transport Canada

A.I.P., Transport Canada

Canada Flight Supplement, Transport Canada

Air Command Weather Manual, Transport Canada

## V. EVALUATION PROCESS/GRADING SYSTEM

The student will be assessed by tests following the delivery of each topic. Weighting of each test within a topic will be 50 % for all tests prior to the final and 50 % for the final exam. Each topic is then averaged together for the overall mark for final semester grade.

For the navigation grade, the navigation logs for the first four cross country trips will be submitted to the instructor covering navigation. The student will be given a credit of 2.5% for each navigation log handed in, for a total of 10% of the final grade. If, due to weather and other circumstances beyond control, the four cross countries are not completed in semester 4, then the grade will be adjusted accordingly.

### GRADE:

A+ - 93 - 100%

A - 87 - 92%

B - 80 - 86%

C - 70 - 79%

R - Below 70%

- In the event of a failure in one Aviation Topic, the highest grade achievable will be a "C". Failure of two or more topics will result in an "R" Grade.

- 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.**

- "R" grades in any subject at the end of a semester will result in termination from the program. Re-writes in aviation subjects are not permitted except as provided in the re-write policy below.

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

- Although attitude, co-operation, 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. SPECIAL NOTES:

### RE-WRITE POLICY

-No re-writes on mid-term tests.

■ An individual section of AVT 200 may be re-written in the event of a failure provided the overall semester average is 70% or greater and the failed section is within 5% of a pass. (i.e. 65% or above) If more than one section is failed, re-writes will not be permitted. The re-written section will be averaged with the failed section to determine the resulting mark which must be 70% or above to pass.

■ No re-writes on any D.O.T. exam.

- Special Needs

If you are a student with special needs (eg. physical limitations, visual impairments, hearing impairments, learning disabilities), you are encouraged to discuss required

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accommodations with the instructor and/or contact the Special Needs Office, Room E1204, Ext. 493, 717, 491 so that support services can be arranged for you.

- Retention of Course Outlines

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post-secondary institutions.

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

## **VII. PRIOR LEARNING ASSESSMENT**

Students who wish to apply for advanced credit in the course should consult the instructor. Credit for prior learning will be given upon successful completion of the following: