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



Sault College

COURSE OUTLINE

COURSE TITLE: Aeronautics 2

CODE NO.: AVT 100-5 SEMESTER: two

PROGRAM: Aviation Technology (flight)

AUTHOR: Louis St Pierre

DATE: December, PREVIOUS OUTLINE December 1998

2000 **DATED**:

APPROVED:

DEAN DATE

TOTAL 5

CREDITS:

PREREQUISITE(S): AVT 101

HOURS/WEEK: 5

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For additional information, please contact K. DeRosario, Dean School of School of Technology, Engineering and Technical Trades

(705) 759-2554, Ext.642

I. COURSE DESCRIPTION:

To teach the theory and practice of Aviation Technology, with emphasis in the study for the completion of the Private Pilot Licence Standard

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Understand the theory and techniques of dead reckoning navigation, as well as theory of radio navigation aids, required for the completion of the navigation portion of the Transport Canada Private Pilot Exam

Potential Elements of the Performance:

use of flight computers and mental dead reckoning, navigation logs, aviation charts and publications such as the Canada Flight Supplement, preparation for cross country flight, application of Air Law regarding recognition of controlled and uncontrolled airspace and any other airport operations, basic radio navigation

2. Understand operations such as being able to determine aircraft performance data and weight and balance basic search and rescue as required for the Transport Canada Private Pilot exam

Potential Elements of the Performance:

the Zlin 242 ground school manual, aircraft performance, use of performance charts, weight and balance

3. Understand the theory of meteorology required for the completion the meteorology portion of the Transport Canada Private Pilot exam

Potential Elements of the Performance:

Any other meteorology not taken in AVT 101, meteorological information available to pilots, weather reports, charts and forecasts

4. Understand the airframes, engines and systems, and instruments of general aviation aircraft for the completion of the general knowledge section of the Transport Canada Private Pilot Exam

Potential Elements of the Performance:

airframes, landing gear, brakes, flaps, engines, carburation, fuel injection, electrical systems, lubrication systems and oils, fuel systems and fuels

5 Preparation for flight operations in semester 3

Potential Elements of the Performance:

The Zlin 242 systems and performance, maintenance procedures, dispatch

III. TOPICS:

- 1. Meteorology
- 2. Navigation
- 3. Operations
- 4. Airframes and engines
- 5 Flight operations

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

From the Ground Up
Zlin 242 ground school manual
AIP
VNC charts – Toronto, Sault Ste Marie
VTA charts – Toronto
The Canada Flight Supplement
Maintenance Policy and Control Manual

V. EVALUATION PROCESS/GRADING SYSTEM:

Enter description of how they will be graded

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.

- In the event of a re-write in one Aviation Topic, the highest grade achievable will be a "C". Failure of two or more topics will result in an "R" Grade.(see re-write policy in section VI)
- 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 (see section VI). 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.

The following semester grades will be assigned to students in postsecondary courses:

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<u>Grade</u>	<u>Definition</u>	Grade Point <u>Equivalent</u>
A+	93 - 100%	4.00
Α	87 - 92%	3.75
В	80 - 86%	3.00
С	70 - 79%	2.00
R (Repeat)	70% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non- graded subject areas.	
U	Unsatisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see <i>Policies & Procedures Manual – Deferred Grades and Make-up</i>).	
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has not been possible for the faculty member to report grades.	

VI. SPECIAL NOTES:

Attitude and Conduct

Attitude plays an important role in your ability to exercise good judgement. Although attitude is not being graded, it affects your ability to learn as well as your safety as a student and future as a professional pilot. Students who display a strong tendency towards any of the five hazardous attitudes pose a grave risk to themselves and others. For this reason these students will be counseled and will be put on a behavioural contract. If counseling is ineffective, then the student will be withdrawn from the program.

The five hazardous attitudes are identified as Anti-authority, Impulsivity, Invulnerability, Machismo, and Resignation. These hazardous attitudes are described in "Human Factors for Aviation – Basic Handbook" on pages 151 and 152.

Re-Write Policy

- No re-writes on mid-term tests.
- The final exam of an individual topic of AVT 100 may be re-written in the form of a new exam provided the overall AVT 100 semester average is 70% or greater and the failed topic is within 5% of a pass (i.e. 65% or above). If more than one topic is failed, re-writes will not be permitted. The re-written exam will be averaged with the failed exam to determine the resulting topic mark which must be 70% or above to pass.
- No re-writes on any D.O.T. exam.
- In the event of a re-write, the highest achievable overall grade will be a C

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 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 postsecondary institutions.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Rights and Responsibilities*. Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.