

I. COURSE DESCRIPTION:

This course carries on from the knowledge learned in AVT112, with an emphasis on the practical application of the Dead reckoning navigation.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Calculate heading, groundspeed and ETA (estimated time of arrival) by using Mental dead Reckoning techniques

Potential Elements of the Performance:

Master the use of special equations for calculating Maximum Drift, wind correction angles, groundspeed and ETE (estimated time enroute) calculations

2. retrieve and interpret airport information

Potential Elements of the Performance:

learn to use the Canada Flight Supplement

3. Prepare and execute a cross country flight in preparation for AFT130 in semester 3

Potential Elements of the Performance:

flight planning, navigation log usage, chart preparation, calculation of navigation data, weight and balance, fuel analysis, using checkpoints for groundspeed calculation, drift correction, lost procedures

4. radio theory and basic navigation aids

Potential Elements of the Performance:

radio theory, VOR, transponders, GPS

5. Understand and apply 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:

this course prepares students for the Private Pilot exam and the Commercial Pilot exam as well as the applicable qualification exams

III. TOPICS:

1. Mental Dead Reckoning
2. the Canada Flight Supplement
3. Dead Reckoning Navigation and Preparation for Cross Country Flight
4. Radio Navigation
5. Preparation for the Private Pilot and Commercial Pilot written exams

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

From The Ground Up
Flight Training Manual
Sault Ste Marie VNC
Toronto VNC
Toronto VTA
Jeppesen CR-5 Navigation Computer
Canada Flight Supplement
Aeronautical Information Manual (AIM)
Navigational Plotting Instruments

V. EVALUATION PROCESS/GRADING SYSTEM:

The student will be assessed by a combination of attendance, quizzes, assignments, tests and a final exam. Weighting of each will be as follows: 10% for quizzes, 10% for assignments, 30% for all tests prior to the final exam and 50% for the final exam. A minimum mark of 70% is required to pass the course. Make-up tests are not permitted except in accordance with section VI of this outline.

- marks may deducted on a test for using an expired Canada Flight Supplement or VFR navigation chart.
- Unexcused absences will result in 2% deduction of the final mark for each occurrence, arriving for class late, not having the required charts or equipment will result in a 1% deduction of the final mark for each occurrence, and violations of the dress code will result in a 1% deduction of the final mark for each occurrence.
- Quizzes will be given without prior notice.
- If it is necessary to write a second final exam in order to pass the course, the highest grade achievable will be a "C". (See make-up policy in section VI)
- Students may request a deferment of a test **prior to the writing of that 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. **Make-ups will not be permitted after the fact for compassionate reasons.**
- **"F" grades in any subject at the end of a semester will result in termination from the Aviation program.**
- Dates of tests will be announced at least 1 week in advance.

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	assigned if a make-up exam was required to complete the course	0.00
F (Fail)	69.5% and below	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

VI. SPECIAL NOTES:

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session. *It is possible that once the classroom door has been closed, late arrivers will not be granted admission to the room*

Make-up Policy

- No make-ups on tests occurring prior to final exams.
- No make-ups on quizzes.
- assignments handed in after the due date will receive a 50% deduction.
- If the final grade achieved for this course is less than 70%, a second final exam may be written at the discretion of the professor for this course. The grading system will be modified as follows: the first exam attempt will be weighted at 25% instead of the original 50% of the final mark, and the make-up exam will be weighted at 25% of the final mark. The minimum mark for the course is still 70% or better after the grade has been re-calculated to include the make-up exam.
- In the event that a second final exam is required, the highest achievable overall grade for this course will be a C
- Any student that requires 90% or greater on a make-up exam to pass the course will not be allowed to write a make-up exam.

VI. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.