SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Meteorology 4

CODE NO.: AVT361-3 SEMESTER: Six

PROGRAM: Aviation Technology (Flight)

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DATE: June 2010 **PREVIOUS OUTLINE DATED:** June

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APPROVED: "B. Punch"

CHAIR DATE

TOTAL CREDITS: 2

PREREQUISITE(S): AVF241

HOURS/WEEK: 1

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For additional information, please contact Brian Punch, Chair School of Natural Environment/Outdoor Studies & Technology Programs (705) 759-2554. Ext. 2681

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I. COURSE DESCRIPTION:

This course reviews meteorology theory already learned, and explores the methods of using meteorological services available to pilots to prepare for an IFR flight. More advanced theory is also introduced. This course is in preparation for writing the Transport Canada Instrument Rating Exam (INRAT).

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

 demonstrate a practical knowledge of meteorology theory taken in first and second year

Potential Elements of the Performance:

A review of fundamentals of weather, Icing, Turbulence, Thunderstorms, Aviation Weather Reports, Aviation forecasts, Weather maps and prognostic charts, Weather interpretation as it applies to the Instrument Rated Pilot

2. identify the factors that lead to Airframe Icing and its effect on flight operations

<u>Potential Elements of the Performance</u>: portions of a NASA icing course

3. apply Air Regulations as it applies to IFR flight, with respect to the weather requirements

Potential Elements of the Performance:

Departure, approach and landing minima, alternate minima.

4. make a go/no go decision with respect to an IFR flight

Potential Elements of the Performance:

determine what weather products to retrieve, then interpret them to form the appropriate decision

III. TOPICS:

- 1. Review of previously learned material
- 2. Air Law pertaining to IFR flight
- 3. Decision Making

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IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Air Command Weather Manual Canada Air Pilot (CAP GEN and CAP4) AIM Access to internet is an asset

V. EVALUATION PROCESS/GRADING SYSTEM:

The student will be assessed by a combination of quizzes, tests and a final exam. Weighting of each will be as follows: 20% for quizzes, 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.

- Quizzes will be given without prior notice. Unexcused absence on a day of a quiz will result in that quiz being assessed as 0%.
- 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 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.

A classroom code of conduct can be found in the SOP General section, and will be adhered to.

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	Grade Point Equivalent
A+	90 – 100%	4.00
Α	80 – 89%	
В	70 - 79%	3.00
C	assigned if a make-up exam was required	2.00
	to complete the course	
F (Fail)	69% and below	0.00
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR W	Grade not reported to Registrar's office. Student has withdrawn from the course without academic penalty.	

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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 the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers may not be granted admission to the room.

 Unexcused absences will result in 2% deduction of the final mark for each occurrence, arriving for class late 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. Refer to the SOP GEN section for dress code policies and for policy regarding absence from classes

Make-up Policy

- No make-ups on tests occurring prior to final exams.
- No make-ups on quizzes.
- 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.

VII. COURSE OUTLINE ADDENDUM:

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