



COURSE OUTLINE: AVT378 - HUMAN FACTORS-SAFETY

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Approved: Greg Farish - Dean

Course Code: Title	AVT378: SAFETY AND HUMAN FACTORS
Program Number: Name	4061: AVIATION TECHNOLOGY
Department:	AVIATION TECHNOLOGY
Academic Year:	2025-2026
Course Description:	This is the third human factors course. You will continue to develop the skills required for a safe and successful aviation career. Some of the topics covered are aviation physiology, aviation psychology, pilot-equipment/materials relationship, CFIT and threat and error management.
Total Credits:	3
Hours/Week:	4
Total Hours:	60
Prerequisites:	AVT248
Corequisites:	There are no co-requisites for this course.
This course is a pre-requisite for:	AVF373
Essential Employability Skills (EES) addressed in this course:	<p>EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</p> <p>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 3 Execute mathematical operations accurately.</p> <p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</p> <p>EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.</p> <p>EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>EES 10 Manage the use of time and other resources to complete projects.</p> <p>EES 11 Take responsibility for ones own actions, decisions, and consequences.</p>
Course Evaluation:	<p>Passing Grade: 70%, B</p> <p>A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.</p>



Other Course Evaluation & Assessment Requirements:

Evaluation Considerations:

Students will be assessed by a combination of attendance and department, quizzes, tests, and a final exam.

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

Quizzes will be given without prior notice.

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-up evaluations will not be permitted without prior notice regardless of the circumstances.

Attendance:

Attendance is mandatory for courses which appear on the student's formal Ground School Record required by Transport Canada.

To be excused from class due to illness or other unforeseen circumstance, students must inform their instructor/professor via email prior to the start of class. A make-up class may be required.

Unexcused absences will result in 2% deduction from the final mark for each occurrence. Arriving for class late will result in a 1% deduction from the final mark for each occurrence.

Classroom Conduct:

A classroom code of conduct can be found in the Sault College Student Code of Conduct policy, on the Sault College Website. This along with the list of Unacceptable Behaviours in the Sault College Aviation's SOPs must be adhered to.

Violations of the dress code will result in a Letter of Warning (LOW). Refer to the Sault College Aviation Standard Operating Procedures (SOPs) manual, Section 10, for dress code policies.

Student Support and Students at Risk:

Student support services are provided through Sault College's Student Services department. All students are encouraged to use these services to enhance their learning experience. Services like peer tutoring provides support from Aviation students in years ahead, who have demonstrated success in the program.

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
The student will have acquired communication and decision making skills required to succeed in the	Human Factors and Airmanship as applicable to the INRAT. Topics include, Aviation Physiology - Hypoxia/hyperventilation



	aviation industry, as well as, review aircraft accidents and incidents.	<ul style="list-style-type: none"> - Orientation/disorientation/visual and vestibular illusions - Sleep/fatigue Aviation Psychology - Decision-making process - Factors that influence decision-making - Situational awareness Pilot - Equipment/Materials Relationship - Controls and displays - errors in interpretation and control - Cockpit visibility - seat position - Correct use of charts, checklists, manuals - Automation advantages/threats Controlled Flight into Terrain Threat Error Management - Threats and errors in IFR flight
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Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
ASSIGNMENT(S)	15%
FINAL EXAM	35%
MIDTERM EXAM	25%
QUIZZES	25%

Date: August 27, 2025

Addendum: Please refer to the course outline addendum on the Learning Management System for further information.