



COURSE OUTLINE: AVT119 - HUMAN FACTORS AVIAT

Prepared: JOHN PORTAS

Approved: Greg Mapp, Chair, Aviation Technology - Flight

Course Code: Title	AVT119: HUMAN FACTORS IN AVIATION
Program Number: Name	4061: AVIATION TECHNOLOGY
Department:	AVIATION TECHNOLOGY
Semesters/Terms:	19F
Course Description:	Students enrolled in the aviation technology (flight) program will participate in 3 human factor courses. This, the first course, provides an introduction to human factors with a focus on basic flight physiology. You will learn why human factors are so important and the role they will play in your career. The topics covered include: basic human anatomy, hearing, vision, altitude physiology, the atmosphere, sleep and circadian rhythms, stress, situational awareness and orientation, acceleration and motion sickness.
Total Credits:	2
Hours/Week:	2
Total Hours:	24
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
This course is a pre-requisite for:	AFT120, AVF122, AVT123, ELR104
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>
General Education Themes:	Personal Understanding Science and Technology



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Course Evaluation:	Passing Grade: 70%, B
Other Course Evaluation & Assessment Requirements:	<p>The student will be assessed by a combination of attendance and department, quizzes, tests and a final exam. Weighting of each will be as follows: 30% for quizzes, 30% for all tests prior to the final exam and 40% for the final exam. In order to pass the course, A minimum grade of B must be achieved, otherwise the course must be repeated in accordance with the Aviation Standard Operating Procedures. Make-up tests are not permitted except in accordance with section VI of this outline.</p> <p>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 1.3 for dress code policies and SOP GEN 1.6.7 for policy regarding absence from classes</p> <p>Quizzes will be given without prior notice.</p> <p>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.</p> <p>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.</p> <p>Dates of tests will be announced at least 1 week in advance.</p> <p>A classroom code of conduct can be found in the SOP General section, and will be adhered to.</p> <p>The following semester grades will be assigned to students:</p> <p>Grade Definition Grade Point Equivalent A+ 90 - 100% 4.00 A 80 - 89% 4.00 B 70 - 79% 3.00 C 60 - 69% 2.00 D 50 - 59% 1.00 F (Fail) 49% 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 Grade not reported to Registrar's office. W Student has withdrawn from the course without academic penalty.</p> <p>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 in an effort 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.</p>

Books and Required Resources:	Human Factors for Aviation - Basic Handbook / Published by Transport Publisher: VIP Pilot Centre Inc ISBN: 0660166550
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Course Outcomes and Learning Objectives:	<table border="1"> <thead> <tr> <th data-bbox="488 1362 803 1406">Course Outcome 1</th> <th data-bbox="803 1362 1459 1406">Learning Objectives for Course Outcome 1</th> </tr> </thead> <tbody> <tr> <td data-bbox="488 1406 803 1519">The student will have acquired communication and decision making skills used in a multi crew</td> <td data-bbox="803 1406 1459 1519">Define where flight physiology fits into safe flying practices</td> </tr> </tbody> </table>	Course Outcome 1	Learning Objectives for Course Outcome 1	The student will have acquired communication and decision making skills used in a multi crew	Define where flight physiology fits into safe flying practices
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	environment with the objective of maintaining safe operating procedures and adopting a proactive approach to potential emergencies.	Role of human factors in aviation and why? Historical perspective in the development of human factors A simple model of pilot performance
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Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
FINAL EXAM	40%
MIDTERM EXAM	30%
QUIZZES	30%

Date:

August 1, 2019

Addendum:

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