



## COURSE OUTLINE: AVT378 - HUMAN FACTORS-SAFETY

Prepared: ANDREA COLLINS

Approved: Greg Farish, Chair, Aviation Technology - Flight

<b>Course Code: Title</b>	AVT378: SAFETY AND HUMAN FACTORS
<b>Program Number: Name</b>	4061: AVIATION TECHNOLOGY
<b>Department:</b>	AVIATION TECHNOLOGY
<b>Academic Year:</b>	2022-2023
<b>Course Description:</b>	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.
<b>Total Credits:</b>	3
<b>Hours/Week:</b>	4
<b>Total Hours:</b>	60
<b>Prerequisites:</b>	AFT240, AVT361, AVT363, AVT364, AVT366, AVT369
<b>Corequisites:</b>	There are no co-requisites for this course.
<b>Essential Employability Skills (EES) addressed in this course:</b>	<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>
<b>Course Evaluation:</b>	<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>
<b>Books and Required Resources:</b>	HUAMN FACTORS ADVANCED ISBN: 0660166569



**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 aviation industry, as well as, review aircraft accidents and incidents.	Human Factors and Airmanship as applicable to the INRAT. Topics include, Aviation Physiology - Hypoxia/hyperventilation - 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

**Evaluation Process and Grading System:**

Evaluation Type	Evaluation Weight
ASSIGNMENT(S)	15%
FINAL EXAM	35%
MIDTERM EXAM	25%
PARTICIPATION	5%
QUIZZES	20%

**Date:**

July 4, 2022

**Addendum:**

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

