



## COURSE OUTLINE: AVT363 - ADVANCED FLIGHT SYS.

Prepared: Michael Nearing

Approved: Greg Farish, Chair, Aviation Technology - Flight

<b>Course Code: Title</b>	AVT363: ADVANCED FLIGHT SYSTEMS	
<b>Program Number: Name</b>	4061: AVIATION TECHNOLOGY	
<b>Department:</b>	AVIATION TECHNOLOGY	
<b>Academic Year:</b>	2023-2024	
<b>Course Description:</b>	This course is designed to familiarize the student with modern Flight Management Systems (FMS). General philosophy of the FMS will be studied as well as modes of operation. The course of study will focus on FMS principles, Pilot interface and Procedures. Topics will include programming the FMS from Origin to Destination, including vertical and lateral revisions to the Flight Plan. The Flight Management Guidance System of the Airbus family of aircraft will be studied.	
<b>Total Credits:</b>	2	
<b>Hours/Week:</b>	2	
<b>Total Hours:</b>	30	
<b>Prerequisites:</b>	AVT258, AVT366	
<b>Corequisites:</b>	There are no co-requisites for this course.	
<b>This course is a pre-requisite for:</b>	AVF373, AVT370, AVT377	
<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 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 10 Manage the use of time and other resources to complete projects.</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>Other Course Evaluation &amp; Assessment Requirements:</b>	Attendance.	
<b>Course Outcomes and</b>	<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>



**Learning Objectives:**

The student should be able to reliably demonstrate the use of the FMS as it relates to the Airbus Family of Aircraft in all phases of flight. Also be able to differentiate between Managed and Selected Guidance and how this relates to aircraft trajectories.

To methodically load the Flight Plan into the FMS applying the correct procedures with emphasis on Lat/Long entries through the Multi Function Control and Display Unit (MCDU). Also to familiarize the student with modern Electronic Flight Instrument Systems (EFIS) and illustrate how the system is integrated with the FMS.

**Evaluation Process and Grading System:**

Evaluation Type	Evaluation Weight
Final exam	50%
Mid-term test	50%

**Date:**

June 1, 2023

**Addendum:**

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

