COURSE OUTLINE: AVT363 - ADVANCED FLIGHT SYS.

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Approved: Greg Farish, Dean, Aviation

Course Code: Title	AVT363: ADVANCED FLIGHT SYSTEMS
Program Number: Name	4061: AVIATION TECHNOLOGY
Department:	AVIATION TECHNOLOGY
Academic Year:	2024-2025
Course Description:	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.
Total Credits:	2
Hours/Week:	2
Total Hours:	30
Prerequisites:	AVT258, AVT366
Corequisites:	There are no co-requisites for this course.
This course is a pre-requisite for:	AVF373, AVT370, AVT377
Essential Employability Skills (EES) addressed in this course:	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. EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication. EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems. EES 6 Locate, select, organize, and document information using appropriate technology and information systems. EES 7 Analyze, evaluate, and apply relevant information from a variety of sources. EES 10 Manage the use of time and other resources to complete projects.
Course Evaluation:	Passing Grade: 70%, B A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation & Assessment Requirements:	To be excused from class due to illness or other unforeseen circumstances, students must email the faculty member before the start of class. Students may request a deferment of a test for compassionate reasons, including but not limited to the death of an immediate family member, personal illness, or a recent diagnosis of a serious illness in a family member.

	Make-ups will not be permitted after the fact for compassionate reasons. Test dates will be announced at least one week in advance. If a faculty member determines that a student is at risk of not succeeding academically and has exhausted all available strategies, the student`s contact information may be confidentially provided to Student Services to offer additional support. Any student wishing to restrict the sharing of their information should inform the coordinator or faculty member.

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
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%
Midterm test	50%

Date: August 22, 2024

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