

Master Syllabus

AVT 2150 - Crew Resource Management for UAS

Division: Science, Mathematics and Engineering

Department: Aviation Technology

Credit Hour Total: 1.0

Lecture Hrs: 1.0

Other Prerequisite(s): Restricted to Majors

Date Revised: September 2013

Course Description:

Provides students with an introduction to the principles and concepts of crew resource management (CRM) through interactive discussion and scenario based analysis as it relates to UAS operations and the challenge of optimizing the human/machine interface and accompanying flight operations. Discussion and scenario based activities include CRM markers, principles and concepts of CRM, team building, information transfer, problem solving, risk management and decision making, communications process, conflict resolution and maintaining situational awareness when dealing with UAS automated systems.

General Education Outcomes:

- Critical Thinking/Problem Solving Competency

Course Outcomes:

Risk Management and Decision Making

Comprehend and demonstrate a basic understanding of risk management, information transfer and decision making in UAS operations.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct responses on exams

Workload Management and Situational Awareness

Comprehend and demonstrate an understanding of workload management, communication processes, problem solving and maintaining situational awareness when when operating within a UAS.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct responses on exams

Human/Machine Interface

Comprehend and demonstrate an understanding of the principles, concepts and application of Crew Resource Management and the human factors associated with the human/machine interface.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct responses on exams

Crew Resource Management Markers

Comprehend, analyze, and demonstrate a basic understanding of the Crew Resource Management Markers and their effect on managing errors.

Assessment Method: Locally developed exams

Performance Criteria:

70% correct responses on exams

Outline:

Crew Resource Management (CRM) Markers

Principles and concepts of CRM

Effective team building

Risk management and decision making

Workload management and situational awareness

Conflict resolution and the human/machine interface