

Master Syllabus

AVT 2242 - Aircraft Accident Investigation

Division: Science, Mathematics and Engineering

Department: Aviation Technology

Credit Hour Total: 3.0

Lecture Hrs: 3.0

Prerequisite(s): DEV 0035

Date Revised: April 2015

Course Description:

Provides pilots and other aviation professionals with an understanding of techniques used by investigators to identify causes of accidents and how to make recommendations to reduce the likelihood of recurrence and reduce the consequences.

General Education Outcomes:

- Oral Communication Competency
- Written Communication Competency
- Critical Thinking/Problem Solving Competency
- Values/Citizenship/Community Competency
- Computer Literacy Competency
- Information Literacy Competency

Course Outcomes:

The Human Factors Analysis Classification System (HFACS)

Demonstrate an understanding of and the ability to document the use of HFACS to define causes of aircraft accidents.

Assessment Method: Locally developed exams

Performance Criteria:

Score 65% or higher

Assessment Method: Oral examination

Performance Criteria:

Score 65% or higher

Assessment Method: Written surveys and/or questionnaires

Performance Criteria:

Score 65% or higher

How to apply HFACS to aviation accidents

Demonstrate the ability to use and to document the use of the HFACS to define specific causes of aircraft accidents.

Assessment Method: Locally developed exams

Performance Criteria:

Score 65% or higher

Assessment Method: Oral examination

Performance Criteria:

Score 65% or higher

Assessment Method: Written surveys and/or questionnaires

Performance Criteria:

Score 65% or higher

Analyze a General Aviation accident to determine causes

Demonstrate the ability to use and to document the use of the HFACS to define causes of specific aircraft accidents.

Assessment Method: Locally developed exams

Performance Criteria:

Score 65% or higher

Assessment Method: Oral examination

Performance Criteria:

Score 65% or higher

Assessment Method: Written surveys and/or questionnaires

Performance Criteria:

Score 65% or higher

Definitions and National Transportation Safety Board (NTSB) procedures

Demonstrate a knowledge of definitions and NTSB procedures associated with aircraft accident investigation.

Assessment Method: Locally developed exams

Performance Criteria:

Score 65% or higher

Assessment Method: Oral examination
Performance Criteria:

Score 65% or higher

Assessment Method: Written surveys and/or questionnaires
Performance Criteria:

Score 65% or higher

Causes and contributing factors of aviation accidents

Demonstrate understanding of the analysis of aircraft and human performance limitations and how they contribute to aircraft accidents.

Assessment Method: Locally developed exams
Performance Criteria:

Score 65% or higher

Assessment Method: Oral examination
Performance Criteria:

Score 65% or higher

Assessment Method: Written surveys and/or questionnaires
Performance Criteria:

Score 65% or higher

Outline:

Definitions and National Transportation Safety Board (NTSB) procedures
The Human Factors Analysis Classification System (HFACS)
Causes and contributing factors of aviation accidents
How to apply HFACS to aviation accidents
Analyze a general aviation accident to determine causes