

## 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

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#### 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