

## Master Syllabus

### AVT 1119 - Aviation Meteorology

**Division:** Science, Mathematics and Engineering

**Department:** Aviation Technology

**Credit Hour Total:** 2.0

**Lecture Hrs:** 2.0

**Date Revised:** January 2014

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### Course Description:

Prepares students with the knowledge necessary to comprehend the fundamentals of meteorology, analyze weather factors, hazards and in-flight weather conditions and weather conditions as they relate to aircraft and flight performance using aviation meteorology charts and internet weather resources.

### General Education Outcomes:

- ▣ Critical Thinking/Problem Solving Competency
- ▣ Values/Citizenship/Community Competency
- ▣ Information Literacy Competency

### Course Outcomes:

#### Atmospheric Circulations

Demonstrate a basic knowledge of atmospheric circulation, air masses, fronts, and thunderstorm structure and behavior and the threat it poses to aircraft operations.

**Assessment Method:** Behavioral observations  
**Performance Criteria:**

Mastery of competency at 100%

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

80% correct response on exam

#### Weather Hazards

Recognize the hazards of wind shear, turbulence and icing conditions to aircraft operations and flight performance.

**Assessment Method:** Behavioral observations  
**Performance Criteria:**

Mastery of competency at 100%

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

80% correct response on exam

#### Sources of Weather Information

Identify, comprehend and analyze sources of weather information regarding in-flight weather conditions using aviation meteorology charts and internet weather resources.

**Assessment Method:** Behavioral observations  
**Performance Criteria:**

Mastery of competency at 100%

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

80% correct response on exam

#### Meteorology Fundamentals

Comprehend the fundamentals of meteorology and proper technical vocabulary of meteorological terms.

**Assessment Method:** Behavioral observations  
**Performance Criteria:**

Mastery of competency at 100%

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

80% correct response on exam

### Outline:

Fundamentals of meteorology

Meteorological technical terms

Atmospheric circulations

Air masses, fronts and thunderstorms

Wind shear, turbulence and icing conditions

Sources of weather information

Aviation charts and internet resources