

## Master Syllabus

### AVT 1128 - Powerplant Safety Systems

**Division:** Science, Mathematics and Engineering

**Department:** Aviation Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 2.0 **Lab Hrs:** 2.0

**Date Revised:** October 2012

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#### Course Description:

Troubleshooting of electrical wiring and connections on instruments, legal repairs allowed on instruments by Airframe and Powerplant (A&P) mechanics, different types of fire protection systems, different extinguishing agents used, Auxiliary Power Unit (APU) use, inspection, operation, removal, and replacement of APUs requiring servicing and troubleshooting and unducted fan engines. Two classroom, two lab hours per week.

#### 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:

##### Engine fire indicating systems

Demonstrate knowledge of the different types of fire indicating systems used on aircraft and their inspection, maintenance, and repair.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher correct responses on exam

##### Fire protection requirements

Demonstrate knowledge of the different requirements for different category aircraft fire suppression systems and types of extinguishing agents.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher correct responses on exam

##### Engine temperature and pressure indicating systems

Demonstrate knowledge of engine indicating instruments, wiring, and data systems, and their inspection and repair.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher correct responses on exam

#### Outline:

Instrument electrical connections  
Mechanical fluid flow rate indicating systems  
Engine temperature and pressure indicating systems  
Engine fire indicating systems  
Fire protection system types  
Fire protection requirements  
Auxiliary power units  
Unducted fan engines