

## Master Syllabus

### AVT 1107 - Fuel Systems

**Division:** Science, Mathematics and Engineering

**Department:** Aviation Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 2.0 **Lab Hrs:** 3.0

**Date Revised:** October 2012

---

### Course Description:

Inspection, operational checkout and repair of fuel systems and components to include tanks, transfer pumps, indicating systems and fuel heating; leak detection, identification and repair; proper servicing and regulatory compliance. Two classroom, three 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:

#### Regulatory Compliance

Demonstrate an understanding of requirements for compliance with federal and international regulations governing aircraft maintenance and documentation requirements as they relate to servicing of the aircraft.

**Assessment Method:** Locally developed exams

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

#### Leak Detection and Repair

Demonstrate knowledge of requirements to detect and repair fuel system leaks; demonstrate component operation for leak detection, fuel indicating and pressurization system, fuel temperature and heating, and proper servicing.

**Assessment Method:** Locally developed exams

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

#### Fuel System Components

Demonstrate an understanding of aircraft fuel system components and their operation; inspection and repair of fuel pumps, transfer manifold lines, fuel lines, and indicating and pressure sensors for proper installation.

**Assessment Method:** Locally developed exams

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

### Outline:

Fuel system components  
Aircraft fueling and defueling  
Leak detection and repair  
Fuel indication systems  
Regulatory compliance