

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