

Master Syllabus

AVT 2138 - Engine Fuel & Fuel Metering

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:

Fuel system components for turbine and reciprocating engines, carburetor adjustment and overhaul, installation and removal of carburetors, repair of fuel metering components, repair and installation of fuel system components, inspection, adjustment and servicing of engine fuel metering system components. 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:

Turbine engine fuel metering systems

Demonstrate knowledge of turbine engine fuel metering systems to include the following: adjustment, removal, servicing, installation, indexing of controls, and operation.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Carburetor removal and installation

Demonstrate an indepth knowledge of carburetor removal, inspection, repair, proper installation, and correct adjustment of engine controls.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Fuel injection systems

Demonstrate an indepth knowledge of fuel injection systems, removal, repair, servicing, and installation, and operational checkout for proper volume and pressure.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Outline:

Carburetor overhaul
Carburetor removal and installation
Turbine engine fuel metering system components adjustment and repair
Fuel injection metering system components
Fuel injection system component adjustment and repair
Engine primer systems