

Master Syllabus

AVT 2121 - Assembly & Rigging

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:

This course covers proper adjustment of cables and torque tubes, proper alignment of primary and secondary control surfaces, proper inspection and alignment of landing gear components and associated controls, correct alignment of all structures in both fixed wing and rotary wing aircraft. 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
- ▣ Information Literacy Competency
- ▣ Computer Literacy Competency

Course Outcomes:

Flight control surface positioning

Demonstrate proper inspection of primary and secondary control surface hardware and attaching fixtures and proper inspection, installation, and alignment of flight control surfaces.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Adjustment and rigging of flight control and other cables

Demonstrate knowledge of proper adjustment and rigging of primary and secondary flight control cables, and other control cables and torque tubes in fixed wing and rotary wing aircraft.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Landing gear components

Demonstrate knowledge of proper inspection and alignment of landing gear components and adjustment of control rigging in both fixed wing and rotary wing aircraft.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Outline:

Flight control surface positioning for correct alignment, and proper installation
Torque tubes and control rod end adjustment and servicing for proper operation
Proper adjustment and rigging of flight control and other cables
Proper inspection and alignment techniques of landing gear components