

## 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
- ▣ Written Communication
- ▣ Critical Thinking/Problem Solving
- ▣ Values/Citizenship/Community
- ▣ Information Literacy
- ▣ Computer Literacy

### 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