# CENTER FOR INNOVATIVE TECHNOLOGIES MASTER COURSE DOCUMENT

### **AMT 155 Airframe Assembly and Rigging**

**Course Description:** A course on balancing rigging, and inspecting primary and secondary flight controls of rotor and fixed wing aircraft.

Prerequisites(s): AMT 100, AMT 105, and MAT 122 Corequisite(s): No corequisite

Lecture Hours: 3	Lab Hours: 4		Credit Hours: 5	
Lab Fee: 200	Supplemental Fee: 0		Purpose:	
☐ Transfer Assurance Guide Course (TAG)		☐ Transfer Module Course (TM)		
Course Format: Lec/Lab		Grading: A/B/C/D/F/I		
Delivery Method: Classroom				
Semesters Offered: Summer - Days, Spring - Evenings				

### **Course Primary Text:**

Title: Aircraft Maintenance & Repair	Edition: 6th
Author(s): Kroes, Watkins, and Delp	
Publisher: Glencoe	

#### **Supplemental Materials:**

Advisory Circular (43.13-1B), U.S. Department of Transportation, Federal Aviation Administration

FAA 8083-31A, U.S. Department of Transportation, Federal Aviation Administration

#### **Course Outcomes:**

1	Students will label drawings to illustrate the three axis of rotation.
2	Students will label drawings to illustrate aerodynamic forces on an aircraft.
3	Students will check alignment of an airplane verifying gear, wing and empennage alignment.
4	Students will install a flight control surface on an airframe per manufacturer instructions.
5	Students will identify cables by diameter, type of cable, material and approximate tensile strength.
6	Students will splice aircraft flight control cable to specified length using two nicopress sleeves.
7	Students will move flight controls and label diagram to illustrate control and airplane response.
8	Students will inspect complete cable operated control system of a specific airplane.
9	Students will record results of a cable inspection in simulated aircraft maintenance records.
10	Students will describe and explain corrective action required to balance a flight control surface.

# CENTER FOR INNOVATIVE TECHNOLOGIES MASTER COURSE DOCUMENT

## **Course Topics:**

Course booklet with FAA approved practical projects and course lectures is located in the AMT Offices at the Cincinnati State West Campus.

#### **Methods of Evaluation/Assessment**

Tests
Quizzes
Lab Projects
Lab & Class Participation
Attendance

Course Keeper: Gary Goodpaster Date Completed: April 01, 2019