

## Master Syllabus

### AVT 1116 - Regulations for Maintenance

**Division:** Science, Mathematics and Engineering

**Department:** Aviation Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 2.0 **Lab Hrs:** 2.0

**Date Revised:** October 2012

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#### Course Description:

This course provides the aviation mechanic with critical knowledge in the following areas: FAA regulations, airworthiness directives, mechanics' privileges, legal aircraft record entries, maintenance publications, repair manuals, wiring diagrams, structural repair manuals, Air Transport Association (ATA) numbering system and human factors. Two classroom, two lab hours per week.

#### General Education Outcomes:

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

#### Course Outcomes:

##### Regulation Compliance

Demonstrate an understanding of federal and international regulations governing aircraft maintenance and documentation requirements as they relate to each area of expertise, such as weight and balance requirements and ground operations, and servicing of the aircraft including airworthiness directives and maintenance publications.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct responses on exams.

##### Principles of Aircraft Electrical Systems

Demonstrate basic knowledge of the operation of aircraft electrical power production and distribution systems; demonstrate basic knowledge of wiring diagrams, load analysis/math, troubleshooting, and repair.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct responses on exam.

##### Aircraft Structures

Demonstrate basic knowledge of the composition of materials, the forming of metallic and non-metallic structures used in aircraft construction, repair, materials and processes, corrosion control, inspection methods of those materials, and proper rigging.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct responses on exam.

#### Outline:

Indepth analysis of FAA regulations, parts 1, 13, 39, 43, 65, and 91  
Principles of aircraft electricity  
Aircraft structures