

Master Syllabus

AVT 2236 - Non-Metallic Structures

Division: Science, Mathematics and Engineering

Department: Aviation Technology

Credit Hour Total: 4.0

Lecture Hrs: 2.0 **Lab Hrs:** 6.0

Date Revised: October 2012

Course Description:

This course covers composites, different types of composite glass, wood structures, types of wood used in aircraft, defects in wood, proper repair of fabric and wood structures, types of fabrics used to cover aircraft structures, sewing, lacing and finishing, and the required inspection of fabrics on aircraft. Two classroom, six 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:

Composites

Demonstrate a knowledge of types of composites and their use in aircraft structures, inspection methods for composites, and finishes for composites.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Wood structures

Demonstrate a knowledge of types of wood used in aircraft, inspection, preparation, removal and repair of bad sections, wood glues used, and finish requirements for wood structures.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Fabric coverings

Demonstrate a knowledge of different types of fabric covering for aircraft structures, stitching for fabric structures, lacing around structures, preparation for shrinking, and finishing.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Outline:

Composites
Wood structures
Fabric coverings