

Master Syllabus

AVT 1136 - Sheet Metal

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:

Identification and selection of sheet metal types; inspection, cleaning, preparation, forming, layout, bending, cutting, dimpling, countersinking, drilling, installing special fasteners and rivets in sheet metal. Fabrication of sheet metal projects is required. 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:

Sheet metal types

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

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Forming, layout, and bending calculations

Demonstrate the proper calculations required for the forming and layout of parts for each type of sheet metal .

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Permanent and temporary fasteners

Demonstrate the ability to perform proper calculations for correct installation of permanent and temporary fasteners in aircraft structures; demonstrate the correct installation techniques of these fasteners.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Outline:

Sheet metal types and selection
Sheet metal forming, layout, and bending calculations
Permanent and temporary fasteners
FAA Advisory Circular 43-13-1A & 2B
Manufacturers' maintenance manuals
Sheet metal fabrication