

Master Syllabus

AVT 1213 - Corrosion

Division: Science, Mathematics and Engineering

Department: Aviation Technology

Credit Hour Total: 3.0

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

Date Revised: October 2013

Course Description:

Causes of corrosion, the chemical process, types of corrosion, locations susceptible to corrosion, detecting corrosion, removing and treating corrosion, cleaning of the interior and exterior of the airplane, polishing windshields and windows and paint removal and protection of bare surfaces. Two classroom, two 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:

Identification and treatment

Demonstrate indepth knowledge of types of corrosion, and the cleaning and treatment or removal of corrosion-affected parts.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exam

Cleaning processes

Demonstrate the ability to inspect for different types of corrosion, and to clean metal to prevent corrosion, clean or remove corrosion, and prepare metal.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exam

Damage repair process

Demonstrate knowledge of different repair processes for corrosion control on different types of metal such as sheet metal, stainless steel, and steel.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exam

Outline:

Corrosion identification and treatment
Correct cleaning processes
Corrosion damage repair process
Aircraft exterior types - metal, plastic, and composite
Aircraft windshield and passenger windows