

Master Syllabus

AVT 1214 - Cabin Atmospheric Control

Division: Science, Mathematics and Engineering

Department: Aviation Technology

Credit Hour Total: 2.0

Lecture Hrs: 1.0 **Lab Hrs:** 2.0

Date Revised: February 2014

Course Description:

Inspection, operation, troubleshooting, repair and service of the following items: heating, cooling, air conditioning, pressurization, air cycle machines and gaseous oxygen systems. One 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:

Pressurization systems

Demonstrate a basic knowledge of the requirements of different types of pressurization systems, and their repair, operation, removal and installation, corrosion control, and inspection methods of those systems.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exam

Air conditioning systems

Demonstrate knowledge of air conditioning systems, their operation, removal and installation, inspection for corrosion, troubleshooting, and repair.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exam

Heating systems

Demonstrate knowledge of different types of heating systems, and an understanding of federal regulations governing aircraft heating systems and their maintenance, removal, installation, and repair.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher correct responses on exam

Outline:

Oxygen system safety requirements
Tools for cleaning oxygen systems
Oxygen generators
Pressurization systems
Air conditioning systems
Heating systems