**I. COURSE TITLE:** Airframe Inspection

 **COURSE NUMBER:** 2244 **CATALOG PREFIX:** AVIT

**II. PREREQUISITE(S):**

**III. CREDIT HOURS:** 3 **LECTURE HOURS:** 2

 **LABORATORY HOURS:** 1 (2 contact) **OBSERVATION HOURS:**

**IV. COURSE DESCRIPTION:**

This course will introduce the student to the aircraft inspection process and programs. Students will open and inspect an aircraft following the prescribed 100 hr or annual inspection check. Students will write discrepancies found on aircraft on appropriate inspection paperwork. Students will perform necessary repairs to correct the discrepancies on aircraft inspected and return aircraft to an airworthy condition. The inspection process will be performed to conformity and airworthiness standards.

**V. ADOPTED TEXT(S):**

Jeppesen Maintenance

 A&P Technician

Airframe Textbook

**VI. COURSE OBJECTIVES:**

Students will be able to:

• Perform airframe conformity and airworthiness inspections (3)

 Objective levels:

Level 1 requires:

Knowledge of general principles, but no practical application.

No development of manipulative skill.

Instruction by lecture, demonstration, and discussion.

Level 2 requires:

Knowledge of general principles, and limited practical application.

Development of sufficient manipulative skill to perform basic operations. Instruction by lecture, demonstration, discussion, and limited practical application.

Level 3 requires:

Knowledge of general principles, and performance of a high degree of practical application.

Development of sufficient manipulative skills to simulate return to service.

Instruction by lecture, demonstration, discussion, and a high degree of practical application.

**VII. COURSE METHODOLOGY:**

May include but not limited to Lecture and problem solving, independent and group projects, in-class and home assignments, quizzes, and tests. Problem solving will use both graphical and mathematical methods.

Attendance is required.

**VIII. GRADING**

A= 90-100

 B= 80-89

 C= 70-79

 D= 60-69

 F= 0-59

Grades of 69 and below will not meet the requirements of the FAA for Mechanic

Certificate .

See catalog for description of other possible grades.

**IX. COURSE OUTLINE:**

Weeks:

1. Pre-flight inspections, FAR Part 91 required inspections, annual inspection.

2. 100-hour inspection, progressive inspection.

3. Large and turbine powered multi-engine aircraft inspections, conformity inspections.

4. Air carrier and air charter operations, Part 121 air carrier inspections.

5. Part 135 air charter inspections.

6. Special inspections, conditional inspections.

Test 1

7. Inspection fundamentals, inspection guidelines.

8. Inspection procedures, pre-inspection phase.

9. Maintenance records and aircraft specification review, service bulletins and letters, airworthiness directives.

10. Examination phase, service and repair phase.

11. Functional check phase, return-to-service phase.

Test 2

12. Maintenance record form and content.

13. Inspection record form and content.

14. Annual inspection entries, 100-hour inspection entries.

15. Progressive inspection and approved aircraft inspection program (AAIP) entries, airworthiness directive compliance entries.

16. Final exam

**X. OTHER REQUIRED TEXTS, SOFTWARE, AND MATERIALS:**

FAA AC-65-15A

Airframe and Powerplant Mechanics

Airframe Handbook

 FAA-AC-43.13-1B/2B

Acceptable methods, Techniques, and practices of aircraft inspection and Repair

**XI. EVALUATION:**

Test count – 40% of Final Grade

 Quizzes count – 10% of Final Grade

 Lab Grade counts – 50% of Final Grade

**XII. SPECIFIC MANAGEMENT REQUIREMENTS:**

Class and lab attendance is mandatory. Students are required to be in class and lab to satisfy the time requirement of the FAA. Quizzes cannot be made up. No test can be taken late without prior approval of the instructor.

**XIII. OTHER INFORMATION:**

**FERPA:** Students need to understand that your work may be seen by others. Others may see your work when being distributed, during group project work, or if it is chosen for demonstration purposes. Students also need to know that there is a strong possibility that your work may be submitted to other entities for the purpose of plagiarism checks.

**DISABILITIES:** Students with disabilities may contact the Disabilities Service Office, Central Campus, at 800-628-7722 or 937-393-3431.