**I. COURSE TITLE:** Aircraft Maintenance Publications and Regulations

**COURSE NUMBER:** 1121 **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 aircraft publications and regulations. The student will become familiar with the use of the aircraft manufacture maintenance and structural repair manuals and illustrated parts catalog. The student will learn basic drawing skills and will learn to read blue prints and wire schematics required to complete aircraft maintenance. The student will investigate the Federal Aviation Regulations, Airworthiness Directives and Advisory materials related to aircraft maintenance and paperwork required by the FAA.

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

Jeppesen Maintenance

A&P Technician

General Textbook

**VI. COURSE OBJECTIVES:**

Students will be able to:

• Use aircraft drawings, symbols, and system schematics (2)

• Draw sketches of repairs and alterations (3)

• Use blueprint information (3)

• Use graphs and charts (3)

• Demonstrate ability to read, comprehend, and apply information

contained in FAA and manufacturers' aircraft maintenance specifications,

data sheets, manuals, publications, and related Federal Aviation

Regulations, Airworthiness Directives, and Advisory materials (3)

• Read technical data (3)

• Exercise mechanic privileges within the limitations prescribed by part 65

of this chapter (3)

• Write descriptions of work performed including aircraft discrepancies

and corrective actions using typical aircraft maintenance records (3)

• Complete required maintenance forms, records, and inspection

reports (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 included but not limited to lecture and problems solving, group and lab projects, in-class and home assignments, quizzes and tests. Lab project will be individual and group. Attendance to class and lab 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. Detailed drawings, assembly drawings, installation drawings, section drawings.

2. Block diagrams, flow charts, wiring diagrams.

3. Orthographic projection, isometric drawings, oblique drawings, perspective drawings.

4. Drawing lines and their meaning, dimensioning.

5. Aircraft production drawings, basic sketching.

Test 1

6. Nomograms, wiring chart, break-horsepower charts, fuel consumption charts, horsepower-altitude charts.

7. FAA organization, maintenance FAR’s, Airworthiness Directives.

8. Repairs and alternations, preventive maintenance, inspection check list, annual inspections, progressive inspections, pito-static system checks, transponder checks, ELT’s, special inspections, recurring inspections.

9. Advisory circulars, type certificate data sheets, aircraft specifications, aircraft listings, supplemental type certificates.

10. ATA specifications, maintenance manuals, overall manuals, illustrated parts catalog, wiring manuals.

Test 2

11. Parts manufacturing approval, technical standard orders, real-time monitoring, trend analysis, computer records tracking.

12. Inspections forms, major repair and alteration form, malfunction or default report.

13. Airworthiness certificate, registration certificate, maintenance records, permanent records, temporary records, reconstructing records.

14. Maintenance record entries, inspection entries, unairworthy entries, repair station entries, AD records.

15. Eligibility requirements for technicians, Inspection Authorization, Repairman’s certificate, drug and alcohol testing, personal certificate records.

16. Final Exam.

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

FAA-H-8083-30

Aviation Maintenance Technician 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.