AMT A155: GENERAL BLUEPRINT READING & DRAFTING - FAA

Item	Value
Curriculum Committee Approval Date	12/08/2021
Top Code	095000 - Aeronautical and Aviation Technology
Units	2 Total Units
Hours	54 Total Hours (Lecture Hours 27; Lab Hours 27)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

Fundamental theory of aviation blueprints and drafting. Practical experience in blueprint reading, drawing, sketches of repairs, alterations, schematics, and varied uses of graphs and charts. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Demonstrate the ability to read and interpret drawings, wiring diagrams and engine performance charts.
2. Draw sketches of major repairs and alterations.

Course Objectives

- 1. Identify each kind of line as it appears in the drawings. He will interpret the meaning of the lines and they relate to surfaces and details of the part represented by the drawing.
- 2. Locate and interpret any dimension appearing on the drawing, including the application of any limits or tolerance to the dimension.
- 3. Locate, isolate and extract specific circuits from the wiring diagram. He will trace specifically identified circuits.
- 4. Recognize the symbols and interpret information pertaining to identification and location of components within the system.
- 5. Illustrate three sketches or drawings illustrating major repairs or alterations.
- 6. Interpret the information necessary to comply with the modification and will describe the procedure required to comply with the publication.
- 7. Interpret, and apply data obtained from an engine or aircraft performance chart.

Lecture Content

AIRCRAFT DRAWINGS Use drawings, symbols, and schematic diagrams Identify lines and symbols Interpret dimensions Interpret electrical system drawings Use installation diagrams and schematics Draw sketches of repairs and alterations Makes sketches Use blueprint information Read and interpret drawings Interpret installation diagrams Use graphs and charts Use manufacturers charts and graphs

Lab Content

Faculty input required.

Method(s) of Instruction

- Lecture (02)
- Lab (04)

Instructional Techniques

1. Detailed multimedia/lectures of each topic covered. 2. Student feedback during each lecture. 3. Detailed illustrative discussion of textbook examples. 4. Concentration on schematic reading and system operation fault diagnosis. 5 Practical troubleshooting. 6. Laboratory exercises pertaining to subjects discussed during which students work individually or in small groups.

Reading Assignments

.

Writing Assignments

Student must show proficiency in writing logbook entries using correct punctuation, sentence structure and readability.

Out-of-class Assignments

.

Demonstration of Critical Thinking

Interview, list, multiple choice exams, and short answer.

Required Writing, Problem Solving, Skills Demonstration

Student must show proficiency in writing logbook entries using correct punctuation, sentence structure and readability.

Textbooks Resources

1. Required Kroes, Michael J., and James R. Rardon. Aircraft Basic Science, 7th ed. New York: Glencoe/McGraw-Hill, 1993 Rationale: - 2. Required Jeppesen. AP Technician “GENERAL” Textbook, ed. Englewood: Jeppesen Sanderson, 2000 Rationale: latest