I. Course Number:  AERM 1241

II. Course Title: Wood, Fabric & Finishes

III. Instructional Time:

   Semester ------  2 hours  
   Lecture -------- 14 hours  
   Lab ----------- 42 hours  
   Final Test ------ 1 hour  
   Total Clock -- 57 hours

IV. Course Description:

   A course in the use and care of various covering materials, finishes, and wood structures including approved methods and procedures.

V. Course Learning Outcomes:

   Service and repair wood structures; identify wood defects; and inspect wood structures. Select and apply fabric and fiberglass covering materials; and inspect, test, and repair fabric and fiberglass. Apply trim, letters, and touch up paint; identify, select, and apply aircraft finishing materials; and inspect finishes and identify defects.

VI. Program Objectives:

   Level 1 A. Identify wood defects.

   Level 1 B. Service and repair wood structures.

   Level 1 C. Inspect wood structures.

   Level 1 D. Select and apply fabric and fiberglass covering materials.

   Level 1 E. Inspect, test, and repair fabric and fiberglass.

   Level 2 F. Identify and select aircraft finishing materials.

   Level 2 G. Apply finishing materials.

   Level 2 H. Inspect finishes and identify defects.

   Level 1 I. Apply trim, letters, and touchup paint.
VII. Practical Projects:

A. Research to identify wood defects.

B. Research maintenance of wood structures.

C. Research inspection of wood structures.


E. Research maintenance of fabric and fiberglass.

F. Simulate identification and selection of aircraft finishing materials.

G. Simulate finishing material application.

H. Simulate finish inspection and defect identification.

I. Research application of trim, letters, and touchup paint.

VIII. Teaching Methods:

To include lecture, discussion, audio/visual aids, computer based training, hand outs, and reference materials.

IX. Evaluation:

Evaluation methods for this course are as follows:

A. Quizzes: Informal quizzes may be administered periodically to measure student progress and to identify significant learning problems. The quiz type (multiple choice, oral, essay, etc.) and the frequency of administration shall be at the discretion of the instructor. Quiz grades are not used in computing course grades.

B. Practical Projects and Mid-term Tests: At the completion of instruction of an objective, the students performance will be evaluated by a knowledge test and/or a practical project. Mid-term tests grades are averaged with Practical Projects grades.

C. Final Examination: A final exam will be administered at the conclusion of the course and shall be comprehensive of the entire course.

D. Grading: A percentage grading system shall be used and the student's final grade shall be computed as follows:

Practical Projects and Mid-term Test 65%
Final Examination 35%

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E. Final percentage grades shall be converted to letter grades as follows:

- 90-100: A
- 80-89: B
- 70-79: C
- 60-69: D
- 59-0: F

X. Tools and Equipment:

Special tools and equipment required for this unit are to be furnished by Coastal Bend College. All hand tools, however, are to be furnished by the individual student and shall be immediately available to the student at the beginning of this course of instruction.

XI. Attendance Policy:

Refer to the Coastal Bend College Airframe & Power Technology Program attendance policy.

XII. Bibliography:

A. Required Text:

2. JS312624, Standard Aviation Maintenance Handbook, Jeppesen Sanderson, Inc.
3. JS312617, AC 43.13-1B/2A, Acceptable Methods, Techniques, and Practices, Aircraft Inspection and Repair, Department of Transportation, Federal Aviation Administration, Jeppesen Sanderson, Inc.

B. Supplementary Text:

4. JS312616, Federal Aviation Regulations Handbook for Aviation Maintenance Technicians, Jeppesen Sanderson, Inc.
7. JS312625, Aircraft Technical Dictionary, Jeppesen Sanderson, Inc.
8. Aircraft Manufacturers Specifications and/or Support Material.