Date: August 22, 2013
Revision: 000

COASTAL BEND COLLEGE
Airframe & Power Technology Program
Airframe Course Syllabus

I. Course Number: AERM 2233

II. Course Title: Assembly and Rigging

III. Instructional Time:

Semester ------ 2 hours
Lecture -------- 13 hours
Lab ---------- 52 hours
Final Test ----- 1 hour
Total Clock -- 66 hours

IV. Course Description:

An advanced course in assembly and rigging of fixed and rotary-wing aircraft.

V. Course Learning Outcomes:

Rig rotary-wing and fixed-wing aircraft; check alignment of structures; assemble aircraft components including flight control surfaces; balance, rig, and inspect movable primary and secondary flight control surfaces; and jack aircraft.

VI. Program Objectives:

Level 2 A. Rig fixed-wing aircraft.

Level 3 B. Assemble aircraft components, including flight control surfaces.

Level 2 C. Check alignment of structures.

Level 3 D. Balance, rig, and inspect movable primary and secondary flight control surfaces.

Level 3 E. Jack aircraft.

Level 1 F. Rig rotary-wing aircraft.

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VII. Practical Projects:

A. Simulate rigging of fixed-wing aircraft.

B. Perform aircraft components assembly, including flight control surfaces.

C. Simulate checking of symmetry and structural alignment.

D. Perform inspection, balancing, and rigging of movable primary and secondary control surfaces.

E. Perform jacking of aircraft.

F. Research rigging of rotary-wing aircraft.

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:

1. JS312692, **A&P Technician Airframe Textbook**, Jeppesen Sanderson, Inc.

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.

5. JS312693, **A&P Technician Airframe Test Guide**, Jeppesen Sanderson, Inc.

6. JS322711, **A&P Technician Airframe Workbook**, Jeppesen Sanderson, Inc.

7. JS312625, **Aircraft Technical Dictionary**, Jeppesen Sanderson, Inc.

8. Aircraft Manufacturers Specifications and/or Support Material.