

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 199130

UC TRANSFER:

Not Transferable

PREREQUISITES:

COREQUISITES:

STUDENT LEARNING OUTCOMES:

1. The student will be able to perform all calculations required by the FAA on the Commercial Pilot written exam; and be prepared to both pass that exam and the oral exam.

TOPICS AND SCOPE:

Inactive Course: 05/10/2010

Curriculum Approval Date: 03/07/1991

Please see course content that is attached to course outline which is located in the Instruction Office.

ASSIGNMENTS:

Assignments are included with course content.

COURSE OBJECTIVES:

1. Student will understand requirements for a commercial pilot's certificate, and the restrictions that apply to it. Will be able to explain basic aerodynamics pertinent to high performance aircraft, and analyze their effects and control requirements during flight.
2. Student will be able to explain and analyze control usage in the performance of commercial flight test maneuvers.
3. Student will be able to explain the difference between carbureted and fuel injected engines, and be able to analyze their operation and malfunctions; be able to explain the operation of a controllable pitch propeller, and how power is measured with manifold pressure; and be prepared for flight instruction in an aircraft with over 200 horsepower.
4. Student will be able to calculate cabin pressure vs. cabin differential pressure, and explain and troubleshoot landing gear systems.
5. Demonstrate competence in all material covered to date.
6. Student will be able to calculate takeoff and landing distance, climb performance, cruise speed and fuel consumption, and density altitude by using performance charts.
7. Student will be able to calculate weight and balance by 1) mathematical calculation, 2) graphic charts, and 3) tabulated data chart.
8. Be able to apply FAR to specific flight operations.
9. Student will be able to explain the differences between General Aviation regulations, Charter Regulations, and Air Carrier Regulations.
10. Demonstrate competence on material covered.
11. Student will be able to analyze weather patterns, and be

able to predict their impact on flight operations.

12. Be able to interpret and analyze printed and graphic weather reports and forecasts.

13. Student will be able to read and prepare a flight plan using WACS.

14. Student will understand how to use LORAN, inertial, and omega systems.

15. Student will demonstrate competence on material covered weeks 11-14, and be able to explain the adverse physiological factors affecting a pilot or passenger in flight.

16. Student will be able to explain the control of asymmetrical thrust, and analyze how to control it.

17. Student will be able to explain the management of multi engine aircraft systems, such as fuel crossfeeding, multiple generators, etc.

METHODS OF INSTRUCTION:

Lecture and demonstration

REPRESENTATIVE TEXTBOOKS:

Private Pilot Flight Manuals, Jeppesen-Sanderson

Federal Aviation Regulationss, Jeppesen-Sanderson

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: I

Noncredit Category: Y

Cooperative Education:

Program Status: 2 Stand-alone

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: AFT

CSU Crosswalk Course Number: 133

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: D

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000456041

Sports/Physical Education Course: N

Taxonomy of Program: 095000