APT A127: ADVANCED INSTRUMENT PILOT FLIGHT LAB

Item	Value
Curriculum Committee Approval Date	12/08/2021
Top Code	302020 - Piloting
Units	1 Total Units
Hours	54 Total Hours (Lab Hours 54)
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	Pass/No Pass (B)

Course Description

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Instrument Rating Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the addition of an Instrument Rating for the Private Pilot Certificate. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Performs within the tolerances for each flight maneuver required by in the Federal Aviation Administration (FAA) Practical Test Standards for Instrument Pilot Airplane.

Course Objectives

- 1. Demonstrate preflight planning to include performance data computations, weight and balance computations and cross country flight planning pertaining to instrument flight operations.
- 2. Conduct a preflight inspection of the aircraft in accordance with the aircraft manufacturers handbook.
- 3. Demonstrate knowledge of airport operations and traffic pattern procedures.
- 4. Perform instrument holding procedures, approaches, and instrument flying to the standards defined in the FAA Instrument Pilot Practical Test Standards.
- 5. Demonstrate the ability to perform emergency procedures in accordance with the aircraft manufacturers handbook.
- 6. Conduct aircraft post flight procedures.

Lecture Content

This is a lab only course.

Lab Content

Accumulate the following flight experience (FAR 61.65): 50 hr. of cross-country flight time as pilot in command, of which at least 10 hr. must be in airplanes: The 50 hr. includes solo cross-country time as a student pilot, which is logged as pilot-in-command time. Each cross-country must have a landing at an airport that was at least a straight-line distance of more than 50 NM from the original departure point. A total of 40 hr. of actual or simulated instrument time in the areas of operation listed in 7. below, including: 15 hr. of instrument flight training from a CFII (CFII is an instructor who is authorized to give instrument instruction) days preceding the practical test Cross-country flight procedures that include at least one cross-country flight in an airplane that is performed under IFR and consists of: A distance of at least 250 NM along airways or ATC-directed routing An instrument approach at each airport Three different kinds of approaches with the use of navigation systems

Method(s) of Instruction

- Lab (04)

Instructional Techniques

Equipment proficiency demonstrations.

Reading Assignments

Study text material relating to completion of flight plans and flight logs, weight and balance exercises and aircraft performance problems.

Writing Assignments

Completion of flight plans and flight logs, weight and balance exercises and aircraft performance problems.

Out-of-class Assignments

Lab-only courses (outside assignments are not required).

Demonstration of Critical Thinking

In flight problem solving exercises based on FAA Practical Test Standards for the Instrument Rating.

Required Writing, Problem Solving, Skills Demonstration

Completion of flight plans and flight logs, weight and balance exercises and aircraft performance problems.

Eligible Disciplines

Aviation (flight, navigation, ground school, air traffic control): Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Other Resources

1. Instructor handouts: E-6B Flight Computer, Course Plotter, Los Angeles IFR Sectional Chart