Degree Applicable

Glendale Community College
March 2013

COURSE OUTLINE

Aviation and Transportation 113
Private Pilot Laboratory II

I. Catalog Statement

Aviation and Transportation 113 is a flight training laboratory course intended to complete the student's preparation for the Federal Aviation Administration Private Pilot Certificate Oral and Practical Tests. Topics covered include: night flying techniques, short and soft field takeoffs and landings, navigation, emergency procedures, power on/off stalls, s-turns across a road, turns around a point, and instrument flight procedures.

Total Lecture Units: 0.0
Total Laboratory Units: 3.0
Total Course Units: 3.0

Total Lecture Hours: 0.0
Total Laboratory Hours: 144.0
Total Faculty Contact Hours: 144

Prerequisite: AT 112 or equivalent

II. Course Entry Expectations

Skills Level Ranges: Reading 5; Writing 5; Listening/Speaking 5; Math 1.

Prior to enrolling in the course, the student should be able to:

1. obtain a Federal Aviation Administration Student Pilot Certificate;
2. safely complete a first supervised solo flight.

III. Course Exit Standards

Upon successful completion of required coursework, the student will be able to:

1. use basic flight instruments in both dual and solo flight maneuvers;
2. demonstrate pre-flight procedures;
3. design and file a flight plan;
4. assess the effects of weather on a flight plan;
5. calculate cross wind takeoffs and landings;
6. demonstrate short field takeoffs and landings;
7. demonstrate soft field takeoffs and landings;
8. analyze and evaluate safety procedures for normal and emergency landings;
9. prepare a flight log;

10. pass the Federal Aviation Administration Private Pilot Certificate Oral and Practical Tests.

IV. <u>Course Content</u> **Total Faculty Contact Hours = 144**

A. Basic Instrument Review-Dual 5 hours
1. Climbs
2. Steep turns
3. Descents
4. Straight-and-level
5. Slow flight
6. Stalls
7. Unusual attitude recovery
8. VOR interception and tracking
9. ASR approaches (emergency procedure)

B. Proficiency Maneuvers Review-Dual 10 hours
1. Navigating to and from the practice area
2. Slow flight
3. Stalls (power-on, power-off, accelerated)
4. S-turns across a road
5. Turns around a point
6. Rectangular patterns
7. Emergencies and emergency landings
8. Review of instrument flying fundamentals
9. Return to airport and proper pattern entries

C. Proficiency Maneuvers 10 hours
1. Slow flight
2. Stalls
3. S-turns across a road
4. Turns around a point
5. Rectangular patterns
6. Normal and cross wind takeoffs and landings

D. Specialized Takeoffs and Landings-Dual 10 hours
1. Cross wind takeoffs and landings (review)
2. Short field takeoffs and landings
3. Soft field takeoffs and landings

E. Specialized Takeoffs and Landings-Solo 10 hours
1. Cross wind takeoffs and landings
2. Short field takeoffs and landings
3. Soft field takeoffs and landings

F. Night Flying-Dual 10 hours
1. Review of night flight physiology and aircraft/airport lighting
2. Night pre-flight inspections
3. Night taxi procedures
4. Night takeoffs and landings

5. Night navigation and night emergency procedures

G. Cross Country Flight-Dual (WHP-IYK-WHP) 10 hours
1. Review planning
2. Weather briefing review
3. Flight plan procedures
4. Use of pilotage and dead reckoning
5. Unfamiliar airport recognition and orientation

H. Cross Country Flight-Dual (WHP-SBA-WHP) 10 hours
1. Review planning/flight log preparation
2. Weather briefing review
3. Flight plan procedures
4. Use of pilotage, dead reckoning, and radio navigation
5. Unfamiliar airport recognition and orientation

I. Cross Country Flight-Solo (WHP-SBA-WHP) 10 hours
1. Review planning/flight log
2. Weather briefing review
3. Flight plan review
4. Solo cross country flight
5. Debrief of flight

J. Cross Country Flight-Solo (WHP-IYK-WHP) 10 hours
1. Review planning/flight log
2. Weather briefing review
3. Flight plan review
4. Solo cross country flight
5. Debrief of flight

K. Night Cross Country Flight-Dual (WHP-CRQ-WHP) 10 hours
1. Review planning/flight log preparation
2. Weather briefing review
3. Flight plan procedures
4. Use of pilotage, dead reckoning, and radio navigation
5. Unfamiliar airport recognition and orientation

L. Cross Country Flight-Solo (WHP-SBA-SBP-WHP) 10 hours
1. Review planning/flight log
2. Weather briefing review
3. Flight plan review
4. Solo cross country flight
5. Debrief of flight

M. Proficiency Maneuvers Review (Check Ride Preparation)-Dual 8 hours
1. Navigating to and from the practice area
2. Slow flight
3. Stalls (power-on, power-off, accelerated)
4. S-turns across a road

5. Turns around a point
6. Rectangular patterns
7. Emergencies and emergency landings
8. Review of instrument flying fundamentals

N. Specialized Takeoffs and Landings (Check Ride Preparation)-Dual 8 hours
1. Cross wind takeoffs and landings (review)
2. Short field takeoffs and landings
3. Soft field takeoffs and landings

O. Solo Practice as Directed by Instructor-Solo 5 hours

P. Simulated Check Ride-Dual (Check Airman Instructor) 8 hours
1. Pre-flight procedures
2. Starting, taxi, and run-up procedures
3. Normal takeoff and landing
4. Short field takeoff and landing
5. Soft field takeoff and landing
6. Simulated emergency landing
7. Slips
8. Go-arounds
9. Steep turns
10. S-turns across a road
11. Turns around a point
12. Slow flight
13. Stalls (power-on, power-off, accelerated)
14. Basic instrument flying
15. Recovery from unusual attitudes in simulated IMC

V. Methods of Instruction

The following instructional methodologies may be used in the course:
1. classroom lecture and demonstration;
2. flight lessons in airplane;
3. student observation of flight lesson in airplane;
4. student practice in airplane.

VI. Out of Class Assignments

The following out of class assignments may be used in this course:
1. homework reading assignments;
2. laboratory notebook assignments and daily journal.

VII. Methods of Evaluation

The following methods of evaluation may be used in this course:
1. written examinations following each module;

2. successful completion of FAA private pilot certificate examination.
3. Take off and landings utilizing area airports.

VIII. Textbook

ASA. Private Pilot for Airplane Single Engine Etc. 2002.
10th Grade Reading Level ISBN: 9781560274629

Hayes, Michael D. Private Oral Exam Guide [9th Edition]. Newcastle, WA: Aviation Supplies Academics, 2009.
10th Grade Reading Level ISBN: 9781560277231

Jeppesen, Elroy Borge. Private Pilot (FAA Practice Test Study Guide) (JA312404-010. East Englewood, CO: Jeppesen Sanderson, Inc, 2006.
10th Grade Reading Level ISBN: 9780884874287

Pratt, Jeremy. CESSNA 172. Newcastle, WA: Aviation Publishing.
10th Grade Reading Level ISBN: 9781560272113

IX. Student Learning Outcomes

1. Student will plan and prepare for long distance flight.
2. Student will demonstrate knowledge of emergency routines and simulate an emergency landing.
3. Student will demonstrate all maneuvers required to fly across country.
4. Student will pass the Federal Aviation Administration Private Pilot Certificate Oral and Practical Tests.