



MASTER COURSE OUTLINE

Prepared By: Gregory Crane

Date: January 2014

COURSE TITLE

Commercial Pilot (Stage 4)

GENERAL COURSE INFORMATION

Dept.: AVF

Course Num: 251

(Formerly:)

CIP Code: 49.0102

Intent Code: 21

Program Code:

Credits: 4

Total Contact Hrs Per Qtr.: 44

Lecture Hrs: 44

Lab Hrs:

Other Hrs:

Distribution Designation: General Elective (GE)

COURSE DESCRIPTION (as it will appear in the catalog)

Scheduled flight time, ground critique, discussion and observation time, dual, solo, cross-country, and instrument, and complex aircraft time. Includes simulator time.

PREREQUISITES

AVF 143

TEXTBOOK GUIDELINES

Aircraft Flight Manual for B19 and C23 by Beechcraft

Airplane Flying Handbook by FAA, FAA-H-8083-D

Professional Pilot Course Handbook by Big Bend Community College

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills:

1. Perform all basic VFR operations, including navigation required for the commercial pilot certificate safely, accurately and within practical test standard guidelines. Commercial maneuvers: Lazy eights, chandelles, steep spirals and steep turns should be safe and recognizable.

INSTITUTIONAL OUTCOMES

IO2 **Quantitative Reasoning:** Students will be able to reason mathematically

COURSE CONTENT OUTLINE

LESSON 1: INTRODUCTION LAZY 8'S AND CHANDELLES

Objective: The student shall become familiar with lazy-8's and chandelles.

LESSON 2: LAZY 8'S AND CHANDELLES PRACTICE

Objective: The student shall become more proficient in performing lazy-8's and chandelles.

LESSON 3: DAY VFR CROSS-COUNTRY INTRODUCTION TO GPS (100+ NM)

Objective: The student shall be introduced to GPS Navigation and fly a cross-country of at least 2.0 hours duration and at least 100 NM straight-line distance from the original departure point.

LESSON 4: PRACTICE LAZY 8'S, CHANDELLES, AND STEEP TURNS

Objective: The student shall become more proficient in performing chandelles, steep turns, and lazy 8's.

LESSON 5: PRACTICE ASSIGNED MANEUVERS

Objective: The student shall practice those maneuvers assigned by the instructor.

LESSON 6: CROSS-COUNTRY

Objective: The student shall complete a cross-country solo in a triangular pattern, including two strange airports.

LESSON 7: COMMERCIAL MANEUVERS REVIEW

Objective: The student shall review maneuvers and practice those that have been troublesome.

LESSON 7A: ALTERNATE

Objective: familiarize the student with seaplane operating procedures.

LESSON 7B: ALTERNATE

Objective: familiarize the student with helicopter operating procedures.

LESSON 7C: ALTERNATE

Objective: Familiarize the student with tail wheeling operating procedures.

LESSON 8: PRACTICE OF ASSIGNED MANEUVERS

Objective: The student shall review previous maneuvers and shall practice landings and takeoffs.

LESSON 9: SIMULATOR REVIEW OF BASIC INSTRUMENTS

Objective: The student shall continue to improve proficiency in basic instrument control of the aircraft.

LESSON 10: CROSS-COUNTRY SOLO

Objective: The student shall complete a cross-country solo in a triangular pattern, including two or more strange airports.

LESSON 11: VOR/GPS INTERCEPTS, AND USE OF INSTRUMENTS

Objective: The student shall demonstrate reasonable proficiency in all assigned maneuvers and shall perform VOR and GPS intercepts.

LESSON 12: BASIC INSTRUMENTS AND INTRODUCTION TO PARTIAL PANEL

Objective: The student shall show increased proficiency in basic instrument control of the aircraft and shall acquire the ability to control the aircraft under instrument conditions without the use of either the attitude gyro or the directional gyro.

LESSON 13: CROSS-COUNTRY SOLO FLIGHTS

Objective: The student shall complete three cross-country flights using various means of navigation, including landings at two strange airports. (If appropriate, student may count each 50 NM leg as a separate cross-country.)

LESSON 14: SIMULATOR REVIEW OF BASIC INSTRUMENTS AND UNUSUAL ATTITUDES

Objective: The student shall review basic instrument flight, both full and partial panel and will further his/her understanding in recovery from unusual attitudes.

LESSON 15: PRACTICE ASSIGNED MANEUVERS

Objective: The student shall review previously learned maneuvers, especially landings and takeoffs.

LESSON 16: SIMULATOR VOR NAVIGATION, AND ORIENTATION

Objective: The student shall become more proficient in the use of the VOR and ADF.

LESSON 17: NAVIGATION

Objective: The student shall review all cross-country procedures in preparation for the stage check.

LESSON 18: STAGE 4 FLIGHT CHECK

Objective: The student shall plan and conduct a cross-country flight, including diversion to alternate airport, revising flight log, making position reports, and obtaining en route weather updates.

INSTRUCTIONS FOR STAGE 4 FLIGHT CHECK

The student should meet with the assigned check pilot the day before the flight to obtain cross-country destination airport.

INSTRUCTIONS FOR STAGE 4 FLIGHT CHECK

The student should plan to demonstrate any maneuver previously performed. Particular attention will be paid to commercial maneuvers, VOR intercepts, ADF position determination, and landings

DEPARTMENTAL GUIDELINES *(optional)*

Evaluation is by in flight demonstration of proficiency and completion of home assignments.

Grading:

Satisfactory performance of **in-flight** maneuvers, procedures and at least 70% on home assignments _____ Pass

Unsatisfactory performance of **in-flight** maneuvers and procedures or less than 70% on home assignment _____ Fail.

DIVISION CHAIR APPROVAL

DATE