

Pacific Union College
Aviation Program
Course Outline

Advanced Instrument Flight Training

AVIA 277

4 Quarter Hours Credit

2005-2006

Course Objectives

1. Complete Lesson 1-11 of the PUC Instrument Training Course.
2. Complete the Instrument Pilot Stage Check I
3. To gain a knowledge of instrument flying principles.
4. To gain a knowledge of aviation weather theory and the interpretation and application of Weather Reports and Forecasts.
5. To obtain a basic knowledge of the Federal Airspace system and the Regulations which pertain to the Instrument Flight Rules.
6. To master the skills of instrument navigation by VOR, NDB, ILS and GPS approach and departure systems.

Required Materials

1. PUC Instrument Pilot Kit
2. Instrument pilot registration form on file.
3. FAA Class 2 (Class 3 for non-majors) Medical Certificate.
4. Original birth certificate or unexpired passport.
5. Flight computer.
6. Plotter

Course Requirements

1. Meet all flight lessons.
2. Complete all homework assignments.
3. Have available all required items such as plotter, computer, Textbook and Test Booklet.
4. To pass the AVIA 276 Stage I Check

Time

Flight lessons and ground (G) lessons will be arranged with the instructor and as aircraft availability permits.

Reference Material

Instrument Commercial Manual by JEPPESEN
FAA Instrument flying handbook. FAA-H-8083-15
Instrument Rating Practical Test Standards.
Sporty's Complete Flight Training Instrument Course.(DVD)

Course Progression

In order to complete this course within the quarter you register for it, please ensure that you have completed each lesson according to the following schedule.

Quarterly Schedule	AVIA 277
Week 1	12
Week 2	13 – FTD
Week 3	14 -- FTD
Week 4	15 -- FTD
Week 5	17, 18
Week 6	19, 20 -- FTD
Week 7	21, 22
Week 8	22, review
Week 9	24, stage 2 check
Week 10	Instrument check ride

Attendance

Regular attendance, coupled with clear communication, is vital to your success in this course and in your career. If circumstances require you to be absent, you must make arrangements with your instructor 24 hours prior to the appointment you will miss. **Any unexcused absences or tardiness may result in reduction of the grade in this course** at the discretion of your instructor in consultation with the Chief Flight Instructor.

Grading System

The flight training grade will be based on performance during the stage check. The rubric for grading is constructed so that boxes can be checked for the points given for that particular maneuver or task. This point value will then be totaled and using the possible points available, a percentage can be calculated and converted into a letter grade for the quarter. The following percentages would equal the letter grade.

- 95%-100% = A
- 90%-94% = A-
- 87%-89% = B+
- 84%-86% = B
- 80%-83% = B-
- 77%-79% = C+
- 74%-76% = C
- 70%-73% = C-
- 67%-69% = D+
- 64%-66% = D
- 60%-63% = D-
- 0%-59% = F

There are 20 check items and at 5 points each there is a total of 100 points possible. The total points earned/100 = the letter grade for the quarter. The Stage I Check and the Flight Training Log determines the grade for the quarter. The Flight Training Log must total a score of no lower than 70% to be acceptable.

The grading criteria for the flight maneuvers are listed below the Objective Criteria. These maneuvers have completion standards as specified by the FAA and since they are numerical they lend themselves well to an objective evaluation. For example, if the altitude stays within plus or minus 25 feet of the altitude (see steep turns standards) where the steep turn was entered for the entire 360 degree turn, 5 points are given. Stage check items that are subjective are evaluated on how well the student performs them or knows the subject material. They are then given a point value by the Chief Flight Instructor or Assistant Chief Flight Instructor during the stage check. Tasks without measurable objectives will be graded by the instructor based on knowledge of the subject matter, accuracy, control and smoothness of the tasks.

There is 1 stage check at the end of the quarter. The quarter's grade is a combination of the stage check points combined with the points earned in the flight training log. The flight training log earned points are added to the stage check earned points and divided by the total number of possible points. Only points 3 and above will count in the flight training log. 2's, 1's and 0's will equal 0 points when applied toward the total points for the class grade. The training log points added to the stage check points divided by the total points possible will give a percentage of points earned and these will be converted to a letter grade shown above in the syllabus. The stage check and the flight training log are equally weighted. 50% of the grade is stage check and 50% of the grade is flight training log. This balance will protect the good student from getting a low stage check score if the student was having an off day. Flight conditions for the day will be taken into consideration during the stage check.

In-Progress Grades

You are expected to meet the requirements of this course during the quarter in which you register for it. If, however, due to unforeseen circumstances, you are unable to meet the requirements during that timeframe, you may fill out an application for an In-Progress (IP) grade. If approved, you will have **one additional quarter** to complete the course requirements. After this extra quarter, you will be assigned a grade of F.

Pacific Union College
AVIA 276 – Instrument Flight Training
Stage 1 Check Grade Sheet

Name _____

Date ___ / ___ / ___

	5	4	3	2	1	0
Instrument cockpit check						
ATC clearances						
Clearance compliances						
Hold procedures						
Straight & level flight						
Change of airspeed						
Constant speed climb & descent						
Rate climbs and descents						
Magnetic Compass turns						
Steep turns						
Unusual attitudes						
Intercept / VOR's						
Non precision approaches						
Precision approaches						
Missed approach						
Non precision/AP						
Missed w/ auto P.						
Circling approach						
Land straight in						
Lost communications						
No gyro approach						
Instruments check						

Objective Criteria

(as specified in the FAA Instrument Rating PTS)

ALTITUDES	+/- 10'	5
	+/- 25'	4
	+/- 100'	3
	more than 100'	0

HEADINGS	+/- 2 degrees	5
	+/- 5 degrees	4
	+/- 10 degrees	3
	more than 10 degrees	0

AIRSPEEDS	+/- 5 knots	5
	+/- 10 knots	3
	more than 10 knots	0

STEEP TURNS	+/- 5 degrees	5
	+/- 10 degrees	3
	more than 10 degrees	0

TRACKING VORs ,HEADINGS & COURSES.

+/- 2 degrees	5
+/- 5 degrees	4
+/- 10 degrees	3
more than 10 degrees	0