

MASTER COURSE OUTLINE

Prepared By: Gregory Crane Date: December 2013

COURSE TITLE

INSTRUMENT GROUND SCHOOL

GENERAL COURSE INFORMATION

Dept.: AVF Course Num: 223 (Formerly:)
CIP Code: 49.0102 Intent Code: 21 Program Code:

Credits: 5

Total Contact Hrs Per Qtr.: 55

Lecture Hrs: 55 Lab Hrs: Other Hrs:

Distribution Designation: General Elective (GE)

COURSE DESCRIPTION (as it will appear in the catalog)

Preparation for FAA instrument knowledge examination, includes: FARs that apply to IFR; appropriate sections of AIM; air traffic control system and procedures; IFR navigation systems and instruments; use of en route and instrument approach charts, aircraft operations under IFR; procurement and use of aviation weather reports and forecasts, recognition of critical weather situations and wind shear avoidance, ADM and judgment, and CR.

PREREQUISITES

AVF 113 & AVF 114

TEXTBOOK GUIDELINES

Instrument Flying Handbook – FAA-8083-15 FAR/AIM

COURSE LEARNING OUTCOMES

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

- 1. Develop understanding of instrument flight rules, ATC procedures, navigation concepts, and equipment.
- 2. Establish proficiency in IFR chart interpretation and use.

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

- 1. Applicable Federal Aviation Regulations for IFR flight operations;
- 2. Appropriate information in the "Aeronautical Information Manual";
- 3. Air traffic control system and procedures for instrument flight operations;
- 4. IFR navigation and approaches by use of navigation systems;
- 5. Use of IFR en route and instrument approach procedure charts;
- 6. Procurement and use of aviation weather reports and forecasts, and the elements of forecasting weather trends on the basis of that information and personal observation of weather conditions;
- 7. Safe and efficient operation of aircraft under instrument flight rules and conditions;

- 8. Recognition of critical weather situations and windshear avoidance;
- 9. Aeronautical decision making and judgment; and
- 10. Crew resource management, to include crew communication and coordination.

DEPARTMENTAL GUIDELINES (optional)

DIVISION CHAIR APPROVAL

The student shall demonstrate sufficient mastery of the principles of instrument flight as indicated by classroom participation, tests, and a final examination score of at least 70%. Grades will be earned according to the following numerical system. Note *70% is lowest passing grade.

98-100%	4.0	90%	3.2	82%	2.4	74%	1.5
97%	3.9	89%	3.1	81%	2.3	73%	1.3
96%	3.8	88%	3.0	80%	2.2	72%	1.1
95%	3.7	87%	2.9	79%	2.1	71%	.9
94%	3.6	86%	2.8	78%	2.0	70%	.7
93%	3.5	85%	2.7	77%	1.9		
92%	3.4	84%	2.6	76%	1.8		
91%	3.3	83%	2.5	75%	1.7		

DATE