

AERO 51 Course Outline as of Spring 2011**CATALOG INFORMATION**

Dept and Nbr: AERO 51 Title: INSTRUMENT RATING GRD SC

Full Title: Instrument Rating Ground School Course

Last Reviewed: 5/14/2007

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

Catalog Description:

Federation Aviation Administration (FAA) Part 141 approved course. Principles of instrument flight including the operation, use, and limitations of flight instruments and instrument navigation systems. Students will also learn how the air traffic control system functions and the use of instrument flight charts for IFR planning and flight. Emphasis will be placed on advanced human factors and physiological factors directly related to instrument flight. Also covers Federal Aviation Regulations (FAR) applicable to instrument flight operation. The student will obtain the necessary aeronautical knowledge and meet the prerequisites specified in FAR Part 61 and Part 141 for an instrument rating airmen knowledge test.

Prerequisites/Corequisites:

Completion of AERO 50 or equivalent or possession of private pilot certificate.

Recommended Preparation:**Limits on Enrollment:****Schedule of Classes Information:**

Description: Principles of instrument flight, including the operation, use, and limitations of flight

instruments and instrument navigation systems. The student will obtain the necessary aeronautical knowledge and meet the prerequisites specified in Federal Aviation Regulations (FAR) Part 61 and PART 141 for and instrument rating airmen knowledge test. (Grade or P/NP) Prerequisites/Corequisites: Completion of AERO 50 or equivalent or possession of private pilot certificate.

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer:		Effective:	Inactive:
UC Transfer:		Effective:	Inactive:

CID:

Certificate/Major Applicable:

Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:

Upon completion of this course, the student will be able to:

1. Demonstrate familiarity with instrument/commercial training, opportunities in aviation, human factors, and private pilot privileges.
2. Explain the principles of instrument flight, including the operation, use, and limitations of flight instruments and instrument navigation systems.
3. Describe how the air traffic control system functions and explain how to use instrument flight charts for IFR planning and flight.
4. Demonstrate familiarity with the FARs applicable to instrument flight operations.
5. Explain procedures used to execute the various IFR approaches as well as the procedure for IFR departure, enroute, and arrival operations.
6. Analyze weather information, conditions, and trends while on the ground and in flight.
7. Describe IFR flight planning and emergency procedures and demonstrate a greater understanding of the decision-making process.

Topics and Scope:

Assignment:

1. Reading: 15 - 25 pages per week.
2. Complete chapter questions for each chapter.
3. STAGE I, II, and III EXAMS.
4. End-of-course exam. (Student must achieve a score of 70% or better to obtain FAA endorsement to qualify to take the required FAA aeronautical knowledge test.)

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing
0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Chapter questions.

Problem solving
5 - 10%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations
0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, Completion

Exams
80 - 90%

Other: Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation

Other Category
5 - 10%

Representative Textbooks and Materials:

Guided Flight Discovery Instrument Commercial textbook, by Jeppesen Sanderson Training Products, Jeppesen Sanderson, current year.

Instrument Commercial Syllabus, by Jeppesen Sanderson Training Products, Jeppesen Sanderson, current year.

Instrument Pilot FAA Airmen Knowledge Test Guide, Jeppesen Sanderson, current year.

U.S. Govt. Publications current year: Aeronautical Information Manual FARs (Federal Aviation Regulations).