

San Jose State University
Department of Aviation & Technology
College of Engineering

Aviation 62-01: Instrument Flight Techniques
Section 01 Code 47572 Lecture - Units 3

Course Outline – Fall 2018

Lecture:	Room IS 133	Time: M 09:00am – 10:45am
Lecturer:	Victoria Collom	E-mail: vecollom@gmail.com
Office hours:	Office IS 133: M 10:45 – 11:15am (or upon request)	Telephone: 408-234-3951 text only
Prerequisite:	AVIA 02	
Required Texts:	Instrument Commercial, Guided Flight Discovery. Jeppesen Edition 2016 FAR/AIM 2018 or website (reference) Prep test - Sample <u>Written</u> Test questions (reference)	

Course Description: Flight procedures, radio navigation, air traffic control, use of instrument charts. Flight simulator exercises on instrument flight maneuvers, departure and approach procedures.

Course Content: AVIA 62 is designed to introduce the student to flight operations and the management procedures in the instrument environment. Included subjects are instrument flight concepts, the use of navigation systems, familiarization with the published materials for use in flight planning and operations, air traffic procedures, and the National Airspace System. The course places emphasis on integrating resources to optimize safety and efficiency in instrument flight operations.

Course Objective: The objectives of the course are for the student to:

1. become familiar with the instrument flight environment
2. be able to solve problems within the instrument flight environment
3. gain insight into the role of the pilot as a flight manager, and
4. understand the need for standardization of instrument flight procedures.

Grading Policy: The final grade will be calculated by the following distribution:

Class Assignments and quizzes	25%
Midterm Exams (2):	25%
Research Project:	25 %
Final Exam:	25 %

Class Procedure:

Each week's activities include one lecture, one three-hour laboratory period with associated assignments.

Lecture: Lectures will emphasize subject analysis, reinforce the reading, and introduce additional topics not found in the reading assignments. Reading assignments must be completed prior to the scheduled lecture.

Laboratory: Lab periods will cover practical applications of instrument flight, simulator practice procedures, and other instrument flight subjects.

Individual Simulator Sessions: Each student is required to complete three one-hour session in the simulator each week. The student should study that week's assignment prior to the lab scheduled time by watching a prior session. Additional 2 hours of lab time may be necessary to complete and practice the assignment outside of class on the appropriate simulator. The student's success will depend, to a great degree, upon how well he/she manages his/her simulator time.

Grading and Attendance Policy:

The total of the final grade will be based upon the following factors:

Quizzes and Worksheets	20%
Lab Reports	20%
Research Project – written/lab	20%
Midterm examinations (2)	20%
Final Examination	20%

The final grade will be determined by the following scale:

A: 90-100% B: 80-89% C: 70-79% D: 60-69% F: below 60%

- **Missing an in-class examination or assignment due date will result in a grade of zero.** Only exceptions will be documented illness/injury or a significant personal event. When possible, arrangements must be made **before** the assigned date.
- Written work will be submitted with proper grammatical syntax and spelling. This will be considered in the final grade evaluation.

University, College, or Department Policy Information

Academic integrity statement (from Office of Student Conduct and Ethical Development):

“Your own commitment to learning, as evidenced by your enrollment at San José State University, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Conduct and Ethical Development.

The policy on academic integrity can be found at http://sa.sjsu.edu/student_conduct

Campus policy in compliance with the Americans with Disabilities Act:

“If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with DRC to establish a record of their disability.”

AVIATION 062 - FALL 2018
LECTURE –SCHEDULE

Week	Weekly Date	Lecture	Text:	Testing
1	08-27-18	Introduction to Lecture, lab processes VFR Private Pilot Review Introduction to Aircraft Systems Attitude Instrument flying	ICM 1A, 2A: AIM 7-2-1 thru 5 FAR 91.411, FAR 413	
2	09-03-18	Monday – Holiday (09/05 & 06 - NBAA conference)		
3	09-10-18	VOR Navigation, DME, RNP	ICM 2C AIM 1-1-1 thru 1-1-8	Quiz 1 Wk 1
4	09-17-18	Other Navigation Systems RNAV, ADF, GPS Navigation	ICM 2C AIM 1-1-2 thru 1-1-8e, 1-1-10g AIM 1-2-1 thru 1-2-4	Quiz 2 Wk 3
5	09-24-18	Introduction into Flight Environment	ICM 3 AIM Chapter 2 Section 1,2, 3 AIM 5-1-1 thru 5-1-13,15 FAR Part 91: 103,167,169,173, 177	Quiz 3 Wk 4
6	10-01-18	Midterm 1: Weeks 1 – 5 Safety of Flight (lecture)	ICM 10 AIM Chapter 7: Section 2,3,4,5, 6	
7	10-08-18	Departure Charts and Procedures	ICM 4 A, B. AIM 5-2-1 thru 5-2-8	Quiz 4 Wk 6
8	10-15-18	Arrival, Approach Procedures	ICM 6 A,B AIM 5-4-1 thru 5-4-27	Quiz 5 Wk 7
9	10-22-18	Enroute Charts – Jeppesen & NOS	ICM 5 A AIM 5-3-1 thru 5-3-8	Quiz 6 Wk 8
10	10-29-18	Enroute Procedures Emergency Procedures	ICM 5B AIM Chapter 6	Quiz 7 Wk 9
11	11-05-18	Midterm 2: Weeks 6 - 10 Holding Procedures (lecture)	ICM 5C AIM 5-3-7 thru 5-3-8	
12	11-12-18	Monday - Holiday		
13	11-19-18	Instrument Approaches/ Navigation	ICM 8A,B,C AIM 5-5-1 thru 5-5-16	Quiz 8 Wk 11
14	11-26 -18	Instrument Rating: Aircraft & Airman Currency, Human Factors,	ICM 1A, ICM 1B FAR Part 61: 3,5,23,51,57,65 FAR Part 91: 3,7,9,203,205,215,405, 409,	Quiz 9 Wk 13
15	12-03-18	Meteorology	ICM 9 A,B,C,D,E AIM 7-1-1 thru 7-1-30	Quiz 10 Wk14
16	12-10-18	IFR Cross Country Due Last Day of Instruction	FAR review	
	12-12-18	FINAL EXAM	Wednesday Dec 12 th 0715 - 930	EARLY!