

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

**Aviation 02: Introduction to Aviation**  
**Section 01 Code 23048 Lecture - Units 3**

**Course Outline – Spring 2018**

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<b>Lecture:</b>	Room IS 216	<b>Time:</b> MW 0900am – 10:15am
<b>Lecturer:</b>	Victoria Collom	<b>E-mail:</b> <a href="mailto:vecollom@gmail.com">vecollom@gmail.com</a> * <a href="mailto:victoria.collom@sjsu.edu">victoria.collom@sjsu.edu</a>
<b>Office hours:</b>	Office IS 216/108: MW 0815-0900am	<b>Telephone:</b> 408-234-3951 (email first)
<b>Prerequisite:</b>	Desire to excel academically with integrity and honesty.	
<b>Required Texts:</b>	Jeppesen Private Pilot Manual, 5 <sup>th</sup> Edition 2015 FAR/AIM Manual. Current SFO Aeronautical Sectional E6B computer and Plotter Gleim or ASA Private Pilot Test questions ( optional) FAA websites and resources	
<b>Course Description:</b>	Concepts, responsibilities, and professional ethics of an aviation professional. History of aviation, FAA certification, qualifications and privileges of aviation professionals. Career opportunities, career paths and progression.	
<b>Course Content:</b>	This is an introductory course for all future aviation studies at San Jose State University. A broad spectrum of aviation information will be provided in a relatively short time frame. Reference will be made to examples in the real world of flight training along with theoretical knowledge that may only be obtained by careful analysis of the reading materials. The course is designed to introduce the student to many of aviation basics such as the subject of aerodynamics, basic laws of physics, aviation weather, aircraft and engine performance, navigation, pilots physiology and limitations, and safety of flight. Related subjects will include Air Traffic Control systems, the National Airspace System, weight and balance, federal aviation regulations and the role of the NTSB. The student will be introduced to navigation techniques such as pilotage, dead reckoning, radio navigation and technically advanced aircraft systems. Aviation history, issues pertaining to the aviation professional and career path planning will be introduced. Flight simulators will be part of the curriculum.	
<b>Course Objective:</b>	With successful completion of course materials, the student will be able to: <ol style="list-style-type: none"><li>1. Understand the fundamental forces and principles of flight.</li><li>2. Identify the major systems, structures, and performance parameters of an airplane</li><li>3. Understand the importance of weather and identify local weather phenomena that impact aviation.</li><li>4. Learn to recognize the human factors that affect pilot aviation safety for safe decision-making.</li></ol>	

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

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

The final grade will be determined by the following scale:

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

- 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. This will be considered in the final grade evaluation including written test work

Please note: This course is designed to introduce subject material that student will require to become a safe Private Pilot as well as the foundation for all future pilot certificates. If a score of 80% or higher is achieved on the final, the student will receive an endorsement to take the Private Pilot written within a thirty day time period. This course will require extensive textbook reading & review before each class. Thus before class starts, students are expected to be prepared to actively engage in the class assignment. Therefore, **class attendance is essential** to obtain the maximum benefit of the course.

### **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://www.sjsu.edu/studentconduct/facultyandstaff/Academic\\_Integrity/index.html](http://www.sjsu.edu/studentconduct/facultyandstaff/Academic_Integrity/index.html)

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 02 – SPRING 2018  
CLASS SCHEDULE**

Week	Date	Lecture	Text:	Schedule
1	01-24-18	Introduction: Past and Future of General Aviation		NBAA Website
2	01-29-18	DISCOVERING AVIATION- Pilot Training, Aviation Opportunities, Human Factors, Aviation Physiology	Chapter 1 A, B, C; Chapter 10, A, B	
3	02-05-18	AIRPLANE SYSTEMS- Airplanes, Power Plant & Related Systems, Flight Instrument	Chapter 2 A, B, C	Quiz 1 - W
4	02-12-18	AERODYNAMIC PRINCIPLES - Four Forces of Flight, Aerodynamics of Maneuvering Flight, Stability	Chapter 3 A, B, C	Quiz 2-W
5	02-19-18	THE FLIGHT ENVIRONMENT - Collision Avoidance, Airports, Aeronautical Charts, Airspace	Chapter 4 A, B, C, D	Midterm I-W
6	02-26-18	FEDERAL AVIATION REGULATIONS - FAR's Part 1,61,91,135, NTSB 830	FAR/AIM	Quiz 3-W
7	03-05-18	COMMUNICATIONS & FLIGHT INFORMATION - Radar & ATC Services, Radio Communications, Sources of Flight Information/FAA Airport Directory	Chapter 5 A, B, C, AIM	Quiz 4-W
8	03-12-18	METEOROLOGY FOR PILOTS- Basic Weather Theory, Weather Patterns, Weather Hazards	Chapter 6 A, B, C	Quiz 5 -W
9	03-19-18	INTERPRETING WEATHER DATA- The Forecasting Process, Printed Reports and Forecasts, Graphic Weather Products	Chapter 7 A, B, C, D	Midterm II-W
10	03-26-18	SPRING BREAK		
11	04-02-18	AIRPLANE PERFORMANCE Predicting Performance, Weight & Balance, Flight Computers E6B & plotter	Chapter 8 A, B, C, D	
12	04-09-18	NAVIGATION - Pilotage & Dead Reckoning, VOR Navigation, ADF Navigation, Advanced Navigation	Chapter 9 A, B, C	Quiz 6-W
13	04-16-18	INTEGRATING PILOT KNOWLEDGE & SKILLS - Aeronautical Decision Making, Cross County Navigation skills & Project	Chapter 10 B, Chapter 11 A	E6B & plotter, SFO chart
14	04-30-18	Introduction to Simulators – Cross Country		Simulator
16	05-07-18	Cross Country Project		Simulator
17	05-14-18	<b>Cross Country Project Due- Last day of instruction - Review</b>		
	05-22-18	Tuesday - FINAL EXAM		0715-0930