

**COLLEGE OF SAN MATEO
AERO 100 PRIVATE PILOT GROUND SCHOOL
COURSE INFORMATION (Fall 2009)**

GENERAL COURSE INFORMATION (25 August 2009)

Course/Section:	AERO 100
Class Hours:	Tuesday 7:00 - 9:50 PM, 3 semester units
Class Location:	College of San Mateo Bldg 16, Room 209
Instructor:	Godfrey D. Watson
Web Site:	http://www.smccd.edu/accounts/watson/
Phone(s):	(650) 574-6482 office / messages (650) 726-1958 home (650) 504-1890 cell
Office Hours:	Bldg 12-82G (or sometimes at classroom) before and after class. Questions anytime via phone and e-mail.

COURSE DESCRIPTION

AERO 100 is designed to prepare the student for the FAA Private **Airplane** Pilot written exam. All subject areas in which an applicant for the Private Pilot Airplane certification may be tested are covered in this course. Although this course is intended to primarily cover the necessary subjects for the Federal Aviation Agency written Exam, the subject material goes beyond the bare necessities.

REQUIRED TEXT AND MATERIALS

TEXTBOOKS: *ASA Test Prep Private Pilot (and FAA Computer Testing Supplement)*
Pilot's Handbook of Aeronautical Knowledge
(http://www.faa.gov/library/manuals/aviation/pilot_handbook/)

SUPPLIES: Navigation flight computer (E6B type)
Navigation plotter (and No. 2 pencil and eraser)
Dallas-Ft. Worth Sectional Chart

Electronic calculators are acceptable for all tests (they are not required).

SCOPE OF COURSE:

As per Test Prep Guide— Basic Aerodynamics, Aircraft Systems, Flight Instruments, Federal Aviation Regulations, Procedures and Airport Operations, Aviation Weather (Wx), Aviation Weather Services, Airplane Performance (Weight and Balance, etc.), Enroute Flight (Navigation, Charts, Airspace, Computer), Navigation Systems, Communication Procedures, Preparation for FAA Written.

TESTS AND READING ASSIGNMENTS:

HOMEWORK: Reading assignments will not be formally given. Students are expected to:

- 1) Study chapters in Private Pilot Test Prep
- 2) Take Practice Test for the chapter (note missed questions)
- 3) Reference the material in Private Pilot Handbook as needed
- 4) Review missed practice test questions, weak knowledge areas

- TESTS / QUIZZES:** At beginning of class after completion of each chapter, plus final exam. Make-up tests are available with prior arrangement with instructor. You will have opportunity to re-take test for higher grade upon request.
- ATTENDANCE:** Attendance is critical! If you miss more than two (2) classes, you will find it hard to keep up; poor performance on tests may result. Good attendance will result in passing grade.
- GRADING:** Final grade will be the average of all test including final exam or your final exam score, whichever is higher. Your final exam will be graded upon completion. The Final and Course Grade will be given immediately.

FEDERAL AVIATION ADMINISTRATION PRIVATE PILOT WRITTEN TEST:

1. Authorization is required before taking the Private Pilot Written Test.
2. If you make 80 or better on the final exam, I will provide immediate written authorization.
3. If you make less than 80, I will provide a review and retest for your authorization.
4. I suggest you take the FAA written as soon as possible after receiving authorization.

STUDENT LEARNING OUTCOME (SLO):

The primary goal of this course is to prepare the student for the FAA Private Airplane Pilot written exam. In doing so, all subject matter required by Federal Aviation Agency curriculum (14 CFR Part 61) will be covered in the 51 lecture hours provided by this course. Upon successful completion of this course, the students will be able to:

1. Pass the FAA Private Pilot Written Exam for Airplane (PAR).
2. Pass FAA Recreational Pilot Written Exam for Airplane (RPA) via additional self study.
3. Use the <http://www.faa.gov/> website to locate education, research, and regulatory information.
4. Demonstrate appropriate knowledge and ability in the following subject areas
 - **Basic Aerodynamics** (How airplanes fly, turn, and stall. Forces acting on aircraft and stability)
 - Aircraft Systems (Engines, ignition, electrical, fuel, propeller, preflight inspection)
 - Fight Instruments (Airspeed, Altimeter, Gyroscopic principles, Magnetic Compass, and others)
 - **Regulations** (Pilot certification requirements, responsibilities, flight rules, accident reporting)
 - Procedures and Airport Operations (ground and traffic pattern procedures, collision avoidance)
 - **Weather** (basic understanding of wind, clouds, turbulence, thunderstorms, wind shear, fog, ice).
 - **Weather Services** (know available services, interpret aviation weather reports and forecasts)
 - Aircraft Performance (determine aircraft weight and balance, takeoff, and landing distance)
 - **Airspace** (know how to identify various airspace areas and operating rules within them)
 - Enroute Flight (read navigation charts, locate airports, understand symbols and geography)
 - Computer (perform calculations and conversions with E6-B Flight computer)
 - Cross country plotting and planning (plot a cross-country trip with times, directions, and fuel)
 - Radio Navigation (Understand use of radio navigation instruments)
 - Communication Procedures (Know how to talk to controller and other procedures)
 - Aeromedical Factors and Aeronautical Decision Making
5. Be better prepared for flight training or flight proficiency review (although ground training is not required before flight training is started, this course will better prepare students for flight training).