Last Updated
Spring 1998

**SAN BERNARDINO VALLEY COLLEGE**
**COURSE OUTLINE**

## I. CATALOG DESCRIPTION:

AERO 125: FLIGHT SAFETY
2 hours Lecture = 2 units

Provides an in-depth study of flight safety, including flight safety records, aircraft accident prevention, casual cause factors, agencies and organization contributing to flight safety, pilot and command responsibilities and liability and litigation.
Prerequisite(s): None

## II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: One

## III. EXPECTED OUTCOMES FOR STUDENTS:

After completing this course, student will be able to:

A. Define flight safety terms;
B. Identify agencies and organization contributing to flight safety and explain their functions;
C. Identify pilot and passenger responsibilities relative to flight safety;
D. Explain appropriate emergency radio procedures;
E. Use pilot resources/references to determine all information necessary to insure the safety of a cross country flight;
F. Describe appropriate and safe ground operation of aircraft;
G. List and explain mid-air collision avoidance procedures;
H. Identify hazardous weather conditions;
I. Compile a complete survival kit appropriate to use in a light aircraft;
J. Identify and explain medical factors effecting pilot performance;
K. Explain required accident reporting procedures;
L. Describe key factors in aircraft accident investigation; and
M. Identify accident investigation procedures.

## IV. CONTENT:

A. DEFINITIONS AND ORGANIZATIONS:
   1. Flight safety terminology
   2. Organizations contributing to aviation safety

B. PILOT/ PASSENGER RESPONSIBILITIES:
   1. Pilot in Command
   2. What the passenger should know

C. EMERGENCY RADIO PROCEDURES:

1. Frequencies/communications
2. Emergency locator transmitters
3. D.F. steers

D. USING PILOT RESOURCES:
1. FAR's
2. AIM's
3. Airport facilities directory
4. Navigation charts

E. GROUND SAFETY:
1. Ground handling
2. Flight line safety
3. Wake turbulence
4. Re-fueling safety

F. MID-AIR COLLISIONS:
1. Scanning the sky
2. Mid-air collision avoidance

G. WEATHER/NIGHT FLIGHT:
1. Hazardous weather
2. Night flight hazards
3. Density altitude
4. Mountain flying

H. SURVIVING EMERGENCIES
1. Survival kits
2. Emergency procedures
3. Over water flight
4. Flammability
5. CPR

I. MEDICAL FACTORS
1. Hypoxia
2. Hyperventilation
3. Vertigo
4. Vision
5. Motion sickness
6. Carbon monoxide poisoning
7. Drugs
8. Alcohol
9. Human factors

J. CRASH INVESTIGATION/LIABILITY
A. Investigating agencies
B. Methods of investigation
C. Negligence
D. Litigation

## V. METHODS OF INSTRUCTION:

A. Lecture;

B. Discussion between teacher and students plus discussion between individual students; and

C. Written homework assigned each week from the question and problems that follow each chapter.

## VI. TYPICAL ASSIGNMENT:

A. Plan a flight from the San Bernardino International Airport to Henderson Field, south of Las Vegas Nevada

B. Prepare a survival kit from articles you possess at home and bring the kit to class with your flight plan.

## VII. EVALUATIONS:

Methods of Evaluation
A. Timely Quizzes;
B. Mid-term exam;
C. Final exam;
D. Practical evaluations
Typical test question
a. What is the percentage of Nitrogen in the atmosphere?
b. Describe the system of hypoxia.

## VIII. TYPICAL TEXT(S):

Title: All course materials provided by the FAA
Author: Dept. of Trans
Publisher: FAA
Date of Publication: 1998

**IX. OTHER SUPPLIES REQUIRED OF STUDENTS:** None