

**SAN BERNARDINO VALLEY COLLEGE  
COURSE OUTLINE**

**I. CATALOG DESCRIPTION**

AERO 134: CIVIL AVIATION MANAGEMENT AND LAWS  
3 hours lecture = 3 units

This history of civil aviation in the United States including federal legislation; international treaties and agreements relevant to civil aviation; and regulations pertaining to the management of airports and airplane companies.

Prerequisite(s): None

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

**III. EXPECTED OUTCOMES FOR STUDENTS:**

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

- A. Identify major legislation relative to civil aviation from 1911 to the present;
- B. Explain the structure and function of the National Airspace System;
- C. Describe the operation of the National Airport Systems;
- D. Identify past and current technological developments and trends in civil aviation;
- E. Describe characteristics and classifications of U.S. air carriers;
- F. Identify and describe facets of the general aviation industry; and
- G. Describe the structure and services of the air cargo industry.

**IV. CONTENT:**

- A. INTRODUCTION TO CIVIL AVIATION:
  - 1. Importance of Civil Aviation
  - 2. Aviation Terminology
  - 3. Aviation Organizations
- B. HISTORICAL DEVELOPMENTS IN CIVIL AVIATION:
  - 1. Developments prior to 1938
  - 2. Developments between 1938 and 1958
  - 3. Developments between 1958 and 1978
  - 4. Developments after deregulation
- C. THE NATIONAL AIRSPACE SYSTEM:

1. Airspace structure and airways
2. Air traffic services
3. Air traffic control facilities
4. Users

D. THE AIRPORT SYSTEM:

1. Review of government policy
2. The national airport system
3. Airport facilities, system components, and configurations.
4. Economic and financial operations
5. Capacity enhancement and delay reduction
6. Airport master planning

E. THE AERNAUTICAL VEHICLE:

1. Basic airplane components
2. Fundamentals of aerodynamics
3. Flight dynamics
4. Technology trends and human factors
5. Production and marketing of civil airplanes

F. AIR CARRIERS:

1. General characteristics and industry structure
2. Major carriers
3. National carriers
4. Regional/commuter carriers
5. New entrants

G. GENERAL AVIATION:

1. Development and general characteristics
2. Fixed-based operators
3. Corporate aviation
4. Foreign competition

H. INTERNATIONAL AIR TRANSPORTATION:

1. The regulatory framework
2. International tariffs
3. International carriers

I. THE AIR CARGO INDUSTRY:

1. The airfreight market
2. Industry structure and services
3. Intermodal competition
4. The total distribution cost concept
5. Rate structure and pricing policies
6. Infrastructure considerations

**V. METHODS OF INSTRUCTION:**

- A. Lecture and classroom demonstrations;

- B. Blackboard illustrations;
- C. Class group discussions; and
- D. Field trips to airports and other aviation facilities.

#### **VI. TYPICAL ASSIGNMENTS:**

- A. Give a hypothetical fleet of airplanes, demonstrate the ability to schedule those airplanes into a flight schedule which accommodate the passenger flights and the maintenance requirements of the fleet.
- B. Perform a weight and balance check of a loaded airplane to determine proper aerodynamic balance and weight limits.

#### **VII. EVALUATIONS:**

- A. Methods of Evaluation:
  - 1. True and False testing;
  - 2. Multiple choice type testing;
  - 3. Completion type tests; and
  - 4. Matching type tests.
  - 5. Short EssayTypical Questions:
  - a. What is the meaning of the term “seat mile revenue”?
  - b. Name the 5 “Freedoms of the Air” discussed at the 1919 Paris Conference
- B. Frequency of Evaluation:
  - 1. Weekly assignments and quizzes.
  - 2. One mid-term examination.
  - 3. One final examination.

#### **VIII. TYPICAL TEXT(S)**

Title: Introduction to Civil Aviation 1st or 2nd Edition  
Author: Taneja Newal K  
Publisher: Lexington Books  
Date of Publication: 1987 or subsequent

#### **IX. OTHER SUPPLIES REQUIRED OF STUDENTS:**

Required Supplemental Materials: None