

CATALOG INFORMATION

Dept and Nbr: AERO 52L      Title: AIRPLANE PILOT ADV  
Full Title: Airplane Pilot Advanced Course, Lab/Lecture  
Last Reviewed: 5/8/1998

| Units   |      | Course Hours per Week |      | Nbr of Weeks | Course Hours Total |       |
|---------|------|-----------------------|------|--------------|--------------------|-------|
| Maximum | 2.00 | Lecture Scheduled     | 1.00 | 17.5         | Lecture Scheduled  | 17.50 |
| Minimum | 2.00 | Lab Scheduled         | 3.00 | 17.5         | Lab Scheduled      | 52.50 |
|         |      | Contact DHR           | 0    |              | Contact DHR        | 0     |
|         |      | Contact Total         | 4.00 |              | Contact Total      | 70.00 |
|         |      | Non-contact DHR       | 0    |              | Non-contact DHR    | 0     |

Total Out of Class Hours: 35.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable  
Grading: Grade or P/NP  
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP  
Also Listed As:  
Formerly:

**Catalog Description:**  
Expansion of the material presented in Aeronautics 52. Emphasis on practical application of the subject matter through student use of aircraft simulators and audio visual aids.

**Prerequisites/Corequisites:**

**Recommended Preparation:**  
Course Completion or Concurrent Enrollment in AERO 52

**Limits on Enrollment:**

**Schedule of Classes Information:**  
Description: Recomm: Enrollment in Aero 52 & completion of Aero 50L or possession of equiv FAA Certificate or rating, Elig. Eng. 100A. Expansion of the material presented in Aero 52. (Grade or P/NP)  
Prerequisites/Corequisites:  
Recommended: Course Completion or Concurrent Enrollment in AERO 52  
Limits on Enrollment:  
Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

|                   |                      |                   |                  |
|-------------------|----------------------|-------------------|------------------|
| <b>AS Degree:</b> | <b>Area</b>          | <b>Effective:</b> | <b>Inactive:</b> |
| <b>CSU GE:</b>    | <b>Transfer Area</b> | <b>Effective:</b> | <b>Inactive:</b> |

|               |                      |                   |                  |
|---------------|----------------------|-------------------|------------------|
| <b>IGETC:</b> | <b>Transfer Area</b> | <b>Effective:</b> | <b>Inactive:</b> |
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| <b>CSU Transfer:</b> | <b>Effective:</b> | <b>Inactive:</b> |
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| <b>UC Transfer:</b> | <b>Effective:</b> | <b>Inactive:</b> |
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**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Successful completion of this course will provide the student with the academic skills necessary to act as a commercial pilot in aircraft. The course is designed to meet the certification requirements set forth in the FAR, parts 61 and 141 for aeronautical knowledge and flight operation skills for the commercial pilot.

Phase I: 28 hrs, Attitude Instrument Flying

Objective:

To develop commercial level aeromedical knowledge.

To develop commercial level piloting skills.

To enhance student performance based on aerodynamic and aeromedical principles.

To further develop student skill in instrument scanning techniques.

Content:

Physiological factors for pilots

Instrument calibration and scan

Four fundamentals of flight

Attitude instrument flying

Outcomes:

A written exam along with a simulator exercise will be completed by the student demonstrating comprehension of principles of aerodynamics and attitude instrument flying to commercial standards.

Phase II: 28 hours, Commercial Flight Operations

Objective:

To obtain and analyze pertinent UA information.

To exhibit accurate knowledge of the normal operating procedures and limitations of aircraft systems.

To demonstrate proficient use of performance drafts.

To plan near maximum range VER cross country flight.

Content:

Aircraft Flight Operations

Aircraft Systems Considerations  
Weather Services - Review and Interpretation  
Performance Charts and Limitations  
Cross Country Flight Planning

**Outcomes:**

Student will complete written exam along with maximum range VFR flight plan, demonstrating skills in aeromedical factors, aerodynamics, weather theory and services, and aircraft performance to commercial standards.

Phase III: 8 hrs Airplane Advanced Course, Final Exam Review

**Objective:**

To review Phases I and II course content as preparation for final exam.

**Outcome:**

All questions included in the final course exam are answered and the course final test must be passed with a 70/% or higher score.

**Topics and Scope:**

- I. Attitude Instrument Flying
  - A. Physiological Factors for Pilots
  - B. Instrument Calibration and Scan
  - C. Four Fundamentals of Flight
  - D. Attitude Instrument Flying
- II. Commercial Flight Operations
  - A. Aircraft Flight Operations
  - B. Aircraft Systems Considerations
  - C. Weather Services - Review and Interpretation
  - D. Performance Charts and Limitations
  - E. Cross Country Flight Planning
- III. Airplane Advanced Course - Final Exam Review

**Assignment:**

Weekly reading and homework assignments.

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

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| Written homework |
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| Writing<br>10 - 15% |
|---------------------|

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

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|-----------------------------------|
| Homework problems, Quizzes, Exams |
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|                             |
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| Problem solving<br>10 - 15% |
|-----------------------------|

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

|  |                                  |
|--|----------------------------------|
| Class performances, Performance exams  | Skill Demonstrations<br>10 - 15% |
| <b>Exams:</b> All forms of formal testing, other than skill performance exams.                   |                                  |
| Multiple choice, True/false, Matching items, Completion  | Exams<br>60 - 75%                |
| <b>Other:</b> Includes any assessment tools that do not logically fit into the above categories. |                                  |
| None   | Other Category<br>0 - 0%         |

**Representative Textbooks and Materials:**  
 The Flight Training Handbook, U.S. Govt. Pub., 1980, AC61-21A, U.S. Govt:  
 Aeronautical Information Manual, Current Year, F.A.R.s Current Year, and  
 Pilots' Handbook of Aeronautical Knowledge, U.S. Govt. Pub., AC61-23B.