

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

Transfer course A.A. degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: AERONAUTICAL SCIENCES 115
Air Traffic Control

UNIT VALUE: 3

MINIMUM NUMBER OF SEMESTER HOURS: 48

BASIC SKILLS REQUIREMENTS:

Appropriate language and computational skills.

ENTRANCE REQUIREMENTS

PREREQUISITE: Aeronautical Sciences 105

COREQUISITE: None.

RECOMMENDED PREPARATION: None.

SCOPE OF COURSE:

The national airspace system and the handling of air traffic within this area. Emphasis is placed on the operation of Federal Aviation Administration controlling agencies.

SPECIFIC COURSE OBJECTIVES:

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

1. explain the duties/responsibilities of each of the facilities within the F.A.A.'s air traffic control system.
2. apply principles learned to describe how the facilities work with one another and with the pilot.
3. discuss/demonstrate proper communications phraseology.
4. explain the handling of VFR traffic by air traffic control.
5. explain the handling of IFR traffic by air traffic control

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. INTRODUCTION
 - A. Terms of Reference
 - B. Application of Air Traffic Control Service

- C. Abbreviations
- II. GENERAL CONTROL
 - A. General
 - B. Weather Information
 - C. Navaid Use Limitations
 - D. Reporting Essential Flight Information
 - E. Radio and Interphone Communications
 - F. Route and Navaid Description
 - G. Altimeter Settings
 - H. Flight Plans and Control Information
 - I. Flight Progress Strips
- III. AIRPORT TRAFFIC CONTROL-VFR
 - A. General
 - B. Visual Signals
 - C. Airport Conditions
 - D. Runway Use
 - E. Taxi and Ground Movement Procedures
 - F. Departure Procedures
 - G. Arrival Procedures
 - H. Airport Lighting
 - I. Runway Visibility
 - J. Spacing and Sequencing
 - K. Departure Separation
 - L. Arrival Separation
 - M. Helicopter Separation
 - N. Special VFR Helicopter Separation
- IV. WAKE TURBULENCE
 - A. General
 - B. Radar Separation
 - C. Nonradar Separation-Terminal
 - D. Cautionary Advisory
- V. EMERGENCIES
 - A. General
 - B. Emergency Assistance
 - C. Control Actions
 - D. Direction Finder Service
 - E. Miscellaneous Operations
 - F. Ground Missile Emergencies

REQUIRED READING:

F.A.A. Air Traffic Control. 7110.65L ed. Washington, D.C.:
United States Government Printing Office, 1998.

SUGGESTED READING:

F.A.A. Airman's Information Manual. 2000 ed. Washington, D.C.:
United States Government Printing Office, 2000.

F.A.A. Federal Aviation Regulations, Parts 65 & 91. Washington,
D.C.: United States Government Printing Office, 1999.

REQUIRED WRITING:

Short paper (2-4 pages) assigned on an individual basis. Topic to be one of the areas listed under the "Content in terms of specific body of knowledge".

OUTSIDE ASSIGNMENTS:

Field trips to FAA Facilities (Tower, Flight Service Station, and Approach Control), or an independent visit to same, or a research paper (describing the duties and responsibilities of the facility visited) if unable to make trips. Reading and study of the textbook as assigned in class.

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply.

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

Three tests will be given. Tests will be true/false, multiple choice, and fill in. The short paper will count as one test.

3 Tests = 75%
 Paper = 25%

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes ___ No X Number of times course may be taken for credit: 1

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable:

CONTACT PERSON:

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SIGNATURES:

SIGNATURES ON FILE

