



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

LAST REVIEW: 2008-2009
2007--2008)

NEXT REVIEW: 2013-2014

STATUS: A
A

COURSE TITLE: Environment of the Air Traffic Controller

COMMON COURSE NUMBER: ATT 1810

CREDIT HOURS: 3

CONTACT HOUR BREAKDOWN
(per 16 week term)

CLOCK HOURS:
(Voc. Course ONLY)

Lecture: **48** Lab:
Clinic: Other:

PREREQUISITE(S):

COREQUISITE(S): ATT 2820, ATT1100 & ASC1100

PRE/COREQUISITE(S):

COURSE DESCRIPTION :

This course provides an understanding of the Air Traffic Controller’s mission and working environment. This course presents a candid view of the Air Traffic Controller’s language, tools and profession.

General Education Requirements – Associate of Arts Degree (AA), meets Area(s): Area
General Education Requirements – Associate in Science Degree (AS), meets Area(s): Area
General Education Requirements – Associate in Applied Science Degree (AAS), meets Area(s): Area

UNIT TITLES

- 1. Overview of the ATC System and National Airspace**
- 2. Overview of Orders and Manuals used in the FAA**
- 3. Overview of tower cab**
- 4. Overview of Radar Environment both terminal and center**
- 5. Overview on how to study and manage your time to become an effective Air Traffic Controller**
- 6. Visit a Tower, Approach control, Enroute center, and interview an Air Traffic Controller to get a more personal side of the profession**
- 7. Overview of the Psychological and Sociological affects of Air Traffic Controllers and the stress that is caused everyday in the work environment**
- 8. Overview of geography in relations to The Air Traffic Control Airspace**
- 9. Teamwork in the Air Traffic Environment**



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EVALUATION:

Students will be assessed on the course outcomes through written and/or oral quizzes and exams along with special projects and/or presentations.



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UNITS

Unit 1: Overview of the ATC System and National Airspace

General Outcome:

- 1.0 *In accordance with Order 7110.65, 7210.3, AC-61-27, and the AIM, the student shall identify the following concepts: Elements of the National Airspace System (NAS) and the Role of the Traffic Management System (TMS) within the NAS*

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 1.1 Discuss the elements of the National Airspace System (NAS)
- 1.2 Explain the role of the Traffic Management System (TMS) within the NAS



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Unit 2: Overview of Orders and Manuals used in the FAA

General Outcome:

- 2.0 *In accordance with FAA Air Traffic Control Publication Orders 7110.10, 7110.65, 7210.3, 7340.1, 7350.7 and the Aeronautical Information Manual (AIM), the student shall be able to identify the purpose and organization of each order and manual.*

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 2.1 **Demonstrate an understanding of and have a good working knowledge of FAA Orders and Regulations**
- 2.2 **Explain and demonstrate a good working knowledge of 7110.65 and be able to identify where to find different important topics related to the operation**
- 2.3 **Discuss and demonstrate a good working knowledge of important acronyms used in Air Traffic Control facilities**



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Unit 3: Overview of Tower Cab

General Outcome:

- 3.0 *In accordance with the FAA Tower Cab information, the student shall be able to identify Tower Cab basics and basic elements in a Tower Cab, and be able to understand how the equipment is used to assist the Air Traffic Controller*

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 3.1 **Demonstrate an understanding of the basic elements of a Tower Cab through identification**
- 3.2 **Explain the functions of the equipment as used to assist the Air Traffic Controller**



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Unit 4: Overview of the Radar Environment of both Terminal and Center

General Outcome:

- 4.0 *In accordance with FAA radar centers, and terminal radar* the student shall be able to identify basic elements in the radar environment and to understand how the equipment is used to assist the Air Traffic Controller.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 4.1 Discuss and identify the basic elements of the radar environment
- 4.2 Explain how the equipment is used in assisting the Air Traffic Controller



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Unit 5: Overview of Time Management

General Outcome:

- 5.0 The student shall learn how to manage time to become an effective Air Traffic Controller.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 5.1 Discuss proven techniques developed by Stephen Covey**
- 5.2 Demonstrate study techniques enabling student to learn and assess large amounts of information.**



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Unit 6: Field visits: Tower, Approach control, Enroute center and interview of an Air Traffic Controller

General Outcome:

- 6.0 The student shall gain first-hand experience and familiarization of various Air Traffic control positions.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 6.1 Discuss and explain a visit to a VFR Tower outlining duty details
- 6.2 Demonstrate an understanding of a visit to a TRACON facility and discuss its functions
- 6.3 Outline details of a visit to an Air Traffic control center and its functions
- 6.4 Demonstrate knowledge of a CPC Air Traffic Controller through and interview culminating in a written report of the controller's functions



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Unit 7: Overview of the Psychological and Sociological affects of Air Traffic Controllers and the stress that is caused everyday in the work environment

General Outcome:

- 7.0 The student shall learn the effects on the body from shift work and prolonged stress the Air Traffic Controllers environment produces.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 7.1 Discuss the effects of stress upon the human body
- 7.2 Explain examples of stressful controller situations
- 7.3 Understand and discuss the latest research from the FAA Office of Aerospace Medicine Civil Aerospace Medical Institute (CAMI)
- 7.4 Explain the human factors of the profession



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Unit 8: Overview of Geography

General Outcome:

- 8.0 The student shall be able to have a good working knowledge of major airports in the United States, South America, Europe and various Caribbean airports in relation to South Florida and Air Traffic Control Airspace**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 8.1 Identify and locate the geographical location of all major airports in the United States in relation to South Florida.**
- 8.2 Identify and locate the geographical location of all major airports in South America**
- 8.3 Identify and locate the geographical location of all major airports in Europe**
- 8.4 Identify and locate the geographical location of all major airports in the Caribbean in relation to South Florida**



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Unit 9: Teamwork

General Outcome:

- 9.0 The student shall be able to demonstrate the importance of teamwork in the Air Traffic Environment.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 9.1 Discuss elements affecting team performance**
- 9.2 Explain the characteristics of an effective team**
- 9.3 Discuss various stages of group development**