

Common Course Outline
AVMT 221
The Air Traffic Control System
3 Credits

Community College of Baltimore County

Description

AVMT 221 - The Air Traffic Control System is a comprehensive overview of Air Traffic Control (ATC) responsibilities and functions. Topics include the history, development, and structure of the Federal Aviation Administration, the national airspace system, air traffic control procedures, integrated navigation systems, terminal and en route control, flight service, flight safety, and weather facilities.

3 Credits

Prerequisites: AVMT 101 and AVMT 141 or approval of the Program Coordinator.

Overall Course Objectives

Upon completion of this course students will be able to:

1. describe the major historical events that led to the current air traffic control system in the US;
2. describe the ways in which the air traffic information is disseminated;
3. summarize air traffic control communications methods and techniques;
4. identify the key features of weather forecasting, observation, and reporting;
5. explain the duties and actions performed by air traffic personnel during inflight emergencies;
6. discuss the duties performed by Flight Data and Clearance Delivery personnel;
7. discuss the duties performed by Ground and Local Control personnel;
8. identify Visual Flight Rules and Instrument Flight Rules procedures during departure, en route, and approach phases of flight;
9. explain the function of terminal and en route radar systems used by ATC personnel; and
10. identify the future challenges facing the national airspace system in the United States.

Major Topics

- I. The history of air traffic control and the development of the national airspace system
- II. Aviation publications, regulations, and information distribution systems
- III. Pilot and air traffic controller communications
- IV. National Weather Service forecasting, observation, and reporting systems
- V. The use of weather information by pilots and air traffic control personnel
- VI. Air Traffic Management responsibilities and procedures during inflight emergencies
- VII. Visual and Instrument Flight Rules procedures
- VIII. Duties and responsibilities of air traffic control tower and radar facility personnel
- IX. Flight Service Stations, flight planning, and weather dissemination
- X. Current and planned modifications to the ATC system in the United States

Course Requirements

Grading procedures will be determined by the individual faculty member but will include the following:

Grading/exams

- A minimum of two examinations
- A minimum of ten homework assignments

Written Assignments: The individual faculty member will determine specific writing assignments. Students are required to use appropriate academic resources.

Other Course Information

This course is a program requirement in the following Aviation Technology Associate of Applied Science degrees: Air Traffic Control, Aircraft Dispatcher, Flight Operations Management, Professional Pilot-Airplane, Professional Pilot-Helicopter, and Professional Pilot-Unmanned Aircraft Systems.

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