

**Common Course Outline**  
**AVMT 229**  
**Air Traffic Control Operations IV**  
**3 Semester Hours**

**The Community College of Baltimore County**

**Description**

**AVMT 229 – 3 Credits – Air Traffic Control Operations IV** provides a study of radar air traffic control enroute procedures. Topics include radar theory, equipment and operation, radar interpretation, hand off procedures, sector coordination, Letters of Agreement, flight progress strips, weather and conflict resolution. Students practice these skills in Terminal Radar Approach Control (TRACON) and Air Route Traffic Control Center (ARTCC) laboratory simulation facilities.

**Prerequisite: AVMT 227 with a B or better.**

**Overall Course Objectives**

Upon completion of this course, using air traffic control (ATC) radar simulation equipment, the student will be able to:

1. explain the relationship and function of radar procedures in the enroute environment;
2. explain key components of the Federal Aviation Regulations applicable to radar control;
3. recognize the elements of Air Traffic Control Order 7110.65 applicable to radar control;
4. explain Terminal Radar Approach Control (TRACON) procedures;
5. explain Air Route Traffic Control Center (ARTCC) procedures;
6. demonstrate advanced radar aircraft separation procedures;
7. demonstrate the principles of non-radar and emergency procedures;
8. given advanced air traffic scenarios, apply proper ATC radar procedures;
9. perform air traffic controller duties as a team in high density air traffic scenarios; and
10. apply proper pilot-controller communications and phraseology.

**Major Topics**

- I. Relationship and function of enroute and terminal air traffic control facilities
- II. Air traffic control equipment and operating parameters
- III. Publications and regulations applicable to air traffic control
- IV. Air Traffic Order 7110.65
- V. Terminal and enroute procedures
- VI. Aircraft recognition
- VII. Advanced radar interpretation
- VIII. Non-radar procedures
- IX. Air traffic controller duties
- X. Pilot-controller communications and phraseology

## **Course Requirements**

**Grading/exams:** Grading procedures will be determined by the individual faculty member but will include two (2) in-class examinations and four (4) practical air traffic control radar simulator evaluations.

**Writing:** The individual faculty member will determine specific writing assignments such as special topic papers, current events reports, article or textbook summaries, research analysis papers, and personal journals.

## **Other Course Information**

This course is a core course in the Aviation Management Associate of Applied Science degree, Air Traffic Control option.

This course is taught in a classroom and simulator training environment.