

Common Course Outline
AVMT 246
Commercial Pilot Ground School

The Community College of Baltimore County

Description

AVMT 246 - 4 Credits

Commercial Pilot Ground School

Provides all required ground instruction for the Commercial Pilot Certificate and an endorsement to take the FAA Commercial Pilot knowledge examination upon successful completion; includes advanced aerodynamics, high performance aircraft, advanced aircraft systems, FAA regulations, flight physiology, high altitude flight operations, and crew resource management (CRM).

Prerequisite: AVMT 141

Overall Course Objectives

Upon completion of the course the student must be able to:

- A. Understand and apply the aeronautical knowledge required for the Commercial Pilot Certificate as specified in Federal Aviation Regulations.
- B. Pass a comprehensive final examination based on the actual FAA Knowledge Examination.
- A. Understand the theory of advanced aerodynamics, stability, and aircraft control.
- B. Understand the proper operation of aircraft powerplants and aircraft systems.
- C. Identify classes of airspace and associated weather minimums.
- D. Understand the procedures for calculating weight and balance and aircraft performance.
- E. Understand proper pilot-controller communications
- F. Demonstrate a thorough knowledge of aviation weather.
- G. Understand applicable FAA regulations.
- C. Apply the principles of CRM, flight physiology, and emergency procedures.

Major Topics

- A. Advanced aerodynamics
- B. High performance single engine aircraft
- C. Multi-engine and turbine aircraft
- D. Advanced aircraft systems
- E. Meteorology
- F. High altitude flight operations
- G. Flight Physiology
- H. FAA Regulations
- I. Aeronautical decision making and CRM
- J. Flight safety

Course Requirements

- A. Mid-term and/or periodic examination
- B. Term paper and/or projects

- C. Comprehensive final examination
- D. Attendance and participation