

# Common Course Outline

AVMT 070

Commercial Pilot Training

0 Credits, 3 Billable Hours

## The Community College of Baltimore County

### Description

**Commercial Flight Training** provides academic, flight, and simulator training required for the Commercial Pilot Certificate. Instruction includes preflight preparation, specialty takeoffs and landings, commercial pilot maneuvers, navigation, slow flight, stalls, spin awareness, emergency procedures, safety, operation of complex and high performance aircraft, high-altitude procedures, and postflight procedures. Students successfully completing this course will receive their Commercial Pilot Certificate.

Prerequisite: Private Pilot Certificate Lab Fee: \$10,000.

### Overall Course Objectives

Upon successful completion of AVMT 070, students should be able to:

1. Describe the concepts of advanced aerodynamics;
2. Identify the components of turbocharged and constant speed propeller engine systems;
3. Describe flight operations procedures for retractable landing gear systems;
4. Describe multi-engine aircraft systems and operations;
5. Explain the operation of modern turbojet, turboprop, and turbofan engines;
6. Describe the operation of various types of turbine aircraft;
7. Describe the procedures for proper aircraft loading and determining performance;
8. Describe the principles of aircraft pressurization, oxygen, and environmental systems;
9. Explain the operation of weather radar and aircraft de-icing and anti-icing systems;
10. Describe capabilities and operation of advanced navigation equipment;
11. Identify applicable FAA regulations pertaining to commercial flight operations;
12. Identify hazards to flight operations associated with various weather phenomena;

13. Describe the elements of Crew Resource Management and Aeronautical Decision-making; and
14. Given an emergency scenario, identify the proper action or response.

### **Major Topics**

- I. Advanced Aerodynamics
- II. Advanced Aircraft Systems
- III. Multi-engine Aircraft Systems and Operations
- IV. Turbine Aircraft Systems and Operations
- V. Predicting Performance and Proper Aircraft Loading
- VI. Navigation and Autopilot Systems
- VII. Airports and Airspace
- VIII. FAA Regulations
- VIII. Basic Meteorology & Weather Reporting
- X. Environmental Systems
- XI. Emergency Procedures
- XII. Crew Resource Management, Aeronautical Decision-making, and Aero-medical Factors

### **Course Requirements**

Grading/exams: A minimum of two (2) exams will be administered in this course. Grading procedures will be determined by the individual faculty member.

Writing: A minimum of one (1) writing assignment will be required. The individual faculty member will determine specific writing assignments.

## **Other Course Information**

This course is an elective for the Aviation Management degree program.

This course is taught in a computerized environment.

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common Course Outline.

The Community College of Baltimore County (“CCBC”) is committed to providing a high-quality learning experience that results in growth in knowledge, attitudes, and skills necessary to function successfully as a transfer student, in a career, and as a citizen. To accomplish this goal, we maintain high academic standards and expect students to accept responsibility for assignments, participate actively in class activities and prepare accordingly for all forms of assessment.

CCBC takes seriously our responsibility to maintain high-quality programs and will periodically ask the instructors to participate in various assessment activities to determine whether our students are attaining the knowledge, attitudes, and skills appropriate to various courses and programs. The assessment activities may take many different forms such as surveys, standardized or faculty-developed tests, discussion groups, or portfolio evaluations. We ask that the instructor take these activities seriously so that we can obtain valid data to use for the continuous improvements of CCBC’s courses and programs of study.