

## **AVMT 131**

### **Private Pilot Ground School**

3 Credits

## Community College of Baltimore County Common Course Outline

### **Description**

**AVMT 131 – Private Pilot Ground School:** provides all required ground instruction for the Federal Aviation Administration (FAA) Private Pilot Certificate. This course addresses both airplane and helicopter topics including aerodynamics, aircraft systems, aircraft control and operation, communications, airspace, navigation, weight and balance, aircraft performance, meteorology, regulations, and crew resource management (CRM).

**Co-requisites:** ACLT 052 and MATH 082 and approval from Aviation Program Director

### **Overall Course Objectives**

Upon completion of this course, students will be able to:

1. discuss the requirements and steps to becoming a licensed private pilot;
2. distinguish between various aircraft systems and flight controls;
3. describe the instruments in the aircraft, how they function, and what to do if they fail;
4. describe aerodynamic principles and how they relate to aircraft control;
5. describe effective radio communication at controlled and uncontrolled airports;
6. identify airspace classes and the specific procedures that apply;
7. calculate weight and balance and aircraft performance;
8. interpret weather charts and data;
9. perform cross country flight planning and risk assessment; and
10. differentiate between pilotage, dead reckoning, and radio navigation.

### **Major Topics**

- I. Aerodynamics
- II. Aircraft systems
- III. Airspace, airport operations, and communications
- IV. Aviation weather
- V. Ground reference maneuvers
- VI. Specialty takeoffs, landings, and go-arounds
- VII. Normal and emergency procedures
- VIII. Regulations
- IX. Flight planning and cross-country navigation
- X. Human factors and risk assessment

The Common Course Outline (CCO) determines the essential nature of each course.  
For more information, see your professor's syllabus.

### **Course Requirements**

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- 2 examinations
- comprehensive final exam
- 2 writing assignments such as flight plans, special topic papers, current events reports, article or textbook summaries, research or case study analysis papers, and personal journals

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

### **Other Course Information**

This course is a required course in all Associate of Applied Science Aviation Technology degree programs.

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