

Common Course Outline
AVMT 101
Aviation History and Development
3 Semester Hours

Community College of Baltimore County

Description

AVMT 101 – 3 Credits - Aviation History and Development explores the evolution of aviation, focusing on the rapid growth of the aviation industry and its influence on economic, military, and political advancement; discusses developments in aircraft design, aerodynamics, powerplants, government agencies, and the national airspace system.

Prerequisite: ACTL 052 or ACLT 053

Overall Course Objectives

Upon completion of this course, using air traffic control tower simulation equipment, the student will be able to:

1. describe the evolutionary periods of aviation.
2. explain the impact of military, government, and economic factors on aviation development;
3. describe basic aerodynamics and development of airfoil designs;
4. identify the development of airframe shapes and designs;
5. explain the evolution of aircraft powerplant technology;
6. identify key people who contributed to the growth of aviation; and
7. recognize major airframe designs and associated performance criteria.

Major Topics

- I. Man's early attempts at flight
- II. Lighter than air flight
- III. Powered flight
- IV. Evolution of the airplane in WW I
- V. The Airmail Service
- VI. The Barnstormers
- VIII. Advancements during the Lindbergh era
- IX. Aircraft development in WW II
- X. Jet engine theory
- XI. The X programs
- XII. Progressive military and civilian development of airframes and the jet engine
- XIII. Development of the airlines
- XIV. Supersonic flight
- XV. Cold War aviation developments
- XVI. Stealth Technology
- XVII. Future advancements in aviation

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 tower 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.