# Common Course Outline
## AVMT 161
## Unmanned Aircraft Systems
### 3 Credits

# The Community College of Baltimore County

**Description**

**AVMT 161 - 3 credits - Unmanned Aircraft Systems Operations** presents an overview of Unmanned Aircraft Systems (UAS) including the history and development of UAS, Remotely Piloted Aircraft (RPA), UAS types, payloads and employment, control functions, flight operations, regulations, and safety considerations.

**3 Credits**
**Prerequisite: AVMT 141 or Aviation Program Coordinator approval**

**Overall Course Objectives**

Upon completion of this course students will be able to:

1. describe the historical relationship and integration of UAS with traditional manned aircraft types;
2. demonstrate the proper employment of UAS in the National Airspace System;
3. explain key components of the Federal Aviation Administration regulations applicable to UAS;
4. relate UAS operations to Department of Homeland Security and law enforcement missions;
5. recognize the technical concepts associated with UAS command and control;
6. identify support and maintenance functions required for UAS operations;
7. identify the capabilities and flight parameters of each UAS category, class and type;
8. explain the function of sensor, kinetic, and electronic systems installed on UAS;
9. discuss UAS mission planning considerations; and
10. identify safety procedures and backup systems applicable to the operation of UAS.

**Major Topics**

I. Historical development of UAS
II. UAS employment in the National Airspace System
III. Publications and regulations applicable to UAS operations
IV. Control data links, communications, and connectivity
V. Training, support, and maintenance functions associated with UAS operations
VI. UAS capabilities and flight characteristics
VII. Sensor, kinetic, and various electronic systems installed on UAS
VIII. UAS mission planning factors
IX. Command and control of UAS
X. Safety considerations relating to UAS operations

## Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include three (3) in-class examinations and one (1) practical mission planning evaluation.

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.

Students are required to utilize appropriate academic resources.

## Other Course Information

This course is designed to be used as an elective or substituted course in the Aviation Management, Associate of Applied Science degree.

Date Revised: 2/22/2014