

# AV 117 : HELICOPTER FUNDAMENTALS

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## Transcript title

Helicopter Fundamentals

## Credits

3

## Grade mode

Standard letter grades

## Contact hours total

30

## Lecture hours

30

## Recommended preparation

MTH 060 or higher or minimum placement Math Level 10.

## Description

This course covers fundamentals of helicopter flight, flight operations, helicopter performance, navigation, helicopter systems, aeronautical publications, helicopter flight maneuvers, flight planning, radio procedures, meteorology, and human factors.

## Learning outcomes

1. Recognize fundamental concepts of helicopters and powered flight.
2. Recall basic function of helicopter engines, helicopter systems and flight instruments.
3. Identify the essential aeronautical and aerodynamic concepts of helicopter flight.
4. Demonstrate the fundamentals of helicopter performance and flight planning.

## Content outline

Helicopter Flight Controls  
Helicopter Systems  
Aerodynamics  
Flight Manual  
Weight Balance  
Ground Procedures  
Flight Preparation  
Basic Flight Maneuvers  
Helicopter Emergencies Hazards  
Aeronautical Decision Making

## Required materials

Requires textbook and/or online learning materials.

## Grading methods

This course is assessed through presentation, exams, and a final exam.