# **AV 115: PRIVATE PILOT-HELICOPTER**

## **Transcript title**

Private Pilot-Helicopter

#### **Credits**

5

# **Grading mode**

Standard letter grades

#### **Total contact hours**

50

#### **Lecture hours**

50

### **Recommended preparation**

MTH 060 or higher or minimum placement Math Level 10.

### **Course Description**

Covers fundamentals of flight, flight operations, aviation weather, performance, navigation, aircraft systems, aeronautical publications, FAA regulations, flight planning, radio procedures, meteorology and human factors. Comprehensive course that prepares student for the FAA Private Pilot airman knowledge exam.

### **Course learning outcomes**

- 1. Develop understanding of fundamental concepts of helicopter powered flight.
- 2. Demonstrate an understanding of the helicopter power-plant, systems, and flight instruments.
- 3. Demonstrate an understanding of essential aeronautical and aerodynamic concepts.
- 4. Demonstrate knowledge of basic weather theory, weather forecasting, and weather products available to the pilot.
- 5. Develop fundamental knowledge of helicopter performance.
- 6. Demonstrate the basic tasks of navigation and flight planning.
- 7. Demonstrate familiarity with aviation charts, airfield directories, and other aviation publications.
- 8. Develop comprehension of the flight environment, airport operations, safety of flight, and human factors in aviation.
- $9. \ Demonstrate \ an \ understanding \ of \ the \ Federal \ Aviation \ Regulations.$
- 10. Apply flight concepts to pilot training, and have the knowledge to operate safely in today's complex flight environment.
- 11. Demonstrate preparedness for FAA Private Pilot exam.
- 12. Demonstrate preparedness for the FAA Private Pilot ground evaluation.

# **Content outline**

- · Flight Lab Process
- · Aeronautical Decision Making
- · Fitness for Flight
- · Flight Instruments
- · Aircraft Systems

- Aerodynamics
- · Airport Operations Communication
- · Aircraft Performance
- · Weight and Balance
- · Weather Theory
- · Weather Charts and Services
- Navigation -Pilotage Sectional Charts, VOR and GPS, Dead Reckoning, Flight Planning

## **Required materials**

Requires textbook and/or online learning materials, and additional equipment.