

AV 204 : ADVANCED AIRCRAFT SYSTEMS

Transcript title

Advanced Aircraft Systems

Credits

4

Grading mode

Standard letter grades

Total contact hours

40

Lecture hours

40

Recommended preparation

AV 104.

Course Description

Encompasses a detailed study of aircraft systems and structures and enables the student to progress into heavier, more complex single and multi-engine aircraft. Aircraft in current use by industry will be studied with an emphasis placed on operations, including emergencies. Applicable FAR and Minimum Equipment Lists, will be studied.

Course learning outcomes

1. Define complex aircraft systems.
2. Describe the principles of operation of reciprocating and turbine engines.
3. Explain aircraft structures.
4. Demonstrate understanding of flight control systems, landing gear systems, fuel systems, electrical systems, and thrust augmentation.

Content outline

Principles of Electricity Electrical Systems Turbine Engines Lubrication and Cooling Systems Aircraft Propellers Hydraulic and Pneumatic Systems Fuel Systems Environmental Systems Landing Gear Systems Fire Protection Systems Aerodynamic Control and Protection Systems

Required materials

Requires textbook and/or online learning materials.