

Course Number and Title

AVSC 1003 Aeronautics Lecture

Catalog Description

Beginning with an overview of aviation, the course covers basic aerodynamics, navigation, safety, weather, aircraft performance, flight planning, introduction to aircraft systems, and FAA regulations. All necessary information to complete FAA Private Written Test.

Prerequisite/Co-Requisite

Consent of the instructor or Department Head/ AVSC 1022 Aeronautics Lab

Credit hours/ Contact hours/ Load hours

3/3/3

Target Audience & Transferability

Course is designed for students who are working towards a Private Pilot's license and are pursuing an Associate's Degree in Aviation as a professional pilot. Course will transfer to other accredited four year institutions which offer a Bachelor's in Aviation Science with a Professional Pilot option.

Common Objectives/ Student Outcomes:

Students completing this course will be able to:

1. Demonstrate a knowledge of private pilot operations in a single engine aircraft.
2. Understand the basic principles of flight, weather factors, navigation, FAA Regulations, aircraft systems, and flight planning.
3. Make critical decisions based on a knowledge of human factors, the aircraft to be flown, and the reasoning for the intended flight.
4. Successfully complete ground school testing in preparation for the Private Pilot License checkride.

Required Text(s)

Instrument Commercial Manual, Jeppesen Sanderson, Inc., 1998

Optional Text(s):

Topics

- I. Building Professional Experience-Introduction to private pilot and commercial training (Part I, Chapter 1, Section A).
- II. Human Factors Concepts (Part I, Chapter 1, Section B).
- III. Principles of flight-Instrument Systems for flight, attitude, and navigation (Part I, Chapter 2).
- IV. The Flight Environment-Airports, airspace, air traffic control and the FAA (Part I, Chapter 3).

Required Methods of Instruction:

Attendance and participation in class is highly stressed. Role playing in decision-making will be the routine.

Required Forms of Assessment:

Assessment will be by means of a series of multiple choice exams, leading to the final exam to be passed prior to recommendation for the Private Pilot check-ride. Class participation and attendance will also be part of the final grade.

Resources

The NWACC Library, Drake Aviation Academy, and the NWACC Aviation Department Resource center are all available to students.