

**Course Code:** AVI 220

**Course Title:** Flight Instructor Airplane Initial

**Department:** Aviation

**Effective Date:** Summer 2026

**PCS Code:** 1.1 - Baccalaureate/Transfer

**CIP Code:** 14.0101

**Repeatability:** 0

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## Credit Hours

**Catalog Notation:** 3-2-4

**Credit Hour Distribution:**

Lecture: 3

Lab: 2

Clinical: 0

**Total: 4**

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## General Course Information

### Catalog Description

FAA Flight Instructor Airplane certification for pilots not holding a flight instructor certificate. Fundamentals of instruction, fundamentals of flight, technical subject areas, and flight maneuver analyses. Includes 26.2 hours flight and simulator training and spin training.

### General Course Objectives

Develop the knowledge and proficiency required for initial Flight Instructor certification with an Airplane Single Engine rating.

### Minimum Placement Levels

**English**

None

**Reading**

None

**Math**

None

### Prerequisites

FAA Commercial Pilot Certificate with Airplane Single Engine Land and Instrument Airplane Ratings

### Methods of Evaluation

Written assignments, quizzes, exams, oral questioning, and observation of flight performance.

### Instructional Materials and Additional Supplies

[Aviation Instructor's Handbook](#), FAA. Current edition.

[Airplane Flying Handbook](#), FAA. Current edition.

[Pilot's Handbook of Aeronautical Knowledge](#), FAA. Current edition.

[Federal Aviation Regulations and Aeronautical Information Manual \(FAR/AIM\)](#), FAA. Current edition.

[Flight Instructor Airplane FAA Knowledge Test preparation course](#), Current edition.

Cost of aircraft use is covered by course fees.

## Course Content

### General Learning Outcomes (GLOs)

- Communication: Students will demonstrate the ability to read, write, listen, and speak effectively.
- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

### Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Ground Lesson 1: Fundamentals of Instructing	1. Understand the fundamentals of instructing topics: the learning process, human behavior, and effective communication.	3	0	0
Ground Lesson 2: Fundamentals of Instructing	1. Understand the fundamentals of instructing topics: teaching methods, critique and evaluation, flight instructor characteristics and responsibilities, and planning instructional activities.	3	0	0
Ground Lesson 3: Fundamentals of Flight	1. Demonstrate instructional knowledge of the fundamentals of flight including straight-and-level flight, level turns, straight climbs and climbing turns, and straight descents and descending turns.	3	0	0
Ground Lesson 4: Technical Subject Areas	1. Demonstrate instructional knowledge of the following technical subject areas: aeromedical factors, visual scanning and collision avoidance, airplane flight controls, and principles of flight.	3	0	0
Ground Lesson 5: Technical Subject Areas	1. Demonstrate instructional knowledge of the following technical subject areas: airplane weight and balance, navigation, and flight planning.	3	0	0
Ground Lesson 6: Technical Subject Areas	1. Demonstrate instructional knowledge of the following technical subject areas: night operations, high altitude operations, national airspace system, navigation systems, and radar services.	3	0	0
Ground Lesson 7: Technical Subject Areas	1. Demonstrate instructional knowledge of the following technical subject areas: federal aviation regulations and publications, logbook entries, and certificate endorsements.	3	0	0
Ground Lesson 8: Preflight Preparation	1. Demonstrate instructional knowledge of preflight preparation including the following: certificates and documents, weather information, and operations of systems.	3	0	0
Ground Lesson 9: Preflight Procedures	1. Demonstrate instructional knowledge of preflight preparation and preflight procedures including the following: performance and limitations, airworthiness requirements, preflight inspection, single-pilot crew resource management, taxiing, before takeoff check.	3	0	0
Ground Lesson 10: Airport Operations and Takeoffs	1. Demonstrate instructional knowledge of airport operations and takeoffs including the following: radio communication and ATC light signals; traffic patterns; airport, runway and taxiway signs, markings, and lighting; normal and crosswind takeoffs and climbs; short-field takeoff and maximum performance climb; and soft-field takeoff and climb.	3	0	0
Ground Lesson 11: Stalls and Spins	1. Demonstrate instructional knowledge of stall awareness, stalls, spin recognition, and entry and recovery including the following areas: maneuvering during slow flight, power-off stalls, power-on stalls, crossed-control stalls, elevator trim stalls, secondary stalls, accelerated maneuver stalls, aerodynamics of spins, spin entry, spins, spin recovery, and aircraft capabilities and limitations.	3	0	0

<b>Course Segment</b>	<b>Learning Outcomes</b>	<b>Lecture Hours</b>	<b>Lab Hours</b>	<b>Clinical Hours</b>
Ground Lesson 12: Ground Reference Maneuvers, Performance Maneuvers	1. Demonstrate instructional knowledge of ground reference maneuvers and performance maneuvers including the following: steep turns, steep spirals, chandelles, lazy eights, rectangular course, S-turns across a road, turns around a point, and eights on pylons.	3	0	0
Ground Lesson 13: Landings, Go-Around, Postflight	1. Through student teaching presentations, demonstrate instructional knowledge of landings, go-arounds, and post-flight procedures including the following: normal and crosswind approach and landing, slip to a landing, go around, short field approach and landing, soft-field approach and landing, power-off 180° accuracy approach and landing, postflight procedures.	3	0	0
Ground Lesson 14: Emergency Operations	1. Demonstrate instructional knowledge of emergency operations including the following: emergency approach and landing, systems and equipment malfunctions, emergency equipment and survival gear, and emergency descent.	3	0	0
Ground Lesson 15: Review	1. Demonstrate readiness to successfully complete the oral portion of the Flight Instructor Airplane end-of-course test.	3	0	0
Flight Lesson 1: Building Flight Proficiency	1. Demonstrate knowledge of performing basic flight maneuvers from the right seat and become familiar with the change in visual perspective from the right seat.	0	2	0
Flight Lesson 2: Building Flight Proficiency	1. Continue to practice maneuvers and improve proficiency from the right seat.	0	2	0
Flight Lesson 3: Building Flight Proficiency	1. Demonstrate proficiency in performing maneuvers from the right seat.	0	2	0
Flight Lesson 4: Flight Training Device Operations	1. Demonstrate knowledge of operation of the Flight Training Device. 2. Practice demonstration and critique of maneuvers as directed by the flight instructor in preparation for teaching a novice pilot two lessons in the Advanced Aviation Training Device (AATD).	0	1	0
Flight Lesson 5: Cross-Country Demonstration	1. Demonstrate proficiency in navigation and cross-country operations. 2. Demonstrate the fundamentals of pilotage, dead reckoning, and radio navigation during short cross-country flight.	0	1.5	0
Flight Lesson 6: Solo Practice, Night Practice	1. Demonstrate proficiency in night landings from the right seat. 2. Improve proficiency while flying solo.	0	2.5	0
Flight Lesson 7: Demonstration and Analysis	1. Gain familiarity with the spin aircraft in preparation for the spin training lesson.	0	2	0
Flight Lesson 8: Spin Proficiency/Demonstration	1. Gain instructional proficiency in the performance and demonstration of stall awareness, spin entry, spins, and spin recovery procedures. Receive the required logbook endorsement. 2. Fly the spin aircraft in solo flight.	0	2.5	0
Flight Lesson 9: Demonstration and Analysis	1. Demonstrate and critique basic flight maneuvers and selected private and commercial pilot tasks. 2. Analyze and correct simulated common errors performed by the flight instructor.	0	2.5	0
Flight Lesson 10: Demonstration and Analysis	1. Demonstrate and critique basic instrument maneuvers and selected private and commercial pilot tasks. 2. Analyze and correct simulated common errors performed by the flight instructor.	0	2.5	0

<b>Course Segment</b>	<b>Learning Outcomes</b>	<b>Lecture Hours</b>	<b>Lab Hours</b>	<b>Clinical Hours</b>
Flight Lesson 11: Analysis and Critique	<ol style="list-style-type: none"> <li>1. Demonstrate and critique the private and commercial pilot tasks identified in lessons 9 and 10.</li> <li>2. Analyze and correct simulated common errors performed by the flight instructor.</li> </ol>	0	2.5	0
Flight Lesson 12: Analysis and Critique	<ol style="list-style-type: none"> <li>1. Demonstrate and critique the private and commercial pilot tasks identified in lessons 9 and 10.</li> <li>2. Analyze and correct simulated common errors performed by the flight instructor.</li> </ol>	0	2.5	0
Flight Lesson 13: Practice End-of-Course Test and Solo Flight	<ol style="list-style-type: none"> <li>1. Demonstrate instructional knowledge in reviewed tasks.</li> <li>2. Improve proficiency while flying solo in the complex aircraft.</li> <li>3. Take an optional practice end-of-course test at the discretion of the assigned instructor.</li> </ol>	0	1.7	0
Flight Lesson 14: Review	<ol style="list-style-type: none"> <li>1. Demonstrate instructional knowledge in reviewed tasks, including any weak areas identified in Lesson 13.</li> </ol>	0	1.3	0
Flight Lesson 15: End-of-Course Test	<ol style="list-style-type: none"> <li>1. Take the Flight Instructor Airplane end-of-course test.</li> </ol>	0	1.5	0

**Total Contact Hours**

<b>Lecture Hours</b>	<b>Lab Hours</b>	<b>Clinical Hours</b>
45	30	0