

The lessons below are designed as units. Each unit's time will vary with each student, and will be considered complete once the student is proficient with each item. A student is considered proficient once the maneuver meets either the CFI's standards and/or the practical test standards published by the FAA. More than one unit can be covered per flight.

1) Dual Flight Instruction

- a) Airplane, Cockpit, and Controls Familiarization
- b) Introduction to Checklists
 - (a) Preflight, Before Start, After Start, Before Takeoff, Climb, Cruise, Descent, Before Landing, After Landing, Shutdown, Post-Flight
- c) Pilot and Passenger Briefings
- d) Take Off, and Introduction to the Basic 4, Climbs, Turns, Straight and Level, and Descents.
- e) Taxing, Shutdown and Securing

2) Dual Flight Instruction

- a) Thorough Preflight and Checklist Usage
- b) Review Lesson 1
- c) Discuss Certificates and Documents required aboard
- d) Taxiing and Ground Operations
- e) General Awareness of Environment
 - i) Intro to Radio Communication
 - ii) Intro to Traffic Pattern
 - iii) Intro to Situational awareness to geographic landmarks
 - iv) Intro to Airport Signs and Markings / Light Signals
- f) Discuss and begin to practice Special Emphasis Areas
 - i) Positive aircraft control
 - ii) Positive exchange of flight controls
 - iii) Collision avoidance
 - iv) Wake turbulence avoidance
 - v) Runway incursion avoidance
 - vi) Controlled Flight into Terrain
 - vii) Wire Strike Avoidance
 - viii) Aeronautical Decision Making
 - ix) Checklist Usage
- g) More detail instruction and proper usage of the propeller, throttles and flight controls
- h) Taxing, Shutdown and Securing

3) Dual Flight Instruction

- a) Review Lesson 2
- b) Normal and Steep banked turns
- c) Constant speed climbs and descents

- d) Constant rate climbs and descents
- e) Normal, Crosswind, and short field landings
- f) Normal, Crosswind and short field takeoffs
- g) Rejected Landing
- h) Rejected Takeoff

4) Dual Flight Instruction

- a) Preflight Inspection
- b) Taxing Operations With Braking, Nose Wheel, And Differential Power
- c) Normal Takeoff And Climb
- d) Phases Of Flight
 - i) Slow Flight
 - ii) Cruise Flight
 - iii) Climbs, Descents
- e) Power On Stalls
- f) Power Off Stalls
- g) Spin Awareness

5) Dual Flight Instruction - Take Off And Landings And Engine Failures

- a) Take Offs
 - i) Normal
 - ii) Crosswind
 - iii) Short Field
 - iv) Aborted
- b) Landings
 - i) Normal
 - ii) Crosswind
 - iii) Short Field
 - iv) Rejected
- c) Simulated Engine Failures
 - i) Before Vmc
 - ii) After Takeoff And After 400 AGL
 - iii) Cruise
 - iv) Approach

6) Dual Flight Instruction - Vmc Demo, Engine Shutdown/Startup In Flight

- a) Vmc Demonstration And Recovery
- b) Drag Demo With Critical Engine Failed
 - i) Observe Climb Rate With Improper And Proper Aircraft Configuration
 - ii) Observe Control Forces With Improper And Proper Aircraft Configuration
- c) Complete Shutdown And Securing Of Critical Engine
- d) Restarting And Bringing Back Online The Critical Engine
- e) Simulated Feather Of Critical Engine, And Maneuvering

7) Dual Flight Instruction - Other Emergencies

- a) Electrical Failure / No Flap Landing / Sim Manual Gear Extension
- b) Emergency Descent
- c) All Engine Failure
- d) Precautionary Engine Shutdown – Over Speed, Engine Health

8) Dual Flight Instruction - Simulated IMC (3 Hours)

- a) Climbs, turns, descents, turns to heading, recovery from unusual attitudes, radio communication, use of navigation systems and facilities and radar services

9) Dual Flight Instruction / Solo Flight

- a) Complete Pre-Solo written Exam and Discuss
- b) 2-5 Proficient Traffic Patterns DUAL
- c) SOLO FLIGHT, supervised w/radio contact, at uncontrolled, low volume airport.
- d) SOLO Normal Takeoff, Normal Traffic Pattern and Landings

10) Dual Flight Instruction / Solo Flight

- a) Dual Review
- b) SOLO Normal Takeoff and Landings
- c) Taxing, Shutdown and Securing
- d) Discuss and Schedule FAA Knowledge Exam (Primary Students Only)

11) Dual Flight Instruction Night Flight

- a) Introduction to Night Flying (3 Hours)
- b) Normal Procedures
- c) Emergency Procedures
- d) Discuss Human Factors
 - i) Night Vision, Off Center Viewing, Reduced Depth Perception
 - ii) Hypoxia
 - (1) Altitude
 - (2) Smoking and Drugs
 - (3) Excess nitrogen from scuba diving
 - iii) Hyperventilation
 - iv) Spatial disorientation
 - v) Motion sickness
 - vi) Carbon monoxide poisoning
 - vii) Stress, Fatigue, dehydration
- e) Perform Landings to full stop and touchdown (at least 10)

12) Dual Cross Country Flight (3 Hours)

- a) Pilotage and Dead Reckoning
- b) Use of Charts, publications, performance charts
- c) Review National Airspace System
- d) Weather, NOTAMs, and other data collection
- e) Lost Procedures, Adverse weather and Diversions

13) Dual Cross Country Flight

- a) Review Lesson 12
- b) Radio Navigation
- c) Radar Services and Flight Following
- d) GPS Navigation
- e) Sectional Charts

14) Solo Cross Country (5 Hours)

15) Dual Flight Instruction – Test Prep (3 Hours)

- a) Discuss and Review all Previous Lessons
- b) Normal and Emergency Procedures Review
- c) Discuss and Correct any deficiencies
- d) Prep for FAA Practical Exam
- e) Discuss Scheduling Practical Exam

16) Dual Flight Instruction – Simulated Practical Exam

- a) Simulate Examiner by following FAA published Practical Test Standards book (PTS)
- b) Discuss and Correct any deficiencies
- c) Prepare IACRA or 8710 Form

17) Repeat any Lessons as needed / Allow student SOLO (10 Hours)

18) FAA Practical Exam