



PILOT RISE  
LLC

## Private Pilot Syllabus

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### **Description:**

This course makes getting your private pilot's license easier and cheaper than traditional methods. The focus of this course is to teach you piloting skills not just to pass a test, but to be a safe and knowledgeable pilot.

Students should take notes with all ground lessons and ground videos to be used to study.

This course consists of three major parts:

- Flight training
- Ground training
- Basic Aviation Training Device (BATD)
- Online Ground Course / Homework (Gold Seal Online Ground School - Private Pilot)

### **Objective:**

The student will obtain the knowledge, skill, and aeronautical experience necessary to meet the requirements for a private pilot certificate with an airplane category rating and single-engine land class rating.

## Topics:

### **Ground Training:**

1. Principles of Flight
2. Airspace
3. Flight Planning
4. Navigation
5. Weather
6. Instruments
7. Weight and Balance
8. Aircraft Performance
9. Airport Operations
10. Regulations
11. Aircraft Systems
12. Other Technical Subjects

### **Flight Training & BATD:**

1. Fundamental Maneuvers
2. Controls and Instruments
3. Airport Operations
4. Preflight Planning
5. Preflight Checks
6. Takeoffs
7. Landings
8. Maneuvers, Stalls, Slow Flight
9. Emergency Operations
10. Navigation

### **BATD Usage:**

We recommend using a BATD for lessons 1.5 and 1.7 as well as any lessons during stage 1 of training. Use of a BATD, even if you logged the maximum 2.5 hours is **STRONGLY** recommended for the procedures & maneuvers listed below.

- Procedures & Maneuvers
  - Instrument procedures
    - Cheating yourself is not possible. More challenging since no motion.
  - ATC communications
    - Lower stress
  - Navigation
    - VOR, GPS, Dead reckoning
  - Emergency Scenarios
    - Get deeper into emergency procedures without compromising safety. Able to practice more emergency scenarios back to back saving you a ton of flight time.
  - Experiencing different locations.

**NOTE:** By using a BATD (even when not loggable) early on in training, the cost savings will enable you to “fly” much more often reducing how much you forget between lessons. Avoid more than three BATD sessions in a row without a flight in a real aircraft.

**Lesson Time Allocation**

Lesson	Dual	BATD	Solo	DL Night	Dual XC	Solo XC	Inst.	Ground
<b>STAGE 1 - Pre-Solo</b>								
1	1.3							1.0
2	1.3						0.2	0.5
3	1.3							0.5
4	1.3							0.4
5		1.3					0.2	0.4
6	1.3							0.4
7		1.2					0.2	1.0
8	1.3						0.2	0.7
9	0.6							0.6
10	0.5		0.5					2.4
<b>STAGE 2 - Cross Countries</b>								
1	0.6		0.7					1.1
2	1.2							1.0
3			1.4					
4			1.4					
5	1.4						0.4	1.5
6	1.3			1.3				0.5
7	2.3				2.3		0.4	1.5
8	2.8			2.8	2.8		0.7	1.5
9			1.8			1.8		
10			2.2			2.2		
11			1.8			1.8		
<b>STAGE 3 - Checkride Prep</b>								
1	3.0						0.4	3.0
2			3.0					
3	2.5						0.3	2.0
<b>Totals</b>	24	2.5	12.8	4.1	5.1	5.8	3.0	20

## STAGE 1 - LESSON 1

### Dual - Local

#### Objective:

Students will be introduced to the aircraft. They will learn preflight procedures, be introduced to flight controls, and learn the four fundamental maneuvers.

#### GROUND

##### Lesson Introduction:

- Certificates & Documents
- Use of Checklists
- Preflight Inspection
- Basic Systems
- Servicing Oil
- Refueling
- Securing & Post Flight
- 8710 Form

#### FLIGHT

##### Lesson Introduction:

- Engine Starting
- Leaning the Mixture
- Use of Carb Heat
- Radio Communications
- Taxi
- Run-up
- Use of Trim
- Normal Takeoff & Climb
- Climbs
- Level Off
- Straight & Level
- Turns
- Normal Approach & Landing

#### HOMEWORK

- Sign Up for Gold Seal Ground School
- Section 1 - Gold Seal Ground School

## STAGE 1 - LESSON 2

### Dual - Local

#### Objective:

Students will review elements from Lesson 1. The student will be introduced to basic instrument flight and practice airspeed control.

#### GROUND

##### Review:

- Preflight
- Certificates & Documents
- Oil Servicing
- Basic Systems
- Refueling
- Securing & Post Flight

#### FLIGHT

##### Review:

- Engine Starting
- Leaning the Mixture
- Use of Carb Heat
- Radio Communications
- Taxi
- Use of Trim
- Run Up
- Normal Takeoff & Climb
- Straight & Level Flight
- Climbs
- Turns

##### Lesson Introduction:

- Airport Operations
- Airport & Rybway Markings
- Crosswind Taxi
- Maneuvering at Approach Speed
- Collision Avoidance Precautions
- INSTRUMENT - Straight & Level
- INSTRUMENT - Constant Airspeed Climbs
- INSTRUMENT - Constant Airspeed Descents

#### HOMEWORK

- Fill Out MedExpress Form
- Schedule Medical
- Section 2 - "Understanding Sectional Charts"
- Section 2 - "Airport Operations"
- Section 2 - "Stalls, Spins, Spirals"
- Section 2 - "The Stabilized Approach"

## STAGE 1 - LESSON 3

### Dual - Local

#### Objective:

Student will review airspeed control, and they will be introduced to basic stalls and slow flight.

#### GROUND

Review as needed.

#### FLIGHT

Review:

- Crosswind Taxi
- Maneuvering at Approach Speed
- Collision Avoidance Precautions
- Airport & Runway Markings
- Normal Approach

Lesson Introduction:

- Slow Flight
- Power-Off Stalls (Imminent)
- Power-On Stalls (Imminent)
- Descents with and without flaps

#### HOMEWORK

- Complete Section 2 - Gold Seal
- Review Part 91 Regulations Document

## STAGE 1 - LESSON 4

### Dual - Local

#### Objective:

The student will practice the maneuvers they need to work on. The student will be introduced to emergency procedures and additional maneuvers.

#### GROUND

Review as needed.

#### FLIGHT

Review:

- Slow Flight
- Power-Off Stalls (Imminent)
- Power-On Stalls (Imminent)
- Normal Takeoff
- Normal Approach
- Descents with and without flaps

Lesson Introduction:

- Wake Turbulence Avoidance
- Emergency Descent
- Emergency Approach & Landing
- Systems & Equipment Malfunctions
- Climbing & Descending Turns
- Steep Turns
- Turning Stalls (Imminent)
- Turns to a Heading
- Slow Flight with Distractions & Stall Recovery

#### HOMEWORK

- Complete Section 3 - Gold Seal

## STAGE 1 - LESSON 5

### Dual - Local

#### Objective:

This lesson is primary for review. A few new maneuvers will be introduced, and previous maneuvers will be expanded upon.

To save on costs, this lesson will be conducted in with a BATD. If extra training is needed after using the BATD, use a real aircraft.

#### GROUND

Review as needed.

#### FLIGHT

Review:

- Slow Flight
- Imminent Stalls
- Emergency Descent
- Emergency Approach & Landing
- Forced Landing Procedures

Lesson Introduction:

- INSTRUMENT - Slow Flight
- INSTRUMENT - Steep Turns
- INSTRUMENT - Turns to a Heading
- Power-Off Stalls (FULL)
- Power-On Stalls (FULL)
- Normal Takeoff & Landings

#### HOMEWORK

- Part 61 Regulations Document
- Study Sectional Chart & Legend



## STAGE 1 - LESSON 6

### Dual - Local

#### Objective:

The student will practice and review maneuvers. Also, slips and other various procedures will be introduced.

#### GROUND

Review as needed.

#### FLIGHT

Review:

- Normal Takeoff & Landings
- Traffic Pattern Operations
- Wake Turbulence Avoidance

Lesson Introduction:

- Rectangular Course
- S-Turns
- Turns Around a Point
- Go-Arounds
- Forward Slips
- Side Slips
- Crosswind Takeoff & Climb
- Crosswind Approach & Landings
- Light Gun Signals
- Forced Landing Procedures (during climb, cruise, descent)
- Forced Landing Procedures in the Pattern (power off 180)

#### HOMEWORK

- Half of Section 4 - Gold Seal
- Study Operating Manual
- Section 5 - "Weight & Balance"
- Section 5 - "Performance Charts"

## STAGE 1 - LESSON 7

### Dual - Local

#### Objective:

This lesson is focused on preparing the student for their first solo. The student will review instrument flight maneuvers. Most of the lesson will be focused on takeoffs and landings.

To save on costs, this lesson will be conducted in with a BATD. If extra training is needed after using the BATD, use a real aircraft.

#### GROUND

Lesson Introduction:

- Takeoff & Landing Data
- Weight & Balance

#### FLIGHT

Review:

- INSTRUMENT Straight & Level
- INSTRUMENT Constant Airspeed Climbs & Descents
- INSTRUMENT Turns to a Heading
- Straight & Level Flight
- Steep Turns
- Climbing & Descending Turns
- Takeoff & Climb
- Approach & Landing
- Go-Around
- Forward Slips
- Emergency Descent
- Emergency Approach & Landing
- Light Gun Signals
- Forced Landing Procedures
- Power Off 180

#### HOMEWORK

- Study Airspace
- Study Operating Manual

## STAGE 1 - LESSON 8

### Dual - Local

#### Objective:

This lesson is focused on preparing the student for their first solo. The instructor evaluates the student's readiness for solo flight.

#### GROUND

##### Review:

- Takeoff & Landing Data
- Weight & Balance

#### FLIGHT

##### Review:

- Engine Starting
- Radio Communications
- Normal & Crosswind Taxi
- Run-up
- Normal & Crosswind Takeoff & Climb
- Power-Off Stalls (FULL)
- Power-On Stalls (FULL)
- Slow Flight
- Handling Distractions
- Situational Awareness
- INSTRUMENT - Straight & Level
- INSTRUMENT - Steep Turns
- INSTRUMENT - Turns to a Heading
- INSTRUMENT - Constant Airspeed Climbs & Descents
- System & Equipment Malfunctions
- Emergency Descent
- Emergency Approach & Landing
- Traffic Pattern Operations
- Go-Around
- Normal & Crosswind Approach & Landings

**STAGE 1 - LESSON 9**  
**PRE-SOLO STAGE I CHECK**

**Objective:**

The Chief Instructor verifies the student's paperwork and evaluates that they are prepared for their first solo.

**GROUND**

Review:

- Takeoff & Landing Data
- Weight & Balance
- Preflight

**FLIGHT**

Review:

- Airplane Systems
- Engine Starting
- Radio Communications
- Taxi
- Run Up
- Normal Takeoff & Climb
- Power Off 180
- Collision Avoidance Precautions
- Situational Awareness
- Normal Approach & Landings
- Securing & Post Flight

## STAGE 1 - LESSON 10

### Dual & Solo - Local

#### Objective:

In this lesson, the instructor will go up with the student and verify three takeoff and landings. Then the student will complete the same for their first solo.

#### GROUND

##### Review:

- Takeoff & Landing Data
- Weight & Balance

##### QUIZ:

- Pre-Solo Exam

#### FLIGHT

##### Review:

- Normal Takeoffs
- Normal Landings
- Go-Around
- Power Off 180

##### Lesson Introduction:

- First Solo
- Normal Takeoffs (3)
- Normal Landings (3)

#### HOMEWORK

- Complete Section 5 Gold Seal

## STAGE 2 - LESSON 1

### Dual & Solo - Local

#### Objective:

In this lesson, the instructor will fly with the student again to review some items. Then the student will spend time soloing doing pattern work to improve skills.

#### GROUND

Review as needed.

#### FLIGHT

Review:

- Engine Starting
- Radio Communications
- Normal and Crosswind Taxi
- Run Up
- Normal Takeoffs
- Traffic Pattern Operations
- Go-Around
- Normal Landings

Solo:

- Normal Takeoffs
- Normal Landings

#### HOMEWORK

- Study for written test.
- Continue with Gold Seal Ground School as needed.

## STAGE 2 - LESSON 2

### Dual - Local

#### Objective:

The student will learn short-field and soft-field techniques. The student will also be introduced to towered airports if not already.

#### GROUND

Lesson Introduction:

- Towered Airport Communications
- Short Field Takeoffs
- Short Field Landings
- Soft Field Takeoffs
- Soft Field Landings

#### FLIGHT

Review:

- Traffic Pattern
- Turns around a Point
- S-Turns
- Slow Flight

Lesson Introduction:

- Short Field Takeoff
- Short Field Landing
- Soft Field Takeoff
- Soft Field Landing
- Towered Airport Communications

#### HOMEWORK

- Study for written test.

## STAGE 2 - LESSON 3

### SOLO - Local

#### Objective:

The student will practice maximum performance takeoffs and landings and practice maneuvers in the practice area. The student will practice at least 3 takeoffs and landings to a full stop with a taxi-back at a towered airport.

#### FLIGHT

Solo:

- Normal Takeoffs
- Turns around a Point
- S-Turns
- Slow Flight
- Power-Off Stalls (Imminent)
- Power-On Stalls (Imminent)
- Traffic Pattern
- Normal Landings
- Short Field Takeoff & Landings
- Soft Field Takeoff & Landings
- 3 Takeoff and Landings to Full Stop at a Towered Airport

#### HOMEWORK

- Study for written test.



## STAGE 2 - LESSON 4

### SOLO - Local

#### Objective:

The student will practice flight maneuvers assigned by the instructor with emphasis on deficient areas.

#### FLIGHT

Solo:

- Traffic Pattern
- S-Turns
- Turns around a Point
- Slow Flight
- Power-Off Stalls
- Power-On Stalls
- Short Field Takeoff & Landings
- Soft Field Takeoff & Landings
- Forward Slips

#### HOMEWORK

- Study for written test.

## STAGE 2 - LESSON 5

### Dual - Local

#### Objective:

During this lesson, the student will be introduced to VOR navigation and cross-country planning.

#### GROUND

##### Lesson Introduction:

- Navigation Log
- FAA Flight Plan
- Cockpit Management
- Power Settings
- Lost Procedures
- Estimates of Ground Speed & ETA
- Fuel Burn
- VOR Usage

#### FLIGHT

##### Lesson Introduction:

- Pilotage
- VOR Course Tracking
- VOR Course Interception
- VOR Cross Check
- GPS Usage (if installed)
- Lost Procedures
- INSTRUMENT Stalls (Imminent)
- INSTRUMENT Unusual Attitudes
- INSTRUMENT VOR usage
- INSTRUMENT Radar vectors & climbs
- INSTRUMENT Emergency descent

##### Review:

- Short Field Takeoffs
- Short Field Landings
- Soft Field Takeoffs
- Soft Field Landings
- Power-Off Stalls (FULL)
- Power-On Stalls (FULL)

#### HOMEWORK

- Schedule & Take Written Test

## STAGE 2 - LESSON 6

### Dual - Local - Night

#### Objective:

The student will be introduced to night operations at a towered airport.

#### GROUND

Lesson Introduction:

- Aeromedical Factors
- Preflight
- Required Equipment

#### FLIGHT

Review:

- Towered Airport Communications

Lesson Introduction - Night:

- Normal Takeoffs & Landings
- Short Field Takeoffs & Landings
- Soft Field Takeoffs & Landings
- Complete at least 8 full-stop takeoff and landings.

#### HOMEWORK

- Practice creating Navigation Logs & Cross Country Planning.

**STAGE 2 - LESSON 7**  
**Dual - Cross Country**

**Objective:**

The instructor will take the student on their first cross-country flight.

**GROUND**

Review:

- Takeoff & Landing Data
- Weight & Balance
- Navigation Log
- Sectional Charts
- File Flight Plan
- Aeromedical Factors

Lesson Introduction:

- Weather Information
- Fuel Requirements

**FLIGHT**

Lesson Introduction:

- Departure
- Open Flight Plan
- Pilotage
- Dead Reckoning
- VOR Navigation
- Power Settings & Mixture
- Flight Following
- Arrival
- Closing Flight Plan

Review on Return Leg:

- Departure
- Open Flight Plan
- Pilotage
- Dead Reckoning
- Lost Procedures
- Estimates & ETA
- Find position with VOR
- INSTRUMENT Course Interception & Tracking
- Diversion Approach & Landing
- Continue to destination
- Emergency Descent
- Emergency Approach & Landing
- Radios

**HOMEWORK**

- Practice creating Navigation Logs & Cross Country Planning.

**STAGE 2 - LESSON 8**  
**Dual - Cross Country - 100nm Night**

**Objective:**

The instructor will take the student on a night cross country. The student will be introduced to Class B airspace.

**GROUND**

Review:

- Fuel Requirements
- Takeoff & Landing Data
- Weight & Balance
- Navigation Log
- Sectional Charts
- File Flight Plan
- Weather Information

**FLIGHT**

Review - To Destination:

- Departure
- Open Flight Plan
- Pilotage
- Dead Reckoning
- Power Settings & Mixture
- Flight Following
- VOR Navigation
- Lost Procedures
- Diversion
- Ground Speed & ETA
- Position by VOR
- Arrival
- Closing Flight Plan

Review - Return Leg:

- Cross Country Procedures
- Class B Airspace Communications
- Dead Reckoning
- Pilotage
- INSTRUMENT Tracking VOR
- INSTRUMENT Use of GPS
- INSTRUMENT Radar vectors

Lesson Introduction:

- Class B Airspace Communications
- Pilot Controlled Lighting
- Emergency Go-Around

**HOMEWORK**

- Practice creating Navigation Logs & Cross Country Planning.
- Study Oral Checkride Guide

**STAGE 2 - LESSON 9**  
**SOLO - Cross Country**

**Objective:**

The student will complete their first solo cross country. There must be a full-stop landing at an airport at least 50nm away.

**GROUND**

Review:

- Flight Instructor Reviews and Signs off Solo Cross Country Flight

**FLIGHT**

Solo:

- +50nm Cross Country
- Pilotage
- Dead reckoning
- Use of VORs
- Estimates & ETA
- Flight Following
- Opening & Closing Flight Plan
- Full stop at destination

**HOMEWORK**

- Study Oral Checkride Guide

**STAGE 2 - LESSON 10**  
**SOLO - Cross Country - 150nm**

**Objective:**

The student will complete their required 150nm cross country. There will be three stops in the shape of a triangle. Each stop will have 50nm in-between. One leg must be at least 50nm straight-line-distance.

**GROUND**

Review:

- Flight Instructor Reviews and Signs off Solo Cross Country Flight

**FLIGHT**

Solo:

- 150nm Cross Country
- +50nm at least one leg
- Pilotage
- Deadreckoning
- Use of VORs
- Estimates & ETA
- Flight Following
- Opening & Closing Flight Plan (Only 1 flight plan)
- Full stop at each airport

**HOMEWORK**

- Study Oral Checkride Guide

## STAGE 2 - LESSON 11

### SOLO - Cross Country

#### Objective:

This is the last solo cross country the student should need for the experience requirements.

#### GROUND

Review:

- Flight Instructor Reviews and Signs off Solo Cross Country Flight

#### FLIGHT

Solo:

- +50nm at least one leg
- Pilotage
- Deadreckoning
- Use of VORs
- Estimates & ETA
- Flight Following
- Opening & Closing Flight Plan
- Full stop at each airport

#### HOMEWORK

- Study Oral Checkride Guide
- Prepare cross country flight plan for practice checkride.



## STAGE 3 - LESSON 1

### Dual - Local

#### Objective:

The instructor will evaluate the student for any deficiency areas. This is essentially a practice checkride given by the instructor.

#### GROUND

##### Document Review:

- Pilot Documents
- Logbook Review
- Aircraft Documents
- Aircraft Maintenance Logbooks
- ADs
- Flight Planning

##### Practice Oral:

- Pilot Qualifications
- Airworthiness Requirements
- Weather Information
- Cross Country Flight Planning
- Airspace
- Performance & Limitations
- Systems
- Human Factors
- Preflight

#### FLIGHT

##### Review:

- Run Up
- Radio Communications
- Taxiing
- Traffic Pattern Operations
- Deadreckoning
- Pilotage
- Diversion
- S-Turns
- Turns around a Point
- Short Field Takeoffs
- Short Field Landings
- Soft Field Takeoffs
- Soft Field Landings
- Forward Slips
- Go-Around
- System & Equipment Malfunctions
- INSTRUMENT Straight & Level
- INSTRUMENT Turns to Headings
- INSTRUMENT Constant Airspeed Climbs & Descents
- INSTRUMENT Tracking a VOR
- INSTRUMENT Unusual Attitudes
- Steep Turns
- Power-Off Stalls
- Power-On Stalls
- Slow Flight
- Emergency Descent
- Emergency Approach & Landing
- Real Grass Strip Landing \*\*
- Collision Avoidance Precautions
- Wake Turbulence Avoidance
- Postflight Procedures
- Situational Awareness
- Aeronautical Decision Making

## STAGE 3 - LESSON 2

### SOLO - Local

#### Objective:

The student will practice any areas that the instructor has marked “Needs Improvement”, “Satisfactory”, or “Unsatisfactory”. This lesson may require multiple flights.

#### FLIGHT

##### SOLO:

- Run Up
- Radio Communications
- Taxiing
- Traffic Pattern Operations
- Diversion Practice
- S-Turns
- Turns around a Point
- Short Field Takeoffs
- Short Field Landings
- Soft Field Takeoffs
- Soft Field Landings
- Forward Slips
- Go-Around
- System & Equipment Malfunctions
- Steep Turns
- Power-Off Stalls
- Power-On Stalls
- Slow Flight
- Emergency Descent
- Emergency Approach & Landing

#### HOMEWORK

- Study Oral Checkride Guide

## STAGE 3 - LESSON 3

### Dual - Local

#### Objective:

The chief instructor will give the student a practice checkride. Upon getting the chief instructor's approval, the instructor may send the student to the real checkride.

#### GROUND

##### Document Review:

- Pilot Documents
- Logbook Review
- Aircraft Documents
- Aircraft Maintenance Logbooks
- ADs
- Flight Planning

##### Practice Oral:

- Pilot Qualifications
- Airworthiness Requirements
- Weather Information
- Cross Country Flight Planning
- Airspace
- Performance & Limitations
- Systems
- Human Factors
- Preflight

#### FLIGHT

##### Review:

- Run Up
- Radio Communications
- Taxiing
- Traffic Pattern Operations
- Dead reckoning
- Pilotage
- Diversion
- S-Turns
- Turns around a Point
- Short Field Takeoffs
- Short Field Landings
- Soft Field Takeoffs
- Soft Field Landings
- Forward Slips
- Go-Around
- System & Equipment Malfunctions
- INSTRUMENT Straight & Level
- INSTRUMENT Turns to Headings
- INSTRUMENT Constant Airspeed Climbs & Descents
- INSTRUMENT Tracking a VOR
- INSTRUMENT Unusual Attitudes
- Steep Turns
- Power-Off Stalls
- Power-On Stalls
- Slow Flight
- Emergency Descent
- Emergency Approach & Landing
- Real Grass Strip Landing \*\*
- Collision Avoidance Precautions
- Wake Turbulence Avoidance
- Postflight Procedures
- Situational Awareness
- Aeronautical Decision Making