## Private Pilot Lesson Outline

1.	SUBJECT AREAS (GENERAL)				PE
	a.	Aeromedical Factors			a.
	b.	Principles of Flight / 4 Forces		8.	GF
		1. Left Turning Tendencies			a.
		2. Load Factor			b.
	с.	Airplane Flight Controls/Surfaces			c.
		1. Stability /Controllability		9.	NA
	d.	Weight and Balance			a.
	e.	High Altitude Operations, Oxygen			b.
	f.	Regulations: FAR's, AIM, Reading List			с.
		1 MSA Right of Way			d.
	σ	Aviation Publications Reading list			о. Р
	ь. h	Airspace (ABCDEG SUA Other)			f.
		1 Equipment Rules Wx			σ.
	i	ATC Radar Services			۶۰ h
	1. ;	Logbook Corts Endorsoments Cat/Class			11. i
	J. لا	Chacklists and Acronyms		10	і. ст
	к.			10.	31
	1.	ADIVI: PAVE, IIVISAFE, DECIDE			d.
•	m.				D.
Ζ.	TEC	HNICAL SUBJECTS			С.
	d.	Certificates, Documents, Airworthiness			d.
	D.	Operation of Systems			e.
		1. Engine, ignition, carb/injected, oil, turbo			t.
		2. Propeller, Constant Speed			g.
		3. Landing Gear, Brake Systems			h.
		4. Flaps and High Lift Devices		11.	BA
		5. Fuel System, grade, usable, Hi/Lo Wing			a.
		6. VFR Flight Instruments			р.
		7. Electrical, Vacuum, Pitot/Static,			с.
	с.	POH Sections, Perf/Limitations, Vspeeds, Charts			d.
	d.	Airspeeds, KIAS, KCAS, KTAS, Ground Speed			e.
_	e.	Placards and Limitations, Instrument Indications			t.
3.	PRE	FLIGHT PROCEDURES		12.	EN
	a.	Preflight Inspection			a.
	b.	Cockpit Management and CRM			b.
	с.	Engine Start and Run-up, Passenger Briefing			с.
	d.	Taxiing, Wind Correction			d.
	e.	Before Takeoff Checks, Departure Briefing			e.
4.	AIR	PORT OPERATIONS			f.
	a.	Radio Communications, ATC, CTAF			g.
	b.	Traffic Patterns (right/left), Pattern Entry			h.
	с.	Airport and Runway Markings and Lighting		13.	NI
	d.	Tower and Non-Tower Operations			a.
	e.	Wind Indicators, Fly Overs, Unicom		14.	W
	f.	Clearances, Hold Shorts, Lineup, Rwy Xing			a.
5.	TAK	CEOFFS, LANDING AND GO-AROUNDS			b.
	a.	Normal and Crosswind Takeoff			с.
	b.	Short-Field Takeoff and Climb			d.
	с.	Soft-Field Takeoff and Climb		15.	РС
	d.	Normal and Crosswind Landing			a.
	e.	Forward Slip to a Landing		16.	Ac
	f.	Go-Around/Rejected Landing			a.
	g.	Short-Field Approach and Landing			b.
	h.	Soft-Field Approach and Landing			c.
	i.	Power-off 180° (commercial only)			d.
	j.	Aborted Takeoff			e.
6.	BAS	SIC FLIGHT MANEUVERS			f.
	a.	Straight-and-Level Flight, Level Turns		17.	Sta
	b.	Climbs and Climbing Turns			a.
	с.	Descents, Turning, High/Low Drag			b.
	d.	Side Slips to lose Altitude			c.
	e.	Rudder, Coordination, Crabbing			
	f.	Compass Errors, UNOS, ANDS, Timed Turns			

7.	PER	FORMANCE MANEUVERS (>1500' AGL)	
	a.	Steep Turns (45°)	
B.	GRC	OUND REFERENCE MANEUVERS (600-1000 AGL)	
	a.	Rectangular Course	
	b.	S-Turns Across a Road	
	с.	Turns Around a Point	
э.	NAV	IGATION and CROSS COUNTRY	
	a.	Pilotage and Dead Reckoning	
	b.	FSS/ATC Services, Navigation/Comm Systems	
	с.	Diversion and estimations	
	d.	Lost Procedures	
	e.	Navigation Log and Flight <u>Planning steps</u>	
	f.	Radio Navigation, VOR, ADF, GPS Systems	
	g.	Flight Planning, Wx, VFR File	
	h.	Charts, AF/D, Airport Diagrams	
	i.	Solo Cross-Country Checklist	
10.	STA	LLS, SLOW FLIGHT, SPINS (>1500' AGL)	
	a.	Maneuvering During Slow Flight	
	b.	Power-On Stalls (pre, full, turning)	
	с.	Power-Off Stalls (pre, full, turning)	
	d.	Crossed-Control Stalls	
	e.	Elevator Trim Stalls	
	t.	Secondary Stalls	
	g.	Spins and Spin Awareness	
	n.	Accelerated Maneuver Stalls	
11.	BAS	IC INSTRUMENT MANEUVERS	
	a. h	Constant Airspood Climbs /Docconts	
	ы. С	Heading Turns, Partial Papel, Compass/Time Turns	
	с. d	Recovery from Unusual Elight Attitudes	
	u. o	Comm Nay Systems/Eacilities and Services	
	e. f	Instrument Scanning Techniques	
12	FMF		
	a.	Emergency Approach and Landing (engine out)	
	h.	Systems and Equipment Malfunctions	
	с.	Emergency Equipment and Survival Gear	
	d.	Emergency Descent (commercial only)	
	e.	Departure Decisions. Use of Checklists	
	f.	Lost, Lost Comm, Light Gun Signals	
	g.	Loss of Flight Controls (primary controls)	
	ĥ.	Fire in flight procedures	
13.	NIG	HT FLIGHT	
	a.	Preflight, Min Equip, Med, Emergencies	
14.	WE/	ATHER	
	a.	Weather Theory	
	b.	Wx Reports: METAR/TAF, TFR, Notam's,	
	c.	Wx Briefings, Hazardous Wx, In-Flight	
	d.	Atmosphere and Performance	
15.	POS	TFLIGHT PROCEDURES	
	a.	After Landing, Parking and Securing	
16.	Add	ition Areas and Maneuvers	
	a.	Minimum Equipment Lists (MEL)	
	b.		
	С.	Impossible Turn, small radius turns	
	d.	Failing Leaf Stalls	
	e. f	Stuck Infottle Approach/Landing	
	Τ. C+	A/C Logs, Maintenance Four, Fower Four	
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	d. b	CheckRide Drep: Dractical Tast Standards (DTS)	
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## Pre-Solo Checklist - 14 CFR 61.87

Pre-Solo Knowledge Test	
Proper flight preparation procedures, including preflight	
planning and preparation, Power plant Operation, and	
Aircraft System.	
Taxiing or surface operations, including run-ups.	
Takeoffs and landings, including normal and crosswind	
Straight and level flight, and turns in both directions.	
Climbs and climbing turns	
Airport traffic patterns, including entry and departure	
procedures	
Collision avoidance, wind shear avoidance, and wake	
turbulence avoidance.	
Descents, with and without turns, using high and low drag	
configurations.	
Flight at various airspeeds from cruise to slow flight.	
Stall entries from various flight attitude and power	
combinations with recovery initiated at the first indication of	
a stall and recovery from a full stall.	
Emergency procedures and equipment malfunctions.	
Ground reference maneuvers.	
Approaches to a landing area with a simulated engine	
malfunctions.	
Slips to a landing.	
Go-arounds.	
Endorsements (3: Medical, Logbook, Logbook knowledge test)	

## **Cross-Country Checklist – 14CFR 61.93**

Use of aeronautical charts for VFR navigation using pilotage and dead reckoning with the aid of a magnetic compass.Use of aircraft performance charts pertaining to cross-country flight.Procurement and analysis of aeronautical weather reports and forecasts including recognition of critical weather situations and estimating visibility while in flight.Emergency procedures.Traffic pattern procedures that include area departure, area arrival, entry into the traffic patter, and approach.Procedures and operating practices for collision avoidance, wake turbulence precautions and wind shear avoidance.Recognition, avoidance, and operational restrictions of hazardous terrain features in the geographical area where the cross-country flight will be flown.Procedures for operating the instruments and equipment installed in the aircraft to be flown including recognition and use of the proper operational procedures and indications.Use of radios for VFR navigation and two-way communications.Climbs at best angle and best rate.Control and maneuvering solely by reference to flight instruments, including straight and level flight, turns, descents, climbs, use of radio aids and ATC directives.	Grobb Gountry Greeningt Trarit office	
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	Endorsements ()	

## Aeronautical Experience - 14CFR 61.109

Log at least 40 hours of flight time that includes at least	
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20 nours of flight training and 10 nours of solo flight	
training in the areas of operation listed in §61.107(b)(1)	
3 hours of cross-country flight training	
3 hours of night flight training that includes	
One cross-country flight of over 100 nautical	
miles total distance; and	
10 takeoffs and 10 landings to a full stop (with	
each landing involving a flight in the traffic	
pattern) at an airport	. <u> </u>
3 hours of flight training on the control and maneuvering	
of an airplane solely by reference to instruments,	
including straight and level flight, constant airspeed	
climbs and descents, turns to a heading, recovery from	
unusual flight attitudes, radio communications, and the	
use of navigation systems/facilities and radar services	
appropriate to instrument flight	L
3 hours of flight training with an authorized instructor in	
preparation for the practical test, which must have been	
performed within the preceding 2 calendar months.	
10 hours of solo flight time ne, consisting of at least	
5 hours of solo cross-country time	
One solo cross country flight of 150 nautical	
miles total distance, with full-stop landings at	
three points, and one segment of the flight	
consisting of a straight-line distance of more	
than 50 nautical miles between the takeoff and	
landing locations; and	
Three takeoffs and three landings to a full stop	
(with each landing involving a flight in the traffic	
pattern) at an airport with an operating control	
tower.	
Note: A maximum of 2.5 hours of training in a flight	
simulator or flight training device representing the	
category, class, and type	

Image: Construct of the system of the system

(Matt Beyer 2016.0508)