

Total Lessons - Minimum of 4. Time to Complete: 6-12 hours flying, 2-4 hours ground instruction, 2-4 hours self-study

Ground - 1, BASICS: normal & x-wind landings 20 minutes

Watch:	https://www.youtube.com/watch?v=IAiWH2pV8Do
Read:	AFH ch. 8 - approaches & landing (normal & cross-wind)
Watch:	https://www.youtube.com/watch?v=FBYbT6riWXE
Discuss:	Ground discussion about material reviewed. Student demonstrates knowledge of subject material

Flight Phase - 1, BASICS: normal & x-wind landings 1.5-2.0

Normal traffic pattern w/wind correction	Student flies rectangular pattern, 3/4 - 1 mile from runway, no more than 30 deg bank, +/- 100ft pattern altitude, corrects for wind
Normal takeoffs	Smoothly rotates when airplane is ready to fly, no wing dip, tracking centerline, proper x-wind correction, ball centered in climbout
Normal landing, full flaps	Establishes aimpoint, lands +/- 200 ft, minimal float, airspeed +5, -0.
Normal landing, full flaps	Establishes aimpoint, lands +/- 200 ft, minimal float, airspeed +5, -0.
Normal landing, 2 notches	Establishes aimpoint, lands +/- 200 ft, minimal float, airspeed +5, -0.
Normal landing, 1 notch	Establishes aimpoint, lands +/- 200 ft, minimal float, airspeed +5, -0.
Normal landing, no flaps	Establishes aimpoint, lands +/- 200 ft, minimal float, airspeed +5, -0.
Touch 'n go's	Maintains centerline, rotates smoothly, no wing dip, ball centered in climbout

*Instructor determines if student is ready to move on; if not, student will repeat the basics until mastered.

Ground - 2, SHORTS & SOFTS 30 minutes

Watch:	https://www.youtube.com/watch?v=bSi2-SdwJis	https://www.youtube.com/watch?v=yw4Umlj4sbQ	https://www.youtube.com/watch?v=0m1-tWDAOho
Watch:	https://www.youtube.com/watch?v=majL5KcBrG4	https://www.youtube.com/watch?v=gLAyzcHRbzg	
Read:	AFH, Ch 8 - Short & Soft-field landings		
Discuss:	Ground discussion about material reviewed. Student demonstrates knowledge of subject material & factors affecting aircraft performance.		

Flight Phase - 2 - SHORT / SOFT FIELD T/O & LDG 1.7-2.0

Normal pattern, approach / landing	Review of previous material, student performs per above standards
Short-Field Demo	Instructor demonstrates short-field landing & takeoff technique
Short-Field Takeoff Practice	Student holds brakes, full power & release, becomes airport ASAP, climbs out at Vx +/- 5kts until clear of obstacle
Short-Field landing Practice	Student established on final ~ 500 AGL, fully configured, touch down w/minimal float, Aimpoint +200, -0 ft, Airspeed +5/-0
Soft-Field Demo	Instructor demonstrates soft-field landing & takeoff technique
Soft-field takeoff Practice	Student taxies w/full aft yoke, becomes airborne ASAP, accelerates in ground effect ~ 2-5ft above rwy, climbs out at safe airspeeds
Soft-Field landing Practice	Student flies stable approach, adds ~50rpm in flare, touches down softly & keeps weight off of nose wheel on roll-out
Short / Soft ldg to soft-takeoff	Students performs short or soft landing, and transitions to a soft-field takeoff smoothly & on centerline
Stop & Go	Student performs short-field landing to a complete stop on rwy, performs short-field takeoff from stopping point.

*Instructor determines if student is ready to move on; if not, student will repeat lessons until mastered.

Ground - 3 ABNORMAL & UNUSUAL 30-45 minutes

Watch:	https://www.youtube.com/watch?v=TueFgC-vPLU	https://www.youtube.com/watch?v=aK5ks7iXF1M
Watch:	https://www.youtube.com/watch?v=aOISPtexCsA	
Read:	AFH, Ch 8 - power off approaches, high / low approaches, go-arounds, high round-out, ballooning / bouncing	
Read:	http://flightsafety.org/files/alar_bn8-5-wetwry.pdf	
Discuss:	Ground discussion about material reviewed. Discuss off-airport landings, density altitude, + all other study areas.	

Flight Phase - 3 ABNORMAL & UNUSUAL 1.7-2.0

Power-Off 180	Maintains best glide, turns toward runway as soon as practical, touches down on runway safely & under control
High Approach to Landing	Performs a forward slip, maintains proper airspeed +5, -0 kts, touches down in first 1/3 of runway, transitions smoothly to normal landing, uses s-turns as appropriate
Stall / Spin Awareness	Keeps ball centered during turns & especially at low airspeeds
Go-Around	Elects to go-around in sufficient time, without delay, maintains airspeed, and slowly retracts flaps with sufficient speed on climbout, ball centered
Ballooning	Demonstrates proper technique in recovering from a balloon, makes proper decision to go around safely.
Contaminated Surfaces Landings	Student demonstrates (with CFI talking through) proper wet / contaminated surface landing technique
Aborted takeoff	Makes decision to abort, smoothly retards power & applies brakes & stopping technique, stops on runway & makes decision on what to do.
Simulated high density alt takeoff / landing	Student, with CFI help, has student feel what a high density altitude takeoff / landing would be like with simulated reduced power / higher landing speeds

*Instructor determines if student is ready to move on; if not, student will repeat lesson until mastered.

Ground - 4, REFINEMENT / PRACTICE**15 minutes**

- Discuss: Short flight briefing
- Discuss: Ground discussion about material reviewed. Student demonstrates knowledge of subject material & factors affecting aircraft performance.

Flight Phase - 4 REFINEMENT / PRACTICE**1.7-2.0**

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|--|------------------------|
| <input type="checkbox"/> Normal T/O & Landing | Per previous standards |
| <input type="checkbox"/> Short-Soft field combined | Per previous standards |
| <input type="checkbox"/> Power-off 180's | Per previous standards |
| <input type="checkbox"/> Stop & Go | Per previous standards |
| <input type="checkbox"/> Go-Around | Per previous standards |
| <input type="checkbox"/> High Approach to landing | Per previous standards |
| <input type="checkbox"/> Cross-wind t/o & landing | Per previous standards |

- *Instructor determines if student is ready to move on; if not, student will repeat lessons until mastered.

Ground - 5, ORAL EXAM**30 minutes**

- Question: CFI questions student on proper techniques to demonstrate sufficient knowledge.

Flight Phase - 5 FINAL DEMONSTRATION**1.7-2.0**

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|---|--|
| <input type="checkbox"/> Normal T/O & Landing | Flies rectangular pattern, +/- 100 feet, airspeeds +5, -0, establishes touchdown point & touches down w/in 200 feet. |
| <input type="checkbox"/> Short field T/O & Landing | Demonstrates maximum effort takeoff, Vx +5, -0 kts, safely retracts flaps. Makes steep appr & minimal float, touchdown +200 / -0 ft from aimpoint |
| <input type="checkbox"/> Soft Field T/O & landing | Keeps weight off nosewheel during taxi / takeoff, lifts off ASAP, accelerates in ground effect & climbs out normally. Lands softly w/minimal weight on nosewheel |
| <input type="checkbox"/> Power off 180, touch 'n go | Maintains best glide, makes turn toward rwy ASAPractical, makes runway & touches down in normal, safe attitude |
| <input type="checkbox"/> High approach-to landing | Uses forward slip / and or s-turns to loose altitude, maintains proper airspeeds (not too slow), and touches down w/in first 1/3 of runway |
| <input type="checkbox"/> No-Flap landing | Flies a normal approach to land with zero flaps, maintains sufficient airspeed & aimpoint reference, and touches down normally, without excess speed |
| <input type="checkbox"/> x-wind landings & takeoffs | On every pattern, demonstrates proper x-wind technique, lands in center of runway, maintains centerline, with proper aileron correction / crab angle |
| <input type="checkbox"/> Pattern / other | On every pattern, pilot flies rectangular patterns, corrects for wind, etc. Elects to go-around if necessary. |

- Upon satisfactory completion, instructor will issue certificate of training & course completion!