

Bermuda Dunes Flight Training

Adaptive Private Pilot Syllabus



"If you aren't having fun, you're doing it wrong."

Our Training Philosophy

At Bermuda Dunes Flight Training, we know that nobody learns in a perfectly linear straight line. For that reason, this syllabus does not include rigid timelines, fixed hour requirements, or published financial estimates, because every individual pilot's capabilities and success rates are completely unique.

Instructors: Use this as a roadmap, not a constraint. If a student is struggling with a family of maneuvers, find a new path. Read their unspoken signals, adapt your teaching style, and focus on building safe, competent pilots.

Phase 1: Fundamentals & Aircraft Control

The goal of this phase is getting the student's eyes outside the cockpit and developing a natural feel for the aircraft's energy.

- **Pre-Flight & Risk Management:** Introduce the P.A.V.E. checklist to evaluate pilot readiness, aircraft health, environmental factors, and external pressures.
- **Systems Familiarization:** Introduce the student to the specific aircraft, whether they are flying the 1980 Cessna 172P, the heavier 180 HP 172S, or the Gen 1 Cirrus SR20 equipped with steam gauges and dual GI275s.
- **Basic Attitude Flying:** Mastering pitch, power, and trim without fixating on digital screens or chasing analog needles.
- **Slow Flight:** Teaching the student to pitch for airspeed and use power for altitude, while applying massive right rudder to counteract the P-factor.
- **Steep Turns:** Entering at 95 KIAS, smoothly rolling to 45°, and adding a ~100 RPM bump of power.
 - *Instructor Note:* Encourage students to manage the back pressure by feel and look outside at the cowling, rather than masking the forces with trim.
- **Stall Recognition & Recovery:**
 - *Power-Off Stalls:* Simulating the approach to landing at 65 KIAS with 30° of flaps.
 - *Power-On Stalls:* Simulating takeoff by aggressively pitching up 15-20° and stepping heavily on the right rudder.

Phase 2: The Pattern & Precision

The goal of this phase is mastering ground tracks, traffic pattern discipline, and specialized landings.

- **Ground Reference Maneuvers:** Practicing turns around a point and S-turns between 90-100 KIAS to build wind awareness.
- **Standard Traffic Pattern:** Establishing a disciplined flow: 90 KIAS on the downwind, 80 KIAS on base with 20° flaps, and a stabilized final approach at 65-70 KIAS with 30° of flaps.
- **Short Field Operations:**
 - *Takeoff:* Rotating briskly at 51 KIAS and pitching for 56 KIAS to clear obstacles.
 - *Landing:* Nailing exactly 61 KIAS on final, touching down firmly, and immediately retracting the flaps to dump lift for maximum braking.
- **Soft Field Operations:**
 - *Takeoff:* Keeping the nosewheel off the ground, lifting off into ground effect, and accelerating to 62 KIAS (V_x) or 74 KIAS (V_y) before climbing.
 - *Landing:* Arresting the sink rate with a touch of power and holding the yoke full aft throughout the entire rollout to protect the nose gear.
- **0-Flap Landings:** Teaching patience by pulling power early, not forcing the nose down, and holding the aircraft inches off the runway until the main wheels chirp.

Phase 3: Cross-Country & Real-World Operations

The goal of this phase is spatial orientation, navigation, and advanced energy management.

- **Pilotage & Dead Reckoning:** Navigating strictly by visual landmarks, time, and distance.
- **En-Route Energy Management:** Transitioning from the 74 KIAS (Vy) climb to an 80-85 KIAS en-route climb to increase forward visibility and engine cooling.
- **Emergency Descents:** Training the muscle memory to pull throttle to idle and immediately roll into a 30° to 45° bank.
 - *Instructor Note:* Emphasize that this rolling bank maintains positive Gs, keeps fuel feeding, prevents debris from floating into the eyes, and clears the airspace below.
- **Power-Off 180s (Introduction):** Developing advanced glidepath judgement by trimming aggressively, using the first 10° of flaps to tighten the turning radius, and strategically saving remaining flaps to balloon or dial in the target.

Phase 4: Checkride Polish

The goal of this phase is ensuring the student meets all Practical Test Standards (PTS/ACS) and operates entirely as Pilot-in-Command.

- **Mock Checkride:** A comprehensive, scenario-based flight where the instructor acts as the Designated Pilot Examiner (DPE).
- **Weak-Point Polishing:** A strictly adaptive phase where the instructor and student mutually identify and clean up any remaining maneuvers.
- **Final Endorsement:** Signing the student off with the confidence that they are safe, capable, and ready.

Appendix B: Instructor Notes & Navigating Student Plateaus

The Golden Rule: Teach the Individual, Not the Syllabus

Every single person who walks through our doors is unique, and pilot flight hour success rates vary far too widely to hold anyone to a fixed, rigid timeline. When a student hits a wall, it is not a failure of their ability; it is a signal that our approach needs to shift. Read their unspoken signals, identify the bottleneck, and change the script.

1. The "Landing Flare" Plateau

The most common plateau in aviation. The student is consistently over-controlling, flaring too high, or dropping the aircraft onto the runway.

- **The Fix:** Stop doing laps in the traffic pattern. It creates fatigue and frustration. Leave the pattern and fly out to the practice area to do slow flight just above stall speed. Get them comfortable with the sloppy feel of the controls at low airspeed.
- **The Bermuda Dunes Way:** Revisit the 0-flap landing. A 172 floating down the runway with zero flaps forces patience. Have them fly the airplane inches off the runway without trying to land, just holding it there until the mains chirp.

2. Information Overload & Instrument Fixation

The student's eyes are glued inside the cockpit. They are chasing needles, over-correcting, and losing their intuitive feel for the aircraft's energy.

- **The Fix:** Cover the instruments. Whether they are flying the 172s or transitioning into the Gen 1 SR20, a piece of paper over the steam gauges or the dual GI275s works wonders.
- **The Bermuda Dunes Way:** Force them to look outside. Remind them that regardless of what avionics are in the panel, stick-and-rudder fundamentals are exactly the same. Pitch and power equal performance. Have them set the pitch visually using the cowling and the horizon, then remove the cover so they can see the instruments confirm what their eyes already know.

3. The "Radio Paralysis" Plateau

The student flies beautifully but freezes up or stammers the moment they press the Push-To-Talk (PTT) switch.

- **The Fix:** Stop letting them try to script entire paragraphs in their head before keying the mic. Break it down to the basics: *Who you are calling, Who you are, Where you are, What you want.*
- **The Bermuda Dunes Way:** Take the pressure off during flight. Have them practice calls on the ground, in the car, or sitting in the hangar. If they stumble in the air, do not immediately take over the radios unless safety dictates it. Let them correct their own mistakes; ATC is used to student pilots.

4. The "Pre-Solo Confidence" Plateau

The student has the mechanical skills to fly the airplane safely but lacks the decision-making confidence to do it without you sitting in the right seat.

- **The Fix:** Stop talking. As instructors, we often talk our students through maneuvers without realizing we are acting as a crutch.
- **The Bermuda Dunes Way:** Brief a flight where you announce you will be acting merely as a "safety pilot passenger." Fold your arms, look out the window, and let them make non-critical mistakes. Let them get slightly off altitude or overshoot a turn, and wait to see if they catch it themselves. They need to prove to themselves that they can fix a bad situation without your input.

5. The "Burnout" Plateau

The student is quiet, frustrated, and performing worse today than they did two weeks ago.

- **The Fix:** Put the syllabus away completely.
- **The Bermuda Dunes Way:** Remember our motto: *"If you aren't having fun, you're doing it wrong."* If a student is burning out, take them on a flight purely for the joy of it. Fly somewhere new, grab a \$100 hamburger, or just do some scenic maneuvers with zero grading or pressure. Remind them why they wanted to learn how to fly in the first place.