

## **NOTE:**

This document is informational in nature and is intended to familiarize prospective students and training partners with ParAmerica's course of instruction. As such, it is not to be considered to be a sole source of information designed to meet all training needs. This document is also not intended to serve as a guide or resource for "self-training", or a replacement for sufficient, comprehensive instruction provided by an expert instructor.

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## Training Syllabus

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### Purpose:

To impart the **skills** necessary to fly paramotors, the **knowledge** to keep pilots safe, the **confidence** to continue to grow, the **humility** to respect the sport, and the **wisdom** to make good decisions as Pilot-in-Command.

This syllabus is based upon the USPPA's training program, designed with input from a wide variety of experienced PPG instructors, and continuously refined to bring you the best possible training experience.

Initialing each subgroup by the student helps track that the material was covered and understood by the student; it is intended to serve as both a checklist and verification. Students should review this syllabus with the instructor to follow up on items that have not been completed.

Students are *highly encouraged* to keep a log that records the date, location, motor, wing, inflation type, number of landings, time, and maneuvers performed for each day of flying or, if more detail is desired, lessons learned within each individual flight.

### Course Outline:

This is intended to be a *general* outline of your course of instruction. Your training progression will be tailored by your instructors to match your physical abilities, aptitude, and attitude along with existing weather conditions during your course of instruction.

Should you need anything during your visit, our staff will be more than happy to serve you:

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## Introduction:

- Staff and Student Introductions
- Overview of Course of Instruction
- Progress Sheets
- Daily Schedule
- Attitudes and Expectations
- Active Participation
- "I Believe Button"
- FBO Expectations
- Fatigue
- Weather
- Hydration
- Sunscreen/Proper Footwear
- Rest Day
- Safety
- The Eight Golden Rules:
  1. DBAD.
  2. Don't fly into stuff.
  3. Be a robot.
  4. Don't be sorry.
  5. Be cool.
  6. Be humble.
  7. Don't use paramotors for evil.
  8. Give back to the sport.
- Administrative Matters: Forms / Waiver / Student Contract / Payments

# Progression Sheet

Student:

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Date:

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*Actual training may not take place in the exact order listed, or in the time period specified.*

<b>Module 1: Introductory Training</b>	<b>Date</b>	<b>Initial</b>
<b>Staff &amp; Student Introductions</b>		
<b>Introduction to Ground Handling</b>		
Unpacking and Laying Out Glider		
Winds, Site selection		
Glider Anatomy, Preflight Check		
Fundamentals of an Efficient Launch		
Harness Procedure		
Forward Preparation/Inflation		
Reverse Preparation/Inflation		
Fundamentals of Control		
Clip-in Practice		
Instructor Demo - Ground Handling *		
Forward Inflation, Forward Control Practice *		
Reverse Inflation, Reverse Control, Turnaround Practice *		
<b>Regulations, Law &amp; Public Perception</b>		
Public Perception		
Overarching Themes		
FAR Part 103 (Origins, Applicability, Operating Procedures)		
Local Codes and Ordinances		
Best Practices		
<b>Airport Usage</b>		
Private and Public Airports		
Preparation, Coordination, Best Practices		

<b>Airspace I Class</b>		
VFR Sectional Charts		
Controlled Airspace (Class A, B, C, D, E, E Surface Areas)		
Uncontrolled Airspace (Class G)		
<b>Homework: Read “Terminology that Must be Memorized” and “Chair Fly”</b>		

<b>Module 2: Pre-Solo</b>	<b>Date</b>	<b>Initial</b>
<b>“First Flight” Class (Basic Motor Safety, Terminology, Procedure, Hand Signals)</b>		
Propeller Safety		
Starting Procedures		
Use of Kill Switch		
Launching		
Flight Agenda/Procedure		
Flight Pattern		
Flight Technique (Turns, Trims, Brake Input, Throttle Control, Oscillation Control)		
Verbal Instructor Commands		
Loss of Communications Procedures		
Motor Simulator Briefing		
Thrust/Posture Exercise Briefing		
Instructor Demo - Simulator and Thrust/Posture Exercise *		
Motor Simulator - Engine Off		
Motor Simulator - Engine On		
Thrust/Posture Exercise aka “Lean Backs” (Trike Students: Taxi Practice)		
Ground Handling Practice with Throttle Simulator		
<b>Towing Exercise Safety Brief (If Applicable) *</b>		
Towing Exercise (If Applicable)		
<b>Tandem Flight Safety Brief and Lesson Plan (If Applicable) *</b>		
Tandem Flight (If Applicable)		
<b>Airspace II Class</b>		
Special Use Airspace (Prohibited, Restricted, Military Operating, Alert Areas)		
Temporary Flight Restrictions		
Military Training Routes, Terminal Radar Service Areas, Special Flight Rules Areas		
Wildlife Areas, Areas of Critical Infrastructure		
<b>Homework: Complete Pre-Solo Exam and “Chair Fly”</b>		

<b>Module 3: Solo Flight</b>	<b>Date</b>	<b>Initial</b>
Review of Module 1 and 2, Question & Answer Period		
Review Pre-Solo Exam		
Solo flight, <i>if ready</i> ("Taxi practice", Turns, Trims, Weight-shift Turns, Pattern, Landing)		
Debrief and Film Review		
<b>Introduction to Paramotor Maintenance</b>		
Overarching Themes		
Common Tools		
Resources		
Two-Stroke Motor Operating Principles		
Motor Anatomy		
Sparkplug Analysis		
Fuel and Oil		
Basic Maintenance Procedures (Assembly, Belt tightening, Basic Carburetor Tuning)		
<b>Preflight and Postflight Inspections *</b>		
<b>Weather I</b>		
Ideal Conditions		
Atmospheric Principles		
Atmospheric Stability & Instability		
Daily Thermic Cycle		
<b>Wing Design I</b>		
Basic Aerodynamics		
Paraglider Principles (Aspect Ratio, Wing Loading, Steering Options)		
Trimmers, Reflex, and Speedbar		
<b>Weather II</b>		
Thunderstorms		
Downdrafts, and Microbursts		
Clouds		
Weather Phenomenon		
Fronts, Pressure Systems		
Forecast Products		

<b>Wing Design II</b>		
“How It’s Made” (Fabric Production, Glider Manufacturing, Load Testing, Certification)		
Classification and Rating Systems		
Glider Selection		
Glider Technology		
Glider Care		
Inspections		

<b>Module 4: Safety</b>	<b>Date</b>	<b>Initial</b>
<b>Human Factors</b>		
The Anatomy of a Mistake		
Hazardous Attitudes		
The “Traps”		
The Dunning-Kruger Effect		
The Boyd “OODA” Loop		
Physical and Mental Margins		
Personal Minimums (“IMSAFE” Checklist)		
<b>Video Studies</b>		
<b>Personal Anecdotes</b>		

<b>Consolidated Theory &amp; Classroom Work</b>	<b>Date</b>	<b>Initial</b>
Introduction to Ground Handling		
Regulations, Law & Public Perception		
Airport Usage		
Airspace I		
“First Flight”		
Airspace II		
Introduction to Paramotor Maintenance		
Preflight and Postflight Inspections		
Weather I		
Wing Design I		
Weather II		
Wing Design II		
Safety (Human Factors, Video Studies, Personal Anecdotes)		

\* Typically Conducted in the Field

## Terminology that Must Be Memorized

<b>Find your Center</b>	Walk forward slowly, feeling tension on both Front-A's, and find the center point on your glider.
<b>Chest Out</b>	Use your chest to inflate your glider, as if trying to keep a quarter between you shoulder blades.
<b>Arms Back</b>	Keep your hands out and back - do not push forward with your hands during inflation.
<b>Touch of Power</b>	Add approximately 10% power and hold to help push you through the power band during inflation.
<b>Run</b>	Run as fast as you can - DO NOT SIT DOWN and do not stop running until instructed to do so.
<b>Release</b>	Release both A-Risers once the glider is overhead.
<b>Lean Back</b>	Lean backwards into the thrust as you increase power to achieve proper takeoff posture.
<b>Power</b>	Gently add 30% power and <i>smoothly</i> increase 30% more each time "power" is asked.
<b>Stop</b>	IMMEDIATELY reduce power completely and kill the engine; turn and face the wing.
<b>Pressure</b>	From the pulley, add 3 inches of pressure at a time each time "pressure" is asked.
<b>Stow Your Break(s)</b>	Attach your brake toggle(s) to the magnet(s), Ozone-to-Ozone, as directed by your instructor.
<b>Find Your Seat</b>	Reach down with your right hand alone and use it to get into your seat.
<b>Shake Legs</b>	Let the instructor know that you are OK and that you hear him.
<b>Hold</b>	Maintain current power or pressure, as directed by your instructor.
<b>Left</b>	Smoothly pull the left toggle to your ear and your shoulder and hold.
<b>Right</b>	Smoothly pull the right toggle to your ear and your shoulder and hold.
<b>Reduce</b>	Reduce power or pressure to the amount directed by your instructor.
<b>Find Cruise</b>	Reduce throttle to a power setting where you are no longer climbing or descending.
<b>Hands up</b>	Keep your hands high at the pulley above your ears with a bit of pressure.
<b>Out of your seat</b>	Push yourself out of the seat and keep one foot in front of the other, ready to run.
<b>Wait</b>	Keep your hands up and do not start your flare until directed.
<b>All the Way Down</b>	At approximately 3-4 feet from the ground, finish your flare.
<b>On Your Feet</b>	Land on your feet while finishing your flare.



# Comments Sheet

What I Did (Topics, Lessons)	What I Learned (Comments, Conditions, Debrief Notes)
<u>DAY 1:</u>	
<u>DAY 2:</u>	
<u>DAY 3:</u>	
<u>DAY 4:</u>	

What I Did (Topics, Lessons)	What I Learned (Comments, Conditions, Debrief Notes)
<u>DAY 5:</u>	
<u>DAY 6:</u>	BE INCOME
<u>DAY 7:</u>	
<u>DAY 8:</u>	SAMA

What I Did (Topics, Lessons)	What I Learned (Comments, Conditions, Debrief Notes)
<u>DAY 9:</u>	
<u>DAY 10:</u>	BE INCOMPL
<u>DAY 11:</u>	
<u>DAY 12:</u>	SAMA