



# Instructor Syllabus

United States Powered Paragliding Association

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This syllabus is for Instructor Administrators who are putting on an Instructor Clinic. It will help educate and evaluate those experienced pilots wanting to become USPPA/USUA PPG instructors. The course has been designed to help administrators perform these clinics in a reasonably standardized format while letting applicants know what to expect when they attend.

**I have given the training listed in this syllabus appropriate to the ratings administered.**

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
Print Admin's Name                      Admin's Signature                      Date

**I have received training in, and understand the material covered in this syllabus,  
appropriate to the ratings administered.**

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
Print Applicant's Name                      Applicant's Signature                      Date

# Requirements & Apprenticeship

The “Ratings Program” document contains the requirements for a USPPA Instructor. Successful completion of this clinic is a major element.

## Apprenticeship Form

During the apprenticeship, the applicant is expected to help train, observe, and generally help with the operation of the school. The instructor in charge recognizes that this is not a test, but rather a chance to impart wisdom that is best learned from experience.

The instructor in charge acknowledges that the apprentice instructor has completed \_\_\_\_\_ hours of apprentice time.

Training Tasks Accomplished and comments:

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Apprentice Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Instructor Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Instructor USPPA#: \_\_\_\_\_

# USPPA Instructor Syllabus

Instructor Administrators should cover this material thoroughly while offering personal techniques to serve as a starting point for new instructors on how to teach powered paragliding. It is beneficial for an instructor to offer numerous techniques that can be applied when necessary.

**Objective:** Instructor Applicant should be able to work with a student (actual or the administrator roll-playing as the student) in an effective manner in each situation.

Task	---Initials---		Curr Date
	Stud	Instr	
<b>1. Before Training Begins. (1:00 hr)</b>			
(a) Documentation & Limitations: .....	_____	_____	_____
i. Go over the applicant’s documentation to insure he is eligible to be signed off for an instructor clinic. Check the USPPA web site for the most current requirements (PPG3 rating, recommendations, etc.).			
ii. Applicant must only work with students as directed by the administrator.			
iii. Motors should not be started unless directed by the administrator.			
(b) Risk awareness and disclosure. There is risk involved, the applicant accepts the risk of his own volition. Fill out and sign any required waivers or forms.....	_____	_____	_____
(c) Payment plans and expectations. Applicant should know what to expect. ....	_____	_____	_____
i. Clinic is two 8-hour days.			
ii. Cost and understanding that successful completion is not guaranteed since there is a performance requirement. It is understood that the administrator will work with the student to correct deficiencies, but it may require more training. These defincies must be thoroughly discussed and documented.			
iii. What gear is provided, if any, and replacement of damaged gear policy.			
(d) USPPA Instructor Responsibilities, Obligations, Rating revocation procedures			
(e) Pass Instructor written test, Go over any missed questions. ....	_____	_____	_____
(f) Importance of human limitations while learning, ..... especially when experiencing new sensations. And importance of insuring the student will respond correctly to instructor commands.	_____	_____	_____
(g) Recognizing when students are no longer learning.....	_____	_____	_____
(h) Teaching styles & attitude.....	_____	_____	_____
(i) Acceptable flight locations.....	_____	_____	_____
Until a student has gained knowledge to read sectionals and call FSS to determine the legality of his flight, the instructor must go over areas where the student may fly.			
<b>2. Radio Communications. (0:30)</b>			
(a) Radio Gear (USHPA, Aviation, FRS, Business Band, CB, 2-Meter HAM, Other).....	_____	_____	_____
i. Importance of using.			
ii. Legality of use.			
iii. Mounting methods to student.			
iv. Ability for student to respond.			

- v. Annunciation, phraseology.
- vi. Importance of student’s correct physical response to radio commands.

(b) Value of having back-up communications (although it is not required). ..... \_\_\_\_\_

**3. Towing—if used, complete section D on risks. (2:00 or 0:05)**

(a) Proper Procedure..... \_\_\_\_\_

- i. Hookup, signals.
- ii. Tension during tow (reducing if anything goes wrong),

(b) Towing Gear..... \_\_\_\_\_

- i. Line,
- ii. Bridle,
- iii. Release,
- iv. Weak Link

(c) Methods and Dangers..... \_\_\_\_\_

- i. Stationary Winch (advantage of turnaround pulley for training)
- ii. Static Line (not for training)
- iii. Payout Winch Ground
- iv. Payout Winch Boat
- v. Step Towing (not for training)

(d) Risks and Their Avoidance..... \_\_\_\_\_

- i. Overtowing risks.
- ii. Quick links.
- iii. Admonition not to use towing until proper instruction is received. This may be part of the clinic but will be in addition to the hours required.
- iv. Requirements of towing certification, availability of training and certification (through USHGA or USPPA instructors.)

(e) Flying on Tow (if used) ..... \_\_\_\_\_

- i. Hookup, signals (especially for release).
- ii. Tension during tow (reducing if anything goes wrong).
- iii. Initial Climb.
- iv. Emergency procedures: lockout, no release, entanglement.

**4. Teaching With a Simulator (2:00 hrs)**

This is critical because it offers a chance to make sure the student will react properly to unanticipated situations and to radio instruction. The applicant must learn to teach these areas with confidence.

- (a) Importance of practice with distractions (like shaking simulator)..... \_\_\_\_\_
- (b) Getting into the seat and common errors..... \_\_\_\_\_
- (c) Emergencies
  - i. Unable to get in seat, risks and what to do with the student.
  - ii. Common emergency response and when to apply it (hands up, power off). Value of steering when near to the ground and reacting slowly (hands up smoothly and reduce power smoothly).
  - iii. Need to stay on the throttle while climbing until at a safe altitude.
  - iv. Brake line tangle.
  - v. Rear riser turns.
  - vi. Parachutal stall (hands up, power off).
  - vii. Stabilio line pull (this may be moved to kiting where it can be demonstrated much clearer).
  - viii. Motor failure.
  - ix. Surge/retreat.
  - x. Pitch oscillation and proper reaction.
  - xi. Roll oscillation and proper reaction.
  - xii. Radio Communication failure, how to recognize it, what to do.
- (d) Flight. .... \_\_\_\_\_
  - i. Launch.
  - ii. Flight including safe brake positions, one hand up one hand down for turning.
  - iii. Landing.

**5. Tips for Teaching and common errors. (8:00)**

It is understood that a new student would never have all this thrown at him at once. The purpose is to insure the applicant instructor can clearly explain each item. Plus, the applicant should describe the common errors that are made. The administrator does not need to cover all the material. Only that which is required to determine ability. This is where the bulk of the clinic will concentrate.

- (a) The applicant should be able to instruct a student in the following areas. .... \_\_\_\_\_
  - i. Motor Equipment Explanation including harness styles, hang points and how they're different, Motor types, Drive types (direct, redrive best, redrive gear), weight shift and cage types (rigid, non-rigid), cage safety, frame safety.
  - ii. Wings including DHV/AFNOR/EN/DULV ratings. Value of beginner wings, difference between performance, size/speed/handling/aspect ratio.
- (b) Safety Equipment. .... \_\_\_\_\_
  - i. Reserve including styles, deployment, repacking, mounting issues, preflight.
  - ii. Advantages and disadvantages for using the reserve during initial training.
  - iii. Helmet, footwear, hook knife.

- (c) Judgment – The single most important aspect of training is instilling good judgment. Poor judgment causes the most fatalities. They should be told about the importance of reading the Incidents Reports at [www.USPPA.org](http://www.USPPA.org).
  - i. The selection Process and Risk Assessment.
  - ii. Selecting equipment.
  - iii. Selecting a launch or landing field.
  - iv. Selecting route, altitude and maneuvers.
  - v. Selecting weather to fly in.
- (d) Preflight..... \_\_\_\_\_
  - i. Starting/propeller safety. Applicant should be familiar with at least three serious accidents regarding propeller injuries and what would have prevented them. Importance of verifying throttle position and being well positioned during start. Precautions for electric start.
  - ii. Wing. Lines, knots, repairs sheath, etc.
  - iii. Untangling (this can be demonstrated by having the student untangle a wing while explaining the process or directing a student how to untangle it.
  - iv. Fueling and oil mix requirements. Availability of avgas and how to acquire.
- (e) Field Assessment & Weather..... \_\_\_\_\_
  - i. Picking a field suitable for new students or risks of obstructions.
  - ii. Describing how winds affect choices of launch areas.
  - iii. Analyzing the weather from winds, clouds, other observable phenomenon. Even though a new student may not understand everything, it's still valuable to explain what's going on at every opportunity.
- (f) Layout ..... \_\_\_\_\_
- (g) Hooking in..... \_\_\_\_\_
- (h) Kiting ..... \_\_\_\_\_
  - i. Straight-arm method, limitations and benefits.
  - ii. Kiting, reverse and forward inflation methods including “wall” building.
  - iii. Motor, reverse and forward inflation methods including “wall” building.
- (i) High Wind (if conditions don't permit, discuss)..... \_\_\_\_\_
  - i. Risks (lifted, dragged, etc).
  - ii. Depowering the wing.
  - iii. Helping a student who's getting dragged.
  - iv. Inflating and controlling.

- (j) Launching..... \_\_\_\_\_
  - i. Forward – no wind (less than 2 mph).
  - ii. Forward – wind from 2 – 6 mph.
  - iii. Reverse inflation.
  - iv. Getting in the seat including radio recommended radio procedures.
- (k) Inflight ..... \_\_\_\_\_
  - i. Turns without pendulum
  - ii. Slow/fast flight.
  - iii. Why pendular problems are deadly
  - iv. How to avoid teach out pendular issues & have students practice.
  - v. Dangers of low, low & downwind, steep turns, wingovers, etc.
  - vi. Explain, as would be to a student, the downwind demon.
  - vii. Climbs and descents without pendulum.
- (l) Landing ..... \_\_\_\_\_
  - i. Pattern.
  - ii. Flare.

**6. Recurrency Requirement**

- (a) Instructors must pass an Instructor Recurrency test, with 100% correct answers, every 2 years..... \_\_\_\_\_
- (b) Instructors must teach and certify a student to PPG 2 level at least once every 3 years.... \_\_\_\_\_
- (c) For the purpose of this, “every two years” means that it was done within the last 36 months. So if the student gets PPG 2 certified on Jan 15, 2020, then the instructor is current until January 15 2023..... \_\_\_\_\_
- (d) The recent certification requirement (b) may also be met by successful completion of an instructor clinic..... \_\_\_\_\_

**7. Assessment, comments, and sign-off or reason for extra training recommended. (1:00 hr)**

- (a) Assessment and comments should be entered on this syllabus in the space below. Anything that requires further training must be documented, with a reason including the relevant number and letter..... \_\_\_\_\_
- (b) Explanation of Apprenticeship..... \_\_\_\_\_
  - i. Apprenticeship consists of helping train students with a current USPPA instructor. That instructor-in-charge must fill out a simple form (included on the syllabus) showing the time and tasks that were completed.
- (c) The instructor administrator will enter a successful applicants rating into the USPPA.org ratings database and include an image of the front page of this completed syllabus. Every section must be initialed by the applicant and admin attesting to satisfactory completion..... \_\_\_\_\_