

Foundational Opti Skills Guide

Here is 10+ years of Opti coaching experience distilled into 3 pages of bullet points. Links at the end go deeper into detail, but this is the core of what I think is really important to start with. Many of these concepts should be introduced at the learn-to-sail level, especially how we sit/move in the boat. Otherwise, you (the race coach) will inherit bad habits that will be difficult to break (like not using tiller extension).

The “Three S’s”- Safety, Sportsmanship, Seamanship

- Before anything else establish good habits and clear expectations
 - Safety- PFD use, how to capsized recover, staying together as a group on the water, how to tow etc.
 - Many class rules are about safety.
 - Mast clamp/ties, airbags, bailers, mainsheet bridle/clip rules
 - Sportsmanship- We’re a team.
 - We all help rig /de-rig. No one is done until we’re all done.
 - Being on a team is a privilege for those that can follow expectations.
 - Regattas should be an expectation
 - This is how we practice
 - Basic understanding of the Racing Rules of Sailing (RRS 10-14)
 - Respecting the rules and not abusing them
 - Teach the broader concepts, not the minutia!
 - Take advantage of teachable moments
 - Seamanship- Rigging, rigging, rigging
 - Taking sail on/off the mast each day
 - Be able to rig without help (or minimal help). Coach does final inspection
 - Care of the equipment.
 - Washing down boats, ROLLING sails, treating blades carefully

Posture/Form, body mechanics, and boat handling

- This is the next most important thing. They should LOOK LIKE A RACER (not on their butt in the bottom of the boat!!!)
 - **Posture**
 - Sail the boat from the rail at all times, unless in drifter conditions. Sailors must get used to sailing from the rail! Even when it’s light.
 - Shoulders outside of hips. Knees together. Forward in the boat (right up against thwart). “Prim and proper like a princess.”
 - Hands- “Who likes sailing? I like sailing” thumbs up on sheet/tiller extension.
 - Arms- 90 deg bend in both arms. Arms in close to the body.
 - Body rotated forward (front knee facing forward) downwind.
 - Hiking- Legs straight (reduce bend at the knee as much as possible). Feet neutral, not pointed together. Make sure rail is not behind the knee... Big sailors may need to use opposite hiking strap.

- Goal is to keep boat trimmed level in both fore/aft and port/starboard planes. “Keep all four corners level”
- **Body Mechanics**
 - Comfort with tiller extension
 - Able to sheet using two hands.
 - Able to hold mainsheet and tiller extension in one hand while bailing with the other (sailing and bailing)
 - Crossing the boat on their feet in one step and landing on the new rail with their butt. Never taking a knee while tacking. Not “super-manning” when gybing
 - Tiller hand exchange- doing it at the very end of the tack. Sailor should be able to steer with hands crossed on new tack, then switch after they are hiking. (Good drill is tack-on-whistle, but can’t switch hands until coach blows another whistle.)
 - Keeping eyes forward through maneuvers

Sail Trim and Tuning

- After body mechanics and boat handling come boat speed/tuning
 - **Sail Trim (basic)**
 - “Watch your woolies!” Get sailors used to looking up and forward, up and forward, etc.
 - Make sure they actually understand how telltales work.
 - Boom should be carried over the back corner of the boat upwind. As it gets windier, the boom may average several inches outside the back corner. Sail will stall if it comes more than an 1-2” inside the back corner (kills boat speed).
 - Sprit should be tightened to just take out wrinkles. The sprit controls the leech tension, similar to a vang on an FJ.
 - Sprit on starboard side of the boat, because sail will have better shape on that tack. Starboard is the more important tack, because we start the race on Starboard.
 - **Sail Trim (more advanced)**
 - Boom should be level, or for bigger sailors the end of the boom should be slightly elevated (this is set by mast rake). No droopy booms!
 - Sail should be set higher on the mast in light air (top end of bands) and lower in heavy air (lower end of bands). The top angle tie affects this the most, so does the boom preventer, vang, and sprit. Know the direction that each of these pull.
 - Boom preventer (aka “bling”) controls where boom rests on the mast. Add twists in light air to raise the boom and relax the luff of the sail. Taking out twists is like applying cunningham. If the boom preventer is the right length, then about 3 twists should produce the light luff tension for light air.

- Vang- Acts like a vang and a cunningham. Pulls boom down until the boom preventer stops it from going any lower. Vang should always be very tight regardless of wind. Set vang by taking off sprit, tensioning mainsheet, and cleating vang (jam in the cleat with your thumb). Then ease mainsheet and apply sprit tension. Vang should become much tighter when sprit is applied (vang/sprit pull against each other). Always do sprit last, because you have 2:1 advantage helping you. Vang has no purchase and very short throw.
- **Tuning for heavy air (overpowered)**
 - Mast is raked aft ~2" more than normal
 - Twists are taken out of the boom preventer.
 - Sail is near the lowest legal position on the mast bands.
 - Vang is applied to the max
 - Sprit is cracked off a little. Perpendicular crease in the sail is OK once you start getting overpowered. In a survival situation, you can completely take off the sprit and sail with a small triangle of sail back to the dock
 - Daggerboard can be raised a few inches upwind. ~8" max when sailors reach survival mode.
 - Set mainsheet "hail mary" knot so, boom stops short of 90 degrees downwind.

Coach Inspection List

- Every day before sailors leave the dock...
 - Mast ties or clamps secured
 - Otherwise mast falls out when capsized and breaks the mast step
 - All sail ties fastened and evenly tensioned
 - Otherwise sail could tear or performance will suffer
 - Square knots are "set" firm
 - Loose square knots will come undone on the water
 - Vangs are tight
 - No vang will cause the boom will fall off the mast
 - Airbags are full
 - Otherwise sailor can't self-rescue
 - Boom is level
 - If not, then mast rake is grossly wrong
 - Sail is between mast bands (not overlapping either band)
 - If not, then top-angle tie and/or bling are not set properly.
 - At a regatta it is illegal to be outside the bands.
 - Sailor has two bailers
 - Two bailers can bail a boat dry twice as fast
 - One port, one starboard
 - Bowline is properly coiled/stowed for easy use under the bow rail. Bowline has a bowline tied in the end of it.

- Bowline is free of granny knots. Granny knots make daisy chain towing difficult and weaken the line.
- Gear check- Sailor is wearing appropriate gear and PFD.

Resources

Opti Class Rules- You don't need encyclopedic knowledge, but coaches should be familiar with where to find these and what the class rules contain... especially at a championship. Will your equipment measure in??? Is your bowline long enough? Do you sailors have the required praddle? <https://www.optiworld.org/default/classinfo/content/id/Optimist-class-rules>

Setting up the Opti- McLaughlin bow-to-stern guide for setting up the boat. With great pictures of some of the things I mentioned. <http://nwyouthsailing.org/media/1191/optimistrigging.pdf>

J-Sails Tuning Guide- J Sails are gold standard for what top-racers are choosing. Their tuning guide is pretty conventional and aligns mostly with what I shared above, but goes into greater detail. <http://www.jsail.eu/tips-and-tricks>