

Part 1: Minimum Water Skills

The following skills are to be tested on the boat and water for mastery. It is recommended that the chronological order of skills be followed as listed. To attain mastery level, the student should be able to perform the skills safely and generally mistake-free - judged on a basis that is appropriate for a Fundamentals of Sailing student. Student performance may be influenced by wind speed and direction, water conditions and air temperature.

- Preparing to Sail:** a) recognizing and forecasting basic weather conditions, b) boarding boat, c) rigging sails, halyards, sheets, winches, d) Pre-sail check: safety and legal equipment, crew indoctrination.
- Basic Knots:** Stopper knots, clove hitch, bowline, sheet bend, cleat hitch, square knot, round turn two half hitches.
- Leaving Dock or Mooring:** Determining wind direction and strength, determining current direction and strength, departure plan.
- Raising Sails:** Crew communication, setting initial sail controls, housekeeping lines.
- Starting, Stopping, and Speed Control:** Luffing sails, No-Go zone, getting out of irons, backing jib, steering backwards onto a specified tack, sail trim, over steering, helmsman/crew coordination and communication.
- Sail Trimming:** Demonstrate proper adjustments for main sheet, jib sheet, outhaul, Cunningham, halyard tension, backstay, boom vang, traveler, jib leads.
- Heaving-to:** Point of sail, sail trim, response time, holding position.
- Tacking:** Steering, course heading, sail trim, use of winches, body movement, helmsman/crew coordination and communication.
- Gybing:** Steering, course heading, sail trim, use of winches, body movement, helmsman/crew coordination and communication.
- Steering with Weight and Sails:** (tiller positioned on centerline and not used for steering.) Respond to luff, correct for weather and lee helm.
- Sailing a Rectangular Course:** Steering, boat speed, sail trim, use of winches, tacks and jibes, body positions and movement, course headings, helmsman/crew coordination and communication.
- Navigation Rules (Rules of the Road):** Use of the rules to avoid collisions under sail, and under power (where applicable).
- Shortening Sail:** Reef mainsail, tie reef knot, drop a sail, demonstrate ability to handle boat with decreased sail area, shake out reef and rehoist sail underway.
- Overboard Recovery:** Communication, recovery plan (include Quick-Stop method), sequence of maneuvers, boat handling, course sailed, pickup approach, bring boat alongside simulated object.
- Chart Reading and Orienting:** Identification of landmarks, working knowledge of symbols, orienting.
- Aids to Navigation:** Identify channel markers, day marks, regulatory markers and other navigational aids specific to local waters.
- Maneuvering in Confined Area:** Simulated area. Helmsman/crew coordination and communication, boat handling, sail trim, course sailed, avoiding obstacles, right-of-way.
- Returning to Dock or Mooring:** Approach plan, boat handling, use of glide zone, stepping onto dock, tying to dock (use of spring lines) or mooring, lowering sails.
- Securing Boat:** De-rig sails, fold/furl sails, stow equipment, clean and secure boat.
- Anchoring:** Preparation, anchoring plan, sequence of maneuvers, setting anchor, raising anchor, boat handling, communications (verbal and hand signals).
- Outboard Motor:** Fueling and safety, controls, operation and troubleshooting, steering with tiller, leaving and returning to dock or mooring, overboard recovery, use of rules to avoid collision under power.

Student Name (Print)

Instructor (Print)

Instructor (Signature)

Date (dd/mm/yyyy)

Review #1 - Parts of the boat

Name the following:

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|--|--------------------------|--|--------------------------|
| 1. The Left side of the boat facing forward | <input type="checkbox"/> | 26. The bottom edge of the sail | <input type="checkbox"/> |
| 2. The right side of the boat facing forward | <input type="checkbox"/> | 27. The forward edge of the sail | <input type="checkbox"/> |
| 3. The front of the boat | <input type="checkbox"/> | 28. The back edge of the sail | <input type="checkbox"/> |
| 4. The back of the boat | <input type="checkbox"/> | 29. Top corner of the sail | <input type="checkbox"/> |
| 5. Moving to the front of the boat is called moving... | <input type="checkbox"/> | 30. The lower back corner of the sail | <input type="checkbox"/> |
| 6. Moving to the back of the boat is called moving... | <input type="checkbox"/> | 31. The lower forward corner of the sail | <input type="checkbox"/> |
| 7. The body of the boat that floats in the water | <input type="checkbox"/> | 32. The closable fastening that connects the halyard to the top of sail | <input type="checkbox"/> |
| 8. The weighted vertical fin at the bottom of the boat | <input type="checkbox"/> | 33. The fastening on forward edge of forwards sail (not on BBSC boats) | <input type="checkbox"/> |
| 9. The distance between the waterline and bottom of vertical fin | <input type="checkbox"/> | 34. The pieces of cloth or tape that indicate air flow | <input type="checkbox"/> |
| 10. The flat surface on top of the boat | <input type="checkbox"/> | 35. The slat of wood, plastic or fiberglass inserted into the sail | <input type="checkbox"/> |
| 11. The passageway from cockpit to below deck | <input type="checkbox"/> | 36. The line used to raise the sail in the front of the boat | <input type="checkbox"/> |
| 12. The roof and sides of the cabin house | <input type="checkbox"/> | 37. The line used to raise sail at the back of the mast | <input type="checkbox"/> |
| 13. The Space where crew sits and where tiller is located | <input type="checkbox"/> | 38. The fitting that connects the boom to the mast | <input type="checkbox"/> |
| 14. The lever arm used to steer the boat | <input type="checkbox"/> | 39. Line sewn into the front edge of the sail | <input type="checkbox"/> |
| 15. The Steering foil used directed by tiller | <input type="checkbox"/> | 40. The pole at the front of the boat is called...(on BBSC boats) | <input type="checkbox"/> |
| 16. The Vertical spar in the middle of the boat | <input type="checkbox"/> | 41. The device that provides mechanical leverage | <input type="checkbox"/> |
| 17. The horizontal spar extending back from the mast | <input type="checkbox"/> | 42. How do you wrap a line around a winch?
(clockwise/counterclockwise) | <input type="checkbox"/> |
| 18. The struts that extend from the side of the mast | <input type="checkbox"/> | 43. The lines that control the forward sail | <input type="checkbox"/> |
| 19. The wire to keep the mast from falling backwards | <input type="checkbox"/> | 44. The lines that control the main sail | <input type="checkbox"/> |
| 20. Rigging wires to keep the mast from falling sideways | <input type="checkbox"/> | 45. What tensions the foot of the main sail? | <input type="checkbox"/> |
| 21. The wire to keep mast from falling forwards | <input type="checkbox"/> | 46. What tensions the luff of the main sail? | <input type="checkbox"/> |
| 22. The wires that keep the mast from falling are collectively called... | <input type="checkbox"/> | 47. What keeps the boom from rising when wind hits the main sail? | <input type="checkbox"/> |
| 23. The arrow atop of the mast | <input type="checkbox"/> | 48. What is the traveler connected to? | <input type="checkbox"/> |
| 24. The forward sail that attaches to the forestay | <input type="checkbox"/> | 49. A spring loaded cleat | <input type="checkbox"/> |
| 25. The sail hoisted on the backside of the mast | <input type="checkbox"/> | 50. A cleat that holds by friction | <input type="checkbox"/> |

Review #2 – Sailing Fundamentals

Name the following:

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|--|--------------------------|--|--------------------------|
| 1. The arrow atop of the mast points to where the wind is blowing from (T/F) | <input type="checkbox"/> | 21. Which way do you turn the tiller to initiate a tack? | <input type="checkbox"/> |
| 2. True wind plus wind caused by the boats motion is called... | <input type="checkbox"/> | 22. What the commands for tacking? | <input type="checkbox"/> |
| 3. Pull mode is when there from air flow over both sides of the sail (T/F) | <input type="checkbox"/> | 23. Which way do you turn the tiller to initiate a gybe? | <input type="checkbox"/> |
| 4. Push mode is when there from air flow on side of the sail (T/F) | <input type="checkbox"/> | 24. What are the commands for gybing | <input type="checkbox"/> |
| 5. Turning the bow of the boat towards the wind is called... | <input type="checkbox"/> | 25. What is sailing by the lee? | <input type="checkbox"/> |
| 6. Turning the bow of the boat away from the wind is called... | <input type="checkbox"/> | 26. A Flapping/luffing forward sail on a run indicates an impending gybe (T/F) | <input type="checkbox"/> |
| 7. When the windward telltale luffs, what should you should do? | <input type="checkbox"/> | 27. What point of sail is directly into the wind? | <input type="checkbox"/> |
| 8. When the leeward telltale luffs, what should you do? | <input type="checkbox"/> | 28. What point of sail in between beam reach and a run? | <input type="checkbox"/> |
| 9. When and why to would back sails? | <input type="checkbox"/> | 29. What point of sail is sailing away from the wind? | <input type="checkbox"/> |
| 10. What clock direction is the No-Go zone? | <input type="checkbox"/> | 30. What point of sail is sailing across the wind? | <input type="checkbox"/> |
| 11. What will sails do in the No-Go zone? | <input type="checkbox"/> | 31. What point of sail is sailing upwind? | <input type="checkbox"/> |
| 12. The boat will slow down and come to a stop in the No-Go zone (T/F) | <input type="checkbox"/> | 32. What point of sail in between closed-hauled and a beam reach? | <input type="checkbox"/> |
| 13. The side of the boat closest to the wind | <input type="checkbox"/> | 33. What point of sail in between beam reach and a run? | <input type="checkbox"/> |
| 14. The side of the boat away from the wind | <input type="checkbox"/> | 34. When is the rudder ineffective for steering? | <input type="checkbox"/> |
| 15. What affects the balance of the helm? | <input type="checkbox"/> | 35. Spring lines are used before the summer season (T/F) | <input type="checkbox"/> |
| 16. The tendency of the boat to head into the wind is called... | <input type="checkbox"/> | 36. What is the purpose of the spring line? | <input type="checkbox"/> |
| 17. The tendency of the boat to bear away from the wind is called... | <input type="checkbox"/> | 37. Lines that run from the bow and stern | <input type="checkbox"/> |
| 18. Easing the main sheet and traveler will increase weather helm (T/F) | <input type="checkbox"/> | 38. Lines that run aft from the stanchion are called... | <input type="checkbox"/> |
| 19. Easing the jib trim will increase weather helm (T/F) | <input type="checkbox"/> | 39. Device used to protect the boat from the dock | <input type="checkbox"/> |
| 20. How do you stop a boat to make repairs? | <input type="checkbox"/> | 40. Fenders should make contact with the water (T/F) | <input type="checkbox"/> |

Review #3 – Navigation and Safety

Name the following:

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|--|--------------------------|--|--------------------------|
| 1. What tack are you on if the wind is crossing the right side of the boat | <input type="checkbox"/> | 26. Knot used to tie lines of equal diameter together | <input type="checkbox"/> |
| 2. A boat on starboard tack gives way to a boat on port tack (T/F) | <input type="checkbox"/> | 27. Knot used to tie sheets to sails | <input type="checkbox"/> |
| 3. A windward boat gives way to a leeward boat (T/F) | <input type="checkbox"/> | 28. Type of knot used to tie fenders to lifelines | <input type="checkbox"/> |
| 4. A boat under power always gives way to a sailboat (T/F) | <input type="checkbox"/> | 29. Type of cleat found on docks | <input type="checkbox"/> |
| 5. A sailboat gives way to a large commercial vessel (T/F) | <input type="checkbox"/> | 30. Knot is used on cleats found on docks | <input type="checkbox"/> |
| 6. A sailboat gives way to a fishing vessel restricted by its fishing lines(T/F) | <input type="checkbox"/> | 31. Wind created by temperature difference between land and water is called... | <input type="checkbox"/> |
| 7. What color is a nun buoy? | <input type="checkbox"/> | 32. What would you use to check weather forecast? | <input type="checkbox"/> |
| 8. What color is a can buoy? | <input type="checkbox"/> | 33. Storms can bring high winds and heavy rain (T/F) | <input type="checkbox"/> |
| 9. What color buoy should be kept to starboard when returning from sea? | <input type="checkbox"/> | 34. Tides are mostly affected by the moon and the sun (T/F) | <input type="checkbox"/> |
| 10. Do the buoy numbers go up and down entering a harbor? | <input type="checkbox"/> | 35. When is the current at its strongest in Hudson River? | <input type="checkbox"/> |
| 11. What colors are a junction/preferred channel marker? | <input type="checkbox"/> | 36. Where is the current at its strongest in the Hudson River? | <input type="checkbox"/> |
| 12. What color is a regulatory marker? | <input type="checkbox"/> | 37. Should you go sailing if there is an impending storm? (Y/N) | <input type="checkbox"/> |
| 13. What is the sound signal for danger or doubt? | <input type="checkbox"/> | 38. Should you go sailing if your crew are too inexperienced for the sailing conditions? (Y/N) | <input type="checkbox"/> |
| 14. When approaching head on and you intend to leave the boat to port what sound signal is made? | <input type="checkbox"/> | 39. What is the recommended scope for anchoring? | <input type="checkbox"/> |
| 15. What three things are common at the beginning of all COB recovery methods? | <input type="checkbox"/> | 40. If you are dragging your anchor – what should you do? | <input type="checkbox"/> |
| 16. Describe the Quick-Stop COB recovery method | <input type="checkbox"/> | 41. Where should you tie the tow line on the boat being towed? | <input type="checkbox"/> |
| 17. Describe the Figure-8 COB recovery method | <input type="checkbox"/> | 42. As the boat being towed, what should you watch out for? | <input type="checkbox"/> |
| 18. Your final approach to the victim should be on what point of sail? | <input type="checkbox"/> | 43. As the boat towing, what should you watch out for? | <input type="checkbox"/> |
| 19. How do you depower the main sail? | <input type="checkbox"/> | 44. The person responsible for the safe operation of the boat is the... | <input type="checkbox"/> |
| 20. You should reef before the wind gets too strong (T/F) | <input type="checkbox"/> | 45. The people who help operate the boat are the... | <input type="checkbox"/> |
| 21. Describe how reef a mainsail | <input type="checkbox"/> | 46. What are the USCG safety equipment requirements? | <input type="checkbox"/> |
| 22. You should reef before the wind gets too strong (T/F) | <input type="checkbox"/> | 47. Name three distress signals? | <input type="checkbox"/> |
| 23. Knot used to tie lines of unequal diameter together | <input type="checkbox"/> | 48. What is the emergency VHF channel? | <input type="checkbox"/> |
| 24. Knot that creates a non-slipping loop | <input type="checkbox"/> | 49. What does “Mayday, Mayday, Mayday” mean? | <input type="checkbox"/> |
| 25. Knot used to a line to a piling | <input type="checkbox"/> | 50. You should be careful of overhead power lines when stepping masts or moving boats with masts (T/F) | <input type="checkbox"/> |