

Norton's Sailing School

BASIC KEELBOAT SAILING STANDARD (ASA 101)

Prerequisites: None

General Description: Sailors must sail a boat of about 20 feet in length in light to moderate winds and sea conditions in familiar waters without supervision. A preparatory Standard with no auxiliary power or navigation skills required. The Basic Keelboat Sailing course is approved by the National Association of Boating Law Administrators (NASBLA) and the U.S. Coast Guard (USCG). As such, it meets all requirements for mandatory education and licensing for every state in the United States.

SAILING KNOWLEDGE

A Certified Sailor has successfully demonstrated his or her ability to:

Terminology

1. Identify the following parts of a sailboat:

backstay	deck	jib	shrouds
boom	forestay	keel	spreaders
bow	gooseneck	lifelines	stern
bow pulpit	headstay	mainsail	stern pulpit
cabin	hull	mast	traveler

2. Describe the functions of the following items on a sailboat:

boom topping lift	fairlead vs. padeye	mainsheet	spring/breast lines
boomvang	fenders	outhaul	stays/shrouds
cleats	halyard	rudder	tiller/wheel
downhaul	jib sheet	shackle	winches
telltails	cunningham		

3. Define the following terms:

aft	coming about	helmsman	standing rigging
abeam	crew	leeward	starboard
ahead	forward	port	windward
astern	jibing	running rigging	tacking
beam	heel	skipper	

4. Identify the following sails and parts of a sail:

battens	foot	jib	spinnaker
batten pockets	genoa	leech	storm jib
bolt rope	hanks	luff	tack
clew	head	mainsail	

5. Explain the following terms and points of sail and identify them from diagrams:

beam reach	head to wind	leeward boat	sailing by the lee
broad reach	heading up	luffing	starboard tack
close hauled	heading down	port tack	windward boat
close reach	in-irons	running	

6. Apply the Navigation Rules (International and Inland Navigational Rules for prevention of collision) by means of diagrams in the following situations and identify the sailboat or powerboat that is the "stand-on" and "give-way" boat.

- port tack and starboard tack sailboats
- windward and leeward sailboats
- overtaking situation
- boat on the right (danger zone)
- boats meeting head-on

7. Apply Rule 5 (Look-out Rule) contained in the Navigation Rules (International and Inland Navigation Rules for prevention of collision)

8. Describe the actions to be taken when sailing in the vicinity of commercial shipping (Rule 9. Nav. Rules)

9. Define hull identification number.

10. Describe the difference between planing and displacement hulls.

11. Describe proper means of waste disposal including penalties for improper disposal and means for Notification of authorities in the event of oil spillage.

12. Describe how and when to file a float plan.
13. Describe registration numbers and how to display them.
14. Describe a capacity plate, where to find one and the information which is contained on the plate.
15. Describe an alternate means of determining a boat's passenger capacity.
16. State the **federal** standards for determining intoxication using Blood Alcohol Content (BAC). What is the BAC of the **state** in which you sail?
17. Give 5 situations which may be considered negligent operation on the part of boater.
18. Describe when and to whom boating accidents must be reported.
19. Describe under what circumstances an operator must render assistance to another boater in danger.
20. Describe the information an operator should acquire before operating his/her boat in an unfamiliar area. Local Knowledge.
21. Describe where a boater would get the information in the item above.
22. Be able to identify lateral aids to navigation by color, shape and numbering.
23. Be able to identify Safe Water, Information and Regulatory Markers by color, shape and numbering.
24. List required safety equipment for recreational vessels between 23 and 40 feet.
25. Describe procedures for safety trailing and launching a boat.
26. Describe sound signals used by recreational vessels and their meanings.
27. Identify the location and color of running lights used by recreational vessels.
28. Describe common anchor types and anchoring procedures.

SAILING SKILLS

A Certified Sailor has successfully demonstrated his or her ability to:

Gear and Equipment

29. Select and properly use a personal flotation device.
30. Select proper clothing for sailing.

Sailing

31. Hoist the basic sails, set appropriate luff tensions, and coil and hang halyards and other lines.
32. Without an Instructor or direction, act as helmsman / skipper and crew on a sailboat using proper commands and responses while sailing away and back to a dock and mooring under various wind directions. Sail a windward / leeward course while performing successful come about and jibe. Sample commands:
 - “ease sheets” – “easing sheets”
 - “heading-up, sheet in” – “sheeting in”
 - “ready about” – “ready”
 - “helms -a-lee” – “hard-alee”
 - “ready to jibe” – “ready” – “jibe-ho”
33. Lower, fold and stow sails properly.

Man Overboard

34. Describe and demonstrate the actions to be taken by a helmsman / skipper when sailing from the time a person falls overboard without warning until the crew member is safely recovered.
Speed is secondary to safety in performing this procedure.
35. Describe how to get an exhausted person aboard.
36. Steer a sailboat by the lee for 100 yards without jibing.
37. Steer a sailboat moving backwards for 20 yards with sails backed.
38. Secure a sailboat to a dock so as to ensure limited movement and set out fenders properly.

Knots

39. Describe the function of and tie the following knots without assistance:
 - bowline (in less than 20 seconds)
 - figure eight (in less than 15 seconds)
 - cleat hitch (in less than 15 seconds)
 40. Tie the following knots without assistance in less than 20 seconds:
 - reef / square knot
 - clove hitch
 - round turn and two half hitches
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BASIC COASTAL CRUISING STANDARD (ASA 103)

Prerequisites: Basic Keelboat Sailing Certification (101)

General Description: Sailor must cruise safely in local and regional waters as both skipper and crew on an auxiliary powered sailboat of about 20 to 30 feet in length, in moderate winds and sea conditions.

SAILING KNOWLEDGE

A Certified Sailor has successfully demonstrated his or her ability to:

1. Identify and describe the following:

gudgeon	pintle	turnbuckle
stern fitting	tangs	chainplates
binnacle	transom	rudderpost
through-hull fitting	self-bailing cockpit	

Gear and Equipment

2. List the "Federal equipment carriage requirements" for a 24 foot sailboat with an outboard motor and portable fuel tank.
3. List the ASA recommended safety equipment for a sailboat heading out on long cruises or into rough weather.
4. Describe the most important reasons for keeping gear and equipment stowed in assigned places on a boat.
5. Describe roller and slab reefing with reef grommets and reef points / diamonds.

Safety

6. Describe the purpose of a safety harness, proper attachment and dangers of improper attachment to a boat.
7. State the purpose of bow and stern pulpits and lifelines.
8. Describe federally required navigation lights on boats between sunset and sunrise when under sail, under power, and at anchor.
9. Describe the three stages of hypothermia and treatments for medium hypothermia.
10. Describe methods to reduce heat loss for a person in the water and a group of people in the water.
11. Describe how to prevent undue magnetic influences on the compass.
12. Identify the common sources of fire and /or explosion and understand the methods for preventing such occurrences, as well as actions to be taken when they do.
13. Describe U.S. Coast Guard recommended refueling precautions.
14. Describe a "diver's flag" and alpha flag used to mark persons and vessels engaged in diving.
15. Describe the danger involved in recharging batteries and setting off flares.
16. Apply the USCG Navigation Rules 11 through 17 by means of a diagram.
17. Describe the required and ASA recommended actions and precautions to be taken during times of reduced visibility.

Weather

18. Interpret marine weather forecasts applicable to the area and apply the information to the candidate's sailing plans for the next six hours.
19. Interpret what weather changes are forecast for the next six hours and determine what effect these changes will have on the day's planned activities.

Duties of the Skipper and Crew

20. Identify the main responsibilities of the skipper and crew as indicated below:

Skipper:

- Safety of the *crew and boat*
- Ensure the crew's knowledge of operating procedures and location of all lifesaving and other safety equipment prior to getting underway
- Assign duties and instruction
- Ensure proper /safe use of domestic equipment (head, stove, etc.)

Crew

- Obey skipper
- Assist in the safe operation of the boat
- Keep a lookout and immediately report any dangers on the water and in the boat.

Seamanship

21. Describe the correct sail combinations to carry under various wind and sea conditions.
22. Describe the dangers of a lee shore.

23. Read and interpret the following information from the NOAA nautical chart of the local area.
 - Depth of water
 - Types of bottom (sand, rock, clay, etc.)
 - Underwater / surface hazards (kelp, cable, rock, shoals, cribs, wrecks, currents)
 - Buoys and what they signify
 - Lights
 - Beacons
 - Distance scale
24. Describe:
 - A good anchorage
 - Suitable ground tackle and scope when anchoring for lunch
 - Suitable ground tackle, scope and the appropriate lights when anchoring overnight
25. Describe the immediate action to be taken when:

• A leak develops	• Steering fails	• Anchor drags
• Propeller fouls	• Halyard breaks	• Rigging fails
• Running aground	• Grounding at anchor	
26. Describe one commonly accepted use for each of the following knots:

• bowline	• clove hitch	• figure eight
• sheet bend	• reef knot	• round turn & two half hitches

SAILING SKILLS

A Certified Sailor has successfully demonstrated his or her ability to:

Preliminaries

27. Demonstrate on land the correct method of putting on a personal flotation device in the water.
28. Carry out a check of the vessel's gear and equipment in accordance with legal requirements and ASA recommendations and demonstrate the use and care of domestic equipment.
29. Demonstrate safe winch techniques with particular attention to:
 - High possible strain on sheets and halyards
 - Overriding turns (overrides) and how to clear them
 - Position of hands and fingers
 - Winch handle fitting, removal and storage
 - Halyard breaks / stops
 - Anchor winches / windlass
30. Perform the ASA outboard motor checklist prior to starting an outboard motor.

Boat Handling Under Power

31. Start an auxiliary engine observing commonly accepted safety practices.
32. to a full stop with the bow one half length away from a buoy using reverse. The objective of this exercise is to know how much distance is required to bring a sailboat to a full stop. The sailboat is to be kept on a straight course while this exercise is being carried out.
33. Maneuver a sailboat under power to a position not more than two feet alongside and parallel to a dock (port side and starboard side to) without the aid of lines and without the bow passing a given mark at any time during the maneuver.

Man Overboard

34. Demonstrate a skipper's actions / commands while **under power** from the time a member of the crew falls overboard without warning until the crew is safely recovered. A float should be used for this exercise. The man overboard is considered as **not** wearing a lifejacket and is able to assist himself. Included in this Standard are the following minimum requirements: lookout, alertness, life ring/ marking, slow, controlled speed approaching the float, crew control, and engine control.
35. Stop an auxiliary engine (outboard motor) and secure it for the night observing commonly accepted safety practices.
36. Anchor in water more than ten feet in depth securely enough so the anchor does not drag with engine at half-throttle astern.
37. Raise anchor with boat ready and get underway under power using commonly accepted practices.

BOAT HANDLING UNDER SAIL

Points of Sail

38. Function as helmsman and crew giving correct commands and proper responses while demonstrating the proper techniques of close hauled sailing, reaching (all three points), running, coming about and jibing, heading up, bearing away, luffing, and reducing heel on all points of sail
39. Describe proper preparatory commands and commands of execution for all sailing skills included in this standard.

Reefing / Heaving To

40. Reduce by reefing and shake out a reef while keeping vessel under control and on course.
41. Heave to and get underway again.

Man Overboard

42. Demonstrate a skipper's actions and commands while **under sail** from the time a member of the crew falls overboard without warning until the crew is safely recovered. A float may be used for this exercise. The person overboard is considered as **not** wearing a lifejacket and is able to assist himself.

Included in the Standard are the following minimum requirements: alertness, life ring / marking, lookout, slow, controlled speed approaching the man / float, and crew control. The crew can be three or ore but the candidate is to describe the actions to be taken of one member of a two person crew falls overboard with the boat under sail.

43. Describe at least two methods of getting a person out of the water and back on board.

Steering

44. Sail an ordered compass course for 5 minutes without varying more than 10 degrees from the ordered heading.

Making Fast and Snugging Down / Securing To A Dock and Mooring

45. Secure a boat to various dock configurations so as to provide limited movement and set out fenders correctly.
46. Take extra precautions and secure a vessel for the night at a dock and at a mooring.

Knots

47. Tie the following knots within 15 seconds:
 - Bowline
 - Reef Knot
 - Sheet Bend
 - Clove Hitch
 - Round Turn and Half Hitches
48. Tie the following knots within 7 seconds:
 - Figure Eight
 - Cleat Hitch