



This National Boating Education Standard, as overseen by the National Boating Education Standards Panel (ESP), is the product of voluntary consensus of representatives of federal and state government, industry, non-profit organizations, and public sectors. It is intended as a guide to aid the boating community in the design and implementation of boating courses and boater education.

ESP will review this standard at least every five years, at which time it may be reaffirmed, revised, or withdrawn. ESP welcomes written comments on the Standard during open public comment periods via <http://esp.nasbla.org/esp/>. Requests for interpretation may be submitted at any time via esp@nasbla.org.

American National Standard

ANSI/NASBLA 101-2017:

Basic Boating Knowledge – Human Propelled



American National Standard (ANS)

Approval of an American National Standard requires review by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer. Consensus is established when, in the judgement of the ANSI Board of Standards Review (BSR), substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made towards their resolution. The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether they have approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards. The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken periodically to reaffirm, revise, or withdraw this standard. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.



Published by

**National Association of State Boating Law Administrators
1648 McGrathiana Parkway, Suite 360, Lexington, KY 40511**

Copyright © 2017 by National Association of State Boating Law Administrators
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without prior written permission of the publisher.

National Boating Education Standards Panel

Harry Munns, Chair

Bob Beck	Robert Kauffman	Amanda Perez
Robert Brandenstein	Emily King	Robin Pope
Hugh Gibson	Ernie Lentz	Jeffrey Riecks
Ed Huntsman	Joe McCullough	Tim Spice
Kim Jackson		Jeff Wheeler

This list represents the membership at the time the standard was complete in June 2017.

NOTE: Membership on a panel or committee shall not in and of itself constitute an endorsement of the National Association of State Boating Law Administrators (NASBLA) or any document developed by the panel or committee on which the member serves.

This standard was developed under procedures of essential requirements for American National Standards Institute. The Panel that approved the standard was balanced based on interest categories to ensure that individuals representing those with material interests in the standard had an opportunity to participate.

This standard, which is the result of extended and careful consideration of available knowledge and experience on the subject, is intended to provide minimum performance requirements.

National Boating Education Standards Panel meetings are open to the public. All contact regarding standards activity, interpretations, or meeting attendance should be directed to NASBLA ESP Staff at esp@nasbla.org.

REQUEST FOR INTERPRETATIONS

Upon written request, the Education Standards Panel will render an interpretation of any requirement of the standard. The request for interpretation should be clear and unambiguous. Requests should be presented to the ESP in a manner in which they may be answered in a 'yes' or 'no' fashion.

The Panel reserves the right to reconsider any interpretation when or if additional information which might affect it becomes available to the ESP. Persons aggrieved by an interpretation may appeal to the Panel for reinterpretation.

REQUEST FOR APPEALS

Any directly and materially affected interest who believe they have been or will be adversely affected by a Standard, or by the lack thereof, shall have the right to appeal substantive or procedural actions or inactions of the National Boating Education Standards Panel per Part XII of the [Panel Rules](#) (latest version) posted at www.nasbla.org under *Education>Education Standards Panel*. As stated in the Rules, prior to the filing of a formal appeal, communication of the alleged actions or inactions, with mutual effort to informally resolve the dissatisfaction, shall be attempted and documented.

Contents	Page
Foreword	i
Scope.....	5
Purpose.....	5
1 The Boat.....	5
1.1 Boat Capacity.....	5
2 Boating Equipment.....	5
2.1 Personal Flotation Devices (Wearable Life Jackets and Throwable Devices) Types and Carriage.....	5
2.2 Personal Flotation Device Availability and Sizing.....	5
2.3 Wearing Life Jackets.....	6
2.4 Personal Flotation Device Serviceability.....	6
2.5 Navigation Light Equipment.....	6
2.6 Sound Signaling Equipment.....	6
2.7 Visual Distress Signal Equipment.....	6
2.8 Recommend Additional Safety Equipment	7
3 Trip Planning and Preparation.....	7
3.1 Checking Local Weather and Water Conditions.....	7
3.2 Checking Local Information	7
3.3 Filing a Float Plan.....	8
3.4 Preventative Maintenance	8
3.5 Pre-Departure Checklist and Passenger Communication.....	8
3.6 Transporting	8
4 Safe Boat Operation.....	9
4.1 Operator Responsibilities.....	9
4.2 Influence of Drugs and Alcohol on Boat Operation.....	9
4.3 Navigation Rules.....	9
4.4 Aids to Navigation.....	10
4.5 Boarding, Propelling, Exiting and Securing the Boat	10
5 Emergency Preparedness	10
5.1 Assisting Other Boaters.....	10
5.2 Capsizing/Falls Overboard	10
5.3 Cold Water Immersion.....	11
5.4 Boating Accident Reports	11
6 Other Water Activities.....	12
6.1 Hunting and Fishing.....	12

Basic Boating Knowledge - Human-Propelled*

Scope

This is the minimum standard that applies to all human-propelled boating courses in the U.S. states and territories and District of Columbia.

Purpose

To establish the national standard for use by course providers to meet the needs of recreational boaters for human-propelled boating knowledge in order to identify and reduce primary risk factors and mitigate their effects on recreational boating.

* This standard applies to all human-propelled craft, such as canoes, kayaks, rafts, stand-up paddleboards (SUPs), dragon boats, etc., hereafter referred to as 'boats.'

1. The Boat

1.1. Boat Capacity

The course shall describe:

- how to determine acceptable loading capacity; and
- how and why to properly balance the load.

2. Boating Equipment

2.1. Personal Flotation Devices (Wearable Life Jackets and Throwable Devices) Types and Carriage

The course shall explain the:

- different classifications and types of U.S. Coast Guard approved personal flotation devices (PFDs), including inflatable life jackets, hybrids, and throwable devices;
- the number and types of PFDs/life jackets that must be carried aboard the boat according to applicable regulations; and
- label information, how to read and understand them.

2.2. Personal Flotation Device Availability and Sizing

The course shall communicate that PFDs/life jackets must be:

- readily accessible, and
- correctly sized for the persons using them.

2.3. Wearing Life Jackets

The course shall inform boat operators of the importance of:

- selecting the proper life jacket for the activity and everyone wearing life jackets at all times while aboard;
- showing passengers how to select the correct size of life jacket and properly put on and wear their life jackets;
- emphasizing the need to be aware that conditions can change quickly while boating (i.e., weather and water conditions, boat traffic, etc.); and
- stressing the need to always wear a life jacket while aboard due to the difficulty of putting a life jacket on in the water while under distress.

2.4. Personal Flotation Device Serviceability

2.4.1. The course shall describe:

- the characteristics of serviceable PFDs/life jackets, and
- when to replace PFDs/ life jackets due to excessive wear or damage.

2.4.2. The course will cover the importance of the maintenance of inflatable life jackets as per manufacturer recommendations.

2.5. Navigation Light Equipment

The course shall cover the applicable navigation lights and shapes requirements as set forth in the most recent version of the NAVIGATION RULES AND REGULATIONS HANDBOOK by the U.S. Coast Guard.

2.6. Sound Signaling Equipment

The course shall cover the applicable navigation sound signaling requirements as set forth in the most recent version of the NAVIGATION RULES AND REGULATIONS HANDBOOK by the U.S. Coast Guard, describing:

- sound-producing requirements; and
- the use of sound signals.

2.7. Visual Distress Signal Equipment

The course shall describe:

- when U.S. Coast Guard approved visual distress signals are required to be carried on board,
- the types of visual distress signals required on boats; and
- the use of visual distress signals when required on boats operating on
 - coastal waters, and

- adjoining rivers two (2) or more miles wide at the mouth and up to the first point the river narrows to less than two (2) miles as summarized in the most recent version of the NAVIGATION RULES AND REGULATIONS HANDBOOK by the U.S. Coast Guard.

2.8. Recommend Additional Safety Equipment

2.8.1. The course shall recommend boaters carry additional safety equipment appropriate for the circumstances, such as:

- helmet, whistle, river knife, rescue throw bag, rescue hardware (webbing, carabiners, z-drag kit), leash, first aid kit, signal mirror, flotation bags, and dry bags;
- dewatering equipment – pump, sponge or bucket; and
- a map or chart (if applicable) of the area.

2.8.2 Recommend carrying visual distress signals, communication devices and survival items ON YOUR PERSON so they are readily available (e.g. whistles, waterproof radios, waterproofed cell phones).

3. Trip Planning and Preparation

3.1. Checking Local Weather and Water Conditions

3.1.1. The course shall describe how to make informed boating decisions based on forecasted local weather and water conditions.

3.1.2. The course shall also describe:

- dangerous weather conditions such as strong winds, storms, lightning, hurricanes and fog;
- dangerous water conditions such as strong currents, waves, hydraulics and high water;
- dangerous areas and features in and around the water, such as rocky shores, man-made structures and debris, and trees or other items in the waters; and
- their importance in trip planning.

3.2. Checking Local Information

3.2.1. The course shall describe how to obtain information about local hazards that may impede the safe operation of a recreational boat.

3.2.2. The course shall describe how to obtain information and inform the boater regarding local and state laws and regulations.

3.3. Filing a Float Plan

The course shall describe:

- the importance of filing a float plan and the basic information that should be included; and
- leaving the float plan with an appropriate responsible person.

3.4. Preventative Maintenance

The course shall describe and illustrate where possible:

- the need for regular inspection; and
- maintenance of the boat, gear and related equipment, including:
 - inspecting the boat for water tightness, including hull integrity, gaskets, and all hatch covers;
 - patching holes with a material suited to the composition of the hull;
 - cleaning the boat to remove all foreign bodies, mud and aquatic invasive species;
 - storing the boat in accordance with manufacturer recommendations;
 - checking, replacing as necessary, and tightening all screws and deck fittings;
 - treating the hull with an appropriate UV inhibitor as recommended by the manufacturer;
 - checking flotation air bags to be sure they are effectively secured and don't leak;
 - checking lines and grab handles for fraying;
 - checking paddles/oars; and
 - all other equipment to ensure it conforms to manufacturer performance guidelines and specifications.

3.5. Pre-Departure Checklist and Passenger Communication

The course shall describe:

- the importance of using a pre-departure checklist, and
- conducting a safety discussion with all in the party.

3.6. Transporting

The course shall describe proper procedures for transporting a boat to prevent accidents and property damage, including:

- making sure the boat is securely fastened to the car or racks, and
- using proper tie downs and knots.

4. Safe Boat Operation

4.1. Operator Responsibilities

4.1.1. The course shall describe:

- a boater’s ultimate responsibility for his or her personal safety;
- the safety of anyone else on board and all activity aboard the boat; and
- how to evaluate currents and determine which should be avoided by the novice paddler/rower.

4.1.2. This responsibility extends to other water users and includes but is not limited to:

- refraining from careless, reckless, or negligent operations on the water;
- abiding by other general boater courtesy;
- crossing a channel as a group;
- understanding the impact of waves and wakes on boat handling; and
- sharing water features such as eddies and rapids with other paddlers.

4.2. Influence of Drugs and Alcohol on Boat Operation

The course shall describe:

- the effects of drinking alcohol or using drugs while boating, and
- the boating laws pertinent to operating a boat while under the influence.

4.3. Navigation Rules

4.3.1. The course shall utilize the content of the U.S. Coast Guard Navigation Rules and Regulations Handbook (most current version) to describe:

- generally avoiding channels used by larger boats and, if navigating in a channel, giving way to vessels constrained by the channel;
- avoiding collision with powerboats by keeping a sharp lookout, using light and sound signals to identify your presence, and maneuvering out of the way;
- observing and operating in accordance with homeland security measures by keeping a safe distance from military and commercial ships at sea and in port and observing all restrictions in security zones;
- observing restricted areas near dams, power plants and bridges; and
- the duty to render necessary assistance.

4.3.2. The course shall include, verbatim, the following disclaimer: “The navigation rules contained in this course summarize basic navigation rules for which a boat operator is responsible on inland waterways. Additional and more in-depth rules apply regarding various types of waterways, and operation in relation to commercial vessels and other watercraft are set forth in the NAVIGATION RULES AND REGULATIONS HANDBOOK by

the U.S. Coast Guard (latest edition). For State-specific navigation requirements, refer to the rules and laws that apply in the state where you intend to boat.”

4.4. Aids to Navigation

The course shall describe:

- the U.S. Aids to Navigation (USATONS) as they are relevant to boaters, including:
 - understanding channel markers;
 - understanding regulatory markers, such as those marking dams, submerged objects and other hazards; and
 - homeland security restrictions.

4.5. Boarding, Propelling, Exiting and Securing the Boat

4.5.1. The course shall describe:

- how to safely board and exit a small boat;
- sufficient clearance or proper fit so that entry into and exit from the boat is not impeded; and
- basic ergonomics of rowing or paddling (e.g. proper body and arm position to reduce the possibility of injury and to maintain balance in/on the boat).

4.5.2. The course shall explain how to secure the boat at the shore to prevent it from drifting away.

5. Emergency Preparedness

5.1. Assisting Other Boaters

The course shall describe procedures and tools for assisting other boaters in difficulty, while minimizing risk to the rescuing boater.

5.2. Capsizing/Falls Overboard

5.2.1. The course shall describe how to prevent and respond to emergencies. The prevention recommendations will include at least the following:

- stay centered and low,
- avoid standing and sudden moves,
- maintain three points of contact,
- never overload,
- avoid rough water, and
- additional techniques specific to individual craft (e.g. falling from a Stand Up Paddleboard).

5.2.2. The responding procedures shall include at least the following:

- wearing life jackets,
- taking a head count,
- staying with the boat when appropriate,
- signaling for assistance,
- using improvised floating aids,
- initiation of procedures to recover people in the water, and
- proper procedures to use when boating.

5.3. Cold Water Immersion

The course shall describe the effects of cold water immersion and how to prepare for, prevent, and respond to a cold water immersion event, including:

- Stages and the physiological effects of cold water immersion:
 - Initial reaction (cold shock response; gasping and hyperventilation);
 - Short-term response (cold incapacitation; swim failure, functional loss); and
 - Long-term response (immersion hypothermia).
- Preparation and Prevention:
 - Wearing a life jacket enhances chances of survival during each stage;
 - Carrying communication and signaling devices on person;
 - Preventing capsizes, swamping and falls overboard; and
 - Proper clothing to enhance survival following cold water immersion.
- Response:
 - Initial reaction (first 1-5 minutes) - airway protection and breath control;
 - Short-term (first 30 minutes) – performing the most important functions first (emergency communication, situational assessment, decision making, and self-rescue activities); and
 - Long-term (after 30 minutes or more) – slow body core heat loss and be prepared at all times to signal rescuers.

5.4. Boating Accident Reports

5.4.1. The course shall describe:

- what kinds of boating accidents require an accident report,
- how, when and where to file the report, and
- reporting accidental loss of boats to reduce likelihood of unneeded search efforts.

5.4.2. The course shall include a sample accident report form, which can be included in the textbook, as a separate handout, or as an online link.

6. Other Water Activities

6.1. Hunting and Fishing

6.1.1. The course shall inform people who hunt and fish from boats that they are boaters, and that they need to follow safe boating practices.

6.1.2. Information must be provided about accident risks relevant to this group of boaters.