

## Paddle Craft Safety Instructor Guide

(3<sup>rd</sup> edition, updated in 2017 to include moving water options)

### **Purpose:**

Float trips are popular Boy Scout, Venturing, and Sea Scout activities. *Safety Afloat* awareness training provides guidelines for safe float trips and is required of unit leaders, but does not provide the skill training mandated by those guidelines. *BSA Paddle Craft Safety* expands *Safety Afloat* training to include the skills, as well as the knowledge, needed for a unit leader to confidently supervise canoeing or kayaking excursions.

The program contains four separate modules. Basic canoeing and basic kayaking options cover flat water skills. River canoeing and river kayaking options build on the basic programs to include moving water.

Persons completing the training should be better prepared to supervise paddle craft activities. The training is open to any registered adult leader, Scout, Venturer, Sea Scout, or Explorer who is age 15 or older. The training must be conducted by a council approved instructor and is valid for three years. Each module takes approximately eight hours.

Adult and youth first aid training, including CPR, is an important safety consideration for all Scouting activities, not just boating. First aid training is not included in the *Paddle Craft Safety* course with the expectation that the leader has addressed that need separately, as noted in the course material and on the training card.

Float trips that last overnight also require camping skills. Since Scouting emphasizes outdoor skills in many programs, only select items specific to canoeing or kayaking are reviewed in the course material.



## Paddle Craft Safety- Basic Canoeing and Basic Kayaking Requirements:

### 1. Prerequisites:

- A. Be age 15 years old or older prior to training
- B. Submit written evidence of physical fitness
- C. Complete Safety Afloat training.

### 2. Swimming Ability:

Complete the BSA *swimmer* test: Jump feetfirst into water over the head in depth. Level off and swim 75 yards in a strong manner using one or more of the following strokes: sidestroke, breaststroke, trudgen, or crawl; then swim 25 yards using an easy resting backstroke. The 100 yards must be completed in one swim without stops and must include at least one sharp turn. After completing the swim, rest by floating.

### 3. Personal Safety Skills:

- A. Select a life jacket of appropriate size and demonstrate proper fit.
- B. Demonstrate the feet-up floating position used if caught in a current.
- C. Demonstrate H.E.L.P and Huddle positions.
- D. Capsize and swim a boat to shore.

### 4. Basic boating skills: Demonstrate the following maneuvers on calm water using standard stroke techniques: \*

- A. Transport boat from rack or trailer to water's edge.
- B. Safely board and launch the craft.
- C. Travel in a straight line for 50 yards.
- D. Stop the craft.
- E. From the stop, move the boat sideways first to the right, then to the left.
- F. From the stop, pivot the boat to the right, then to the left.
- G. Return to shore along a curved course demonstrating both left and right turns while underway.
- H. Land, safely exit and store the craft.

### 5. Group safety skills:

- A. Throw a rescue bag, laying the line within 3 feet of an object 30 feet away.
- B. Demonstrate a boat rescue of a swimmer.
- C. Demonstrate a boat-to-boat assist of a swamped boat in deep water.

### 6. Correctly answer 80% of the questions on the *Paddle Craft Safety* written exam covering *Safety Afloat*, trip preparation, emergency action plans, and basic boating knowledge. Review any incomplete or incorrect answers.

\* Skills may be demonstrated either tandem in a canoe, or solo in a kayak. If a tandem canoe is used, each participant must demonstrate the maneuvers from both bow and stern positions.

## **Paddle Craft Safety- River Canoeing and River Kayaking Requirements:**

1. Prerequisites:
  - A. Submit written evidence of physical fitness
  - B. Have current Safety Afloat training.
  - C. Have current training in Aquatics Supervision: Paddle Craft Safety- Basic for the appropriate craft.
  - D. Demonstrate or provide evidence of current ability to complete the 100- yard BSA swimmer classification.
2. View and discuss the ACA/BSA video “Reading the Rhythms of Rivers and Rapids”.
3. Do the following during an instructor-led canoe or kayak trip of at least three miles down a flowing river with Class I or Class II features, including standing waves, a downstream V, and a large eddy. A segment that includes isolated Class II+ or Class III rapids that can be portaged is appropriate, but not necessary. Features and water levels must be consistent with the safe performance of the requirements.
  - A. Transport boat from trailer or carrier to river’s edge. Safely board and launch the boat into a current.
  - B. Review the effect of basic flat-water strokes in moving water, demonstrating the ability to stay parallel with the current.
  - C. Demonstrate knowledge of river signals to communicate with other boats.
  - D. Perform a controlled swamp in a current, safely exit the craft, and guide it to shore.
  - E. Swim feet first in a current without a boat and catch a throw bag deployed from shore.
  - F. Successfully deploy a throw bag to a person fulfilling requirement 3E.
  - G. If canoeing, demonstrate a cross draw stroke. If kayaking, demonstrate a low brace.
  - H. Demonstrate ability to cross the current using a front ferry.
  - I. Demonstrate an eddy turn.
  - J. Demonstrate peel out of an eddy.
  - K. Stop above a rapid indicated on a river map. Scout the rapid to determine how best to run the rapid and then run it.
  - L. Stop above a hole, low-head dam, or other feature indicated on a river map. Scout and portage the feature, even if it can be safely run.
  - M. Land, safely exit, and load the boat for transport.
4. Write a float plan for a troop, crew, or ship covering the stretch of river used for training.

## Course eligibility:

Requirements 1 and 2 for the basic courses and Requirement 1 for the river courses, along with BSA registration, are course pre-requisites. If the instructor doubts a person's age or registration, proof should be requested. While the training is intended primarily for adult leaders, it may also be used to strengthen the ability of units to function under youth leadership. Venture crews and Sea Scout Ships that specialize in remote outdoor activities that include boating may wish to arrange a course for the entire crew. Although the training is open to and appropriate for Boy Scouts age 15 or older, they should be encouraged to earn Canoeing, Kayaking, and Whitewater merit badges.

The requirements to submit written evidence of physical fitness follows *Safety Afloat* concepts. The instructor should make the point that this course involves boating and therefore abides by the Personal Health Review criteria. Since the activity is not unduly strenuous and lasts less than 72 hours, only a health history is required. Course participation should only be denied on the basis of physical fitness if a parent or physician states that the participant should not be allowed in the water or should not engage in normal exertion associated with boating. Non-infectious illness that is under control or physical limitations are not automatic reasons for exclusion. So long as a person can safely participate in the activity and meet the objective of a physical requirement, the requirement is satisfied, even if an adapted technique is not standard. As part of the medical screening process the instructor should inquire privately whether the participant has any special physical or learning needs. The goal is to understand individual needs to provide successful experiences in the classroom, in and on the water, and during testing.

Although course material will review and expand on points of Safety Afloat, the requirements for current Safety Afloat training recognize that prior exposure to Safety Afloat concepts will aid comprehension and foster class participation. Precourse literature should encourage participants to review the online MyScouting course if their current training cards expire within a year of the Paddle Craft Safety course. However, the instructor does have the option of offering Safety Afloat training at the beginning of a Paddle Craft Safety course. That option will add approximately 45 minutes to the suggested schedule.

Course advertisements and registration procedures should clearly inform the applicant that the BSA *Swimmer* test must be completed to take the basic courses. Since a basic course is a prerequisite for a river course, swimming ability has already been confirmed.

## Instructor and Course Authorization:

*BSA Paddle Craft Safety* training may only be conducted by those currently trained as a BSA Aquatics Instructor for the basic courses or a *BSA Paddle Craft Safety Instructor* for basic and river courses. Details are provided on the instructor application contained in this guide. All course offerings must be approved by the local council, with that approval documented on the Course Record form used for each class. The Scout Executive or his/her designee (e.g. Council Aquatics Committee chairperson, council Training Committee chairperson, Camp Director, or District Executive) determines the local procedure for authorizing a course, which may be by phone or email as well as signature.

## Course fees:

In keeping with the BSA emphasis on program delivery by volunteers, the course is not intended as a source of revenue for the instructor, the council, or other organizations. The participant should only be charged a fee to cover actual costs such as facility rental and course materials. Course fees should not be used to provide instructor compensation. If the instructor is conducting the course as a council employee, for example, as a summer camp staff member, that person should be paid a fixed salary, not a supplement or commission for each participant.

## Insurance:

Registered members of the BSA are typically covered by unit or council insurance programs during Scouting activities. The instructor may obtain details from the local council.

## Completion options:

Normal course completion requires attendance at, or make-up of, all course sessions as well as successful completion of all requirements. The goal is to train all interested leaders to the standards implied by the requirements. Leaders who are not able to meet the requirements are not issued training cards even if conscientious and dedicated. However, the instructor is encouraged to continue to work with such individuals to improve their skills and understanding sufficiently to satisfy the requirements. A training card may be issued to such individuals following satisfactory performance at make-up sessions that are conducted by the original instructor within six months of the initial test date.

Training is renewed or extended either by taking the course again, or 'challenging' the requirements as noted below. Co-instructors of a normal session may each sign a completion card for the other.

The following groups may complete the appropriate basic courses by passing, or challenging, the requirements without attending the normal course sessions:

- a. Anyone with a completed *Paddle Craft Safety* basic training card whose expiration date has not been exceeded by more than six months.
- b. Anyone recognized by the local council as a *Canoeing Merit Badge*, *Kayaking Merit Badge*, or *Whitewater Merit Badge* counselor.
- c. Anyone with an American Canoe Association participation or assessment card in either *Introduction to Canoeing*, *Introduction to Kayaking*, or higher level courses.
- d. Anyone with American Red Cross training in *Small Craft Safety*.
- e. Anyone with training from another approved boating and water safety organization providing a course in paddle craft that includes physical skills. Must be approved through the council before accepting their credentials.

The following groups may complete the appropriate river courses by demonstrating the skills specified in the requirements without the need to participate in the three-mile trip:

- a. Anyone with a completed *Paddle Craft Safety* river training card whose expiration date has not been exceeded by more than six months.
- b. Anyone recognized by the local council as a *Whitewater Merit Badge* counselor.
- c. Anyone with an American Canoe Association participation or assessment card in *Essentials of River Canoeing*, *Essentials of River Kayaking*, or higher level courses.

The basic training may be conducted either using tandem canoes or tandem or solo kayaks. The river canoeing course may also be completed in a solo canoe. Kayaks may be rigid, either a sit on top or with a cockpit, or inflatable. Boats used for the river courses should be designed for the features of the river used for training.

*Safety Afloat* requires leader training in the type of craft being used for a float trip. Therefore, some participants may wish training in both canoes and kayaks. A course may be extended to cover both options if desired. Skill training for different types of craft in the same course should be modular rather than simultaneous.

## Course Completion Cards & Patches:

Course completion cards are available from the council office and should be issued by the instructor at the conclusion of the course. The card, signed and dated by the instructor, is the only documentation provided the participant. The card indicates which of the four modules was completed. Cards expire three years after completion. Replacement cards should be obtained directly from the instructor. A signed course completion card allows the holder to purchase and wear *Paddle Craft Safety* patches and strips from a council service center. Distribution of patches at the end of the course is recommended.

If kayaks are used in the basic course, then a *Kayaking BSA* application may be completed for each participant and *Kayaking BSA* cards and patches issued.

## Course records:

The course instructor is required to maintain a Course Record, included in this guide, which notes the course authorization along with the instructor(s) name, type of training and expiration. The record also includes the name of each participant and a check list to document completion of each requirement. The same form is used for both normal and challenge course completion. Instructors should retain the original Course Record and marked copies of the written exams for a period of three years unless the council office keeps those documents.

This guide contains an evaluation form to distribute to each participant to critique the course and instructor. Each participant should be asked to complete the evaluation form at the end of the course. The council may, at its discretion, require copies of those forms to be forwarded to the council office for review by the council Aquatics or Training Committees.

## Course location:

Course staging requires both a classroom setting and appropriate boating areas. A safe swim area is required for the swimmer classification test and may be either at the boating area or in a pool. The classroom may be outdoors as long it is conducive to effective learning. A classroom facility with a projection system is needed to view training materials.

Basic skill instruction must be conducted on clam water; ideally should on a calm day or in a location protected from the wind. Since the requirements require exposure to the water, safe, comfortable water and air temperatures are needed.

River modules need flowing water with Class I to Class II features, including standing waves, a downstream V, a large eddy, and a hazard to be portaged.

## Course duration:

The basic courses are designed to take roughly eight hours for a moderately sized group. A challenge course may only take two hours. The exact time needed for effective instruction and testing will depend somewhat on the number and skill of participants and is at the discretion of the instructor. Additional time may be scheduled for large groups. Allow sufficient time for participants to effectively absorb and demonstrate their understanding of the material and to refine skills through practice. Over half of the time should be on the water. Schedule time for breaks, meals, and to move from the classroom to the boating area.

The basic course material may be completed in one day. However, such a schedule doesn't allow participants much time to study for the written exam or to practice marginal skills. Therefore, a schedule over two or more mornings, afternoons or evenings, either a day or a week apart, may be preferred over a single day. If the course is conducted on a single day, the instructor should arrange for texts to be delivered to the participants for individual study prior to the start of the course. Alternatively, the written exam may be scheduled separately after the rest of the course, on a different day, and possibly at a different place, to allow time for study.

If a different location is needed to conduct the swimmer test, that segment may be scheduled prior to the rest of the course. That option is useful to those who are not sure of their swimming skills. They may be able to avoid an unnecessary trip to a distant boating location if they are unable to complete the swim.

If desired, the basic courses may be extended on an optional basis by approximately two hours to include both canoes and kayaks, along with Kayaking, *BSA*.

The skill portions of the river courses may also be conducted within a day, provided there is easy, close-by river access. Requirements 2 (video discussion) and 17 (float plan) may be done separately from the skill sessions.

Basic courses and river courses may be presented back-to-back if desired, for example, over a long weekend.

## **Instructor/Participant ratios:**

The maximum instructor to participant ratio is set at one instructor per ten participants for the basic courses (1:8 recommended) and one instructor to six participants for the river courses. It is highly desirable for both effective teaching and safety to have at least two instructors for each course. Two instructors for sixteen tandem canoeists (eight participant boats) provide effective group interaction and individual attention within the allocated time. The suggested times in the schedule for the basic course are for that configuration. It is convenient but not essential to recruit participants in groups of 2 and/or 4 for buddy and buddy boat exercises.

## **Safety:**

The course instructor has primary responsibility for the safety of all participants and shall conduct all training with safety a prime consideration. Every instructor should be familiar with both the classroom and the water area and make sure that appropriate emergency action plans and trained response personnel are in place. Emergency communication systems should be tested, for example, that a cell phone has a signal.

Everyone will wear a properly fitted life jacket when on the water. Participants and instructors for the river courses will wear helmets.

Procedures must be in place to avoid hypothermia and hyperthermia. Wet suits are an option for cool water. Adequate drinking water and breaks in the shade are needed for warm, humid conditions.

Everyone will have a designated buddy during all skill sessions, including the instructors. Tandem canoeists are buddies. Solo kayakers have a buddy in a different boat. Each buddy should be aware of the location and condition of the other at all times. The instructor should do frequent checks to confirm the presence of all boats and participants. A simple head count will suffice, but should be made apparent to the participants. A deliberate, marked emphasis on the buddy system during instruction not only adds a margin of safety during the instruction but also sets the example participants are expected to follow during unit activities. Buddy tags may be used if desired, but are not necessary since the instructor will have a written list of all participants for recording performance.

Buddies for solo kayakers are in a 'buddy boat'. Buddy pairs in tandem canoes are also assigned a buddy boat. During practice of in-water activities, such as swamping or wet exits, one buddy boat does the procedure while the other watches, then they switch.

Capsize drills and wet exits should be done in water at least seven feet deep. The water bottom must be free of trees, trash and other hazards. All participants must wear foot protection at all times. Participants may be offered commercial solutions to remove water from the ears after submersion in natural waters.

All boats in a basic course must be in sight of each other and the instructor at all times. In windy conditions, the group may need to be tightly collected in a cove out of the wind. If travel from the launch site to the cove exposes the group to wind, the boats should not be allowed to spread out. If the group becomes separated, then each buddy boat should immediately proceed in the direction of the other unless the instructor indicates otherwise. Instruction must be cancelled or delayed if excessive wind, waves, or other unsafe conditions arise. (Teaching would be ineffective in such situations anyway.)

On a river, the lead and sweep boats should contain experienced paddlers. Each boat between should keep both the boat ahead and the boat behind within view. Instruction and practice will likely entail landing all boats at a particular location and then having individual boats run and re-run features. In such a setting, instructors should be cognizant of all participants rather than focusing only on a particular participant attempting a skill.

Water flow rates for the river courses must be at safe levels. Instructors are responsible for monitoring water conditions before and during the course and rescheduling activities as needed.

All boats must be cleared from the water during an approaching storm and remain off the water for at least 30 minutes after the last observance of thunder or lightning.

If the course is conducted by a single instructor (not recommended), then the instructor must coach his/her buddy in what to expect during all demonstrations to preclude the possibility that participants will assume an instructor's actions are part of the demonstration rather than a sign the instructor is in trouble. There should

also be a lookout on shore or in another boat who is familiar with the emergency action plans and can respond in an emergency. (For example, if the instructor suffers sudden cardiac arrest, there must be someone else already assigned to call for advanced emergency care.) If two or more instructors are present, they may serve as lookout and backup for themselves as well as the participants.

Adequate drinking water, toilet facilities and emergency transportation should be available for remote locations.

Participants should be given advance instructions on what they should bring to the boating sessions, for example, hats, sunscreen, eyeglass straps, shoes that can get wet, swimsuits, and towels.

## Course material and presentation:

Each participant should have a copy of the BSA *Aquatics Supervision* publication No. 34346 (SKU 616730) that serves as the text for the course and is the standard reference on policies and skills covered during the course. The written exam for the basic courses is taken from material in Section I and Chapters 12 through 21 in Section III of the text. Instructors may not exclude, modify or add any requirements. Since some of the skill requirements involve maneuvers that can be accomplished by more than one technique, instructors do have some leeway in the selection and performance of strokes and other details. However, instructors should not present any material that contradicts information in the text unless there is an official BSA publication with a later print date that amends the material. If the instructor finds material in the text that is at odds with standard practice, the instructor should convey that information to the Outdoor Program group of the National Council.

The local council is responsible for providing all approved instructors with this instructor guide and the extra material noted herein. That material includes this guide, which contains a course record form, a course evaluation form, and instructor application. Standardized presentations and exam materials are provided separately. Course material, including this guide, may be downloaded from [www.scouting.org](http://www.scouting.org) by following the ScoutSource, Outdoor, Aquatics, and Aquatics Resources tabs:

<http://www.scouting.org/Home/OutdoorProgram/Aquatics/forms.aspx>

The videos for the basic courses are available online and also on the Safety Afloat and Aquatics Supervision: Paddle Craft Safety DVD, SKU 612934, available from BSA National Supply at [www.scoutstuff.org](http://www.scoutstuff.org).

Basic course presentations include introductory canoeing and kayaking videos and a PowerPoint file. Either the canoeing or kayaking video, depending on the craft used for instruction, should be shown early in the course. The short videos set the stage for course skill content and expected performance. They do not cover each skill in detail and therefore do not replace effective demonstrations by the instructor.

A standardized presentation for the basic course is provided in Microsoft PowerPoint format. While PowerPoint can be a very effective teaching tool, it is also easy to misuse. Some presenters read verbatim from long bullets lists on a slide that is also provided to participants on handouts. While such a technique assures that everyone is exposed to the same material in the same way, it also eliminates the need for the instructor, stifles interactions, and promotes inattention and boredom. The *Paddle Craft Safety* presentation is designed to avoid such problems by presenting graphics and talking points that focus attention on what the instructor is saying and includes questions to prompt audience participation. The slides do not stand alone without commentary and discussion. That commentary, along with teaching objectives and questions to prompt discussion, is contained in the notes window for each slide. Some slides have simple animation to present components in a logical progression. That animation is highlighted in the slide notes. The instructor should conduct a dry-run of the presentation prior to the course and then present the commentary from memory in his/or her own style. A hardcopy of the slides in notes format will provide the instructor a prompt if needed. Hardcopies of the slides should not be given to participants prior to the presentation. The material is covered in the text so participant copies are not needed. Participants should be encouraged to make notes directly in their texts.

The intent of a common graphics presentation and commentary is to establish a nationwide standard for course content and quality. Instructors should work with their council, including the Aquatics and Training Committees, to provide that commonality. Projection on a screen is ideal, and small groups may be able to watch the presentation on a large computer or TV monitor. However, trying to fit a large group around a small laptop screen in broad daylight is likely not effective. If effective computer projection in any of the various forms is not available, then the slides may be printed as transparencies and presented using an overhead projector with only minor changes in presentation style or commentary. If no projection option is available, the material may be presented using flip charts so long as the session objectives are met, although that is not a preferred option. If flip charts are used, then hardcopies of the slides may be provided participants as needed.

## Basic Course Outline:

Each instructor is expected to work from a course outline that presents the material logically and efficiently. A reasonable starting point is to adopt the schedule that was used when the instructor took the course. However, flexibility is needed when the instructor is adapting to different venues and time slots. The following outline divides the material into seven sessions tied to the requirements. Scheduling involves grouping the sessions into available time slots. Individual topics may be shifted from one session to another. For example, use of a throw bag could be covered during an onshore break from paddling practice between sessions. An optional session may be added to include both canoeing and kayaking. Notes follow for each of the sessions.

### **Session I – Prerequisites** (~ 45 min, but duration variable – pool or swim area)

- Health history review
- Confirmation of Safety Afloat training.
- Swimmer* classification

### **Session II –Safety Afloat principles** (120 min – classroom)

- Introductions
- Course requirements, expectations, and schedule,
- Viewing of either the canoeing or kayaking Paddle Craft Safety video,
- PowerPoint presentation on safety, rules & procedures
- Break-out exercise on trip planning

### **Session III – Intro to paddle craft** (40 min)

- Boat design and nomenclature
- Paddle parts and selection
- Life jacket selection and fit
- Carrying craft to and from the water
- Launching
- Paddling positions
- Trim and balance

### **Session IV – Stroke execution and function** (50 min)

- Forward – back
- Draw – pry
- Forward- reverse sweeps
- Rudder
- Stern steering stroke (for canoes)

### **Session V – Maneuvers** (90 min)

- Maintaining a straight course
- Stopping
- Moving sideways
- Pivots
- Turns under way
- Individual practice
- Group drills

### **Session VI – Safety Skills** (75 min)

- Throw-bag use (from land)
- Capsize drill (for some kayaks, this exercise is moved to Session III)
- Emptying a swamped boat
- Boat-to-boat assist
- What to do if separated from boat in cold water
- What to do if separated from boat in a current
- Swimmer assist

### **Session VII– Written Exam and Review** (60 min - classroom)

- Written exam
- Review of missed questions
- Participant evaluation of course

### **Session IX – Dual craft training (optional)**

Repeat of Sessions III through VI for kayaks or canoes, depending on which was used first.

## **Basic Courses - Session Objectives & Instructor Notes:**

Chapter number refer to the Aquatics Supervision text, No 34346.

### **Session I – Prerequisites (requirements 1 & 2)**

There is a space on the course record form to record each participant's age (req. 1a), which should be noted on the health history form. Items to consider when reviewing the health histories (req.1b) are covered in Chapter 4. Ideally, each participant should be alerted through the sign-up process that a completed health history form will be required. However, adults who enroll late may complete the form onsite. Forms for youth must be signed by their parent or guardian.

*Swimmer* classification requirements (req. 2) and procedures are covered in Chapter 5. Course advertisements and advance sign-up procedures should clearly state this requirement to prevent those with marginal skills from having undue expectations.

If practical, a 'qualification' session may be held separate from the main course, for example on a Thursday evening at a local pool prior to a Saturday course at a distant camp. Candidates for a large group may be scheduled to arrive at different times. Such an arrangement suits those unsure of their swimming ability who may be concerned about performing poorly in front of a group and travelling to a distant venue only to find they are not allowed to participate. At summer camp, the general swim classification procedure may be used to screen candidates.

Requirement 3c, H.E.L.P. and Huddle positions, and requirement 3b, the floating position used in a current, may be moved from Session VI and done immediately following the swim test if life jackets are available at the swim test site.

The appropriate Paddle Craft Safety introductory video may also be scheduled with the pool session.

### **Session II – Safety Afloat principles (prep for requirement 6)**

This session should include introductory materials, such as a schedule and facility review, that were not covered in the first session. That includes showing the appropriate Paddle Craft Safety introductory video. The skills covered in the video provide general guidelines meant to establish a common expectation of performance by both instructors and participants. However, the videos do not serve as concise or complete depictions of skills to be presented by the instructor.

This section utilizes a standardized PowerPoint presentation that guides participants through the need and content of each point of BSA Safety Afloat. Instructor notes are provided for each slide. Text references are cued on each slide so participants can follow the material in their texts.

Break-out groups develop a float plan, ideally based on an actual unit experience. Each group then reviews their plan with at least one other group for feedback. Details of the exercise are provided in the PowerPoint file.

### **Session III – Intro to paddle craft (requirements 3A, 4A, 4B)**

The instructor should point out the various design features of the craft being used for the course, including pros and cons of the construction material. Those may be contrasted with other boats available at the site. Basic parts should be identified.

Paddle materials, parts, and selection are also covered in this session. There should be sufficient paddles of various lengths so that everyone is able to find an appropriate paddle. Paddles may be of wood or composite materials, such as hard plastic blades on a metal shaft. However, solid, all-plastic canoe paddles that flex during a stroke should not be used.

Life jacket types and fit are discussed in Session II, but the basics should be reviewed prior to participants selecting and donning a life jacket for the exercises. Point out the size indication on the label. Show how to test fit by pulling on the shoulders. If a life jacket has a non-functioning, non-repairable strap or tear, deliberate destruction of the life jacket in front of the class makes a good point. The instructor might cull through the stack

prior to the class to in order to make that demonstration. Showing how a loose life jacket rides up around the head in the water also makes a good demo.

Type II life jackets are allowed for this course, but Type III's are strongly recommended.

A single person may carry his/her kayak to the water, but canoes should be carried by at least two people. A solo canoe portage is not part of the course.

Canoe launching may be done either perpendicular or parallel to shore. Emphasize "three points of contact" when moving about in the canoe.

During the trim discussion in canoes, the instructors first demonstrate the desired placement of paddlers and then the effects of poor positioning. Kneeling, with the weight against a seat or thwart, is the recommended position from which to learn canoeing strokes, but sitting is acceptable so long as the canoes are stable and the knees are out of the way. For some kayaks, participants should position themselves in the boat on land before trying it in the water.

If close-fitting kayaks with small cockpits are used for the course, then the capsize drill should be done as part of the "trim and balance" discussion. That avoids the potential of beginners having difficulty or worrying about separating themselves from the boat (a wet exit) during an unintentional capsize during practice. For canoes and other kayaks, the capsize drill is delayed until the participants have been shown the basic skills for getting the boat to an appropriate capsize location. (Plus they stay dry during stroke practice.) Most touring canoes and many recreational kayaks are stable enough that novices will be comfortable with stability after deliberately shaking around a bit with their paddles laid across the boat. Prior to such "trim and balance" exercises, the instructor should inform participants that an unintended flip on calm water is unlikely, but if one does occur, to check their buddy and hang on to the boat until the instructor provides guidance.

**A note on terminology** - Part of the mystique of learning a new activity is acquiring a vocabulary known only to a select few. Paddle sports have their own special lingo. The uninitiated reveal themselves when told to grab a gunwale or thwart, move abeam, or execute a Duffek. Special terms, once learned, allow clear communication and many participants will be eager to learn the new idiom. However, those learning a new skill can be overwhelmed by too much too soon. The instructor should be wary of using a special term when a simple one will suffice. "Front" works for "bow"; "move sideways toward me" can substitute for "do an onside abeam". Useful terms should be introduced in context as needed and clearly defined. Potentially confusing words, such as 'onside' for a tandem canoeist, should be avoided.

#### **Session IV - Stroke execution and function (prep for required maneuvers)**

Since this is a flat-water course designed to prepare participants mainly for recreational cruising, instruction and practice should be done in boats that track well. Such boats also facilitate learning the forward strokes and straight line maneuver.

Prior to stroke introduction, the participants should be shown how to hold the paddle. Brief dry land and/or shallow water drills may be used to introduce and review strokes. Kayak paddle exercises are shown in Chapter 17.

Note that maneuvers, not specific strokes, are specified in the requirements. Nevertheless, participants should be shown the basic strokes needed to move the boat efficiently in the desired manner, thereby building skills in an easily understood progression.

Typically, a basic forward, or power stroke, is the starting point. It is possible to analyze every component of the stroke for supposed efficiencies and flaws, but the instructor should avoid too much verbal justification in favor of providing a good physical example for the participants to imitate. If the instructor keeps the blade vertical, then the participants are likely to do likewise. (It doesn't really matter whether the boat is pulled to the paddle or the paddle is used to push water backwards, particularly since both are partially correct.) The instructor should strive to have each person keep the stroke short and hold the blade vertical with the lower arm straight and rotated from the shoulder, but stroke correction should address only one item at a time and be illustrated by the instructor doing the skill correctly. Polishing strokes can wait until after the beginner begins to develop "boat sense", that is, what effect paddle movement has on boat movement.

The order of stroke presentation is at the discretion of the instructor. Some canoeing instructors start with turning strokes. Their rationale is that those strokes and maneuvers are easily learned and therefore give the participants quick success and positive reinforcement.

Other instructors prefer to get the participants into the boats as quickly as possible to execute a short out and back course around a buoy. Most participants will have some boating experience and may be chafing to get going. A short course serves as a simple entry test, unbeknown to the student, that helps the instructor determine how to best progress with the class. If participants have difficulty going straight out and back, it provides them with a useful 'guided discovery'. They can easily be talked through a return if needed, but will generally manage to return without prompting.

Solo canoeing is not part of the requirements, but is one of the best ways for both the participant and instructor to determine the effectiveness of a stern correction stroke. Stern paddlers may be coached in the techniques with the bow paddler turned to watch rather than stroking.

### **Session V – Maneuvers (requirements 4C through 4G)**

For canoes, the 50-yard straight course must be done with the paddlers stroking on opposite sides of the canoe, and ideally should be done without switching sides. Although effective switching techniques are used in marathon canoe racing, novice paddlers tend to switch as a crutch and end up snaking through the course. To help the participants gain 'canoe sense', early emphasis of switch techniques is not recommended. However, the participants may certainly switch sides as necessary to regain control during practice.

To further promote 'boat sense', the participants should be offered a variety of fun exercises that require various maneuvers. Examples include:

- follow the leader around buoys or submerged trees with participants in the lead- generally more effective with the class divided into small groups
- being directed verbally or with signals to go right, left, or stop when headed at speed for a buoy
- a timed English Gate test, particularly the first half, is good for those ready for a challenge
- a canoe 'huddle' may be used to position the group for an on-water demonstration. Forming the huddle provides practice with a purpose.

The requirements specify return along a curved course. Any option that requires turns underway is sufficient. One alternative is to lay out a straight line of single or double buoys. Participants pass through or alongside the buoys for the straight course, and then slalom around the buoys for the return.

For canoes, paddlers must do the maneuvers from both bow and stern positions. Neither the requirements nor the text address changing places on the water. Changing places is done at the shore after the landing required in 4h.

### **Session VI – Safety Skills (requirements 3B, 3C, 3D & 5)**

In-water exercises are grouped together to avoid conducting other sessions with the participants in wet clothes.

All in-water exercises should be tightly structured and controlled. All participants must wear life jackets and shoes and be positioned in water free from hazards and of sufficient depth to avoid forceful contact with the bottom. Buddy boats take turns doing the exercises. Canoes should be carefully swamped by leaning to one side and shipping water (see Chapter 16), rather than flipped. If a canoe is flipped, buddies, buddy boats, and instructor should immediately determine that those in the water are not injured. Participants are not allowed to remain out of sight in the airspace beneath an overturned boat.

Capsize drills should be conducted after the participants have gained basic maneuvering skills unless, as noted before, kayaks with small cockpit openings are used. In that case, wet exits are done prior to any other on-water exercises. Boats may be pushed or pulled ashore by swimming, or re-entered and paddled to shore while swamped. One buddy boat swamps while the other stands by as a safety boat. During the explanation of the exercise, the instructor should point out factors to consider in cold water.

For canoes, two buddy pairs should work together for the swimmer assist. The subject is from the buddy boat and walks or swims out from shore to get into position for the assist. The subject's buddy stays on shore as an additional lookout. The buddy boat performs the assist as outlined in the text, and then roles are switched.

Buddy boats work in tandem for the boat-to-boat rescues following the procedures given in the text, or discussed in Canoeing or Kayaking merit badge pamphlets. Ideally, the exercise should be conducted in an area free from wind. In a slight breeze, boats should be moved upwind of the launch site if possible before starting the exercise. In a moderate breeze, it may be necessary to conduct the exercise near shore one boat at a time. If the wind is such that participants have difficulty completing the exercise, it should be postponed. Winds may be less in the early morning or late evening.

H.E.L.P and Huddle exercises may be moved to Session I if desired.

## **Session VII – Written Exam and Review**

Each section of the text ends with a set of review questions. Exam questions for BSA *Paddle Craft Safety* are taken from the review questions of Sections I and III. Section III questions end with number 30.0 (The other questions concern other types of craft.) The questions are listed with both a digit and a decimal from N.0 to N.3.

If the question number ends with -.0, that question is on the test. If the question ends with a -.1, -.2, or -.3, then one of those questions is included on the test at the discretion of the instructor. Prior to Session VII, the instructor should choose which questions to include and generate a paper copy of the test for each participant. Each participant in the group should receive the same test to facilitate grading and review.

Each test will consist of 50 numbered questions, of which 80%, or 40, must be answered correctly to complete requirement 10. Access to the text or notes is not allowed during the test, nor is collaboration with another person. If a person fails to correctly answer 80% of the questions, then makeup tests may be given until a passing grade is achieved. However, makeup tests must be composed of a different selection from the available questions and must be given at least a day apart.

To make test generation easier, four random sets of questions, A, B, C, D, were generated and are available online at [www.scouting.org/Home/OutdoorProgram/Aquatics/forms.aspx](http://www.scouting.org/Home/OutdoorProgram/Aquatics/forms.aspx). Each consists of 4 pages which may be interchanged with any of the others. That is, an instructor may choose A1, B2, C3, and D4 or any of the other 255 combinations. The instructor should choose a different combination for each course.

The intent of the randomized selection from a bank of questions is to prompt the participants to learn the answers to all the questions in the text rather than memorizing a particular sequence of questions from a single exam. With that in mind, the participants are told in the Session II presentation how the tests are generated. They should also be told that they need to read the text and review all the questions at the end of Sections I and III. Many of the questions are covered during the presentations and skill sessions, but not all. If the course is conducted with minimal elapsed time, the texts and reading assignments should be made in advance of the first meeting to allow ample time for study. Alternately, the test may be scheduled at a later date, and perhaps a different place, than the skill instruction to allow time for study.

If scheduling allows, the instructor may choose to review all the review questions with participants prior to the test. A master answer sheet is also provided online [www.scouting.org/Home/OutdoorProgram/Aquatics/forms.aspx](http://www.scouting.org/Home/OutdoorProgram/Aquatics/forms.aspx)

The instructor may grade each test as it is turned in, or allow each person to grade their own during a group review. Regardless, the participants need to know which questions were missed so they do not leave with incorrect information. The instructor should keep the written tests for three years as a record of the participants' performance. However, copies may be returned to the participants since the test questions are not secret.

If a learning disability precludes a participant's success on the initial written test, then a make-up test may be given orally. If that is done, the instructor should mark the participant's answers on a copy of the test, and ask the participant to sign it after completion.

## **Session VIII– Kayaking (optional)**

If canoes are used for Sessions III to VI above, those sessions may be repeated using kayaks to allow training in both craft to be checked on the same card. *Kayaking BSA* may be used as an incentive to prompt participants to commit the extra time. The second module can probably be completed in less time than the first since kayak skills are somewhat easier, but the material should not be rushed. Although canoeing skills are suggested first in a combined course, the instructor may reverse the order if desired.

## Equipment Lists for Basic Courses:

Each participant should bring:

- Signed health history
- Confirmation of current Safety Afloat training
- Shoes and clothes (or swimsuit) that can get wet
- Knee pads if desired
- Towel
- Change of clothes
- Sunscreen, hat
- Pen or pencil
- Eyeglass strap if needed

The instructor should provide each participant with:

- Name tag
- Aquatics Supervision text
- Written exam
- Course evaluation form
- Course completion card
- Patch (optional)
  
- Kayaking BSA card (optional)

The instructor should have:

- A course record form
- A copy of the instructor guide
- Extra health history forms
- The appropriate Paddle Craft Safety video
- A copy of the standard Paddle Craft Safety PowerPoint presentation

The classroom should have:

- Chairs and tables
- A computer display system (or overhead projector & screen)
- Flip charts, or dry erase boards, with markers
- Extra writing materials
- Easy access to first aid kit & emergency communication

The boating area should have:

- A kayak for each participant and instructor, or
- A canoe for each buddy pair, including the instructors
- A selection of Type III life jackets sufficient to fit all participants
- A selection of paddles suitable for all participants
- Pre-set buoys to facilitate demonstrations and practice
- Throw bags
- Commercial preparation for clearing water from ears
- First aid kit
- Emergency communication

**Note: instructors should use the same equipment as participants to avoid participants thinking that equipment differences are the cause of skill proficiency differences.**

## Check List for Conducting River Courses:

- Expected class size and dates
- Arrangements for co-instructors and/or instructor trainees
- Arrangements for discussion of video and float plans
- River parameters
  - Put-in location
  - Location of downstream V's
  - Location of standing waves
  - Location of eddies for turns and peel outs
  - Location for ferries
  - Location(s) for swamping, swimming, throw bag use
  - Location of scouting position to review course to run
  - Location of scouting position to be followed by portage around hazard
  - Take-out location
  - Range of appropriate water levels
  - Source for river flow information
  - Expected use by other paddlers
- Emergency planning
  - Communication system
  - Access points for emergency services
- Transportation to and from sites; shuttles
- Source of boats and gear
- Equipment list for participants
- Arrangements for meals

## Notes for Conducting River Courses:

### **Pre-skill session:**

It is important to provide an orientation session prior to the on-water skill portion of the course. That is often more effective at a different time and location, for example, an indoor evening session prior to day of instruction. Such a session should include confirmation of prerequisites, logistics of the skill training session, such as where to meet and what to bring, and discussion of the video.

The video is self-contained and must be viewed by all participants in its entirety. Doing so assures that everyone taking the course nationwide is provided the same basic material, including an overview of features that may not be seen on the river selected for training. Skipping chapters and/or covering similar material in a different format is not authorized. Run time is approximately one hour.

After the video, the following sequence is recommended to guide discussion:

- The last video chapter covers trip planning and is therefore a good lead-in to discuss planning for the training that follows. However, prior to discussing specifics of the upcoming trip, the instructor should take the opportunity to review Safety Afloat concepts. The nine points of Safety Afloat are all covered in the last video chapter, but are not identified as such. The instruction should ask the participants how well the information just presented matches Safety Afloat and continue the dialog until each of the nine points is covered.
- Since a float plan is highlighted in the video, discussion should then focus on the float plan prepared by the instructor for the training session. That should include items such as emergency communications and access points for EMS.

- After discussion of the float plan for the training session, a preview of river segments is recommended, ideally using photos that link back to features seen in the video.
- Ferries are discussed in reasonable detail in the video, but other river skills, such as eddy turns and peel outs are shown but not discussed. Instructors may optionally conclude the pre-skill session with supplementary videos showing river skills required for the course.

**Skill session:**

The requirements include a review of basic flat-water paddling skills on moving water as well as new skills and maneuvers such as ferries and eddy turns. Basics of reading a river, that is, scouting, and safety skills are also covered. Optimal presentation of those skills and concepts will depend on the river. Planning and presentation are therefore at the instructors' discretion.

**Post- skill requirement:**

The requirement to prepare a float plan for a unit trip on the river used for training should be completed after participants have been on the river. That provides emphasis to the concept that trip leaders should be familiar with a river prior to supervising a youth trip along it. However, there may not be sufficient time and/or resources at the end of the skill training session for participants perform the task appropriately. The instructor may therefore ask participants to prepare the float plan at their leisure and issue training cards only after the plans are submitted.

**Combining Basic and River Modules:**

Many leaders seeking the skill training required by Safety Afloat to conduct a unit float trip will do so with a river trip in mind, even though they may have little or no previous paddling experience. Those leaders will benefit from a single course combining both the flat water and river modules. The course material discussed above should fit together with little modification. Flexible scheduling is appropriate, for example, over a weekend or on two consecutive Saturdays. Those wishing only the basic course may be allowed to be present only for that portion.

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## ***BSA Paddle Craft Safety*** **Information for Instructor Classification**

### **Requirements:**

To conduct training for a basic level *BSA Paddle Craft Safety* course, a person must be recognized as either:

- *A BSA Aquatics Instructor*
- *A BSA Paddle Craft Safety Instructor – basic level*

To conduct training for a river level *BSA Paddle Craft Safety* course, a person must be recognized as

- *A BSA Paddle Craft Safety Instructor – river level*

To qualify as a *BSA Paddle Craft Safety Instructor*, at either basic or river levels, a person must

- Be registered as a member of the Boy Scouts of America
- Be 18 years of age or older
- Have a signed completion card that confirms current matching training for *BSA Paddle Craft Safety*
- Assist a current instructor in conducting a *BSA Paddle Craft Safety* training course for at least four participants who are not challenging the course requirements. The applicant must attend all sessions.
- As a 'provisional' instructor assisted by a current instructor, conduct a *BSA Paddle Craft Safety* training course for at least four participants who are not challenging the course requirements.
- Agree to follow the policies and guidelines of the Boy Scouts of America.
- Have local council approval.
- For the river options, it is strongly recommended that an instructor also meet current guidelines for service as a Whitewater merit badge counselor.

Qualification is limited to the craft used to satisfy the requirements.

### **Duration:**

- Designation as *BSA Paddle Craft Safety Instructor* is valid for three years from the date of a completed application.
- Co-instructors of a *BSA Paddle Craft Safety* training course may sign application forms for one another whenever a valid Course Record sheet is completed. The intent is for instructors to renew the instructor rating by co-teaching with another instructor.
- A council may revoke an instructor rating at any time.

### **Credit for previous experience:**

A person may be excused from serving as a course assistant under the circumstances given below. That person must still have current training in *BSA Paddle Craft Safety*, which may be obtained by challenging the requirements. Conduct of a course as a 'provisional' instructor with a current instructor as an assistant is still required.

Service as an assistant instructor may be waived if the applicant:

- Has expired training within the last three years as a *BSA Aquatics Instructor* or a *BSA Paddle Craft Safety Instructor*.
- Has taught the corresponding merit badge (Canoeing, Kayaking, Whitewater) as an aquatics staff member at a BSA Boy Scout summer camp for at least four weeks within the last three years.
- Has current training as an instructor for any of the matching American Canoe Association courses.
- Has current training as an instructor by another approved boating and water safety organization providing a course in paddle craft that includes physical skills. Must be approved through the council before accepting their credentials.

## ***Paddle Craft Safety Course Evaluation***

Course location \_\_\_\_\_ Instructor \_\_\_\_\_ Date \_\_\_\_\_

A. Would you recommend this course to other BSA leaders? Yes \_\_\_\_\_ No \_\_\_\_\_

B. What presentation, information, or activity in this course was most useful, interesting, helpful, and/or informative to you in your preparation to lead unit boating events? Why?

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C. What presentation, information, or activity in this course was least useful, interesting, helpful, and/or informative to you in your preparation to lead unit boating events? Why?

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D. To what subjects or skills should more time be given? (Rank by priority.)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

E. What was most enjoyable about your experience? \_\_\_\_\_

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F. What aspects of the course bothered or disappointed you? \_\_\_\_\_

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G. Please provide any thoughts you have on how to improve the course, including material in the text, the scheduling, the physical arrangements, and/or the instructors' presentations.

Comments: \_\_\_\_\_

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Name (optional) \_\_\_\_\_

*Thanks for  
your input*

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## BSA Paddle Craft Safety BASIC Course Record

Instructor Names

Instructor Qualification Expiration

Council Approval by

Date

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Course Location

Course Dates

Participant Name	Canoe <input type="checkbox"/>	Kayak <input type="checkbox"/>	1.A	1.B	1.C	2.	*	*	3.A	3.B	3.C	3.D	4.A	4.B	4.C	4.D	4.E	4.F	4.G	4.H	5.A	5.B	5.C	6.	Card Issued (yes/no)	
			age	health review	Safety Afloat training	swimmer test	present for video intro	present for discussion	jacket selection & fit	current float position	HELP & Huddle	capsize drill	boat carry	launch	straight course	stop	abeams	pivots	curved course	landing	rescue bag toss	swimmer assist	boat-to-boat assist	exam score		
1																										
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										

Use multiple sheets as needed. Instructor qualification is either: BSA Aquatics Instructor, BSA Paddle Craft Safety Instructor, or instructor trainee Optional blank columns may be added for strokes or other exercises to prepare for required maneuvers.

