



White Water Safety
Sample Programme and Session
Plans

BCAB White Water Safety

Sample Programme and Session Plans

Introduction

This document provides an example of the British Canoeing Awarding Body (BCAB) White Water Safety programme and the accompanying session plans for the 9 modules.

Tutors are required to send out BCAB White Water Safety course material to participants prior to the course, these resources will be referred to throughout the practical course.

It is important that tutors obtain, understand and consider the participants' current understanding, knowledge and ability of the craft that they use, and the typical environments that they will paddle. This can be done prior to module 1 through introductions or part of a more formal process.

Note: Tutor to participant ratio is minimum 1:2 and maximum 1:6.

The main focus for the Tutor is to ensure all participants are able to contribute, explore and practice. The 2-day programme does not take into account introductions, information gathering, administration, getting ready or any transportation, the timings provided are for the delivery of the modules.

All modules are interactive, practical sessions, discussing and using equipment, and exploring possible solutions to common issues in a moderate white-water grade 2 (3) environment.

Notes:

1. Participants rescue from their chosen craft throughout the course;
2. It is not mandatory that there is mixed craft on this course but it can be delivered with mixed craft if required by the participants;
3. Care must be taken with the number of participants immersed in the water at one time.
4. The wearing of a leash system in a white-water environment during a BCAB course is **NOT** permitted.

Participants

Participants need to either hold the relevant British Canoeing Awarding Body Personal Performance Award or equivalent ability in/on their preferred craft due to the paddling environment and the boat/board control required to complete the course. This should be filtered via joining instructions and first contact to make sure the participants are suitable for the environment that the course will be conducted in.

As an example, the BCAB White Water Award, BCAB Canoe Award, or BCAB SUP White Water Award would be seen as the appropriate level of ability to fully engage on the course.

The White-Water Safety course is available to all ages. Tutors should check participants' suitability, as well as having appropriate mechanisms for anyone under 18.

Equipment

In addition to the participants chosen craft and relevant kit, the following equipment needs to be referenced and if appropriate used throughout the course:

- Mobile phone in a waterproof case (fully charged);
- Whistle;
- Knife and saw for canoeists;
- Sling or tape with and without a Karabiner;
- Adequate first aid kit;
- Group shelter;
- Spare clothes;
- Food and drink.

Venue

The White Water Safety course must be delivered in suitable conditions that are on a moderate white water river grade 2 (3)

Course duration

The White-Water Safety course is a 2-day programme that consists of 9 modules. This can be delivered in a day or modular, over a maximum of an eight-week period to suit the participants.

Time of year and water temperature

It is crucial that courses are run at times of the year that provide an appropriate learning environment, enabling the course to be delivered as outlined with participants immersed in the water. Care is advised when water and air temperatures are low.

White Water Safety

COURSE PROGRAMME

Module	Time	Module Outline
Module 1	30 minutes	Motivations and Decisions <ul style="list-style-type: none"> • Understanding motivations to participate • Selection of river to match motivations • Practical matters
Module 2	270 minutes	River Trip <ul style="list-style-type: none"> • Pre checks • Collaborative support and vision • Settling in • <u>River running strategies</u> • Equipment considerations
Module 3 (Note: this can be done during the river trip)	30 minutes	Emergency planning & procedures <ul style="list-style-type: none"> • What additional equipment do we take • Locating your position • Calling for assistance • Walking out
Module 4	20 minutes	Review and reflections <ul style="list-style-type: none"> • Reflections on your own learning and areas for development
Module 5	90 minutes	Chase boating and equipment rescues <ul style="list-style-type: none"> • Chase Boating • Paddle Rescues • Boat Rescues • Reuniting
Module 6	90 minutes	Swimming and rescues <ul style="list-style-type: none"> • Swimming • Rescue a swimmer from a craft • Rescue a swimmer using a throwline • Rescue a swimmer from a stopper
Module 7	90 minutes	Retrieving people and equipment <ul style="list-style-type: none"> • Wading • Swimming • Quick release buoyancy harness • Support from the bank

		<ul style="list-style-type: none"> • Extracting methods
Module 8	90 minutes	Scenarios <ul style="list-style-type: none"> • Setting the scene • Scenarios
Module 9	30 minutes	Review and reflections <ul style="list-style-type: none"> • Reflections on own learning and areas for development

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MODULE 1

Module Title:	Motivations and Decisions
Time:	30 minutes
Module Outline:	
<ul style="list-style-type: none"> • Understanding motivations to participate • Selection of river to match motivations • Practical matters 	
Delivery:	
<p>Understanding motivations for participate:</p> <p>As a group, discuss why we started paddling, what a great day on the river would look like. Draw out key words to support and revisit throughout module 1.</p> <p>In a group, explore and develop an understanding and appreciation of the motivations to undertake white water trips which vary from paddler to paddler and from context to context.</p> <p>Explore such motivations including degrees of social engagement, immersion in natural or near-natural settings, enjoyment, personal challenge, and ensuring how such information shapes and informs decision making.</p>	
<p>Selection of river to match motivations:</p> <p>As a group, discuss choices relating to motivation and provide examples of known rivers to provide context - a trip on a new river, or a more familiar local trip. As discussion develops, highlight that motivations inform preferable environments & locations balanced against the presented conditions and an honest consideration of individual abilities.</p>	
<p>Practical matters:</p> <p>Group with support of the tutor to decide and arrange shuttles, discuss equipment being carried and by who within the group.</p>	

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MODULE 2

Module Title:	River Trip
Time:	270 minutes
<p>Module Outline:</p> <ul style="list-style-type: none"> ● Pre checks ● Collaborative support ● Settling in ● River running strategies ● Equipment considerations 	
<p>Delivery:</p> <p>Pre checks: As a recap on the pre-course information, working together in pairs to look at each other's clothing and craft, discussing the appropriateness to the White Water environment.</p> <p>Discuss protocols and the importance of a supportive group, with everyone having a responsibility to safety. What safety kit is being carried and by who within the group, home contact details as well as procedures for any unplanned delays.</p> <p>Highlight the importance of a river brief and the content so that all group members understand 'the plan' and the importance of creating an environment that everyone can share their thoughts and considerations.</p> <p>Collaborative support: Highlight the importance of maintaining a collaborative, positive and supportive atmosphere for all throughout. Including spotting each other and the importance of checking in with those on the river trip.</p> <p>Settling in: With appropriate venue selection, provide opportunities of suitable warm up on the water approaches both physically and psychologically. Explore and share methods and approaches that participants use to settle in. Such approaches could include playing on a jet of water, rolling, making eddies etc.</p> <p>Include within discussions strategies when physical on the water warm ups are not possible due to the nature of the river.</p> <p>Discuss and emphasise that the 'warm up period' can be used to check previous decision making, and whether the trip is suitable or specific sections of the river may need to be considered as appropriate.</p>	

River running strategies:

Discuss, demonstrate and practice the use of effective and appropriate communication, consideration of the individuals in the group, awareness of any hearing or sight impairments, and how certain communication comes across and whether it can be motivating or demotivating.

Throughout the journey establish the importance of checking in with the team, with a consideration of body language, how they are paddling, fatigue, cold etc. Contributing factors that may determine an adopted river running strategy.

Emphasise the importance of checking the river ahead, providing examples of when you may need to scout ahead, slow the group down or position in such a way that avoids a stop/start style of river running.

As a group, if the river is familiar, discuss what's ahead, and the danger of 'I know this section' and paddling the river in auto pilot, rather than making decisions based on what is being seen.

Provide examples and river strategies that are dependent on the environment that are appropriate and safe. Methods to explore and practice could include:

- Group run all together in their own time and their own route.
- Group paddling together following a nominated leader.
- Run in smaller groups (2 or 3), other group members not protecting the rapid.
- Eddy hopping or leapfrog approach.
- Run as an individual or pair with other members setting up pre-arranged protection.
- Portage/Lining

Introduce the importance of spotting each other and a working model for sharing river strategies, including signals which may be hand and paddle signals.

As a group explore the importance of celebrating success and giving reassurance after setbacks, as well as developing an appropriate rapport throughout the group.

Raise awareness of external factors that could change behaviour and approach to safe paddling such as pre-work paddle trips where people may be under pressure to be back by a certain time.

Notes:

- Tutors are required to provide an example of best practice river running where participants are participants and not just passengers.
- River trips relate to motivations and indulge in what makes white water fun for those on the water (surfing, local knowledge, social interaction)
- Tutors must select appropriate locations that provide examples for participants to 'warm up' on the river and provide opportunities to demonstrate and explore a full range of river running strategies for grade 2(3).

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MODULE 3

Module Title:	Emergency planning and procedures
Time:	30 minutes
Module Outline:	
<ul style="list-style-type: none"> ● What additional equipment do we take ● How do we carry additional equipment ● Locating your position ● Calling for assistance ● Walking out 	
Delivery:	
<p>What additional equipment do we take: Explore as a group and discuss what useful additional equipment we may carry on a river trip. Emphasis on the importance of making informed decisions on the river being paddled should influence what is carried, rather than always carrying the same equipment.</p> <p>Include a SIMPLE repair kit, first aid kit, bailers, additional clothing, group shelter, spare paddles, hot drinks and snacks.</p>	
<p>How do we carry additional equipment: Explain and discuss the importance of keeping equipment dry, as well as where it is carried as well as being accessible. Highlight that consideration of additional weight in the craft can affect trim and the overall handling.</p> <p>Discuss how equipment may be shared among the group as for everyone on the trip to understand the shared responsibility on where the equipment can be located.</p> <p>Emphasise the importance of carrying a mobile phone in a waterproof case in the buoyancy aid, alongside any keys for vehicles.</p>	
<p>Locating your position: Support participants to be able to find accurately their location, ideally being able to give a grid reference from their smartphone and a map (if carried).</p> <p>Highlighting that taking into consideration the trip so far will aid in understanding their location, this could include features such as weirs, bridges, tributaries, prominent bends in the river etc.</p>	

Calling for assistance:

Discuss how external assistance can be called, limited signal in some more remote areas as well as the use of text messaging as an option.

Explain what questions will be asked and ensuring you have the relevant information to hand such as group details, location, the condition of the casualty etc.

Encourage suitable first aid qualifications and experience within the group, specific to drowning and CPR, providing knowledge and confidence to participants to cope with first aid situations.

How to use other group members to gain a better signal, and the information they would need to pass on to those assisting.

As a group, revisit the locating your position section, and discuss directing any assistance to the side of the river you are on is significantly important and in some cases time critical.

Show and discuss the importance of keeping everyone warm and in good spirits, using the warm clothing, hot drinks and snacks carried.

Walking out:

Discuss and explore as a group when you may need to decide not to continue the river trip and walk out.

Although this may be seen as straight forward, there may be split decisions within the group as others may want to continue as well as consideration of logistics, manual handling over a period of time, access points to be able to get a vehicle nearer etc.

Discuss the impacts of splitting the group, the need to consider equipment and ensuring if some group members continue, they have the appropriate resources and ability to stay safe.

Notes:

The delivery of the content of this session requires consideration, suited for an appropriate stage during the river trip.

Consider the environment, distractions, air temperature and participants when this module is delivered.

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MODULE 4

Module Title:	Reflections and Skills Checklist
Time:	20 minutes
Module Outline:	
<ul style="list-style-type: none"> • Reflections from the course; • Reflections on own learning and areas for development; • Skills checklist. 	
Delivery:	
Reflections from the course:	
<ul style="list-style-type: none"> • Discuss and share key learning points, what worked well? What was difficult? What solutions did you come up with? 	
Reflections on own learning and areas for development:	
<ul style="list-style-type: none"> • Participants should leave the course with a good understanding of their own areas of strength and areas to develop. The Skills Checklist could be used to aid this discussion. 	
Skills checklist:	
<ul style="list-style-type: none"> • Participants should complete their Skills Checklist with the Tutor and agree areas for development, and ideas on how to complete the development areas identified. 	

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MODULE 5

Module Title:	Chase boating and equipment rescues
Time:	90 minutes
Module Outline:	
<ul style="list-style-type: none"> ● Chase Boating ● Paddle Rescues ● Boat Rescues ● Reuniting 	
Delivery:	
<p>Chase boating: As a group discuss and explore 'chase boating', both when to as well as when not too, taking into consideration ability, environment and priorities. Emphasise the self/team/swimmer/equipment protocol.</p> <p>Demonstrate and practice working as a pair as well as individually. Emphasise the importance of own safety, continual checking downstream, potential for broached craft, keeping a watch on equipment with a focus on communicating with the swimmer and if possible and safe for them to self-rescue, directing them and ensuring they safely get to the bank and out of the water.</p> <p>Discuss the use of bow and stern (carries) but this must be seen as a last resort, and a high-risk option to both rescuer and swimmer.</p> <p>Paddle rescues: Show and participants practice methods of picking up paddles including putting in/on the craft, throw and chase, pick up and throw onto the side, two pairs in hands and under the buoyancy aid.</p> <p>Craft rescues: Emphasise the importance of the increased risk when rescuing a craft on a river, and that selecting appropriate stretches of water to approach the craft, with the importance of regular checks downstream.</p> <p>Demonstrate to the group and participants to practice various methods of 'chase boating' including turning over the craft and nudging / pushing to the side, using swim lines, working in pairs and sending someone ahead to a suitable point to get the craft into the side.</p> <p>Discuss the importance of securing the craft to the bank/in the eddy and show an appropriate method of using a sling/swim line.</p>	

Reuniting:

Explore as a group different methods of reuniting paddlers with their craft and paddles, ideally moving kit to people.

Emphasise the importance that people that are being reunited with their equipment to look for a suitable position downstream to assist in collecting equipment when being moved across the flow.

Methods to show and practice could include a curl to remove some water, moving an empty craft across the flow, tandem paddling, using a line to pull across or in appropriate waters tow using a releasable system. For craft with swim lines show and practice how to paddle the craft to the side whilst holding line - diagonally downstream.

Demonstrate and participants to practice reuniting paddles, methods could include putting the paddle in/on the craft, throw, large karabiner on throwline to pull across the river and paddle across using the methods already explored in this module.

Notes:

- The delivery of the content of this module requires consideration, suited to both participants and craft being used.
- Providers consider how many participants are in the water at one time, and set practices with appropriate safety cover.
- Swimmers checked that they are entering the water with a 'clean principle';
- Selection of suitable training sites is essential. Issues such as water quality, depth of water for swimming, reliability of water levels and in-water hazards all need to be considered. Once a site is identified, it needs to be risk assessed. Throughout the delivery of the course, tutors need to undertake a continual dynamic risk assessment to ensure that the sites being used for particular sessions are suitable and do not present unacceptable levels of risk.
- Craft rescues - Important to provide approaches to possible solutions that can be used on a variety of craft.

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MODULE 6

Module Title:	Swimming and rescues
Time:	90 minutes
Module Outline:	
<ul style="list-style-type: none"> ● Swimming ● Rescue a swimmer from a craft ● Rescue a swimmer using a throwline ● Rescue a swimmer from a stopper 	
Delivery:	
Swimming:	
<p>Using a slower flow initially, demonstrate defensive swimming (feet first, hips up, chin to chest and looking), methods of changing direction and rolling to initiate aggressive swimming, gaining momentum and reading the water to determine the swimmer's approach.</p> <p>Participants practice techniques with the tutor to provide both 'top tips' and coaching to develop confidence and competence of individuals. As participants develop techniques, move to a slightly higher flow, for further practice and appreciation of both speed and power (grade 2).</p> <p>Throughout, discuss with participants the advantages and disadvantages of the different swimming approaches as well as explore their reflections on the learning from this module and openly discuss as a group.</p> <p>As part of this session, introduce the paddle, and how a swimmer can be proactive (if safe) in getting their paddle to the side.</p>	
Rescue a swimmer from a craft:	
<p>Demonstrate to the group how a swimmer can be supported from a craft, keeping a distance to lower any risk, loudly communicating with the swimmer, reminding them of safe swimming (feet up), using their name and directing them to a safe area to get out of the water.</p>	

In pairs (one swimming, the other supporting), practice in slow moving water. For further practice and appreciation of both speed and power (grade 2), progress to a slightly higher flow.

Emphasise the risk of allowing the swimmer to hold onto the craft, and the capsize potential, considering the environment that such approach could be adopted as well as getting into/onto your craft.

Rescue a swimmer using a throwline:

Briefly introduce different types of bags and lines including colour, diameter, length and explain the importance of the clean principle.

Discuss and explore as a group when it is safe and not safe to use a throwline, considering the environment, as well as downstream hazards.

Demonstrate using a throw line to recover a swimmer to the bank and the principle of how the flow of water will pendulum the swimmer to the shore and how this might be limited by eddy lines;

As a group, practice both swimming and throwline practice, providing 'top tips' to improve techniques of accuracy and effectiveness using both static and dynamic approaches as well as how a swimmer receives the line.

Rescue a swimmer from a stopper:

Progress the throwline session from a flow environment to a stopper, with consideration of the length of line thrown and extracting a swimmer from the feature. As a group, practice throwing a line onto the surface aerated water.

Introduce the concept of adding floatation to a throwline, for the disorientated swimmer to grab as well as a reaching aid as possible solutions.

Notes:

- The delivery of the content of this module requires consideration, suited to both participants and craft being used
- Providers consider how many participants are in the water at one time, and set practices with appropriate safety cover.
- Swimmers checked that they are entering the water with a 'clean principle';
- Selection of suitable training sites is essential. Issues such as water quality, depth of water for swimming, reliability of water levels and in-water hazards all need to be considered. Once a site is identified, it needs to be risk assessed. Throughout the delivery of the course, tutors need to

undertake a continual dynamic risk assessment to ensure that the sites being used for particular sessions are suitable and do not present unacceptable levels of risk.

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MODULE 7

Module Title:	Retrieving people and craft
Time:	90 minutes
Module Outline:	
<ul style="list-style-type: none"> ● Paddling out ● Wading ● Swimming ● Quick release buoyancy harness ● Support from the bank ● Extracting methods 	
Delivery:	
<p>Discussion as a group on typical environments that people and craft get stuck grade 2 (3) rivers including stuck in a tree, foot entrapment, rock or in a stopper etc.</p> <p>Emphasise the risks of approaching anything or anyone stuck and that safety is paramount ensuring safety cover is established up and down the river to spot and control other paddlers coming down as well as a group member with a throwline further downstream if required.</p> <p>Discuss, demonstrate and practice methods of attaching a line, this should include paddling out, wading and swimming.</p>	
Paddling out:	
<p>Discuss and explore appropriate methods of paddling out, with an emphasis on safety and risk, ensuring appropriate ability of the person paddling out, the planned approach and understanding the extraction plan.</p>	
Wading:	
<p>Highlight the importance of the appropriate depth for wading and its dependence on speed of water and river bed conditions. Once water at any speed comes above the waist floating will occur.</p> <p>Demonstrate and allow participants to practice wading, taking into consideration the environment, Can I walk out on my own? Do I or the person in the water require additional support with the use of a paddle/pole?</p>	
Quick release buoyancy aid harness:	
<p>Compare and contrast different designs with the importance of following the guidance of individual manufacturers.</p>	

In pairs with tutor support practice on the bank attaching the bag end of the throwline using a locking karabiner to the buoyancy aid harness and under tension locate the toggle and release.

Notes: Check the length of the chest harness tape when correctly fitted (aligned to the manufacturers guidance)

Any cutting should be carried out with a hot knife or electric rope cutter so that the edges are smooth to ensure they do not jam in operation;

Highlight attachment points for chest harnesses and the possible ways in which this can be carried out incorrectly (non-locking karabiner being attached to buoyancy aid webbing by mistake, not clipped in the designated position);

Emphasise the need to ensure the harness has not been incorrectly clipped, i.e. a visual check or pulling on the throw line connected to the attachment point with the release buckle partially open and ensuring that the chest harness runs through the buckle;

Demonstrate and then, participants practice entering the water with a chest harness, wading first and then swimming. As part of this practice session ensure that the participants release from the system using their buoyancy aid harness.

Support from on the bank:

Discuss the forces being applied when supporting a swimmer and the methods that can be adopted including different stances, sitting and the belayer supported by others. In all cases the line must be able to be released if required.

Emphasise the importance of checking the system before the swimmer enters the water, that it is correctly set up including clipped correctly at the buoyancy aid harness point, able to locate the release toggle and that the system from the bank is releasable.

Extraction methods:

As a group practice different methods of extracting a person and/or stuck craft, these methods should be explored and relevant to the craft(s) being paddled by participants.

Pull - a straight pull with added persons to increase the force applied

Pull in a different direction - experiment pulling from different directions with added persons to increase the force applied

Vector - introduce a vector to change the load direction on the main line, either by hand, tape or another throwline.

Introduce a mechanical advantage, referring to the pre-course information, and the use of crib cards to help construct including anchors both on land and craft. Depending of craft(s) being paddled by participants on the course would depend on how much time is spent on this extraction approach. Tutor to encourage independent practice of these techniques as an action plan.

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MODULE 8

Module Title:	Scenarios
Time:	90 minutes
Module Outline:	
<ul style="list-style-type: none"> • Setting the scene • Scenarios 	
Delivery:	
<p>Setting the scene:</p> <p>It is important to emphasise that throughout the course delivery is much based on scenarios but as a tutor it is important to explain the focus of this module and to build on the skills and techniques explored as well as developing decision making.</p> <p>Provide the group with examples that can impact as well as make matters worse when reacting to a rescue situation including, the importance of getting out of your craft and not losing it, slippery ground, taking a throwline with you, consideration of your own and others ability.</p> <p>Explore and discuss dynamic environments, and the need for considered speed.</p> <p>Scenarios:</p> <p>Choose and set up scenarios that are in context with both participants and the craft on the course.</p> <ol style="list-style-type: none"> 1. Paddler in the water and separated with their equipment 2. Equipment and paddler on different sides of the river 3. Shoulder dislocation requiring outside assistance 4. Lost craft 5. Group separated due to a chased craft 6. A very cold paddler 7. A person or craft stuck in the middle of the river 	

Notes:

- The delivery of the content of this module requires consideration, suited to both participants and craft being used
- Providers consider how many participants are in the water at one time, and set practices with appropriate safety cover.
- Swimmers checked that they are entering the water with a 'clean principle';
- Selection of suitable training sites is essential. Issues such as water quality, depth of water for swimming, reliability of water levels and in-water hazards all need to be considered. Once a site is identified, it needs to be risk assessed. Throughout the delivery of the course, tutors need to undertake a continual dynamic risk assessment to ensure that the sites being used for particular sessions are suitable and do not present unacceptable levels of risk.

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MODULE 9

Module Title:	Reflections and Skills Checklist
Time:	30 minutes
Module Outline:	
<ul style="list-style-type: none"> • Reflections from the course; • Reflections on own learning and areas for development; • Skills checklist. 	
Delivery:	
Reflections from the course:	
<ul style="list-style-type: none"> • Discuss and share key learning points, what worked well? What was difficult? What solutions did you come up with? 	
Reflections on own learning and areas for development:	
<ul style="list-style-type: none"> • Participants should leave the course with a good understanding of their own areas of strength and areas to develop. The Skills Checklist could be used to aid this discussion. 	
Skills checklist:	
<ul style="list-style-type: none"> • Participants should complete their Skills Checklist with the Tutor and agree areas for development, and ideas on how to complete the development areas identified. 	