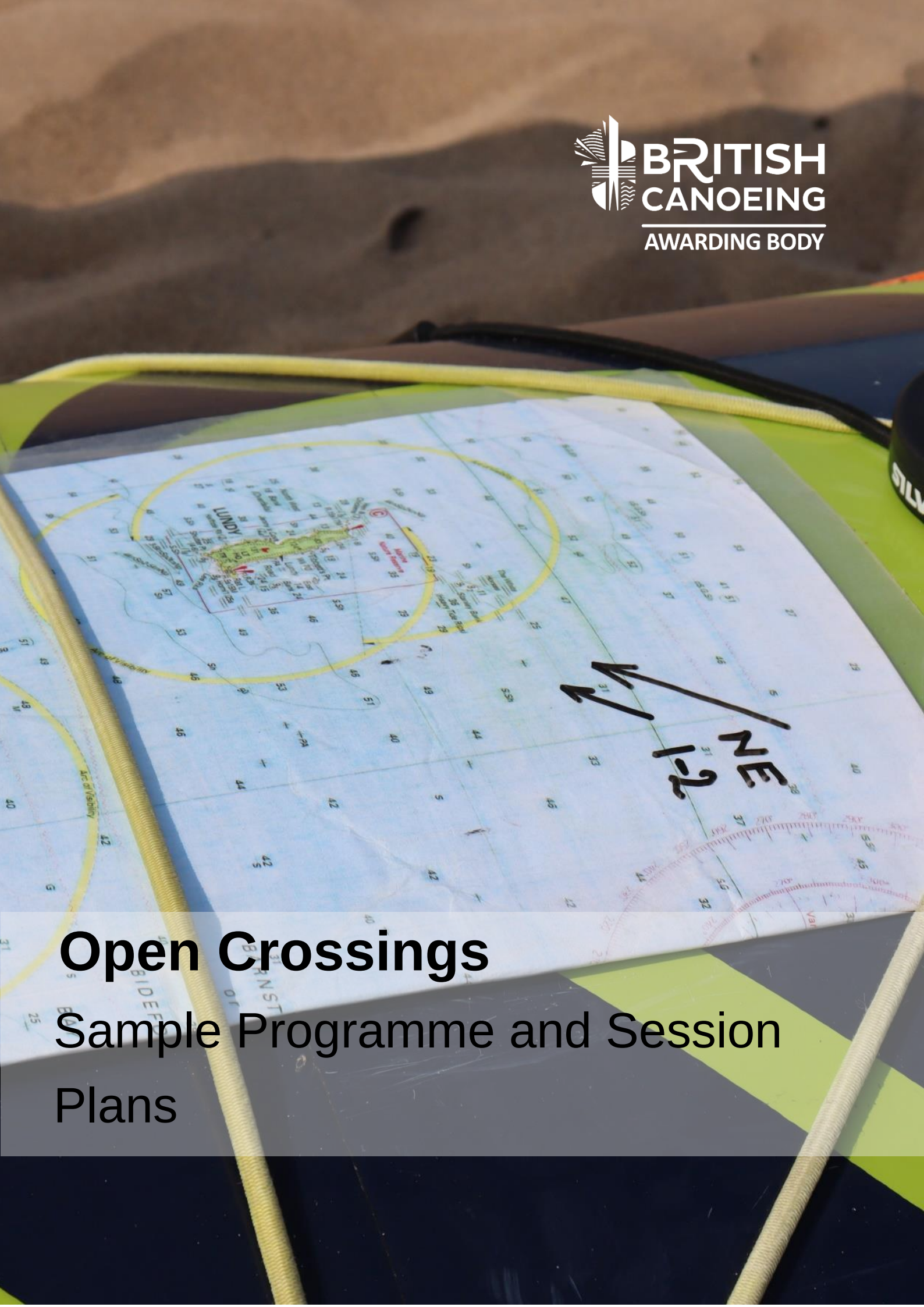


Open Crossings

Sample Programme and Session Plans

BCAB Open Crossings Module

Sample Programme and Session Plans

This document provides an example of the British Canoeing Awarding Body (BCAB) Open Crossings module and the accompanying plans for the 4 activities.

Tutors are required to obtain, understand and consider the participants' current understanding, knowledge, and the craft and environment that they paddle. This can be done prior to activity 1 through introductions or part of a more formal process.

Notes:

1. Tutor to participant ratio is maximum 1:8.
2. A module specific eLearning is available to learners, which could be considered as an appropriate method of a learner accessing the information or used to compliment delivery.
3. Tutors are required to consider the aspirations of the learners and develop their knowledge appropriately in the context of where they are paddling. For aspirants Leaders that want to operate on the sea, additional methods and practices may need to be covered.
4. If delivering using a blended approach, (on and off the water), Tutors are required to obtain an understanding of water confidence and ability in the environment that will be used. This can be done through introductions or part of a more formal process.

The main focus for the Tutor is to ensure all participants are able to contribute, explore and practice. The 3-hour module does not take into account introductions, information gathering, administration, or any logistics, the timings provided are for the delivery of the activities.

All activities are interactive sessions, discussing and using resources, exploring and practising the knowledge to better understand open water navigation techniques and strategies to aid decision making and planning.

Participant prerequisites

- There are no prerequisites for this module
- Tutors should check participants' suitability to attend the course, as well as having appropriate mechanisms for anyone under 18.

Venue

The Open Crossings module can be delivered online, blended or face to face, of which Tutors should ensure all participants are able to engage throughout.

Course duration

The Open Crossings module is a minimum of a 3-hour programme that consists of 4 activities, of which can be delivered in one session or modularly.

Open Crossings module

Activity	Time	Activity Outline
Activity 1	20 minutes	Introduction • Defining open water and what we might need to consider
Activity 2	60 minutes	Open water navigation in non-tidal waters • Estimating position using dead reckoning • Transits • Following a bearing • Considerations
Activity 3	90 minutes	Open water navigation in tidal waters • Challenges • Calculating set and drift • Compensating for tidal flow • Working out position
Activity 4	10 minutes	Potential dangers to consider with open water crossings.

Open Crossings Module

Activity 1

Activity Title:	Introduction
Time:	20 minutes

Activity Outline:

- Defining open water and what we might need to consider

Delivery: This module is designed to be activity based, with practical tasks and examples - these can be found in the eLearning module or Providers can produce their own materials and resources. It is envisaged that the following will be covered through blended learning, rather than several standalone individual sections. How the activities are blended will be dependent on the experience and outcome requirements of the group.

Defining Open Water:

Provider to facilitate a discussion around the challenges in giving one definition to cover all open water. Open water for a group of new or novice paddlers might be crossing a large lake, for experienced sea kayakers it might be a 30+km crossing to an offshore Island.

For the purposes of this module, we will class open water as a:

“a large expanse of open water that at some point has an element of commitment i.e., returning to shore will not necessarily be straight forward, easy or a quick process”.

We will explore both inland and coastal open water navigation.

Suggested Activity:

The provider to invite the learners to write down a list of things you might need to consider before attempting an open crossing?

Possible considerations:

Weather conditions, fitness, hydration, nutrition, group ability, emergency procedures, navigation, equipment, digital or analog maps/charts (or both), going to the toilet afloat, time of year, clothing.

Open Crossings Module

Activity 2

Activity Title:	Open water navigation in non-tidal waters
Time:	60 minutes

Activity Outline:

- Estimating position using dead reckoning
- Transits
- Following a bearing
- Considerations

Delivery:

It is envisaged that the following will be covered through the exploration of practical examples.

Estimating position using dead reckoning:

Providers facilitate a discussion about the need to be able to estimate their position when paddling both for planning and on the water navigation purposes. What are the implications of just going for it and hoping for the best?

Suggested activity:

Complete any gaps in the learner's knowledge about dead reckoning, ensuring they have a usable definition they can apply to the activity.

Use the Go Paddling website, alongside an online OS mapping site e.g. Bing Maps and identify a large body of inland water - the Open Water navigation for paddlers eLearning has an example that could be used.

Identify a launch and landing site and then learners can work out:

- distance to paddle
- overall time for the crossing
- estimated position after each hour of paddling
- course to steer (bearing)

Learners could plan this individually or in pairs. Highlight that it may be tempting to rely on an 'experienced paddler', however, even experienced paddlers can make mistakes. A safer approach is to have multiple people plan the trip and see if this all matches. If it does not match, something may have gone wrong.

Transits

Discuss whether we need to know about transits if we are using GPS technology? We simply input our dead reckoning points of where we expect to be at the end of each hour of paddling into our GPS. We then just check our progress against this; are we going too quickly, too slowly, off track etc.

Ultimately, the answer will always be, that the choice is up to the individual. However, transits are really useful for not only working out position but also for us to check real time progress on the water.

Suggested activity:

Work through the example on the Open Crossings eLearning to establish a baseline of understanding. Then using a variety of maps and/or charts, encourage learners to have a go at working out an estimated position on a different body of water.

Following a bearing

We have done the planning, we have our estimated positions, it's now time to get on the water. Complete any gaps in the learner's knowledge about taking a bearing (see Navigation for Paddlers module) and then encourage learners to give it go.

Once they have a bearing, look at strategies and tactics for following one. Learners should be informed/reminded that it wouldn't be enjoyable (and might make them feel sick) if they were just staring down at a compass or GPS while they were doing the crossing.

Instead, a useful strategy is to line your bearing up with something much closer, paddle to that point and repeat the process. This might be a buoy, a boat at anchor or a distant feature like a mast or aerial on a hill.

Note: we may deliberately decide to "aim off" (see Navigation for Paddlers module) to use an obvious feature like a mast. For example, we follow the bearing on the mast until we get to the shore, then we turn left and handrail the shoreline for 1km until we reach the car park.

Considerations:

The provider to facilitate a discussion around the following points:

If you're using an electronic device to navigate with, do you have sufficient battery to last the duration of the crossing?

Electronic devices can go wrong (get dropped overboard), if this happened, what would be your back up?

It's very convenient to use your mobile phone for navigation but some applications use lots of battery charge. If you intend to use your phone in an emergency and it has run out of battery, this could leave you in a vulnerable

situation. Consider having an alternative method of contacting the emergency services should you need to.

Who's responsible for navigating?

It can be easy to leave the navigation to someone else when in a group and simply follow and hope they have got their planning right. If they haven't got it right however, everyone goes wrong.

The majority of open crossings are carried out in fine weather with no or little wind. Some paddlers will downwind paddle in very strong winds. While most of the principles we are discussing are the same, these conditions and the level of required navigation are beyond the scope of this module.

Open Crossings Module

Activity 3

Activity Title:	Open Water Navigation in tidal waters
Time:	90 minutes

Activity Outline:

- Challenges with open crossings in tidal waters
- Calculating set and drift
- Compensating for tidal flow
- Working out position

Delivery:

It is envisaged that the following will be covered through the exploration of practical examples. The time allocated for this section reflects the amount of doing, rather than talking about open water navigation in tidal waters.

Challenges with open crossings in tidal waters:

Provider to facilitate a discussion around this topic - Open crossings in tidal waters can be very challenging. This could be for a number of reasons:

- Distance
- Strength of the tidal currents
- Changes in weather
- Limited or no options to land

Unlike open crossings on non-tidal waters, quite often the option of returning to the shore you have just left is either extremely difficult or impossible.

Consequently, the level of commitment we mentioned at the start of the module increases significantly.

Guide learners to be able to recognise the limitations of their experience and to work with paddlers/coaches/guides who have more experience in these kinds of

trips.

Calculating set and drift:

Before you look at this, it would be useful to introduce some symbols we may choose to use when planning our crossings.

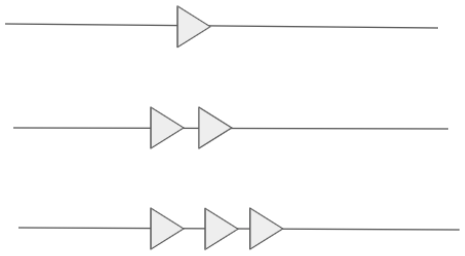
Some helpful simple symbols to mark on your map or chart to help your planning

Water Track (sometimes known as course through water) is the direction the craft moves through the water

Ground track - the actual path of the craft in relation to the ground

Tidal set and drift - where the tide would take you if you did nothing i.e distance and relative angle.

Symbols



Suggested activity:

Work through the example on calculating set and drift on the Open Crossings eLearning - completing any gaps in learner knowledge and ensuring they have a sound understanding of the principle and are able to apply it.

Using a range of charts, encourage learners to calculate the set and drift for an open crossing of their choosing.

Compensating for tidal flow:

Suggested activity:

Work through the example on compensating for tidal flow on the Open Crossing eLearning - completing any gaps in learner knowledge and ensuring they have a sound understanding of the principle and are able to apply it.

Using the set and drift calculation from the previous activity - learners can now

add the new course to steer bearing.

Possible questions:

- Is there any tidal assistance or resistance for the planned crossing?
- How long will the crossing take?
- Do spring or neap tides have a significant effect on the crossing?

Working out position:

Suggested activity:

Work through the example on working out position on the Open Crossing eLearning - completing any gaps in learner knowledge and ensuring they have a sound understanding of the principle and are able to apply it.

Learners can now use the information from their planned crossing to work out their estimated positions at the end of each hour for their crossing. It would be a good opportunity for learners to pair up and check their working out and calculations with someone else. This really helps reinforce the good practice of sharing the navigation responsibility throughout the group, rather than leave it to one individual.

Open Crossings Module

Activity 4

Activity Title:	Potential dangers to consider with open water crossings
Time:	10 minutes

Activity Outline:

- Explore potential dangers associated with open water crossings.

Delivery: It is envisaged that the following will be covered through the exploration of discussion and practical examples.

Explore potential dangers associated with open water crossings:

Suggested Activity:

Provider to give the opportunity for learners to come up with a variety of different dangers associated with open water crossings - emphasising that, if possible, they should differentiate between a danger and a consideration. Considerations will be individual, group, weather etc. A danger is always dangerous e.g. lightning.

There may be others but Providers should ensure that discussion takes place around the following:

Fog - we have already mentioned that the majority of open crossings take place when there is little or no wind. At certain times of year, such as Spring and Autumn, you can experience quite dense fog which could make open crossings uncomfortable or even dangerous.

Lightning - similarly to fog, you can get thunderstorms in periods of fine weather which are ideal for open crossings. Study the forecast carefully and abandon any crossing if there is the chance of lightning.

Shipping/boats - most ships are not expecting or looking for paddlers a long way from shore. Never assume they have seen you and take all necessary precautions and action to get out of their way. Always have a VHF radio to hand so you can put a call out to shipping if needed, but again, avoid getting to this point in the first instance.

Solo paddling - careful consideration needs to be given to any open crossings carried out solo. The sense of achievement is very high but you do also increase the risk to yourself significantly. If in doubt, go with someone more experienced to learn from.

This activity is not about scaring people or making open crossings seem elitist or unachievable - it is about recognising limitations and considerations in our personal experience and ability. As well as being able to recognise the potential inherent dangers in carrying out these kinds of open water crossings.