



## Program Information Package

# Paddle Canada Level Four Coastal Touring



## Program Description

Our 7 day Level 4 Skills program provides skills and knowledge for multi-day touring on Class 4 waters, which includes surf, currents, winds, limited landing options, and limited access and communication. This is a compressed course designed for individuals who have had previous kayak touring experience and training. The general skill training included in this course is designed to polish existing skills; it is NOT an introduction to these skills. Applicants seeking an introduction to intermediate navigation and paddling skills are encouraged to take an intermediate skills course such as the Paddle Canada Level 3 Skills course available through SKILS and other outfitters throughout Canada.

This course requires your full attention and commitment. You will challenge your boat handling skills and knowledge in a peer-to-peer instructional setting. The instructors assume you have extensive previous experience including overnight trips in Class 2 and 3 waters, rolling training, assisted and self-rescue practice, experience towing, piloting skills, and weather interpretation practice. If you are unsure of your ability to take this course, please call us to discuss your concerns prior to registering.

## Paperwork Checklist

Please use the following checklist to ensure you have received and reviewed all the required documentation prior to the program start date:

- Paddle Canada Level Four Skills Training Program Document – please review
- Paddle Canada Waiver - please review and sign in the presence of your instructor
- SKILS Waiver – please review and sign in the presence of your instructor
- SKILS Medical Form – please bring a completed copy to your program
- Policy and Procedures Document – please review

# Program Objectives & Expectations

## Objective

The aim of the Paddle Canada Level-4 program is to facilitate participants in developing skills and knowledge pertaining to multi-day sea kayak tripping along an open coast with rough conditions. This course includes physical skill, touring knowledge and leadership components.

## Expectations

Successful candidates for this award will demonstrate strong technical, tactical, mental, and physical skills in Class 3-4 waters.

### Technical

- Handle their boat and recover from a capsize in currents, surf, moderate seas and strong winds.
- Pilot and dead reckon in a variety of Level 4 conditions including navigating at night, in fog, and on the water in moderate seas.
- Observe, record and predict the weather with and without the aid of a VHF radio.
- Demonstrate proficient coastal camping skills including storm proofing, animal proofing, emergency fire lighting, packing nutritious food, finding water, and minimizing ecological and social impacts.



### Tactical

- Route plan on the open coast.
- Demonstrate situational awareness in a variety of challenging sea conditions.
- Make decisions in moderate and high consequence scenarios.

### Mental

- Show resilience in the face of physical and psychological challenges.
- Show focus and attention in moderate and rough waters.
- Lead and follow within a peer group in Class 4 waters.
- Integrate technical and tactical skills.

### Physical

- Demonstrate power and acceleration in moderate seas and strong currents.
- Demonstrate endurance appropriate to open coastal touring.
- Show balance and recovery in moderate and rough waters.
- Coordinate technical skills in complex paddling conditions.

# Paddle Canada Level 4 Learning Outcomes

The expectations outlined by Paddle Canada for successful completion of the Level Four Sea Kayaking certification are listed below. Please use this list to help prepare and practice for your Level Four Program.

## *Rescue skills*

- Practice and assess rescue skills in complex scenario based exercises.
- Effective and reliable rescue are crucial to success at level 4.

## *Rolling*

- Perform rolls in rough water.
- Wet-exit, re-enter and roll up.

## *Unassisted re-entry*

- Demonstrate skill with several means of re-entry.

## *Assisted rescues*

- Utilize several assisted rescues and adapt them to a range of sea conditions, including rescuing an incapacitated or passive victim.

## *Towing*

- Demonstrate safe and effective use of various towing techniques.
- Demonstrate releasing a towline under tension, including from a capsized position.
- Launching & landing
- Demonstrate launching and landing in difficult conditions.
- Demonstrate the ability to bring an injured paddler to shore.

## *Maneuvering and control*

- It is essential to demonstrate effective forward paddling, towing, maneuvering skills and good control when paddling in swell, broken water, surf, and around rocky shorelines with breaking waves.

## *Knowledge*

- The extent of knowledge required for safe paddling at this level is governed by the conditions along an exposed shore with infrequent landing opportunities. The knowledge and leadership components at this level are substantial and Participants are required to show well informed judgment in all aspects of the course.

## *Journeying & Seamanship*

- Journeying and seamanship refers to the practical skills, equipment preparation, trip planning and judgments that are ongoing throughout the planning and completion of a trip. The following list is not exhaustive and is provided here as a guide to areas of judgment necessary for safe and enjoyable paddling in a level-3 or 4 environment.

## *Navigation and route selection*

- Determine a safe and efficient route along a complex coastline exposed to wind, current, and swell.
- Utilize charts, tide tables, guidebooks, local knowledge, practical observation and other pertinent references to support your judgments.

### *Weather interpretation and forecasting*

- Obtain a marine weather forecast, and interpret its probable effect on paddling conditions.
- Understand the effect of tides, currents and winds on the sea conditions.
- Include considerations of fog formation, onshore and offshore winds, and the effect of local topography.
- Understand typical weather patterns during the passage of low-pressure and high-pressure weather systems.

### *Camping skills*

- Select an unimproved wilderness campsite and prepare a camp for safety and comfort during inclement weather.
- Discuss the implications of tide and weather on a wilderness campsite.
- Prepare a bivouac, simulating an unanticipated emergency overnight stay in wet and windy weather.

### *Group awareness*

- Exercise appropriate group management on the water and demonstrate concern for the comfort and welfare of the party throughout the journey.

### *Heritage*

- Participants will relate traditional Greenland and Aleutian designs to contemporary kayak design features and discuss the merits and challenges of the identified design feature(s).
- Identify at least 2 other genres of kayaking, and describe how the practice of kayaking differs in these genres (equipment, technique, environment) Ex, Flat water racing, Slalom racing, Surf Ski, White water, Kayak polo

### *Environment*

- Participants will provide evidence of their environmental ethics by describing the seven Leave No Trace principles and practices.
- The seven Leave No Trace Principles are:
  - Plan ahead and prepare
  - Travel and camp on durable surfaces
  - Dispose of waste properly
  - Leave what you find
  - Minimize campfire impacts
  - Respect Wildlife
  - Be considerate of other visitors
- Successful Participants will begin to integrate these seven principles while on trip.
- Using a variety of resources (previous knowledge, other participants, leaders, guide books), Participants will be able to identify 1 - 3 natural objects found during the trip

## Assessment

The Paddle Canada Level Four Skills course includes both skill development and assessment. The assessment will be comprised of a written test, on-water general paddling skills assessments, and on-water scenarios. Written or oral navigation and trip planning exercises may also form part of the assessment process. The written test will touch on navigation, weather and general seamanship.

Overall, Participants must demonstrate a high level of ability in controlling their kayak and executing rescue techniques, and leadership style in trip planning and in rescues must demonstrate the ability to adapt. Please refer to The Paddle Canada Level 4 Learning Outcomes provided earlier within this course documentation for a detailed outline of our expectations. Successful candidates will be awarded a Paddle Canada Level 4 Skills certificate, while participants who do not yet meet all requirements will be informed of the necessary steps remaining in order to achieve success.

## Program Logistics



### Prerequisites

This is a compressed course designed for individuals who have had previous kayak touring experience and training. The general skill training included in this course is designed to polish existing skills; it is NOT an introduction to these skills. Applicants seeking an introduction to intermediate navigation and paddling skills are encouraged to take an intermediate level skills course such as the Paddle Canada Level 3 Skills course available through SKILS and other outfitters throughout Canada.

- All participants must have Paddle Canada Level 3 certification, equivalent certification, or comparable skill and experience. Vigorous sea conditions along exposed shores with infrequent landing opportunities present significant challenges for individual safety and group management.
- Participants must be 18 years of age or older.
- Wilderness First Aid Certification (36 hours) with CPR is strongly recommended but not required.
- Restricted Radio Operators License (marine VHF) is strongly recommended but not required.
- Considerable Personal paddling experience in light and moderate sea conditions or higher including overnights, and an ability to roll, is essential.

### Class Size

A minimum of 4 candidates is required to run this program while the maximum group size we adhere to is 8. The limited class size helps to ensure a rich learning environment with lots of opportunity for one-on-one coaching and feedback. Regardless of the class size, there will be a minimum of 2 instructors working with you on this course.

## Locations and Traveling

The first portion of our program will be based out of the Discovery Island Lodge located on Quadra Island. This beautiful facility offers a full kitchen, small bunkrooms, showers, and other amenities. We will sleep at the lodge each night and use the communal space for land based lessons and discussion. The cost of staying at the lodge is included in your course fees.

The Lodge is reached via the Quadra Island ferry from Campbell River on Vancouver Island. Detailed directions can be found on the lodge website; [www.discovery-islands-lodge.com](http://www.discovery-islands-lodge.com). The last gas station is in Quathiaski Cove near the BC ferry terminal on Quadra Island. From there, the trip to the Lodge will take approximately 45 minutes so please be sure you have plenty of gas to get there and return. The road becomes a narrow logging road before you reach the lodge. Please be careful of the soft shoulder and drive in the middle of the road where possible! The driveway down to the lodge is very steep with limited room to turn around. If you are uncertain about your car's ability to handle the last 100m, please park at the top and walk down to check it out first.

The second part of the course starts in Tofino on the west coast of Vancouver Island.

## Meals

You are required to provide your own food for the duration of this course. For the first part of the program you will have access to a full kitchen for preparing meals. However, time is limited so we recommend that you do not plan to spend a lot of time cooking. For the second half of this program we will be camping on the West Coast of Vancouver Island with only the amenities we bring with us. You are expected to bring all you require to prepare your own meals for the duration of the trip.

## Our Classroom

We have divided the course into two parts to take advantage of two distinct and diverse paddling environments. Dynamic currents, abundant wildlife, and a cluster of rocky islands define paddling at Surge Narrows. We'll take advantage of these predictable conditions to refine our core technical, tactical, mental, and physical skills. The West Coast offer a rugged outer coast of reefs and small islands interspersed with surf beaches. Here we'll focus on navigation, weather, route planning, decision making, and expedition behaviour. Of course, it's not all theory. If the surf is up, there are several excellent surf breaks in the area!

The weather is variable at all times on the west coast; over the course we can expect sun, rain, and wind in varying amounts. Please come prepared. You will also spend time in the water during rescue practice and scenarios. The water temperature varies from 6°Celsius to 15°Celsius. Bring lots of clothing and immersion gear. Dry suits are strongly recommended. This course is dependent on a paddling environment with the sea conditions and coastal features necessary to provide suitable challenges. Courses will be cancelled or postponed when conditions do not provide the necessary environment. The necessary environment we are looking for is open coast with infrequent and sometimes difficult landing options, strong winds (near 20 knots), combined sea state 1-metre or greater with a moderate to rough sea state, surf  $\geq 1$  metre, and current  $\geq 3$  knots.

## What You Are Responsible For

You are responsible for all travel, paddling gear, and camping equipment throughout the course. You are also responsible for accommodation before and after the course. SKILS covers the cost of the Discovery Island Lodge. White water helmets are mandatory for this course, and dry suits are strongly recommended. A detailed equipment list is provided with this course material.

You are responsible for all meals and cooking equipment throughout the course. As this is primarily a touring award, your ability to organize, pack, and prepare meals is an important component of the learning and evaluation in the course. If you need to rent equipment, contact our office at [info@skills.ca](mailto:info@skills.ca). Your instructors can carry your rental kayak to Discovery Lodge for you at no cost.

## Suggested Gear List

- Touring kayak appropriate to multiday trip
- PFD with whistle and knife
- Paddle and spare
- Spray skirt
- Pump
- Helmet
- Tow line and other safety gear
- 15 m buoyant heaving line
- Immersion clothing
- Personal camping equipment
- Tarp
- VHF Radio
- Navigation equipment
- Meals and water
- Program paperwork
- Log book, course materials, and reading

## Course Outline

Shown below is a generic outline for Level 4 Skills; please be ready for change and uncertainty in how your program will unfold. Given the skills and experience of Level 4 candidates, the requirements of the course, and the elements we will be playing in, your instructors will strive to take advantage of any and all learning opportunities as they arise. We will alter the course to provide candidates with as rich, unique, and rewarding an experience as possible.

The course starts informally the evening before Day 1 at Discovery Lodge. The first coaching session starts at 8:30 am on Day 1. You do not need to have your boat packed or be dressed in your paddling clothes for the start of this session, time for these tasks is built into the program.

	Morning	Afternoon	Evening
<b>Pre Course Evening</b>			<ul style="list-style-type: none"> <li>Casual meet and greet at Discovery Island Lodge. SKILLS has booked and paid for your stay.</li> </ul>
<b>Day One</b> Meet at 8:30 am Discovery Lodge	<ul style="list-style-type: none"> <li>Meet and Greet</li> <li>Paperwork</li> <li>Course Orientation</li> <li>Questions and Answers</li> </ul>	<ul style="list-style-type: none"> <li>On Water Skills Review</li> <li>Paddling in Currents</li> </ul>	<ul style="list-style-type: none"> <li>Review Decision Making and Group Management</li> </ul>
<b>Day Two</b> Discovery Lodge	<ul style="list-style-type: none"> <li>Paddling in Currents</li> </ul>	<ul style="list-style-type: none"> <li>Paddling in Currents</li> <li>Rescues in Currents</li> </ul>	<ul style="list-style-type: none"> <li>Navigation Strategies</li> <li>Safety and Rescue</li> <li>Communication</li> <li>Navigation</li> <li>Weather</li> </ul>
<b>Day Three</b> West Coast	<ul style="list-style-type: none"> <li>Travel by car to the West Coast</li> </ul>	<ul style="list-style-type: none"> <li>Travel by kayak to camp site</li> </ul>	
<b>Day Four</b> West Coast	<ul style="list-style-type: none"> <li>Touring and Navigation</li> </ul>	<ul style="list-style-type: none"> <li>Touring and Navigation</li> </ul>	<ul style="list-style-type: none"> <li>Weather</li> </ul>
<b>Day Five</b> West Coast	<ul style="list-style-type: none"> <li>Surf Theory</li> <li>Surf Practice</li> </ul>	<ul style="list-style-type: none"> <li>Surf Practice</li> <li>Communication in and around hazards</li> <li>Swimming in the surf</li> <li>Launching and Landing</li> <li>Safety and Rescue</li> <li>Practice, Practice, Practice</li> </ul>	<ul style="list-style-type: none"> <li>Weather</li> </ul>
<b>Day six</b> West Coast	<ul style="list-style-type: none"> <li>Paddling in and around rocks</li> <li>Reading water (and rocks)</li> <li>Communication</li> <li>Safety and Rescue</li> </ul>		<ul style="list-style-type: none"> <li>Review Period</li> </ul>
<b>Day seven</b> West Coast	<ul style="list-style-type: none"> <li>Travel to egress point</li> </ul>	<ul style="list-style-type: none"> <li>Exam</li> <li>Debrief</li> </ul>	





# Course Materials & Background Reading

In our experience, a little preparation goes a long way in this course. Please take the time to order your course materials early and spend some time reviewing the material you covered in Level 3, including tide and current calculations, basic piloting and compass navigation, weather interpretation, boat handling, and rescues.

Each student will need a copy of the following resources with them on the course:

- Chart 3539 – Discovery Passage
- Chart 3673 – Clayoquot Sound
- Tide and Current Tables Volume 6
- New Log Book – this will be handed in at the end of the course
- SKILS Touring Manual – please review prior to the program starting
- Navigation, Sea State, and Weather – A Paddlers Manual by SKILS
  - Participants should review this entire book in advance of the course. Please review in particular pages:
    - 50-57
    - 91-109
    - 133-151
    - 153-202
- Level 4 Study Questions – included in this package

## Level 4 Study Questions

Please review the following questions. Topics covered include information pertaining to Level 3 and Level 4 Skills programs. The answers will not be collected but reviewing this will help you succeed in the program.

### *Weather Interpretation*

- Describe the weather forecast verbatim
- What do you think the weather will be doing 24 hours from now?
- What information did you use to come to this conclusion?
- What signs and signals should you see if your prediction is right?
- If you were leading a trip, what decisions would you be taking/thinking about with this prediction?

### *Marine Forecasts and Reports*

- How often is the marine forecast issued?
- What is the time of the most recent forecast?
- For what period of time is the forecast valid?
- Describe what you heard in the synopsis?
- What is the difference between the synopsis and the Area Forecasts?
- What was the forecast for this area?

- ❑ What other forecast areas could be relevant for our location?
- ❑ For what period is the Outlook issued?
- ❑ What is the difference between the Forecast and Reports?
- ❑ How often are the reports issued?
- ❑ What Area are we in?
- ❑ What are the closest/most useful Reporting Stations?
- ❑ How do the local reports correspond with what is currently described in the Area Forecast?
- ❑ What are your current observations of the weather? (Barometric pressure, wind speed and direction, precipitation, clouds, other)?
- ❑ Is the information in the Local Reports borne out by your observations?
- ❑ How have the local conditions been changing over the last 24 hours?

### **General Weather Knowledge**

- ❑ What direction are the prevailing summer winds on the west coast of BC in the summer? Why?
- ❑ What weather patterns are associated with an approaching cold front? Warm front?
- ❑ Indicate at least 3 signs of deteriorating weather.
- ❑ What are backing winds and what can they indicate?
- ❑ What are some of the differences between sea fog and radiation fog? How can you distinguish them?
- ❑ What is a Sea Breeze? When and where would you expect to experience a Sea Breeze?
- ❑ What are Katabatic Winds? When and where would you expect to experience these winds?
- ❑ What are Gap Winds? Name a local gap wind
- ❑ What are Cornering Winds? Name a local cornering wind?

### **Communication – Radio Work**

- ❑ Find local weather channel on your radio
- ❑ Find channel 16.
- ❑ Change between high and low power.
- ❑ Call CCG or VTS to advise of Rescue Practice and/or crossing restricted channel.
- ❑ Make a mock mayday/pan pan/security call.
- ❑ Contact a fishing vessel in front of camp (no name visible)

### **Communication – General Radio Knowledge**

- ❑ What is the CCG Working Channel?
- ❑ What is Channel 16?
- ❑ When would you use Channel 16? CCG Working Channel?
- ❑ What other channels do you use?
- ❑ How would you hail another vessel on channel 16?
- ❑ What are the 3 levels of emergency used in Marine VHF?
- ❑ Describe a situation where you would use each of them.
- ❑ Talk/Walk through a Mayday call.
- ❑ What is the likely maximum range of the radio on low/high?
- ❑ How can you extend the range of a VHF Radio?
- ❑ What are some of the limits of a VHF Radio?
- ❑ When paddling, how do you store your radio?

### Communication – Flares

- ❑ What are flares used for?
- ❑ Describe at least three different types of flares and 1 advantage and 1 disadvantage of each.
- ❑ How should you store flares?
- ❑ How often should you replace flares i.e. how often to they expire?
- ❑ As a recreational paddler how many flares are you required to carry?
- ❑ How many flares are kayaks over 6m required to carry?
- ❑ How would you signal an approaching boat with a flare?
- ❑ How would you signal an approaching plane with a flare?

### Communication – Other

- ❑ What other types of communication equipment are available to sea kayakers?
- ❑ At least 1 advantage and 1 disadvantage to each of them.

### Navigation – Tides and Current

- ❑ Calculate tides and currents for secondary and tertiary locations Seymour Narrows, Johnstone Strait Central, Nitnat Bar are good examples – these should be done as precisely as possible.
- ❑ Calculate and apply rule of 12ths and rule of 3rds – should be done to within 15 minutes, 1 knot, and 1 foot (.3 metre)

### Navigation – Chart Symbols – first time through, don't use chart 1.

- ❑ For each of the following, identify and explain it's important to kayak navigation.
  - Heights
  - Intertidal
  - Shallow Water
  - Depths
  - Drying Heights
  - Current Arrows – Speed and Direction
  - Kelp
  - Beach Type – Sand, Mud, Shells etc...
  - IR
  - ER
  - Chart Rose
  - Lat/Long
  - Lighted Aid to Navigation – and its characteristics

### Navigation – Compass Work

- ❑ What is variation/declination? What is it here?
- ❑ What is a back bearing?
- ❑ What is deviation?
- ❑ What are some common sources of error in compass bearings? How can you anticipate/identify/correct for these errors?
- ❑ What is a LOP? Identify 2 LOPs.
- ❑ What is Triangulation?
- ❑ What are some considerations for accurate triangulation? Types of objects good for triangulation? Why are headlands/islands, peaks less useful for triangulation than radio towers, aids to navigation etc...?
- ❑ Why should triangulation landmarks be at least 90 degrees apart (where possible)? Surf)
- ❑ How should you prepare your group for surf landings? Equipment? Communication? Technique?
- ❑ In what order would you launch/land your group and why?
- ❑ If you have an injured/ill paddler, in what order would you land them? Why?

### *Environmental Impact/Awareness*

- ❑ Harvesting concerns for salmon? Shellfish? Flora?
- ❑ Describe at least 2 potential negative impacts kayakers can have on the coastal environment.
- ❑ Describe at least 2 potential positive impacts kayakers can have on the coast environment.
- ❑ Identify 3 species at risk from commercial kayakers and some strategies for minimizing this risk.

### *Kitchen/Camp*

- ❑ Describe campsite setup in relation to kitchen, bathroom, water source, and tentsites.
- ❑ Strategy to deal with human waste? Open Coast? Sheltered waters? BC Parks? Natl Parks?
- ❑ Strategy to deal with solid food waste?
- ❑ Strategy to deal with grey water?
- ❑ Identify 3 safety concerns for commercial groups around camp kitchens and strategies to deal with these concerns.
- ❑ Defend the importance of personal hygiene for paddlers.

### *Water Treatment*

- ❑ Identify 3 techniques and pros and cons of each.

### *Megafauna*

- ❑ Describe strategy to minimize risk from black bears.
- ❑ Describe strategy to deal with black bear in camp.
- ❑ Describe strategy to minimize impact on whales from commercial kayakers while paddling.



Thank you for enrolling in our Skills Training program. If you have additional questions or concerns, please contact us at [info@skils.ca](mailto:info@skils.ca). We look forward to playing on the water with you!