



Paddle Canada

Sea Kayak Level 2 Skills

An introduction to sea kayak leadership and journeying skills in class-2 conditions.

Course Description

Building on the skills developed in Level-1, Level-2 provides paddlers with the intermediate skills they need to go sea kayaking in class-2 conditions along semi-exposed shoreline with a possible overnight bivvy. Leadership, incident management, open-water rescue, self-care and navigation are core parts of the curriculum.

General Learning Outcome

Upon completion of the course, the student will be able to confidently sea kayak in class-2 conditions along moderately exposed shoreline in the company of one or more paddlers with similar skills and knowledge. The Level-2 paddler will be an asset to the group in all aspects of multi-day journeys with peers, including leadership, navigation skills and the ability to establish an overnight bivvy.

Prerequisites

- Certification:
- Sea Kayak Level-1 Skills certification or equivalent skill and knowledge at the discretion of the course director.

Paddling experience:

- At least 3, one-day-long kayaking trips in Level-1 conditions in different locations.
- Other training:
- Wilderness first aid (16 hours) with CPR strongly recommended.

Course Length

32 hours of instruction (4 days), minimum 20 hours instruction on the water.

Class Ratio

1 instructor:4 participants

1 instructor+1 assistant:6 participants

Environmental Conditions and Sea State

Class-2: Moderately exposed coastline with frequent easy-landing opportunities and short crossings. Moderate potential wind effects (12–19 knots), surf of less than 1 meter and a combined sea state of less than 1 metre, gentle to moderate nonturbulent currents of less than 3 knots, and light surf beaches. Short delays in access to land-based assistance should be expected. Certification is complete when key skills are demonstrated in class-2 conditions.

Assessment

Assessment in Level-2 is done continuously throughout the program as the instructor observes the participant's performance of each skill and overall development as a paddler.

Learning Outcomes

Re-entry Skills

Unassisted Re-entry

The student will:

- demonstrate techniques to re-enter the kayak unassisted. The paddler must show confidence and control throughout the exercises and be able to be underway again in a timely manner, and
- Demonstrate an unassisted re-entry using a sea kayak packed for an extended day trip, including emergency gear needed for an unplanned night out.

Notes:

- Capsizes must be done with spray skirt in place and simulate an unexpected incident — either while paddling, or attempting to brace or scull for support.
- The re-entry is complete when the student is back in the boat with the cockpit pumped, spray skirt attached, and is ready to continue paddling.
- While there is no specific maximum time a student can take, students will demonstrate consistent and confident progression through the rescue without rushing.

Assisted Re-entry

The student will:

- Demonstrate multiple techniques to re-enter the kayak while being assisted by a peer as well as assisting others. The student must show confidence and control throughout the exercises,
- Demonstrate assisted re-entries in sea kayaks packed for an extended day trip, including emergency gear needed for an unplanned night out, and
- Be made aware of the inherent risks in lifting/draining loaded boats and be introduced to other techniques to mitigate the risk of back or shoulder injury.

All-in Re-entry

The student will:

- participate in an all-in re-entry whereby two (or more) paddlers capsize and assist each other in emptying and re-entering the kayaks, and
- work together as a group to complete the activity in as short an amount of time as possible while still demonstrating good re-entry technique.

Bow Rescue

The student will:

- right a kayak from a capsized position using another paddler's assistance, emphasizing the use of a hip flick, and
- present some portion of a rescue kayak or paddle shaft to assist a paddler in righting him or herself in a timely and effective manner.

Re-entry Exercises or Scenarios

The student will participate in a series of group or solo scenarios that increase in complexity and time. Scenarios will include difficulties such as seasickness, shoulder injuries, repetitive strain injuries, hypothermia, and leaky boats.

Introduction to Rolling

The students will:

- demonstrate a roll on one side in a calm and controlled environment, and Level-2 Skills
- demonstrate safe body mechanics and articulate how to safely keep developing their roll.

Towing

The student will:

- demonstrate safe, efficient towing techniques in a variety of scenarios,
- demonstrate the use of a variety of tow systems such as long and short lines, pigtails and deck mounted equipment,
- give examples of the inherent dangers of towing and how best to mitigate them, and
- outline the use of accessible safety knives as an entanglement rescue tool.

Paddling Skills

Launching and Landing

The student will:

- demonstrate a variety of boat launchings and landings including beach and dock,
- if conditions allow, demonstrate a safe beach landing in gentle surf (knee high or less),
- if conditions allow, demonstrate a safe beach launch in gentle surf (knee high or less), and
- identify appropriate locations to launch and land which minimize exposure to surf and other water users.

Forward Stroke

The student will:

- demonstrate an efficient forward stroke with attention to the catch, power and recovery phases. The principles of lower core engagement, smooth and proper application of cadence as well as use of leg muscles to drive hull will be part of the stroke development coaching, and
- demonstrate efficient and sustained forward paddling during a journey of 4 nautical miles in 2 hours.

Turning Strokes

The student will:

- turn the kayak in each direction while in motion (with little loss of forward momentum) from the stern, middle and bow of the kayak, and
- demonstrate the turns in Level-2 conditions.

Sweep Strokes

The student will:

- demonstrate effective leg drive for more power to assist with turning,
- look where they are going rather than watch the paddle blade, and
- experiment with both off and on-side edging.

Low and High Brace Turns

The student will:

- demonstrate low and high brace turns should be executed under forward momentum and initiated with a sweep stroke on the outside of the turn,
- state the potential risk of shoulder injury with these turns and how to mitigate it, and
- ensure proper body position for shoulder protection.
- Proper and safe body position is critical with these turns.
- The turn can be extended by rotating the blade toward the bow and completed with a forward stroke on the same side.

Bow Rudders

The student will:

- demonstrate the bow rudder under forward momentum and initiated with a sweep stroke on the outside of the turn, and
- demonstrate the turn on both edges (inside versus outside of the turn).
- Effective torso rotation toward the inside of the turn and an outside edged kayak should be evident throughout the turn when executed on flat water. The turn can be extended using a bow draw and completed with a forward stroke on the same side.
- Bow rudders should be practised as a way to turn the kayak while moving forwards, as a stroke to help enter and exit current, and as an effective way to transition from paddling across the wind to paddling upwind.

Low Brace

The student will:

- demonstrate an effective low brace in class-2 conditions, and
- demonstrate proper body positioning for shoulder protection to protect against shoulder injury.
- The paddle blade is pushed down into the water for stability, however, the primary means of recovery is with the hip flick and proper torso and head motion.

High Brace

The student will:

- demonstrate an effective high brace in class-2 conditions, and
- demonstrate proper body positioning for shoulder protection to protect against shoulder injury.
- The paddle blade is pulled down into the water for stability, however, the primary means of recovery is with the hip flick and proper torso and head motion.

Draws

The student will incorporate confident edging into all draw strokes.

Draw Stroke

The student will:

- use a draw stroke (with underwater recovery) to move the kayak directly sideways, and
- use edging to help with weight shift and power.

Sculling Draw

The student will use a sculling draw to move the kayak directly sideways, as well as diagonally.

Hanging Draw

The student will use a hanging (or running) draw to move sideways while moving forward, in order to avoid an object just ahead.

Stern Draw and Stern Pry

The student will:

- demonstrate an effective stern rudder while paddling downwind on small waves, and
- demonstrate effective torso rotation for solid paddle placement while also looking forward.

Paddling in Rough Water

The student will:

- demonstrate the basic foundation skills needed for paddling in rough water such as small surf and/or current,
- demonstrate an understanding of how a boat reacts to surf and current, and
- demonstrate a ferry across gentle current or wind using appropriate landmarks to maintain course.

Knowledge

Equipment

The student will describe the key features and attributes of paddling equipment and clothing including:

- Advantages and disadvantages of various sea kayak outfitting/design variations.
- Sea kayak paddle and spray skirt features, designs and materials.
- Advantages and disadvantages of foot, handheld, and electric pumps.
- Life jacket supplementary features designed for sea kayaking.
- Rescue and safety equipment features necessary for coastal kayak tripping.
- Clothing design and fabric attributes for paddling in harsh conditions.
- First-aid kit basics.
- Repair-kit general preparation and use.

Introduction to Tides & Currents

The student will:

- state the basic science behind what tide is and how it can generate current,
- demonstrate how to locate and interpret relevant tide heights and current speeds from reference ports and stations in tides and currents tables or websites (e.g. tides.gc.ca),
- identify on a nautical chart where those values apply and make inferences on how they will manifest themselves given the local bathymetry in the surrounding areas,
- conclude what current speeds are manageable at a Level-2 skill level as well as how current interact with the sea state, and
- give examples of potentially hazardous environments due to tide and/or current activity.

Wilderness Navigation Techniques and Chart/map Work

Navigation Techniques

The student will:

- use wilderness navigation techniques in the context of a multi-day trip in level-2 conditions such as: piloting, including the use of handrails and backstops, aiming off, lines of position, deduced reckoning, and declination/variation/deviation,
- determine and follow a range in either wind or current in Level-2 conditions,
- use ranges and other simple piloting methods to aid in navigation, and
- demonstrate an understanding of the difference between heading, bearing and course.

Nautical Charts and Topographic Maps

The student will:

- give examples of the benefits, drawbacks and applicable uses of both nautical charts and topographic maps,
- use charts and/or topographic maps to interpret aids to navigation and determine potential hazards as well as identify common symbols on a chart/map. Students should be able to locate those features in the real world,
- use charts and/or topographical maps to determine possible launching/landing sites, possible campsites or other practical features for sea kayakers,
- orient a chart/map to the environment,
- use charts and/or topographical maps to navigate a route,
- confidently take a bearing from a chart/map, and
- confidently shoot and follow a bearing for at least 1 nautical mile.

Other Navigation Tools or Activities

The student will:

- confidently use a compass for simple navigation,
- calculate the group's speed, time, and distance traveled,
- give examples of how to identify or describe their position to the outside world using latitude/longitude and a local description,
- record dead reckoning data and calculations,
- complete a route-planning exercise that includes the following activities:
 - measure distance on a chart/map for a route that is at least 9 nautical miles in length. The proposed route should include a combination of shoreline paddling and short crossings, and
 - identify significant features along the route including; prominent navigational features appropriate for piloting, alternate landing and camping sites, likely sources of water, and hazards.
- describe the advantages and limitations of a GPS for navigation.

Weather Interpretation and Basic Forecasting

The student will:

- describe local and regional weather patterns,
- identify 4 different types of clouds and what types of weather they likely precede,
- identify low or high pressure systems, cold/warm fronts and their effects on local/regional weather,
- identify the signs of weather change,
- describe the effects of wind over water or land including channeling/funneling, corner effects, land and sea breezes, fog, anabatic and katabatic winds,
- obtain and record a marine weather forecast via VHF, internet or weather radio, and
- describe and apply backcountry lightning risk management and avoidance.

Heat/cold Issues

The student will:

- identify and describe symptoms, causes, effects of hypothermia and hyperthermia,
- state and demonstrate the basic treatment for hyperthermia with a focus on prevention and early intervention, and
- state and demonstrate the basic treatment for hypothermia with a focus on prevention and early intervention.

Emergency Overnight

The student will:

- state the importance of being prepared for an emergency overnight as well as be familiar with the essential necessary gear,
- demonstrate how to set-up an emergency overnight shelter to keep warm and dry,
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- demonstrate how to make an emergency hot meal as well as ensure water is safe to drink, and
- be prepared with the necessary gear in the kayak for a possible overnight emergency throughout the length of the course.

Leadership and Decision Making

The student will:

- demonstrate effective leadership and decision-making in the context of leading peers,
- participate in scenarios and exercises that reflect differing styles of outdoor leadership,
- demonstrate group awareness by paying attention to the location and energy levels of other members of the group while on the water,
- demonstrate the ability to make good decisions for the group during simulated incidents, and
- lead the group effectively and safely on the water during designated segments of a day trip or environment transitions (e.g. headlands, getting on/off the water).

Risk Assessment, Incident Management and Evacuation Options

The student will:

- complete a formal route plan for a multi-day journey that accounts for hazards and effectively manages risk,
- assess and mitigate risks as they apply to a multi-day journey with peers in Class-2 conditions,
- demonstrate a strong understanding of current risk assessment concepts and terminology,
- participate confidently in scenarios requiring a complex and efficient response,
- demonstrate effective group management formations for incident management while on the water,