



# Level 4: Whitewater Kayak Hand-Paddling Skills Course

## Course Overview

This Whitewater Kayak Hand-Paddling course is a program emphasizing safety, enjoyment and hand-paddling skill acquisition for entry-level through intermediate individuals in public, private, and commercial settings.

## Course Prerequisites

- Acknowledgment of personal compliance with the [ACA Essential Eligibility Criteria \(EEC\)](#).
- Recommended course preparation: Complete Level 2: Essentials of River Kayak Hand-Paddling Skills Course

## Course Duration

The course duration should be adjusted to best fit the needs and goals of the participants. Half day (4 hours) or more.

## Course Location / Accessible Venues

Sections of rivers rated up to and including class II-III, where maneuvering in current is required to avoid obstacles. A *rapid class includes rapids at the lower and upper ends of the difficulty range, designated “-“ and “+” respectively.*

## Course Size

5 Participants : 1 Instructor; with an additional qualified assistant, the ratio can be 10 : 2.

For additional details, see [SEIC Policy Manual Chapter 6](#).

## Instructor

ACA Level 4: Whitewater Kayak Hand-Paddling Endorsed Instructor (or higher)

## Course Outline

The following is a general summary of course content for the Level 4: Whitewater Kayak Hand-Paddling course. The content covered and sequence of instruction should be adjusted to best fit the participant's needs, class location and time allowance.

### **Introduction, Expectations, and Logistics**

- Welcome, introductions, paperwork
- Student and Instructor course expectations and limitations
- Course itinerary and site logistics
- Review waiver, assumption of risk, challenge by choice, medical disclosure
- About the ACA

- PFD policy (always wear on water)
- Appropriate personal behavior
  - No alcohol / substance abuse
  - Proper etiquette on and off the water
  - Respect private property
  - Practice Leave No Trace ethics

## **Paddling Environment**

- Wind
- Waves
- Weather
- Water

## **Personal Preparation**

- Personal ability
- Swimming ability
- Fitness, conditioning, and warm up
- Safe paddle and kayak handling
- Safety and rescue considerations
- Personal equipment (reviewed by Instructor)
- Judgment. In addition to learning hard skills, the importance of developing personal judgment and group responsibility increases on more difficult paddling venues.

## **Water Comfort**

- Launching, carries and landing
- Water comfort and confidence

## **Terminology of Hand-Paddling**

- Types of strokes: power, turning and bracing
- Stroke components: catch, propulsion, recovery, control, and correction
- Effective body usage and biomechanics
- Use of larger torso muscles
- Body position and how it differs from using a shafted paddle
- Arms as struts connecting paddle to torso
- Avoidance of positions that contribute to shoulder injury or dislocations

## **Equipment**

- Kayak: how the shape, style, volume, and intended use may be affected by utilizing hand-paddles versus a shafted paddle
- Hand paddles: types, parts, size and shape, fitting, position, tethers
- Spray skirts: types and materials, grab loop, and how removal is achieved when using hand paddles
- Care of equipment: how to store and preserve hand-paddles depending on material
- Personal equipment for hand-paddles: gloves, tethers, flotation, backup pair

## **Safety and Rescue**

- Exercising judgment, safety as a state of mind.
- Principles of Rescue
  - Use of safe rescue strategies such as T-RETHROG (Talk, Reach, Throw, Row, Go)
  - Rescue priorities: people, kayak, paddle, gear
  - Responsibilities of: rescuer, group, swimmers
- Shoreline rescue: extension rescues
- Pinned craft
- Introduce ACA River Rescue Course

## **Swimming and Wading Skills**

- Understand the risks associated with standing and walking in the types of environments mentioned above (including entanglement and environmental hazards)
- Strategies to minimize risk of foot entrapment
- Strengths, limitations, advantages, disadvantages, and risks of wading techniques
- Actively participate in scenarios that apply wading skills for rescues
- Wading applications for foot/kayak entrapments
- Defensive and aggressive swimming positions, and transitions
- Techniques for successful exits from current to eddies
- Self-rescue: swimming with equipment
- Strategies to conserve energy
- Techniques for successful downstream swim of a rapid
- Swimming techniques for: waves, hydraulics, and drops
- Strategies for managing strainers in the appropriate venue

## **Kayak-based Rescues**

- Advantages and disadvantages during rescues of various kayaks (e.g., play boats, creek boats, inflatable kayaks)
- Calmly exit the kayak after capsize, using proper body position and contact with the kayak and paddle. When exiting the kayak with a spray skirt after capsize, must be modeled two ways: (1) utilizing the spray skirt grab loop and (2) releasing the spray skirt off the hip (with and without maintaining possession of hand-paddles)

- Paddle recovery options
- Strategies for kayak recovery
- Swimmer tow options
- Swimmer re-entry / re-mount techniques (e.g., stern entry, heel hook, rescue sling, paddle float)
- Kayak bumping / bulldozing
- Kayak towing
- Kayak specific rescues (e.g., boat over boat, boat to boat, scoop)
- Unresponsive paddler rescue
- Emptying water from kayak (e.g., on-shore, bailers, pumps)

### **Throw Rope Skills**

- Throwing techniques
- Receiving techniques
- Belaying techniques
- Rope management and safety strategies
- Rope coiling methods and throwing techniques

### **Maneuvers**

- Forward: kayak moves in a reasonably straight line.
- Reverse: kayak moves in a reasonably straight line
- Stopping: kayak stops within a reasonable distance
- Turns: kayak turns in broad arc made while underway
- Veering, carving, paddling the “inside circle”
- Spin
- Ferries
- Eddy turns
- Peel outs
- Moving abeam
- Sideslips: kayak moves sideways with headway

### **Strokes**

- Forward (alternating hands)
- Power forward (both hands)
- Back (alternating hands)
- Power back (both hands)
- Draw

- Side
- Stationary
- Sculling
- Stern
- Sweep
  - Forward sweep - anticipatory and reactive techniques
  - Reverse sweep
  - Neutral sweep (hands moving in opposite directions to create rotation)
- Brace
  - Single brace (one-hand/one-side)
  - Double brace (both hands on same side)
  - Wing brace (both hands on opposite sides)
- Rudder
- Roll
  - Optional at instructor's certification level and discretion

## **River Reading**

- Universal River Signals with hand-paddles
- How to establish the "best" route and how that might differ for when using hand-paddles
- Identifying, planning for, and navigating obstacles and hazards when using hand-paddles
- Cold water considerations, especially as they pertain to hand-paddling
- Demonstration of effective use of paddle strokes with hand-paddles
- Demonstration of effective whitewater maneuvers with hand-paddles
- Ferries
- Eddy turns
- Peel outs
  - Wide (exit wide from eddy line)
  - Shallow (exit close to eddy line)
- Sequences of maneuvers
  - C-turns (Peel out and eddy into same eddy)
  - S-turns (Peel out one side and eddy into opposite side)
- Surfing

## **Individual Development**

- **Judgment**  
In addition to learning hard skills, the importance of developing personal judgment and group responsibility

increases when using hand-paddles, particularly on more difficult paddling venues.

- **Self Evaluation**

- What moves are required to successfully run the rapid?
- Can I perform the required moves with hand-paddles?
- What are the consequences of missing the required moves?
- Am I willing to accept these consequences?
- What if?
- Rescue considerations

## **Group Evaluation**

Your decision to use hand-paddles as a primary or secondary tool may depend largely on, not only your personal skills and abilities, but the river venue and the group:

- Skill level of the group
- Size of the group
- Group consequences
- Condition of the group
- Continue learning process from more experienced paddlers
- Responsibility to support other paddlers (no peer pressure)
- Group equipment: extra paddles, rescue sling, dry bags, maps, First Aid kit and location, rescue gear
- Guidebooks / local knowledge
- Assessing current environmental conditions (including: water, weather, time of day, and temperature, limited access: canyons, cliffs, remote area)
- Assessing personal and group dynamics (skills, equipment, group makeup, mental status)
- Logistics, group selection, leadership

## **Conclusion and Wrap Up**

- Group debrief / individual feedback
- Course limitations
- Importance of First Aid and CPR
- Importance of additional instruction, practice, experience
- Importance of appropriate level of safety and rescue training
- Life sport / paddling options
- Local paddling groups / clubs
- Handouts / reference materials
- ACA membership forms
- Course evaluation

- Participation cards

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Date of last revision: 12/31/2023

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This curriculum is managed by the ACA River Kayaking Committee. To connect with the leadership of this committee, please view the SEIC Committee rosters on [the ACA website](#).