



# Level 4: Whitewater Kayaking Skills Course

## Course Overview

The **Whitewater Kayaking** course is a program emphasizing safety, enjoyment and 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 \(EEC\)](#).
- No prior paddling experience or training is required to participate in this course

## Course Duration:

Two days (16 hours)

## Course Location / Accessible Venues

Moving water on rivers including class II-III sections. *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

This course may be offered by Level 4: Whitewater Kayaking (or higher) ACA Instructors, Instructor Trainers, or Instructor Trainer Educators.

## Succeeding Courses

- Level 5: Advanced Whitewater Kayaking Skills Course and/or Skills Assessment

## Course Outline

The following is a general summary of course content for the Whitewater Kayaking skills 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
- Water comfort and confidence
- Fitness, conditioning, and warm up
- Safe paddle and boat 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.

## **Getting Started:**

- Launching, carries, landing
- The terminology of paddling (frequently blended in with stroke instruction)
- Types of strokes: power, turning, and bracing
- Stroke components: catch, propulsion, recovery, control and correction
- Effective body usage and biokinetics
- Use of larger torso muscles
- Arms as struts connecting paddle to torso
- Avoidance of positions that contribute to shoulder injury or dislocations

## **Equipment:**

- Life jackets (PFDs): types, fit

- Helmet: types, fit
- Kayak: types, materials, flotation, parts (including safety features: walls, foot braces, grab loops)
- Kayak outfitting: comfort and safety; back rests, hip pads
- Paddle: types, parts, length, blade size and shape, fitting, hand position
- Spray skirts: types and material, grab loop
- Care of equipment
- Personal equipment: water, food, shoes, sunscreen, bug spray, sun glasses, eyeglass straps, protective clothing for heat or cold, sponge, hat, foot protection, bailer, whistle
- Car topping: Loading and unloading, racks, tie down

## **Safety and Rescue**

- 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
- Types of Rescues
  - Shoreline rescue - extension rescues
  - Pinned craft
- Introduce ACA River Rescue Course
- Need to take a First Aid and CPR 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
- 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 (Practiced on flatwater)**

- Spins (onside and offside): kayak pivots in place
- Forward: kayak moves in 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, and paddling the “inside circle”
- Abeam: kayak moves sideways without headway
- Sideslips: kayak moves sideways with headway

## **Strokes**

### ***Required***

- Forward sweep (anticipatory and reactive techniques)
- Reverse sweep
- Stern draw
- Side draw

- Forward
- Back
- High brace
- Low brace
- Bow draw and Duffek
- Stationary draw
- Sculling draw

***Optional at Instructor's discretion***

- Roll

## **River Reading**

### Fundamentals of river currents

- Current speed, direction and changes caused by streambed features
- Downstream and upstream V's / chutes
- Eddies / eddy lines
- Waves / wave holes
- Inside and outside bends
- Effects of obstacles
- Ledges / horizon lines
- Strainers and sieves
- Rocks / pillows
- Holes / hydraulics
- Other hazards
- Power of the current / river level
- Cold water
- Dams, flow diversion structures, pipelines
- Undercut rocks / ice
- International Scale of River Difficulty (handout: American Whitewater Safety Code)

## **Whitewater Practice**

- 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

## **River Running**

- Strategies in running rivers
- How to paddle in current
- Spacing / avoid "tunnel vision"
- Scouting and rapid analysis scenarios
- From kayak / from shore
- How to establish the "best" route/ "Plan B"
- Portaging hazards
- Group organization on the river
- Group cohesiveness (lead, sweep boats, etc.)
- Universal River Signals
- Emergency procedures

## **Individual Development**

### ***Judgment***

In addition to learning hard skills, the importance of developing personal judgment and group responsibility increases on more difficult paddling venues.

### ***Self Awareness***

- Understanding your level of anxiety
- Understanding your personal style and risk tolerance
- Responsibility to the group
- River and group awareness
- Rapid analysis scenarios

### ***Self Evaluation***

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

### ***Group Evaluation***

- 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 paddle, 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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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](#).