



Level 3: River Packrafting Skills Course

Skills Course Overview

This course is designed as a program emphasizing safety, enjoyment, and skill development. The skills and knowledge gained through this course can set the stage for a lifetime of exploration, adventures, a healthy lifestyle, appreciation of water and the natural world, lasting memories with family and friends, and a rewarding experience for all - we paddle because it is fun.

This course is appropriate for all packrafts including traditional decked, non-decked, and self-bailing vessels. The evaluating Instructor, Instructor Trainer, or Instructor Trainer Educator must conduct the course from a packraft.

Skills 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

The course duration should be adjusted to best fit the needs and goals of the participants. Up to 1 day (8 hours).

Course Location / Accessible Venues

Sections of rivers rated class I-II, where limited 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.*

Ideally, this course should include a brief approach to the venue, carrying the deflated packraft.

Course Size

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

Instructor

This assessment course may be offered by Level 3: River Packrafting (or higher) ACA Instructors, Instructor Trainers, or Instructor Trainer Educators.

Succeeding Courses

- Level 3: River Packrafting Assessment or Certification Course
- Level 4: Whitewater Packrafting Skills, Assessment, or Certification Course

Course Outline

The sequence of this course should be adjusted to best fit the participant's needs, class location, time allowance, and craft being used.

Introduction, Logistics, and Expectations

Learning objectives - students should have a basic understanding of the ACA and its policies, how and where this course is being conducted, and acceptable student behavior.

- Welcome! We're so glad that you've chosen to further your paddling experience and education by attending this course! Let's review a few highlights about the ACA
- Let's talk about the course itinerary, expectations, and limitations
- Lay of the land (and water): the logistics of this venue
- Review liability waiver, assumption of risk, challenge by choice, and medical disclosure
- Life jacket policy: always wear while on the water

- Describe and follow safe boating practices (behavior, substance abuse, on water and land etiquette, respecting private property, and Leave No Trace ethics)
- Promotion of a packraft “Culture of Safety”

Paddling and Packrafting Environment

Learning objectives - students should understand the following factors as they relate to the planning and execution of a paddling trip.

- Water
- Weather
- Wind
- Waves
- Approach to the water

Personal Preparation

Learning objectives - students should understand the critical components of trip planning, including how to prepare their equipment and craft for a safe departure and return.

- Describe and follow safe boating practices (behavior, substance abuse, on water and land etiquette, Leave No Trace ethics)
- Review elements of a float plan (who, what, when, where, filing practices)
- Personal ability
- Swimming ability
- Water comfort and confidence
- Fitness, conditioning, and warm up to reduce injury
- 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

Learning objectives - students should understand the logistics of a packrafting trip prior to arriving at the put-in.

- Trip Planning – 6Ps: Prior Proper Planning Prevents Poor Performance
 - Review elements of a float plan (who, what, when, where, filing practices)
 - Sourcing local beta such as river sections, flows, weather, etc. (i.e., online groups, guidebooks, websites, apps, businesses, gauges, etc.)
 - Local rules, regulations, and permitting requirements
 - Shuttle logistics
- Storing, packing, inflating, deflating and transporting a packraft
- Launching and landing craft
 - Posture, safety, comfort, rocking and balance
 - Boarding, three points of contact, weight kept low, etc.
- Address proper rigging, fit, and release of thigh straps*
- Calmly exit the packraft after a controlled capsize, using proper body position and contact with the boat and paddle
 - When exiting the packraft with a spray skirt after capsize: must be modeled at least two ways: (1) utilizing the spray skirt grab loop, (2) releasing the skirt off the hip/hull tubes, or (3) driving knee up through the spray skirt*
- Emptying packrafts after a capsize
- Safe and effective body mechanics
- Types of strokes: power, turning
- Parts of strokes: CPR (catch, power, recovery), control, correction
- Use of larger torso muscles
- Avoidance of positions that contribute to shoulder injury or dislocations
- Communication
 - Paddle, hand, and whistle signals

- Basic navigation using a map and compass

**Skills not required for those participants paddling a packraft without a spray skirt / thigh straps*

Equipment

Learning objectives - students should understand the equipment (both personal and group equipment) needed for packrafting, including appropriate use, maintenance, and care.

- Packraft
 - Types and parts: sizes, geometry, deck, combing, skirt, self-bailer, cargo zippers
 - Outfitting: comfort, safety, entrapment hazards
 - Outfitting: thigh straps, seat height and position, backrest, perimeter lines, tails, locking carabiners
 - Stability
 - Tracking
- Paddle: parts, materials, sizing, hand position
 - How to hold the paddle in correct orientation and grip for effective paddling
- Spray skirts: types and materials, grab loop*
- Life jacket: types, materials, fit
- Helmet types and use
- Thigh straps*
- Throw ropes
 - Types of ropes, materials, options
 - Where to carry and stow
 - Deployment and re-stuffing
- Packing of equipment
 - Methods of packing and transporting packraft and associated gear

- Securing backpacks and other cargo to, or inside, the boat
- Entrapment hazards
- Attachment points
- Weight distribution
- Cargo zippers
- Equipment care and maintenance
 - Packraft
 - Drysuits
 - Packs and other equipment
- Packraft repair
 - Home repair techniques and materials
 - Field repair techniques and materials
- Review of additional personal and group gear, including, but not limited to
 - Environmental supplies (food, water, appropriate clothing, sunscreen, etc.)
 - Navigational and signaling tools (maps, charts, whistle, etc.)
 - Extra paddle
 - Dewatering device
 - Rescue equipment (sling for reentry)
 - Survival equipment (head lamp, fire starting devices, signaling equipment)
 - Packraft repair kit
 - First aid kit (appropriate to training)
 - Bug spray, sun protection
 - Storage systems (dry bags, dry boxes)
- Review proper techniques to safely lift and carry the fully loaded boat on shore
- Making safe gear choices while considering weight sensitivity

River Hydrology, Features, and Hazards

Learning objectives - students should understand basic river hydrology and be able to identify different river features and hazards.

- Currents, volume, speed, direction, and changes caused by streambed features
- Upstream and downstream Vs, chutes
- Eddies
- Eddy lines
- Waves
- Wave holes
- Bends
- Ledges and low head dams (horizon lines)
- Strainers/sieves
- Rocks
- Pillows
- Holes and hydraulics
- Wood hazards
- Undercut rocks or ice
- Dams/flow diversion structures and pipelines
- Pins and entrapment
- Man-made obstacles such as bridge pilings or debris
- In addition:
 - How each of the above changes with river levels
 - How each of the above impacts a boat and why

River Running

Learning objectives - students should understand the concepts of river etiquette and strategies for having a fun and safe day on the water.

Strategies in running rivers:

- Spacing
 - Avoid tunnel vision
 - Paddle your own route
- Scouting
- Portaging
- Group organization on the river:
 - Cohesiveness (lead, sweep boats, etc.)
 - Safety boats, group members with repair kits, first aid kits, and first aid and CPR training
 - Communication and signaling
- Discuss danger vs. difficulty

Safety and Rescue

Learning objectives - students should understand the handling of common emergency situations on the river.

- Exercising judgment, safety as a state of mind
 - Discuss the safety implications of access to remote paddling environments
- Principles of Rescue
 - Rescue Priorities: people, boat, paddle, gear
 - Responsibilities of the group, rescuer, swimmers
 - Appropriate use of rescue and safety gear
 - Emergency procedures
- Types of Rescue
 - Self-Rescue
 - Swimming in current
 - Body/boat position

- Handling equipment
- Emptying boats
- Techniques for re-entry
- Responding to sudden deflation (popped boat or accident cargo fly opening)
- Boat assisted rescue
 - Assisted re-entry
 - Bow and stern towing for a tired swimmer
 - Towing or bulldozing a capsized boat
- Shoreline Rescue
 - Extension rescues,
 - Use of throw ropes/bags
 - Pinned craft
- Wading principles
 - Avoiding foot entrapment
 - Limitations (water depth and speed, bottom conditions, downstream hazards, debris in water)
 - One and two person techniques

Strokes

Learning objective - students should understand and be able to demonstrate the different paddle strokes used to maneuver a packraft.

- Stroke components: catch, propulsion, recovery (CPR), control and correction
- Safe and effective body mechanics
- Types of strokes: power, turning
 - Forward Sweep
 - Reverse sweep

- Back (to stop and go in reverse)
- Draw (to move sideways)
- Bow draw
- Stationary draw (to control turn or sideslip)
- Sculling draw/brace
- Sweep
- Stern draw
- Forward stroke
- Rudder
- Low brace and high brace to avoid capsize

Maneuvers

Learning objectives - students should understand and be able to demonstrate dynamic raft maneuvers in course venue.

- J-lean / heeling the boat
- Spin: boat pivots in place
- Abeam: boat moves sideways without headway
- Forward: boat goes forward in a reasonably straight line
- Stopping: boat stops within a reasonable distance
- Turns: boat turns in a broad arc while underway
- Veering, carving, and paddling the “inside circle”
- Eddy turns
 - Deep into eddy vs. near eddy line
- Peel outs
 - Deep into current vs. pivot near eddy line
- Ferries
 - Facing upstream to move laterally with control

- Facing downstream (to stop in current and move laterally to avoid hazards)
- C-turns (eddy turn and peel out from the same side of an eddy)
- S-turns (eddy turn on one side of an eddy, peeling out from the other side)
- Surfing

Conclusion and Wrap Up

Learning objectives - students should understand the importance of continuing education and practice. The instructor should debrief the course and hand out any pertinent materials.

- This has been a great class! Let's talk through what we've learned with a group debrief and/or individual feedback
- Course limitations: there is always more to learn, and the skills and concepts we discussed require more practice and experience
- First aid and CPR training is a very valuable tool and could make the difference between a "near miss" and an emergency requiring outside rescue / first responders
- Paddling is a lifetime sport - there are local organizations, clubs, events, competitions, and classes through which you can continue your learning and build community. Get connected!
- Handouts and reference materials (if applicable)

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<https://americancanoe.org>

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