

Level 3: River Packrafting

Version 1.0

FOR EDUCATIONAL PURPOSES ONLY

Course Overview: The **River Packrafting** course is a program emphasizing safety, enjoyment and skill acquisition for entry-level through intermediate individuals in public, private and commercial settings.

This course is appropriate for all packraft and inflatable kayak craft, including traditional decked, non-decked, and self-bailing vessels. It is assumed the boats will be paddled solo. The instructor may want to limit this program to one type of craft, but should announce this prior to the start of the course.

Essential Eligibility Criteria (EEC): Instructors should determine appropriate essential eligibility criteria for participants.

Course Prerequisites: None unless instructor deems prerequisites necessary.

Instructors: Determined by individual organizations.

Course Duration: 12 - 16 hours, at the instructor's discretion

Course Location/Venue: Course may be conducted on sections of rivers rated up to class I-II

Class Ratio: 4 students : 1 Instructor; with an additional instructor or qualified assistant the ratio can be 8:2

Succeeding courses: None

The following is a general summary of course content for the **River Packrafting** course. The content covered and sequence of instruction should be adjusted to best fit the participants' needs, class location and time allowance.

Course Content

Introduction, Expectations, & 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
- Instructor should generally and candidly discuss the risks of packrafting, including injury and drowning.
- PFD policy (always wear on water)
- No alcohol/substance abuse
- Proper etiquette on and off the water
- Respect private property

Level 3: River Packrafting

Version 1.0

- Practice “Leave No Trace” ethics
- Promoting a packraft “Culture of Safety”

The Paddling Environment

- Wind
- Waves
- Weather
- Water
- Open water crossings

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

- Boating laws, American Whitewater Safety Code
- Packing, carrying, storing, and inflating
- Launching, landing
- Water confidence and comfort
- Rescue priorities: People, boats, and gear
- Wet exits
- How to empty a packraft
- The terminology of paddling (frequently blended in with stroke instruction)
- Types of strokes: power, turning & 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

- Packraft:
 - Types and parts: sizes, geometry, deck, combing, skirt, self-bailer, cargo zippers
 - Outfitting: comfort, safety, entrapment hazards

Level 3: River Packrafting

Version 1.0

- Outfitting: thigh straps, seat height/position, backrest, perimeter lines, tails, locking carabiners
 - Spray skirt: grab loop!
 - Stability
 - Tracking
- Paddle: types, parts, length and hand position
- Life jackets (PFDs): fit and regulations
- Appropriate clothing: comfortable and protective:
 - Wet/dry suits
 - Footwear
- Helmets: types, fit
- Throw ropes:
 - Where to carry and stow
 - Materials and options
 - Stuffing techniques
- Care of equipment:
 - Packrafts
 - Dry suits
 - Other equipment
- Packraft repair:
 - Field repair techniques and materials
 - Home repair techniques and materials
- Packing of equipment:
 - Securing backpacks and other cargo to your boat
 - Entrapment hazards
 - Attachment points
 - Weight distribution
 - Cargo zippers
- Additional Personal and Group Equipment:
 - Extra paddle, head lamp, compass with signal mirror, emergency blanket/shelter, fire starter, lighter or waterproof matches, sling, dry bags, maps, water, food, sponge, hat, eyeglass strap, whistle, foot protections (shoes), bug spray, sunscreen, first aid kit, river knife, and location of equipment.
 - Optional equipment and outfitting

River Reading

Fundamentals of river currents:

- Current speed, direction and changes caused by streambed features
- Downstream and upstream V's and chutes
- Eddies and eddy lines
- Waves and wave holes
- Bends
- Effects of obstacles
- Ledges and horizon lines

Level 3: River Packrafting

Version 1.0

- Strainers and sieves
- Rocks and pillows
- Holes and hydraulics
- Wood hazards
- Other hazards
- Power of the current and river Level
- Cold water
- Dams, flow diversion structures, and pipelines
- Undercut rocks/ice
- International Scale of River Difficulty (American Whitewater Safety Code)

River Running

- Strategies in running rivers:
 - How to paddle in current
 - Spacing and avoiding "tunnel vision"
- Scouting:
 - From boat and from shore
 - How to establish the "best" route and "Plan B"
- Portaging hazards
- Boat ability vs. paddler's ability
- Group organization on the river:
 - Group cohesiveness (lead, sweep boats, etc.)
 - Universal River Signals System
- Emergency procedures

Safety & Rescue

- Principles of Rescue:
 - Priorities: people, boats, gear
 - Responsibilities of victim
 - Responsibilities of rescuers
 - Responding to sudden deflation (popped boat or accidental cargo fly opening)
- Self-rescue in moving current:
 - Swimming (aggressive and defensive)
 - Body and boat positions
 - Overturning an empty/fully-loaded boat
 - Handling equipment
 - Technique for re-entry
- Boat-assisted rescue:
 - Assisted re-entry:
 - Communication
 - Handling equipment
 - Hand and paddle stabilization position
 - Tired swimmer

Level 3: River Packrafting

Version 1.0

- Towing
- Bumping
- Shoreline rescue
 - Extension rescues
 - Use of throwbags and ropes
 - Stationary target
 - Moving target
 - Stuffing
 - Rapid recoil
 - Rope hazards
 - Receiving and swimming with throwbag
 - Wading (Shallow Water Crossing)
 - Principles (current & control)
 - Applications
 - Hazards (foot entrapment)
 - Methods: Up to the instructor's discretion, but to include solo and group techniques, e.g.:
 - Solo (with paddle/prop)
 - Two-person (A-frame)
 - Tripod
 - Wedge
 - Fence wade
 - One and two-shore rope work to stabilize an entrapment victim
 - Pinned craft rescue

Maneuvers

- Flatwater Practice:
 - Edging, J-leans
 - Spins (onside and offside): boat pivots in place
 - Forward: boat moves in reasonably straight line
 - Reverse: boat moves in a reasonably straight line
 - Stopping: boat stops within a reasonable distance
 - Turns: boat turns in broad arc made while underway
 - Abeam: boat moves sideways without headway
 - Sideslips: boat moves sideways with headway
- Strokes:
 - Forward sweep (aggressive and reactive techniques)
 - Reverse sweep
 - Stern draw
 - Bow draw
 - Forward
 - Back
 - Low and high braces

Level 3: River Packrafting

Version 1.0

- Stationary draw
- Sculling draw
- Whitewater Practice:
 - Ferries:
 - Front ferry (upstream) to move laterally with effective boat control.
 - Back ferry (downstream) to stop in current and move laterally to avoid hazards
 - Eddy turns
 - Peelouts:
 - 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)
 - Optional at instructor's discretion: surfing

Conclusion & Wrap Up

- Trip Planning: resources, gradient, flow levels, online flow gauge resources
- Group debrief and individual feedback
- Course limitations
- Importance of First Aid & CPR
- Importance of additional instruction, practice, and experience
- Importance of appropriate level of safety and rescue training
- Demo advanced maneuver
- Local paddling groups/clubs
- Handouts and reference materials
- Course evaluation
- Participation cards

Source: This sample skills course is provided by the American Packrafting Association (APA) as a suggested guideline in an effort to standardize packrafting curricula and increase safety for all paddlers. In order to align the courses with industry standards, APA used American Canoe Association (ACA) Skills Courses as models in the development of this skills course. The ACA does not endorse or certify this sample skills course and does not currently certify packrafting as an ACA discipline. Check the APA website for updates to this sample curriculum and other education-related information.

APA Packrafting Curriculum Workgroup: Luc Mehl, Becky King, Monica Morin, Tony Perelli, and Monte Montepare

LEGAL DISCLAIMER: Please be advised that this document is intended for educational purposes only, and not for providing technical advice, standards, or opinions. The APA's current and past directors, officers, executive council members, employees, volunteers, sponsors and instructors shall have no legal liability, obligation, or responsibility to any person or entity for any loss, damage, injury or other adverse consequences alleged to have occurred directly or indirectly

Level 3: River Packrafting

Version 1.0

because of information or material contained in this document or otherwise taught during a skills course.