



AMERICAN CANOE ASSOCIATION

ADVANCED SWIFTWATER RESCUE

COURSE OBJECTIVES: To teach effective skills for whitewater rescue, including self rescue techniques, rope handling skills, and approaches for dealing with boat pinning and entrapment. Special attention is given to teaching simple, effective skills that make good use of the limited gear that whitewater paddlers can carry.

JUDGEMENT, SAFETY, AND RESCUE OBJECTIVES: Students are taught that rescue, like river running, requires good judgement. Participation in the exercises contained in this program is voluntary, depending on student self-assessment. The course will use on-water scenarios to help students develop an effective response to commonly encountered problems. Exercises will utilize techniques for protecting the rescuer and providing safety backup.

PREREQUISITES: All paddle craft are welcome. Students should be intermediate whitewater paddlers, capable of ferrying and catching eddies in Class II whitewater. They should be in good physical condition, with strong swimming skills and no fear of going underwater. Students should dress for swimming and prolonged immersion. All appropriate personal river gear, plus a throw rope, two carabiners, and 15 feet of 1" tubular webbing, should be brought to class.

COURSE DURATION: Two days

LOCATION: A whitewater rapid of Class II difficulty with a deep, clean chute, some wave action, and strong eddies. The course may be taught in moving water if whitewater is not available. In case of bad weather, sheltered classroom space is required. Access to a video player is a plus.

COURSE OUTLINE

*are required modules

I: *Introduction to Whitewater Safety and Rescue

- Avoiding Trouble
- On-water Group Management
- Rescue Philosophy
- RETHROG
- KISS

- Rescue Organization
- Liability Issues

II: *Overview of Equipment

- Clothing
- Boats and Gear
- Rescue Gear
 - Rescue PFD
 - Helmet
 - Knife & Whistle
 - First Aid Kit

III: *Swimming Skills

- Swimming- the basis for self-rescue
- Defensive and aggressive Swimming
- Swiftwater entries
- Crossing eddylines
- Swimming into strainers
- Swimming over pourovers and ledges

IV: Wading Skills

- Basic Principle – always maintain your balance!
 - Individual – with paddle
 - Group wading: Paired, Circle, Line, & Wedge

V: Rope handling skills

- *Selecting a Rescue Line
 - Rope Materials & Construction
 - Static vs. dynamic rope
 - Breaking Strengths
 - Throw bag design and lengths
 - Webbing and Prussiks

- *Throw Bag Management
 - Handling a rope in current
 - Avoid “Standing in the Loop”
 - Stance & Throw
 - Underhand,
 - overhand,
 - sidearm

- Re-stuffing and carrying
- Use of Coiled Lines

- *Positioning to pendulum a swimmer
 - Setting up the throw
 - Catching the line
 - Vectoring the line

- *Belaying Skills
 - Individual and Buddy Belays
 - Dynamic Belays



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VI: Using Lines across the river

- Ferrying a line
- The Vee and the Vector Pull
- Use to support wading
- Line Assisted Wading
- The Zip Line

VII: Using Rescue PFD's

Overview of Rescue PFD's

- How the swiftwater harness works
- What causes harnesses to jam
- Makes and Models
- Types of tethers
- Rescue PFD Skills
 - Belaying shore-based personnel
 - Self-belay
 - Belaying Swimmers
 - As a boat towing device
 - Tired Swimmer Rescue
 - Straight and Vee Lowers

VIII: Rescue of Loose Boats and Gear

- Self Rescue
 - Swimmers should abandon gear in difficult rapids
 - Chase people first, gear second
 - When manpower permits, split up the load
 - one person helps the swimmer,
 - another the boat,
 - and the third the paddle
- Using "Snowplow boat bump" rescues.

IX: Knots

- *Figure 8 Family of Knots
- *Water Knot
- *Fisherman's Knot

Bowline

X: Releasing Pins

- Boat Pinning Mechanisms
- Strong Arm Releases
- Using Mechanical Advantage – The Z-Drag
 - Understanding the mechanism
 - Setting Anchor Points
 - Safety Considerations
- The Vector Pull

XI: Dealing with Entrapment

- Causes of entrapment
 - Canoe & kayak outfitting
- Heads up vs. Heads Down situations
- Entrapment Rescue
 - Getting muscle to the scene
 - Support, then extricate
 - Using Stabilization and snag lines
 - Foot entrapment Rescues

XII: Closing: This is just the beginning – keep on learning!

Recommended Resources:

Whitewater Rescue Manual by Walbridge & Sundmacher

River Rescue by Bechdel & Ray

Swiftwater Rescue by Slim Ray

Whitewater Self Defense (Video) by Ford, Walbridge, & DeCuir

River Safety Reports by Walbridge

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