



## AMERICAN CANOE ASSOCIATION ADVANCED WHITEWATER KAYAKING

### **Course Objectives:**

To refine and extend the judgment and technique of intermediate paddlers on class III to IV whitewater. This course is not to be taught on water of greater difficulty than class IV. To introduce advanced techniques including boat control, playboating and river running as appropriate to the site.

### **Judgment, Safety & Rescue Objectives:**

This course will use on-the-water scenarios to assess risk, evaluate rapid features and complexities, develop strategies, and nurture good judgment. Course will emphasize use of proactive, aggressive rescue skills stressing self reliance. This course should only be taken by those with a reliable river roll and self rescue skills.

### **Prerequisites:**

Completion of a whitewater course and proficiency and experience in executing all strokes, maneuvers and techniques needed for paddling on class III whitewater. A reliable roll and the ability to aggressively self rescue required. Participation in a Swiftwater rescue course strongly recommended.

**Course Duration:** Minimum of 8 hours.

**Location:** Minimum of class III whitewater / Maximum of class IV whitewater. Site should include a variety of features to meet the course objectives.

**Course Ratio:** 1 Instructor to every 5 students (1:5) / 2:10 with an additional instructor or qualified assistant

### **COURSE OUTLINE**

#### **Judgment**

Unlike on easier whitewater where the emphasis is on hard skills which are easily defined, on advanced whitewater judgment and personal and group responsibility are of key importance.

#### ***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

RKC 09/2008

© American Canoe Association

[www.americancanoe.org](http://www.americancanoe.org)

### ***Water Reading***

- Current speed, direction and changes to either caused by streambed features.

### **Safety & Rescue**

Expose students to appropriate rescue techniques including:

- Boat bumping
- Aggressive swimming
- Throw rope use
- Wading
- Recommend taking a separate Swiftwater rescue course

### **Paddling Techniques & Mechanics**

#### ***Body mechanics***

- Three Ranges of Motion; tuck, twist, C [example; roll]
  - Posture enhances twist, balance, comfort.
  - Torso Rotation to use large muscle groups, improve reach.
- Minimize Shoulder Problems; correct body positioning, paddle placement; the box
  - Power transfer varies with flexibility and strength
  - Advantages of turning torso into boat's new direction versus steering with stern strokes
- Lower Body Balance:
  - Heeling[J-lean], bellbuoy, fake leans, head dinks
  - Value of Warm Up and Stretching

#### ***Boat factors***

- Carving verse Skidding; affected by steadiness, range of boat heel, power application
- Glide; determined by boat pitch, yaw, roll

- Hull Design; resistance of the boat through water
- Steering and Corrections; done at both ends of boat depending on situation
- Pivot Point of Boat; changes with speed.
- Pressure Control to Transfer Force; feet, knees and pelvic thrust
- Outfitting; to improve efficiency of force transfer

#### ***Blade factors***

- Propulsive; blade close to boat centerline to minimize turning [vertical paddle]
- Turning: blade as far from centerline and pivot point to maximize turn
  - vary power, blade angle, distance from pivot point for fine control
  - define quadrants [angle relative to boat]
  - define blade angle; degrees, open, closed, etc
- Moving the Boat is the Object
  - blade angle relative to direction of travel
  - efficiency of force application; pull instead of punch
  - accelerate blade and recover quickly to increase stroke rate
  - stroke timing

#### **Note:**

The intent of this course is to refine and upgrade the paddler's skills. It is not introducing new material as much as it is refining and fine tuning strokes and maneuvers already taught in previous courses. For example, in this class, catching an eddy is not the real focus, but how it is caught and catching it in a number of ways is emphasized.