

PHED 137: White Water Kayak 1

Instructor:

Phone #

Email

Office:

Office Hours

[Link for student services](#)

<http://cms.montgomerycollege.edu/mcsyllabus/>

Course Description:

This is an introduction to the basic skills of flat water and river kayaking with rapids of moderate difficulty. The course will cover basic paddling skills, equipment selection and adjustment, safety practices, trip planning and rescue procedures. The course will run on four Saturdays from 8 am to 3 pm on the Potomac or other nearby rivers.

Prerequisites: Basic swimming ability and comfort in the water.

Course Goals:

Introduce students to the sport of white water kayaking and develop basic paddling skills and safety skills to maximize the enjoyment of the sport.

Course Objectives:

- 1) The student will understand the procedures used for the proper selection, adjustment and sizing of basic paddling equipment.
- 2) The student will develop proficiency in the basic strokes and maneuvers used in kayaking.
- 3) The student will learn self rescue skills and basic techniques for assisting in the rescue of other paddlers.
- 4) The student will identify common hazards associated with the sport of kayaking and utilize various strategies to minimize risk.

- 5) The student will learn to recognize various river features, pick potential lines and negotiate a variety of rapids.
- 6) The student will learn to use the currents and features of the river to efficiently perform basic maneuvers.
- 7) The student will identify paddling opportunities in the local area and develop an understanding of the risks and preparation necessary for safe paddling.
- 8) The student will respect the natural environment and minimize the impact of kayaking on the environment by not polluting or degrading the river or surrounding resources.

Personal Clothing Requirements:

In order to participate, you must dress for the water and weather conditions of each class. These can vary widely. Bring swim attire and shoes for the river everyday including the first day of class. Bring a towel and a change of clothes including shoes. Paddle jackets and pants are available for your use during cooler weather but you must provide wicking underwear or fleece on cooler days and suitable foot wear for the river. (shoes that are small enough to wear in the kayak and that will stay on your feet in a rapid should you capsize and swim)

Punctuality:

With the exception of the first day, class will begin at the paddling site at 8:30. You will need to arrive by 8:00 in order to get your equipment and participate in a shuttle to get our vehicles to the take-out. If you are late to class your boat and equipment may no longer be available and you will not be able to participate.

Grading Plan:

Completion of the river instruction experience

4 sessions	-	400 points
3 sessions	-	300 points
2 sessions	-	200 points
1 session	-	100 points

Take Home Exam 100 points

Skill Proficiency 50 points

Participation Score

The instructor will use the following criteria to assess the level of participation for each student for each class.

The student demonstrates only a minimum effort or attempts to appropriately challenge themselves during skill practice and while on the river. 25 points/class 100 points

The student demonstrates numerous attempts to appropriately challenge themselves during skill practice and while on the river. 50 points/class 200 points

The student maximizes efforts during skill practice and on the river to challenge themselves and optimize their technical paddling ability. 75 points/class 300 points

Grade Scale Total Points 850 points possible

A 700 points

B 600 points

C 500 points

D 400 points

Please come prepared to get wet on the first class. We will meet in PE class room 137 at 8:00 complete some paperwork and then proceed to the river for the rest of the day. Please dress appropriately swim suit and shoes that you can wear in the kayak) and bring plenty of fluids and a lunch.

Directions to Riley's Lock

13015 Riley's Lock RD, Poolesville MD 20837

From Montgomery College

Left on 355 to Gude Drive

Left on Gude Drive

Right on to 28 to Darnstown

Left on Seneca Rd (Across from Harris Teeter Grocery store)

Left on to Riley's Lock Rd. (after River Rd comes in to Seneca and before the bridge over Seneca Creek, Breton Woods Country Club will be on your left, sign for Caleva.)

Meet in the parking area on the left across from the boat ramp.

Directions to Old Angler's Inn Put-in

10801 MacArthur Blvd., Potomac MD 20854

I 270 South (right spur) to 495 toward Tysons Corner

Take 495 to the last exit before the American Legion Bridge (Carderock Exit)

This is Clara Barton Parkway heading west toward Carderock and Great Falls

Go left on Macarthur Blvd. when the Parkway ends.

Parking area is on the left across from the Old Angler's Inn Restaurant

A student who may need an accommodation due to a disability should make an appointment to see me during my office hour. A letter from Disability Support Services (DSS) authorizing your accommodations will be needed.

ASSIGNMENT/ACTIVITY SAMPLES

Boat Parts

- Bow
- Stern
- Deck
- Bottom
- Cockpit
- Thigh Braces
- Foot Brace
- Hip Pads
- Flotation
- Back band
- Grab loops
- Rails

Boat Features/Types/ Materials

- Rocker
- Planning Hull
- Hard or Soft Chine
- Length
- Beam
- Volume
- White Water Boats: River Runner, Play Boats, Race Boats (Slalom-Down River), Squirt Boats
- Other Types of Kayaks: Sea Kayaks, Rec. Kayaks, Surf Kayaks, Polo Kayaks

- Plastic /Composite

Paddle Parts

- Blade
- Shaft
- Throat
- Power Face
- Back Face

Paddle Features:

- Feathered Blades
- Asymmetrical Blades
- Spooned
- Indexed shaft
- Right or Left Control
- Bent Shaft

Equipment

- Personal Flotation Device
- Helmet
- Spray Skirt
- Throw bag
- First Aid Equipment
- Biners, Pulleys. Prussicks

Boat Skills

Fitting the Boat

Proper sized boat

Snug fit

Foot braces

Thigh braces

Hip pads

Back Band

Stretch before adjusting the boat.

Make sure that you are well connected to the boat so that the boat moves when you do.

Make sure that you are comfortable and can get out when necessary.

Wet Exits

Flip

Kiss the Deck

Slap the boats bottom with both hands.

Find the Skirt Grab Loop

Pop the Skirt

Hands Behind Hips on Deck

Push the Kayak Forward

Roll Toward Your Knees in a Clean and Controlled Fashion

Make sure your legs are out of the boat before coming up for air.

Grab your Boat & Your Paddle In One Hand and Swim for Shore.

T-Rescues

Flip

Remain calm.

Drum on the boat bottom to get potential rescuers attention then reach with both hands forward and aft along the bottom searching for the bow of a rescuer's boat.

When/if you find the boat place both hands and your head on the boat.

Use your knee and hip to roll the boat back under your body.

Minimize the use of your arms. Protect your shoulders.

Strokes

Forward Sweep turning stroke

Catch

Wind Up (Rotate Body)

Blade Immersed

Low Shaft Angle

Power

Blade Anchored (no cavitation)

Complete Arc

Torso Rotation

Quality Stern Draw

Recovery

Stoke ends with both hands over the water & the paddle is parallel to the boat.

Feathered Recovery

Reverse Sweep

Catch

Wind up (rotate body)

Blade Immersed

Low Shaft Angle

Power

Blade Anchored (no cavitation)

Complete Arc

Torso Rotation

Quality Stern Draw

Recovery

Stoke ends with both hands over the water & the paddle is parallel to the boat.

Feathered Recovery

Forward Power Stroke

Moves the boat to the paddle

Maximize the use of the large muscles of the torso

Pick a target and paddle toward it with intention

Use a stern draw for corrections

Catch

Wind Up (rotate body)

Reach with the lower hand

Insert blade near your toes

Blade Anchored

Top Hand between top of head and shoulder

Power

Pull boat to the paddle by unwinding the torso

Top shoulder driven forward maintaining a high pivot point

Pull with torso & lower arm

Short stroke end between knee and hip

Recovery

Lift blade by raising elbow

Lift when your knee approaches the blade

Wind up for another stroke on the opposite side

Reverse or Back Stroke

Use the back face of the paddle

Do not change your grip

Use a rudder or bow draw to correct

Look where you are going

Catch

Wind Up (rotate body)

Reach back with your lower hand

Insert the blade behind your hip

Top hand between shoulder and top of head

Power

Boat is pulled to the paddle by unwinding your torso.

Top shoulder driven back

Push with the lower arm

Short stroke end before the knee

Recovery

Lift blade by raising elbow

End stroke before your knee Wind up for next stroke

Draw Stroke (used to move the boat sideways or abeam)

Catch

Rotate body; face the direction you wish to travel

Hands stacked over the water, vertical paddle shaft

Top hand remains still acts as a fulcrum.

Lower arm extended

Power

Use lower hand to move your hip & the boat to the paddle

End stroke near boat

Recovery

Rotate lower wrist to feather the blade

Slide blade back to the catch position

Rotate wrist back so that the power face is facing the boat

Sculling Draw (variation)

Vertical Shaft

Blade 6"-10" from the boat

Move blade through an arc by rotating body

Apply minimal resistance to the blade with lower arm

Stationary Draw (variation boat must be moving or in moving water)

Vertical Shaft

Power face parallel to the boat at the hip

Paddle does not move

Hands stacked over the water

J –Lean (edging the boat)

Head and body balanced over the boat

Boat on edge using knee and hip

Lower and upper body act independently

Try to develop several distinct leans of increasing angles for various conditions

Kayak Rolls: A basic skill that takes a lot practice but is not physically strenuous. It helps to be relaxed under water.

Set Up: Gets your paddle and body oriented to the boat

Arch: Gets your body near the surface of the water

Hip Snap/ Head Dink: Pulls the boat back under your body using your knee & hip

Think about trying to put your knee in your ear. Lifting your head will stop the roll.

Try to minimize the pressure on your paddle. Roll up with a strong hip snap.

High brace (recovery stroke)

A high brace allows one to avoid flipping by bring the boat back under the body when out of balance using the power face

The power face slaps the water

Paddle is perpendicular to the boat

Paddle is above the elbows

Keep arms low and elbows close to your body

Dink head

Hip snap boat back under body

Rotate wrist to slice blade back to the surface.

Low Brace (recovery stroke)

A low brace allows one to avoid flipping by bring the boat back under the body when out of balance using the back face of the paddle

The back face slaps the water

Paddle is perpendicular to the boat

The elbows are above the paddle

Keep arms low

Dink head

Hip snap boat back under body

Rotate wrist to slice blade back to the surface.

Duffek (turning stroke used to change directions in a current)

This is a static stroke the boat must be moving

Top hand wrist faces your face

Lower hand controls the blade angle and the turn.

Lower elbow in

Rotate body to the direction you wish to turn

C Stroke

This stroke combines a closed face draw stroke with a power stroke.

It is a useful stroke for controlling the spin momentum of the boat and paddling in arcs of various sizes.

Catch: rotate body, anchor the paddle near the bow of the boat with a closed face (front edge) closer to the boat.

Power: Do a draw stroke to the bow and then turn it into a forward stroke. The more draw stroke used the tighter the circle or arc, the more power stroke used the larger the circle or arc.

Recovery: Lift blade by raising elbow lift when your knee approaches the blade

Wind up for another stroke on the opposite side. Or hold the blade parallel to boat near the hip before recovering in order to carve without spinning out.

OTHER

- Meets at Rockville on 1st day – (lecture and pool)
- All other class meetings are off campus
- Need to coordinate equipment use with Lab Coordinator