

FOX CHAPEL CREW CLUB



2010-11

PARENT HANDBOOK



Welcome to all Fox Chapel Crew Club parents and athletes.

We are so happy you are joining us for an exciting new rowing season. We hope this handbook will answer a lot of your questions, however if you have additional questions or suggestions, please let us know.

Rowing is a wonderful sport. Your child will grow and develop both physically and emotionally. Many of us who have participated in the sport as parents of athletes, have come to believe that crew is one the best uses we have ever made of our family's resources. Fox Chapel Crew has taught our children about discipline, motivation, respect, dedication, competition, winning and losing, humility, joy, teamwork and lasting friendships. The character development our kids have gained has been far greater than any financial commitment we have made. It has been worth every penny, and much, much more.

We wish all the rowers and families the very best in the coming season.

Sincerely,

Fox Chapel Crew Board

History of Fox Chapel Crew

The Fox Chapel Crew Club was created in the spring of 1995 with a roster of 8 girls and 5 boys, led by Head Coach Mark Bellinger. Today our team has grown to include over 50 student athletes, and we are fortunate to still have Dr. Bellinger at the head of our coaching staff and President of our board.

The Fox Chapel Crew Club is not simply a team, but an organization of coaches, students, and parents. FC Crew parents play a fundamental role in the continuing success of the club and each parent should try to become involved in some way. Club parents have learned that participating in the crew experience provides them a rare opportunity to mingle with their child's friends, as well as share in their child's triumphs, building long-lasting memories. Giving one's time does entail making some sacrifices. When only a few people volunteer, the sacrifice for them is huge. When all our families volunteer, the sacrifices are small, and the rewards are the greatest.

Rowing benefits its participants in ways that go far beyond fitness and competition. Discipline, leadership, dedication, teamwork and time management are among the skills developed from participation in crew. Fox Chapel Crew rowers are consistently ranked at the top of their classes and have a record of academic excellence and scholastic leadership.

Coming fresh from a 15th season that saw our Lightweight Eight with cox rank 12th in the nation at the US Rowing Junior National Championship—making last year the sixth year in a row in which FC crews have participated in Nationals—we look forward with great anticipation to the challenges and triumphs of the 2010-2011 rowing season.

Coaching Staff

Head Coach	Mark Bellinger	412-973-6653	bellinger@peduro.com
Men's Head Coach	Chelsea Breitenbach	513-518-5030	breitenbachc@duq.edu
Women's Head Coach	Lauren Thorpe	570-510-1884	laurenethorpe@gmail.com
Assistant Coach	Katie McCarthy	412-551-0623	Kmcc08@att.blackberry.net
Assistant Coach	Meaghan Froehlke	412-889-0552	meaghanfroehlke@hotmail.com

FC Crew Board

President	Mark Bellinger	412-973-6653	bellinger@peduro.com
Secretary	Kristi Sparta	412-600-7067	kristisparta@yahoo.com
Treasurer	Bharti Patel	412-967-0585	ramgeet729@gmail.com
Boys	Jeff Good	412-258-5332	Mariner458@aol.com
	Vedant Patel	412-913-0922	Vedant.patel25@gmail.com
Girls	Erica Taylor	412-651-2133	Ericataylor27@comcast.net
	Stephanie Meinert	412-963-6078	Taz13@prodigy.net

Vice Presidents:

VP Communications	Kristi Sparta	412-600-7067	kristisparta@yahoo.com
VP Events	Margaret Bell	412-967-9493	bellmd@upmc.edu
Co-VP Travel	Sharon Genser	412-767-9727	genser.family@verizon.net and Sharon.genser@bnymellon.com
	Kathy Good	412-767-0329	crkbgood@comcast.net
VP Food	Heather and Erik Klug	412-963-7555	Heather_lynn@comcast.net
Assisting	Jeff and Susie Eicher	412-963-0277	susieeicher@comcast.net
Assisting	Judy and Steve Gostowski	412-977-7645	jwg60@verizon.net

Other Contacts:

Media Relations	Shelley Taylor	412-772-1612	shelleymtaylor@comcast.net
Merchandise/Crew Gear	Patty Todd	412-767-4802	gympretzel@aol.com
	Sherri Gould	412-767-5191	cabsgould4@comcast.net
Car Wash Committee	Tom Sparta	412-215-3874	tom.sparta@comcast.net
	Adrian Roe	412-967-5628	aroe@roelawoffice.com
	Eric Hamilton	412-781-8033	hamilton184@comcast.net
SRO Rep	Gary McKaveney	412-4-0794	gary.mckaveney@usfood.com
Giant Eagle Cards Fundraiser	Kim Power	412-963-6432	japowerjr@comcast.net
	Cathy Bellinger	412-781-3392	gramb1@verizon.net
	Barb Barry	412-781-2970	Barbara@in-visionstudio.com
Equipment Trailer Coordination	Daphne Kaplan	412-782-3840	daphnewk@aol.com
Equipment Trailer Driver	Stu Donaldson	412-951-7777	donaldson703@gmail.com
Banquet Committee	Britten McKaveney	412-260-6613	brittmckav@gmail.com
	Arlene Cullen	412-781-8160	Arlene.cullen@agcullen.com
	Nancy Stewart	412-767-5975	nancstew@yahoo.com

2010-11 Team Captains

Captains for Boys' Team	Jeff Good	412-258-5332	Mariner458@aol.com
	Vedant Patel	412-913-0922	Vedant.patel25@gmail.com
Captains for Girls' Team	Erica Taylor	412-651-2133	Ericataylor27@comcast.net
	Stephanie Meinert	412-963-6078	Taz13@prodigy.net

Team captains are elected by the student-rowers. The election is held at the end of the season and once elected, the captain's term of service runs from the spring banquet until the banquet of the following year. Being elected a captain is an honor that carries with it a great many responsibilities. The election of an individual to this position and the amount of work required of a captain should not be taken lightly.

Membership Information

Forms, Waivers, Fees, and Dues

The Fox Chapel Crew Club is a non-profit organization supported by its membership dues and fundraising. Membership forms and waivers are required for each season and are available at the start of practice for each season.

Financial Obligations

Without a doubt, running a crew program is expensive and with limited support from the school district, we raise all our money through dues and fundraisers. Due to the continued tremendous interest in the sport, the need for new boats and equipment to ensure all interested students may participate is significant. For example, the cost of one new, fully equipped racing eight is more than \$35,000; a set of oars run to \$3000; launches at \$5000 . Funds are also needed to ensure adequate coaching support and to assist students and families for whom fees may be prohibitive.

Payment Plans and Scholarships

The club is willing to arrange payment plans to meet any family's budgeting requirements. Payment plans and scholarship requests may be made to the club treasurer at the beginning of each season, all information is kept confidential.

Dues and Travel Fees

These are some of the things you pay for when you pay dues and race fees:

- Coaches' Salaries
- Insurance for our boats and equipment
- Storage fees for our boats
- Membership to Three Rivers Rowing Association for each team member
- Membership to US Rowing Association for our team
- Hotel and transportation fees for each race trip
- Food/snacks at race course
- Race entry fees and other race-related expenses
- Purchasing boats and other major equipment

All rowers must pay their dues and expenses in a timely fashion or it becomes more expensive for all participants.

Fundraising

We receive a minimal amount of funding, approximately \$5000 per year, from the Fox Chapel Area school district. Because registration fees and travel fees do NOT completely cover the cost of operating the club, we rely heavily on fundraising. Fundraising allows us to maintain fees as low as possible, make necessary capital purchases, provide scholarships, and maintain existing equipment.

Our fundraising efforts include both mandatory and optional components. Each rower is required to complete mandatory fundraising as part of their registration, for example, all rowers are required to attend the car wash fundraisers. Optional fundraising supports the club and therefore requires help from all of the FC Crew Club community. FCCC also gratefully accepts donations from individuals and corporations who would like to support our team. All donations are tax deductible.

Giant Eagle Cards

Giant Eagle Cards are the *easiest* way to raise funds for Fox Chapel Crew Club, we earn 5% of the face value of every card! The gift cards can be used at Giant Eagle for food, prescription medicine, [gift cards to over 50 other stores](#) (such as Sears, Kohls, Olive Garden, Best Buy, Home Depot, and just about anything in the store but money orders. They also can be used at Get Go for gasoline purchases. Fuel perks are still earned. Just let us know how much you would like to purchase and we will deliver them personally to your home. Cards come in \$25, \$50, \$100 and \$200 denominations. You can also set up a monthly standing order. The form is on the website under [For Parents](#), just fill out the form and put your check in the mail and you will receive your cards.

Fall Dues

Fall Dues: \$325 (\$275) for additional siblings

Travel Fees: \$90

Total: \$415

Payment 1: \$215 (half) due by **September 1st**

Payment 2: \$200 due by **October 1st**

Please send a check made out to FCCC to our club treasurer:

Bharti Patel

406 Jamesborough Drive

Pittsburgh, PA 15238

*rowers will not be able to continue training beyond September 1 unless their dues have been paid.

Spring Dues (TBD) *based on success of volunteerism and fundraising

Spring Dues: \$325 (\$300) for additional siblings

Travel Fees: \$350

Total: \$675

Payment 1: \$ 337.50 (half) due by **March 1**

Payment 2: \$ 337.50 due by **April 1**

Please send checks made out to FCCC to our club treasurer:

Bharti Patel

406 Jamesborough Drive

Pittsburgh, PA 15238

*rowers will not be able to continue training beyond March 1 unless their dues have been paid.

Practice Facilities

The team trains at the newer of the Three Rivers Rowing Association's two boat houses on the quiet channel beside Herr's Island. Located in Millvale's Riverfront Park under the 40th Street Bridge, the Millvale boat house is actually two buildings, one for storing boats and the other for training.

The training center has two indoor rowing tanks that allow 16 people to simulate rowing. It also has a weight room, a large room with indoor rowing machines, lockers, showers, meeting rooms, and room to house equipment. The boat house is shared by many teams and appropriate security measures should be observed. The locker rooms are open to all who use the facility, and rowers are advised to bring a lock and use a locker during practice. Locks cannot be left on all the time without paying a fee to Three Rivers.

Directions to the Boat House: Take the Millvale exit from Route 28 South. After continuing straight at the traffic light, turn left at the stop sign, following signs to re-enter Route 28 South. Turn immediately left at the bottom of the Route 28 entrance ramp into Millvale Riverfront Park, and follow the road to the right and all the way to the end.

2010-11 Race Schedule

October 9	Head of the Ohio (Pgh) Do NOT schedule SAT on this day!
October 16	Speakmon (Columbus, OH)
October 30	Blake Haxton Fall Invitational (Columbus, OH) Henley-style Race
November 13	Allegheny Boat Race (v. Central Catholic) and Women's Race (Allegheny)
December 11	Central Catholic Biathlon (optional)
January 29	Pittsburgh Indoor Sprints Championship (optional)
March 5	North Allegheny Erg Race (Marshall Middle School: all-team participation)
March 19	Jewell Cup 1 (Allegheny)
March 26	Jewell Cup 2 (Allegheny)
April 2	Golden Bear Invitational (Jewell Cup 3) Columbus, OH
April 9	Jewell Cup 4 (Allegheny)

April 30	Ohio Governor's Cup
May 7/8	Jewell Cup Finals: Western PA Championship (Allegheny)
May 14-15	Midwest Scholastic Championship (Harsha Lake: Cincinnati, OH)
May 25-29	SRAA Nationals *invitation only (Cherry Hill, NJ)
June 10-12	US Rowing Youth Nationals *invitation only (Oak Ridge, TN)

*dues do not cover events in which participation is by invitation only. It is up to the individual participants to cover the costs for these events.

Additional Dates

August 23,24	Novice Camp 3-5 pm
August 28	Novice Camp 8-11 am
August 23, 24	Experienced rowers warm-up camp 5-7:00 pm
August 30	All Team Meeting/Safety Video 5:00-7:00 pm
September 11	Car Wash at Jack's (mandatory attendance)
October 2	Sunoco Carwash / Experienced Boys practice from 7-8:30am and go right to car wash

The dates for the following events have yet to be determined.

November	Fall Fundraiser
December	Boy's Winter Retreat and Girl's Winter Retreat
January	Spring Parent Meeting
February	Winter Fundraiser
March	Spring Car Wash
April	Spring Car Wash
May	Spring Car Wash
May	FC Crew Banquet (Futules' Harmar House)

On The Water

Commitment

Practice is the foundation of success in any sport. Rowing is a unique sport in regards to practice because if just one member of a boat does not attend practice, the eight other athletes in that boat are unable to practice. Therefore, all athletes are expected to attend all scheduled practices. The coaching staff recognizes that legitimate conflicts arise and ask when at all possible, that athletes and/or parents notify coaches in advance of an impending absence.

Safety

When rowers train on the water, coaches accompany them in safety launches. The launches are equipped with safety gear and all coaches carry a cell phone. No rower is allowed on the water without the direct supervision of a coach.

Weather

On the water practice continues in all weather conditions, except lightning and high winds. Canceling on the water practice is at the discretion of the coaches. Unless told otherwise from a coach, athletes should report to the boathouse for practice, erging or other activities may replace practice on the water on inclement days.

If practice is cancelled for transportation reasons BOTH men and women will be cancelled. When classes at FCHS are cancelled, practice will be cancelled as well. If students are still in class and a decision is made to cancel practice, Mark Bellinger will contact the high school by 1:00 pm so an announcement can be made before school ends.

Swimming Test

Basic swimming skills and comfort around the water is required in the unlikely event a rower should go into the water. A swimming test is required for each rower and the certificate is good for 4 years.

Practice Clothes

Rowing gear can be as minimal as a pair of shorts, tank top, and a pair of socks. Clothing should be close fitting so it minimizes wind resistance and does not get caught in the slides of the seat while rowing. Slip on sandals that may be worn over socks are important. Sandals can be slipped off just before getting into a boat and slipped back on again before carrying the boat up off the docks.

Tennis shoes are always required and layering usually works best for colder weather practices. Rowers are encouraged to always bring a bottle of water, even on cool days when there is not much sun.

Fall Schedule

	Mon	Tues	Weds	Thurs	Fri	Sat
3:30-5:30 pm	Novice Millvale	Novice Varsity Men Millvale	Novice Millvale	Novice Millvale	Varsity Men Millvale	TBD weekly
5:00-7:00 pm	Varsity Men Varsity Women Millvale	Varsity Women Millvale	Varsity Men Varsity Women Millvale	Varsity Men Varsity Women Millvale	4-6 pm Jr High Crew Varsity Women 4:30-6:30 pm site TBD	

Tentative Winter Schedule

*begins approx. Jan 5th and continues until we are able to get back on the water.

	Mon	Tues	Weds	Thurs	Fri
Men	5:00-7:00 Millvale	4:00-5:30 Millvale	5:30-7:00 Millvale	4:00-6:00 Millvale	4:00-6:00 Millvale
Women	4:30-6:00 Wash. Landing	3:00-4:15 Millvale	5:00-6:30 Wash. Landing	TBA At school	5:00-7:00 Wash. Landing

Tentative Spring Schedule

	Mon	Tues	Weds	Thurs	Fri
Novice	3:15-5:30 Millvale	3:15-5:30 Millvale	3:15-5:30 Millvale	3:15-5:30 Millvale	3:15-5:30 Millvale
Varsity	5:00-7:30 Millvale	5:00-7:30 Millvale	5:00-7:30 Millvale	5:00-7:30 Millvale	5:00-7:30 Millvale

Spring Break Schedule:

Saturday, April 16	Two practices at MV
Sunday, April 17	Two practices at MV
Monday, April 18	Two practices at MV

Tuesday, April 19	Two practices at MV
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Wednesday, April 20 through Sunday, April 24th: No practices

Carpooling

Due to the nature of being on the water, it is not always a sure thing that practice will end exactly on time, so parents who plan to pick up crew members should not be surprised if practice runs over 15-20 minutes on occasion. This sort of delay can wreck havoc with the finely balanced schedules crafted by many a parent, so it is suggested that team families and neighbors form carpools for travel to and from practice. Check the team roster to find crew members in your neighborhood.

Travel and Racing Information

A major part of what we do is race; even novice rowers race and compete in events specifically designed for novices. All rowers on the team are expected to attend each race. When a rower is training for a particular season it is assumed he or she can make it to the races on the schedule. If you cannot attend a race for any reason, please notify your coach as soon as possible.

Fox Chapel Crew travels as a group, with parent drivers or a charter bus. We work to keep the travel costs per rower as low as possible. Rowers are never permitted to drive themselves to an out of town regatta. All rowers will travel with the team, leaving early is discouraged and should only be planned for emergencies.

Uniforms

Novice rowers generally wear a team decorated t-shirt and black spandex shorts in the fall and a racing jersey and black spandex shorts in the spring. The required boys varsity uniform is a unisuit (around \$60) but it will last several years. The required girls' varsity uniform is a racing tank and black racing shorts. The rest of the Fox Chapel Crew team gear—polo shirts, gortex team jacket, hats, long-sleeved t-shirts, hoodies, are available to the athletes and parents for purchase but are not required.

Trip Itineraries

The Travel Coordinator will make all necessary arrangements for crew participants' transportation, accommodations, and restaurant reservations. Information containing departure and return times, what to bring, where we are going, and where we are staying, will be sent emailed to parents approximately a week before the trip. For economical reasons we attempt to do many out-of-town regattas in one day, leaving around 3am and returning in the late evening.

Chaperones

This is the toughest but most rewarding volunteer position. You are entrusted with the safety and well-being of the rowing team and it is a job that is taken seriously, but it is also a great deal of fun.

For out-of-town regattas a 55 passenger bus is hired to transport most of the team, we require at least two adult chaperones to ride the bus. When staying overnight, students are housed four to a room and chaperones each take responsibility for two or four rooms. The overall goal of the chaperone is to free the coaches up to coach. The Head Chaperone's primary responsibility is ensuring the 50+ kids get from point A to point B safely and on schedule and be able to coordinate actions when unexpected conditions force plans to change. This is done in collaboration with the coaching staff.

Packing for a Regatta

Be Prepared! Some items to bring include: race uniform, extra pairs of socks, sneakers and sandals, long sleeved t-shirt to wear under racing tank in cool weather, several changes of clothes to layer for warmth, rain gear, warm jacket, gloves, hat, towel, water bottle, sunscreen, lip balm, toiletries, cell phone (to keep parents informed), sleeping bag and pillow (in a waterproof bag), spending money, and something to pass the time (music, cards, HOMEWORK). Please do not bring anything of great value.

Parents and spectators may want to bring lawn chairs, binoculars and cameras, in addition to plenty of clothing options.

Typical Rower Race Day

A one-day race day usually starts very early; the bus will leave from FCHS around 3am and arrive on site around 6-6:30 am. Rowers will gather at the boat trailer to unload, rig and meet with their coaches. Chaperones will help the food committee set up breakfast and put up the tents. When rowers meet with their coaches they learn their race times, plans, etc. and are told when to meet back at the boats prior to racing. Many rowers will race twice on race day depending on the length of the race, regatta schedule, and equipment demand. Coxswains are in charge of keeping their particular boats together.

After rowers and their coaches have a pre-race meeting, the rowers take their oars down and launch their boat. After the race, the crew docks, and rowers have a post-race meeting with their coach. Towards the end of the regatta, the team will begin to de-rig the boats and load them onto the trailer. Parents/chaperones will break down the tents and pack up the equipment trailer. This process usually takes no longer than one hour after the final event. The entire team travels home from the regatta together.

Please do not engage a coach in any discussions regarding complaints or issues during a regatta, understanding a coach's mind is generally preoccupied during a race.

Race Information for Parents

Each regatta follows a similar format but each venue has its own schedule. Most of the regattas have event information online. Coaches will register boats for specific events in the regatta several weeks before a race. A heat sheet will be created by the regatta organizers that will post the start times for each heat or event, and will be available on the regatta website.

The final race schedules are posted a few days before the event. It's only then that we have a good idea of when each rower will race. However, because rowing is an outdoor sport, delays in the event schedule are very likely. It is for that reason that we encourage rowers not to plan something important on race days. When we travel, our return times to Pittsburgh are only estimates, and the rowers will call when they are about an hour from town. If we are going to be late returning home we will certainly have the rowers call.

We depend on the parents to help set up the tent at the race site, and to prepare and serve food. The parents also enjoy cheering the rowers as they launch, while they are racing, and when they dock. After the race, parents should wait until after the post-race coaches meeting to talk in detail to their rower. Parents are encouraged to wear Fox Chapel Crew colors. Shirts, hats, fleeces and other rowing items are available for sale at the beginning of each season, and benefit the team.

Team Spirit

Trust me, you will love crew. You will meet wonderful parents and exceptional teenagers, have a great time at regattas, and make life-long friends. Your child will grow and develop both physically and emotionally. With each day, the effort on all to improve individually and together, the benefits of sacrifice and a strong work ethic, the increased sense of self-confidence and personal integrity, develop into team loyalty and mutual respect and help to turn athletes into a crew.

Many of us who have participated in the sport as parents of athletes, have come to believe that crew is one of the best uses we have ever made of our family's resources. Fox Chapel Crew has taught our children about discipline, motivation, respect, dedication, competition, winning and losing, humility, joy, teamwork and lasting friendships. The character development our kids have gained has been far greater than any financial commitment we have made. It has been worth every penny, and much, much more.

Stay In Touch

FCCC maintains a website at www.foxchapelcrew.org which is your source for information about the team. On the website you can read about our coaches, find the season's racing schedule, check out practice schedules and recent announcements, and browse through the photo gallery. The club has also created a blog for parents, thereby allowing discussions amongst one another. The blog can be reached via a link on the FC crew website www.foxchapelcrew.org.

Volunteerism

The participation of crew parents is crucial to the continuation of this club. We have no professional club managers; everything the club does is accomplished by parents like you, most of whom knew nothing about rowing when their children joined the team. Sign up sheets will be available at the parent meetings. You may also sign up through the website and/or contact the Vice-President in charge of the particular area in which you are interested.

- **Car Wash:** Additional parents are always needed to help out at these fundraisers.
- **Hauler:** Provide a pick-up truck (or equivalent) capable of pulling the equipment trailer to a race. If you are experienced in trailer driving but don't currently have a vehicle up to the task, let us know in case there is a need for a substitution driver. **CRITICAL FOR 2010-11**
- **Cook:** The food committee provides the menu and supplies. Cooking positions are available in shifts on regatta day.
- **Server:** The perfect spot for those who like to nurture. Servers keep the food coming, re-supplying the team throughout the day. It requires only 2-3 hours volunteering and several parents can work together.
- **Kitchen Supply Cleaner:** Following a regatta arrangements are made between the food committee and cleaner for all the dirty cooking and serving utensils to be cleaned and returned before the next regatta. A great task for someone who is unable to attend a regatta but wants to help.
- **Set-Up Team:** Occurs a little before the team bus arrives at the regatta site. Set up tents, grill, food tables, etc.; there are plenty of tasks for all levels of physical ability. Get your volunteer task in early and relax and enjoy a day of competition.
- **Tear-Down Team:** During the last hour or so of the regatta the campsite and kitchen gets packed up while the rowers are busy getting the boats ready for travel. Perfect for those who cannot attend the entire regatta but can come towards the end of the day.
- **Recruitment Team:** We are looking for ways to attract new rowers. The committee will take part in FCHS club days, open houses, and other school sponsored events that potential rowers may attend. The team will also attend DMS events where information about the sport can be distributed.
- **Fundraising:** Each season the fundraising committee develops several mandatory fundraising projects. Other events planned are usually not mandatory but offer opportunities to help offset our expenses.

- **Towel Person:** Need someone to collect, wash and return towels that are used to wipe down the boats after practice.
- **Many more options available! Please contact a board member to volunteer.**

For Novice Parents and Athletes

What is Rowing?

Rowing is a sport for recreation or competition in which athletes' race against each other on rivers, lakes or on the ocean. The boats move across the water by person power through the use of oars. Rowing competitions have been established for juniors (under 18 years old), Masters (from 36-100+ yrs), and is an Olympic sport.

Fitness and Health

Rowing is one of the few non-weight bearing sports that exercise all the major muscle groups, including quads, biceps, triceps, lats, glutes and abdominal muscles. Rowing improves cardiovascular endurance and muscular strength. Rowing reduces fat but does not tend to build muscle in itself, though the associated weight training may do this. High-performance rowers tend to be tall and muscular: although extra weight does increase the drag on the boat, the larger athlete's increased power tends to be more significant.

The Equipment

Rowing is done in a boat called a 'shell'. Perhaps this name comes from the very thin veneer like hull, once made of wax paper and later a thin layer of wood, fragile as an egg shell. Currently, shells are significantly sturdier; made of carbon fibers and plastic. Still, a 60 foot long and 2 foot wide shell big enough for eight 200 pound rowers and a 120 pound coxswain (almost a ton in total) weigh little more than 210 pounds and costs about \$35,000 these days.

There are several different types of boats. They are classified referring to one of five variables and use a shorthand notation. The notation is crucial since race programs and results use the shorthand regularly:

- Number of rowers in the shell. In all forms of modern competition the number is 1, 2, 4, or 8.
- Position of 'coxswain'. Boats are either coxless, 'bow'-coxed, or 'stern'-coxed.

'Sweep' or 'scull'. In sweep rowing, each athlete has one oar, either port or starboard (port is on the left facing the bow of the boat) and so each athlete is either a 'port' or 'starboard'. In sculling, each athlete has two oars, one in each hand.

- Sculling options and notation: single (scull) (1x), double (scull) (2x), quad (or quadruple scull) (4x), octuple (scull) (8x). **Note** the designation (x). This is shorthand to denote a sculling shell.

- Sweep options and notation: straight pair (or coxless pair) (2-), coxed pair (2+), straight four (or coxless four) (4-), coxed four (4+), eight (8+) (always coxed). The designation has no “x” for sweeping, and the + or – indicates whether there is a coxswain.
- Lightweight or Openweight: Lightweight men maximum weight in high school is 150lbs, for women it is 130lb. Put an “L” in front of the boat designation to indicate lightweight.
- Gender. Men’s crew is designated with an M, women is with a W. So, a Men’s lightweight 4 with coxswain would be designated ML4+.

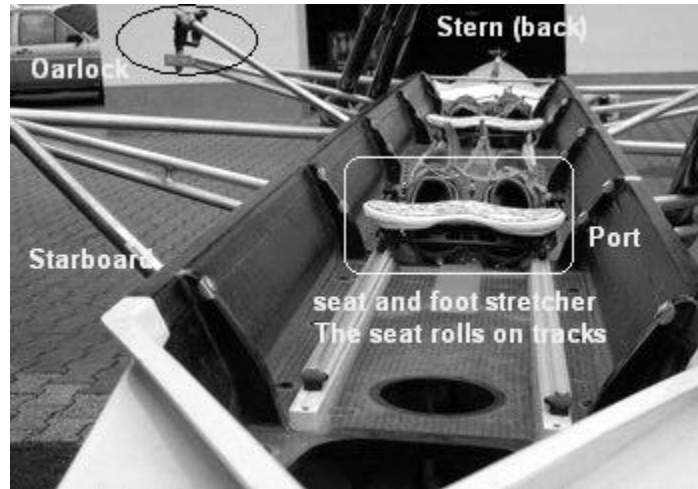
Oars, Riggers, and Seat

Sweep Oars are long poles (360 cm or 11.8 feet) with one flat end about 50 cm (20 inches) long and 25 cm wide, called the blade. Modern oars are made from synthetic material, the most common being carbon fiber. The current blade shape is called the cleaver or ‘hatchet’ and was first introduced in 1991. This replaced the tulip or Macon blade in use from the 1950’s that replaced the long blade used since the turn of the century.

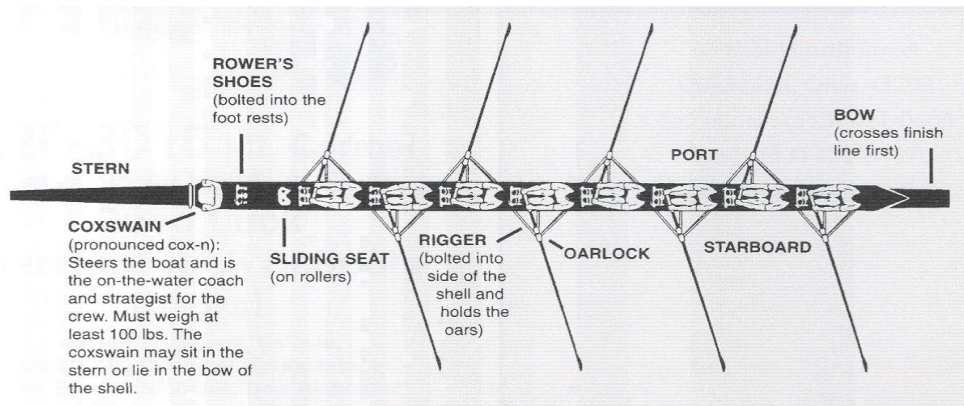


Oars are adjustable. The most common adjustment is at the ‘collar’ that determines how much of the oar is inside or outside the ‘oarlock’ that holds the oar to the boat on the ‘rigger’. Each oar (whether it is a sweep or sculling oar) is designed to be a port or starboard one. Both the asymmetric hatchet blade and collar determine which side the oar fits on.





At each athlete's seat is a rigger (a metal wing or triangle of tubes) that is attached to the hull of the shell. The rigger serves to hold the swiveling oarlock well away from the side of the hull, permitting a much longer oar and narrow hull quite different from typical rowboats. Riggers are highly adjustable to accommodate to weather, athlete build, performance, etc.

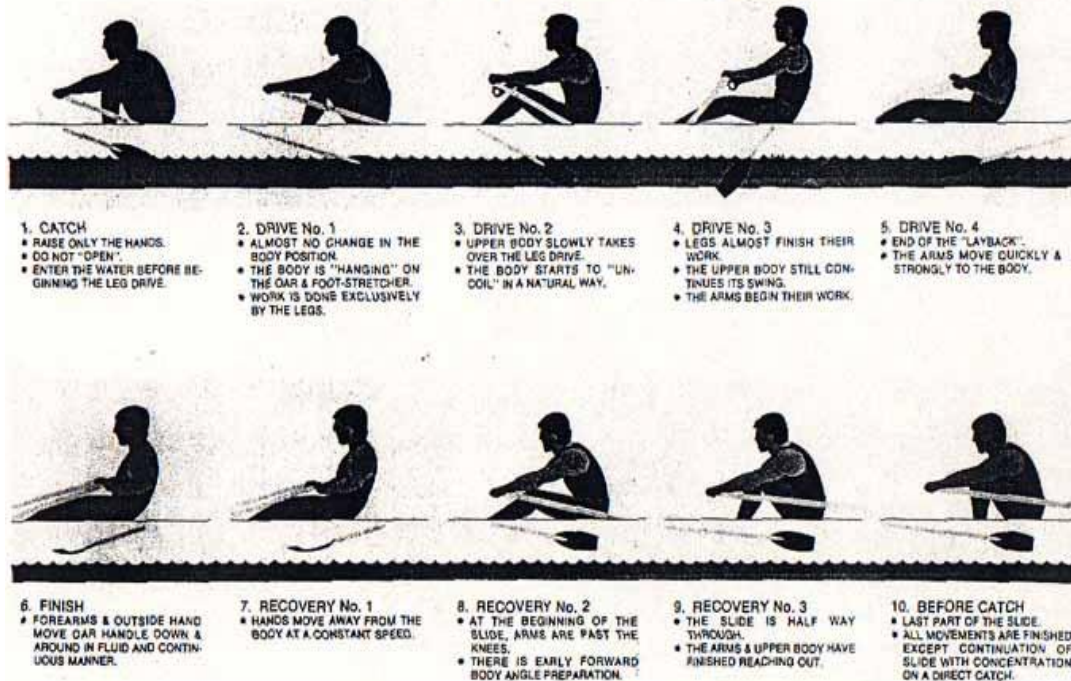


The seat that the rower sits in rolls up and down on tracks. This sliding seat permits the rower to use their legs as a major propulsive force. The feet of the athlete are tied into sneakers (called foot stretchers) that also adjust to permit the many different sized members of the crew to use the equipment.

Rowing Basics

So, how does an athlete row? When rowing, the athlete sits in the boat facing backwards (towards the back of the boat or stern), and uses the legs, back and then arms to lever the boat forward. The major power comes from the legs that 'jump off' the foot stretchers, rolling the seat toward the bow (front) of the boat. It is a demanding sport requiring balance as well as physical strength and cardiovascular endurance.

Rowing Techniques by Kris Korzeniewski and Thor Nilsen



Anatomy of a stroke

Rowing technique consumes much of the attention of coaches, rowers and coxswains. Good technique is essential for crews to go fast enough to cover 1500 meters in less than 5 minutes. There are two reference points in the rowing stroke cycle. The 'catch' where the oar blade is placed in the water, and the 'finish' or 'release' where the oar blade is removed from the water.

After the blade 'catches' the water, the rower 'drives' the boat forward. While on the drive, the blade must be down in the water, 'square'. If the blade is not square it either jumps out of the water (over-squared), or dives deep (under-squared) in what is called 'catching a crab'.

After the 'finish' the blade is taken out of the water and the rower is on the 'recovery' to bring him or herself to the next catch. When on the recovery, the blade is 'feathered' flat to minimize air drag before it is 'rolled up' square to be ready for the next 'catch'.

Boat Speed

Boat speed is determined by the amount of water covered between strokes and the stroke rating in terms of strokes per minute. The power of each stroke and the length of the stroke in the water combine to add speed to the boat during the drive.

With races often decided by a second or two over 5 minutes, fractions of a centimeter difference in the run of a boat between strokes (around 200 strokes for a high school race) can be a deciding factor in who wins and who loses.

Of course, a fast boat steering all over the place will take much longer to get down the course than one that steers straight. Steering is in the hands of the coxswain, but is made much easier by a well rowing crew. Though it would seem easy, steering a shell is very challenging due to the large weight of the boats with crew, uneven pressure between port and starboard, and the very small rudder.

Crews of 2 or more move the best when the members of the crew are in time with each other. The unison of body swing on the recovery, blades in at the catch, swing through the drive, and exit of the blades at the finish is required for fast boats.

Perhaps more than any other feature of the moving boat, the set or balance of the boat is attended to the most. A shell can roll so that either side can be lower than the other. The seat is now slanted. The oar on the recovery may 'chip' the water. On the drive, the roll puts strain on the back and shoulders. Upright posture, uniform movement, and timing at both catch and finish are crucial for maintaining a boat's set and a constantly set boat is the dream of every rower

The coxswain

The coxswain is the captain of the crew. 5 vital skills for coxswains are: 1) Steering. 2) Technical coxing/liaison. The coxswain can feel the boat move and communicate this to the crew and the coach. 3) Flow of practice. It is often the coxswain who can make a practice work effectively. 4) Motivation and Teamwork. 5) Racing and strategy. The coxswain is required to implement the 'race plan' as unlike all other sports, Crew is raced without the input of the coach who is not allowed to communicate to the crew in any way. Moreover, every race plan has its strengths and weaknesses. Though a plan may be rehearsed, it is the adjustments made in the race in response to real conditions that can determine victory or contribute to defeat.

Things to Know About Rowing:

- Rowers are arguably the world's best athletes
The sport demands endurance, strength, and an ability to tolerate the pain that rowers' muscles experience in the last 500 meters of the race.
- It's in the legs
Rowing only looks like an upper body sport. Although upper body strength is important, the drive which moves the boat comes from strong legs. Rowing is one of the few athletic activities that involves all of the body's major muscle groups.
- Meters not miles
The standard length of a rowing race is 2,000 meters - about a mile and a quarter. Rowers refer to the parts of the race in 500-meter sections.
- Sweep (like a broom) and sculling (with at "c")
There are two basic types of rowing - sweep rowing, where the athlete holds one oar with both hands, and sculling, where the athlete has two oars, one in each hand.
- Think even numbers

Sweep rowers come in 2's (pairs), 4's (fours) and 8's (eights). Scullers can row alone (in a single), with somebody else (in a double) or with three other people (in a quad). Scullers steer their own boat, using a rudder that they move with their foot. Sweep rowers may or may not have a coxswain who steers the boat and is the on-the-water coach. For example, all eights have coxswains, but pairs and fours may or may not. An Indianapolis rower is a sweep rower in a 4+ (with coxswain) or 8+ shell.

- It only looks easy

Great rowing looks graceful and fluid, but don't be fooled. Pulling oars in unison smoothly and effectively through the water while balancing a boat that may be as narrow as 11" across with 10' – 12' oars is very difficult work. Watch how quickly that graceful motion before the finish line turns into pain and gasping for air afterwards.

- High tech version of age-old equipment

Although wooden boats were the norm for many years, most of today's rowing boats – called shells – are strong, lightweight carbon fiber. The smallest boat on the water is a single scull, only 27-30' long, a foot wide and approximately 30 pounds. The largest is the eight at 60'. Today's oars – not paddles – are also incredibly lightweight. Sweep oars are somewhat longer than sculling oars and have longer handles that are made of wood or rubber grips.

- SPM not MPH

Rowers speak in terms of "rating" or strokes per minute (SPM); literally the number of strokes completed in a minute's time. The stroke rate at the start of a race is high - 38-45, and then "settles" to a cadence typically in the 30's. The boats sprint to the finish, taking the rate up once again. The coxswain may call a Power 10 – a demand for the crew's best, strongest strokes. Although the number of strokes a boat is capable of rowing per minute is indicative of speed and talent, the boat getting the most distance out of every stroke ("pulling hardest") may win the race.

- Timing is everything

Spring rowing competitions are typically conducted on six lanes on the water. They follow a double elimination format in a system designed to identify the fastest six crews for the final race in each category. Heats are first, followed by a *repechage* (French for second-chance) races. There are no style points for rowing - the bow that crosses the line first is the winner.

- Teamwork is number one

Rowing isn't a great choice for athletes looking for MVP status. It is, however, teamwork's best teacher and the ultimate team sport. No one team member hits the homerun or makes the 3-pointer, touch-down or goal to win the game; the athlete trying to stand out in the eight will only make the boat slower. The boat goes over the finish line only once, with everyone in it. It is the crew made up of individuals willing to sacrifice their goals for the team, the athletes determined to match their desire, their talent and their oar blade with the rower in front of them that will be on the medals stand together.

Crew Selection

How a team of rowers is broken up into boats is comprised of many elements. It's a topic that can bewilder rowers and parents.

This page will help demystify the selection process.

- Gender: Boats are divided into female and male rowers. Coxswains can be of either gender.
- Side: Rowers either row the left side (port), the right side (starboard), or may row either side.
- Level: First year rowers or Freshman and younger are considered Novice. Novice rowers can "row up," but once you become a varsity rower, you cannot compete as novice rower
- Attendance and Attitude: All athletes are expected to attend practices, have a positive attitude, and support their teammates.
- Erg Scores: Erg scores (time trials on the ergometer) help to determine the fitness level of the rowers, in addition to the overall power they can contribute to the boat. Remember that erging is not rowing. Very often, rowers cannot perform well on the erg and ergers cannot perform well on the water. It takes a skilled eye to tell the difference. It is rare that a boat is made up of the top 8 erg scores.
- Skill Level/Technique: Technique is the ability to row with proper form. Technique is considered before erg scores in most cases (see above).

These elements are part of what coaches look at while making lineups, but so much of rowing is a "feel thing." Coaches can never rely entirely on objective tools to measure absolute speed on the water. In fact, in most cases crew selections are based on relative measures of strength, speed, efficiency, and crew chemistry. The coach's job in selections is to put together what she/he believes or feels will be the fastest combination of rowers. Rarely does one factor decide a boating, and rarely are boats set in stone never to be changed. We are also limited to the size boats we have. There are many times when we have 9 rowers who can make the boat go fast but only 8 seats.

What to do if you, or your rower still does not understand the coach's selection:

1. Talk with your rower calmly. Do not get over-excited as this can be an extremely emotional time for them. Understand how much work they have put in and how disappointed they are. Most of the time, they just need you to listen.
2. Determine if your rower just needs a shoulder to cry on, a push to talk with the coach, or if you should contact the coach. (Remember this can be a good learning point for your rower.)
3. If you think you need to speak with the coaches.
 1. Tell your rower you are calling. If the reaction is horror (which it usually is), dig deeper and make sure you have all the information.
 2. Contact your rower's coach. The Head Coach has no say in who is boated on other squads except the one she/he is coaching. As well, the Head Coach cannot force another coach to

- boat a rower.
3. Remember that coaches are open to conversation. Please keep it polite. Yelling will not get your rower boated.
 4. Listen to what the coach has to say. If you are still unsure, contact the Head Coach. The Head coach can investigate and insure that the choice was made fairly and in sync with the program's mission.

It's Not the Seat; It's How You Use It - Demystifying Lineups
posted on June 20, 2007

Boat lineup are as much art as science. If you had a nickel for every rower who thought they should have been rowing some other seat, you could build your own boathouse. This column attempts to ward off some of the unhappiness and to explain -- in an all-too-brief nutshell -- some of the considerations which go into making up lineups and the reasons rowers may find themselves in a seat other than the one they were sure they'd earned.

In a simple world, lineups would be determined by weight -- lighter rowers at the ends, heavier in the middle. Natural left-handers would be starboards because the feather hand is the one requiring the finest motor coordination. If you're light and left-handed, and have a good sense of balance, you're probably my Once and Future bow. If you're light and right-handed and have a good sense of balance, I'm probably going to want you in two. (For more on the bow pair's role in setting the boat, and the reasons for grooming bow rowers by having them row seven seat, see my earlier column "Making the Most of Your Front End." 25 May 2000, <http://row2k.com/columns/index.cfm?action=read&ID=23>)

To every theory, there are counter theories; for every statement in this column, there will be examples where someone has done the opposite and made it work. The subtleties are infinite. There are situations when putting bigger people in your stern pair makes sense too. (e.g. to help counter the rush, or to encourage/force the boat to row longer. I also have a theory it might help the quickness on the drive, but I can't prove it.) In which case, other heavier people might need to be moved towards bow to keep the boat from pitching. A rower who might otherwise be rowing five might find themselves in three seat for this reason. If the power in the bow pair is not quite matched, a more powerful rower might need to be moved forward on the weaker side to keep the sides balanced.

The conventional wisdom is to build a boat around Six and Five. A powerful six rower -- even if that rower is as good a stroke technically as whoever is rowing stroke -- might not be a good choice for the stroke seat for the very simple -- but non-intuitive -- reason that the stroke always has to row for eight and be thinking for the rest of the boat. Thus it is often a more effective use of power to put the most powerful rowers in five and six where they can concentrate on just one job.

This is related to the reason why strokes are often put in six or two seat for a practice or two. Rowing stroke can actually be deleterious to your technique. Putting strokes in the middle of the boat to give

them a chance to "row for themselves" and to get their technique back is NOT a demotion. I know, I know, you feel crushed; you're wondering what you did wrong, etc., etc. You probably didn't screw up at all. (If you did, you'd probably know it.) Its part of the grooming process, a chance to perfect something, or to work on a habit that has developed from compensating for something going on in the boat (set, slide rush, etc.). Even the best of strokes will sometimes develop habits; it actually shows that they are conscious of what is going on.

Another thing which may determine which seat you row is how well you match up with someone else, and this may even go against the conventional power/weight patterns. It might not even necessarily be the person in front of you. It's like being part of a three-way trade in baseball. Or, you may be have been moved forward or back in the boat because you make a good connection through the engine room with the stern pair, or are versatile enough to maximize any seat whereas someone else might be at their most effective in a particular one. If your coach asks you to switch sides, seize the chance. This is usually a high compliment; not only will you be a more versatile and valuable rower, but you may be maximizing someone else, or balancing the power on a side.

Sometimes lineups can be a total surprise. This is why coaches periodically switch them up, because unexpected strengths can emerge which might not have been obvious on paper. Certain lineups just move a boat better, and all the note taking goes out the window.

Glossary of Rowing Terms

Blade:	Flattened or spoon-shaped end of oar or scull; often used as term for oar
Bow:	Forward end of boat
Bow (man):	The rower or sculler in the seat nearest the bow
Bow ball:	Safety ball fitted to sharp stem of racing boat
Bucket Rig	An eight, rigged so that the riggers or seats # 4 & 5 are on the same side, while the others alternate
Button:	Plastic sheath on oar or scull to prevent it from slipping through the oarlock; adjustable on modern oars
Cadence:	Uniform stroke rate
Catch:	The part of the stroke when the blade is put in the water
Cockpit:	Space for a person in a racing boat
Coxswain (cox):	Steers the boat from a seat in the stern or a lying position in the bow
Crab:	Occurs when rower fails to get the oar out of the water at the end of the stroke; can result in the rower being ejected by the oar from boat to water
Crew:	Rowers who man a boat
Deck:	Covered-over areas at bow and stern of boat
Drive:	The part of the stroke between the catch and the finish, pull-through
Erg	Rowing ergometer. A rowing machine to measure the metabolism rate or amount of energy expended during work measured in ergs (unit of work).
Erging	Rowing on a machine off the water.
Feather:	To turn the blade parallel with the water surface at the start of the recovery to reduce wind resistance

Fin:	Small flat plate perpendicular to the bottom of the boat to aid steering a straight course
Finish (release):	The part of the stroke just before and as the blade is taken out of the water
FISA:	Federation Internationale des Societes d'Aviron; the International Rowing Federation.
Frontloader:	A boat in which the coxswain lies in the bows
Gate:	Bar across a oarlock to retain the oar
Gig:	Inboard-or outboard-rigged pleasure or racing boat with straight gunwales
Gunwale:	Horizontal plank at the top of the hull running the length of the boats cockpit
Hands away:	The act of dropping the oar handle at the finish of the stoke so that the blade leaves the water and is feathered at the start of the recovery; sometimes referred to as "out of bow"
Inboard:	The distance between the far end of the handle of an oar or scull and the face of the button. The remainder is called the outboard
Layback:	The amount of backward lean of the rower's body towards the bow at the finish
Length:	The length of a boat (i.e. "won by a length")
Oar:	A lever approximately 12 ½ feet long by which the rower pulls against the oarlock to move the boat through the water; sometimes used as a shortened form of oarsman
Oarlock:	A device which swivels on the end of the rigger to support the oar
Port:	The left-hand side of the boat when facing the bow, all the rowers whose oars are in the water on the left hand side of the boat when viewed from the stern
Puddles:	Whirls left in the water caused by the blade as the rower pulls
Recovery:	The part of the stroke cycle between the finish and the catch in which the oar is feathered and the seat is returned to the aft end of the slide
Regatta:	A competitive event raced in boats.
Release:	The finish of the stroke removing the oar from the water.
Repechage:	A second heat to afford another chance of qualifying to those running second best in preliminary heats
Rhythm:	The proportion of time occupied on the recovery to the time taken on the pull through
Ribs:	Braces between the keel and gunwale for supporting the hull
Rig	German rig, Italian rig, Standard rig
Rigger:	A metal framework or a carbon-fiber reinforced arm to support the oarlock which is placed approximately 85 cm from the center of the boat
Rudder:	Steering device attached vertically to the stern or under the hull of a shell
Run:	The distance a boat travels in one stroke
Sculling:	Using two oars or sculls
Sculls:	A short oar used in each hand for single, double, and quad sculling boats
Shaft:	The part of the oar between the blade and the handle
Shell:	Smooth-bottomed racing boat; made of carbon fiber, fiberglass or wood
Slide:	Parallel rails on which the seat which moves on wheels
Standard rig:	Uniform alternation of riggers (and therefore oars and rowers) in the boat; the rower in the seat nearest the stern is usually on port side
Starboard:	The right-hand side of the boat when facing the bow, all the rowers whose oars are in the water on the right hand side of the boat when viewed from the stern
Stern:	The rear or aft of the boat
Stretcher:	A frame with shoes to anchor the rower's feet
Stroke:	The complete cycle of moving the boat through the water using oars or sculls; the rower seated nearest the stern
Sweep:	Long oars with narrow blades

Rowing in College

There are many opportunities for athletes to continue rowing at the collegiate level and beyond. College coaches are always interested in motivated athletes that demonstrate rowing experience, good technical skills, erg scores, and qualifying academics. A college recruitment session is held at Three Rivers Rowing Association every year.

The following timeline will help you with the college recruitment process.

Fall of Junior Year:

- Complete the NCAA core course requirements found at www.ncaa.org (initial eligibility).
- Register for NCAA clearing house (www.ncaa.org).
- When registering for the SAT or ACT, select the Initial Eligibility Clearinghouse as one of the institutions to which the test scores should be sent currently code 9999.
- Post your scores at www.usrowing.org, www.irow.com, www.concept2.com.
- College coaches cannot talk to rowers and families until after July 1st, but may answer emails

Winter of Junior Year:

- Work hard during winter training
- Compete in indoor rowing championships (Pittsburgh Indoor, Crash B's, etc.)
- Post your scores at www.usrowing.org, <http://www.irow.com>, <http://www.concept2.com>
- Get noticed: email coaches, send letters of interest, fill out online recruiting forms, and request materials! Be sure to always include your name, address, phone # and email address

Summer after Junior year:

- Keep scores current on web sites
- Contact coaches at schools to which you intend to apply
- Prepare college applications
- Attend rowing camps and national competitions

Fall of Senior Year: Crunch time!

- Make a short list of colleges you want to seriously consider.
- Schedule and attend official visits. Beginning September 1st of a rower's senior year they may make official visits (1 per college, 5 colleges total) and college may pay expenses.
- Official visits may not last more than 24 hours on campus, transportation not usually covered, parents expenses not covered. SAT or ACT scores must be on file unless already filed with NCAA clearinghouse, schedule time to see a team practice.
- No more than three visits during the recruiting process are allowed with the coach. Rower can make unofficial school visits to campus any time; a coach can meet with a rower after July 1st.
- Check NCAA website to verify there has been no regulatory changes
- Receive scholarship offers. Negotiate scholarships; if possible (don't be too pushy).

- Decide which college/university you will attend.
- Make a verbal commitment to school, sign letter of intent (binding contract).

Winter of Senior Year:

- Fill out and send in financial aid applications using parent's tax forms. Usually this is done as soon as the parent's tax forms are completed for the preceding year.

Spring of Senior Year:

- Continue to work hard.
- Coaches will be in touch with your school and your coach to make sure you stay on track.
- Letters of Recommendation
- See your guidance counselor for an appropriate timeline for college recommendations.
- Please ask your coach 2 months in advance if they would write a letter of recommendation
- Provide all necessary envelopes, stamps, etc.