



Cardboard Canoe Challenge

To design and build a cardboard boat that is human powered and racing around a pre-determined course in the metro campus pool.

RULES

1. Materials used in construction will be limited to corrugated (open cell) cardboard, glue, paint, tape and waterproofing materials. No other materials may be used.
2. Only seams and joints may be taped, not the whole boat.
3. There is no limitation on the size and shape of each entry. The design must be small enough to be brought into the indoor pool area. Final assembly may be accomplished in the pool area if needed.
4. The hulls must support the racers in a dry condition with all portions of the racers' bodies out of the water.
5. The number of racers in the canoe is at the discretion of the race teams.
6. The race course will be around markers in the CCC Metro campus pool. Floating course markers may be contacted by the craft but if they are submerged (a foul) the team will have to circle the marker and enter the gate again. Declaring a foul will be at the discretion of the judge.
7. The course will involve turns around markers covering an approximate distance of one pool's length. The lowest time will win. A second race will be required if the second fastest boat is within four seconds of the fastest time.
8. Propulsion equipment (paddles or equivalent) will be made out of materials listed in rule #1.
9. The racers must maintain their hands above the water's surface during the race.
10. No propulsive contact is allowed with the sides, ends, or bottom of the pool during the race. Propulsion is limited to action and reaction between the canoe and the water.

11. Canoes will start the race at a stable rest position in the water.
12. Racers will wear US Coast Guard approved buoyancy devices, properly fastened, while in the boat or water.
13. A school may enter as many teams as desired. However, a student may only be a member of one team. This does not preclude a student from giving advice or helping another team.
14. Teams may have up to five members.
15. All boats are subject to technical inspection. Your boat will be inspected for compliance with these rules.
16. Each team must remove boat or boat remains from the pool after you are finished with the race, and dispose of the boat as requested by race officials.
17. Eligibility is limited to Tech Prep students currently enrolled in a drafting or computer aided drafting design courses in high school.
18. Each team must complete the Race Application and submit it to the North Coast Tech Prep office two weeks before race day.

Definitions

Waterproofing material- Waterproofing materials must be non-toxic, non-polluting, and not add significant structural strength. Materials such as paint or tape are acceptable. Materials such as fiberglass or epoxy paint are not acceptable (they add strength). Materials such as tar or caulk, which can rub off on hands or on the pool, are not acceptable.

Paint- Any paint placed on the cardboard must be non-toxic and waterproof. If any paint required the mixing of two or more materials prior to application it is considered to be an epoxy and is not allowed. Boats may be wiped with a wet towel prior to entering the pool by a race official.

Tape- May only cover seams and or joints, not the entire hull.