

VOYAGE TO THE NEW WORLD

Treasure of Axolotlzuma

Frequently Asked Questions v0.1 20130314

- **What is the maximum/minimum depth of the tank?**
 - 150 mm deep, 0 mm at the shoreline (obviously)
- **Are progress reviews group assessments or individual?**
 - Individual assessments, outlining your own personal contributions. During the progress reviews, I expect each student will talk for ~5 minutes describing what they set out to achieve, how it fits into the group's design strategy, work they have done so far and what their results were. Ideally they should also describe what they aim to have done by the next review.
- **Is there a limit to the height of the vessel?**
 - Nope, but you'd want it to be under 1.5 m to avoid hitting the LED panels
(Wind generators will be of variable height, approximately at tank-level)
- **Does the vessel have to have a certain draft?**
 - Nope – you can build a deep-keeled schooner or a shallow raft or whatever works.
- **Do stabilising flaps/fins on the hull count as part of the hull?**
 - So long as they fit in the bounding box <20mm above the waterline, sure
- **Would retractable water brakes or anchors be considered part of the hull? Can these be powered by a pre-charged battery?**
 - Sure, provided their maximum extension is within the bounding box <20mm above the water line. Assuming they are not used for propulsion, Spider-man style, sure
- **Must mast actuators be wind powered or can they use a battery?**
 - If they are not providing propulsion, they can use a pre-charged battery
- **Can rudders, actuators for extending and retracting fins, and other gadgets such as rotating mounts for sensors (that do not propel the vessel) be powered from a pre-charged battery?**
 - Sure – only things that provide propulsion have to be wind-powered
- **How would parts machined from a small portion of the purchased raw material be billed?**
 - Cost the material at the fraction used – eg. charge half a \$5 block of wood as \$2.50

- **Can we make a submarine?**
 - Sure, so long as it's water buoyant
- **Can we propel our craft with exploding electrolytic capacitors?**
 - So long as they are charged by wind power, sure
- **Are we allowed to release oil or sludge contained in our vessel to hinder the other teams' efforts, use it for "buoyancy"?**
 - 1. That's impolite
 - 2. You would be disqualified for damaging the tank and its contents
 - 3. It's not a competition; everyone can win. Hurting others won't actually help you any, and will only make them less inclined to give you assistance if you need it.
- **What does a Mexican salamander have to do with a game of marbles let alone treasure?**
 - Salamanders are awesome
- **Our group member hasn't gotten in touch with us!**
 - Have you emailed them? If not, email me and I'll help you track them down.
- **What is the wavelength/part number of the LEDs?**
 - Uhhhh.... White visible light. I *could* theoretically find the part number, but seriously I'm not going to go digging to find it and it won't really help you. The LED radiation pattern has a 70 deg spread.
- **Will the room lights be on/off?**
 - There is no room – the testing area is outdoors. However, there will be complete cover overhead, so you (hopefully) won't have to compete with the Cursed Daystar.
- **Can we use a Raspberry Pi?**
 - Yes. I won't respect you in the morning, but yes.
- **Can we use an onboard camera?**
 - Sure. You can't use an *offboard* camera, but onboard is totally ok.
- **What do we have to do with the Design Brief?**
 - Show you have understood the design problem. Tell me what part of the project you are undertaking and how it fits with the team's approach. Highlight the key technical problems. Most of all, convince me that you have actually thought about the problem.
 - Better yet – read the Blackboard assessment description!

- **Is there a marking rubric available for the Design Brief?**
 - Yup. Read the Blackboard page.
- **Do rudders count towards the hull size limit?**
 - Nope – but they aren't valid structures for scoring. Only the hull has to fit in the 150 mm x 75 mm bounding box.