Clean Water For All

To: KNW 2300 Engineering Robotics Teams

From: Clean Water for All Review Team

Date: April 23, 2015

You've spent nearly an entire semester designing, implementing, and refining an autonomous robot to tackle some tough challenges. You've encountered successes and setbacks, joys and frustrations. Now is the time to convince CleanWater4All that your robot is the one they should invest in. So here is your prompt for the Final Design Presentation passed down from the organization:

Convince us that your team and your design are the ones that we should invest in.

Your final design presentation will take place during regularly scheduled classes next week (the week of April 27th) in Junkins 202. The other teams in your section will be present as well. Your team should plan for a 20-minute presentation followed by about 20 minutes of Q&A.

Tips and Thoughts

- Connect with us; don't bore us. Tell a (truthful) story about why we should care about the problem your addressing or care about your robot, or at least start with one. Have you ever seen a TED Talk? Why are they usually so amazing? (Hint – perhaps you can Google this.) By the way, who are you?
- Perhaps presenting a quick recap of the problem, as your team understands it, would be helpful to properly position and motivate the remainder of your presentation. What do you think? How much time do you think you should attribute to this?
- How can you communicate your final design with engineering precision but without the need for a nap? Maybe some outstanding technical drawings or renderings can speak 1000 words for you. Remember – be precise. Numbers need units; technical drawings need numbers, etc.
- Convince us that your design is the right one. What type of info do you think you should tell us that would be convincing? **How 'good' is your robot?** Can you **quantify** the 'goodness' of your design? (Shake your head in the affirmative, because the answer is yes). If so, how? Be prepared to answer several levels of "why" about your design decisions. Include numbers or measurements related

to reliability, repeatability, precision, accuracy, etc. that help us understand how successful your design was. Refer to this video before your presentation: https://www.youtube.com/watch?v=hRAFPdDppzs

- How good is your team? What do you think your coefficient of confidence should be? What are its strengths? Weaknesses? Did you overcome any substantial interpersonal or team obstacles? If so, how? It would be good to describe a critical moment during the semester that demonstrates your team's growth and development. For this, describe the situation that prompted the learning opportunity to give some context. Then, identify the behavior or incident that prompted the team's learning. Finally, articulate the impact of how this learning contributed to your team's growth.
- What would you do next if you had two more weeks? What would you have done differently this semester if you started knowing everything you know now? That question can be answered from a team perspective AND a technical perspective. From a team perspective, what leadership insights or lessons would you use if you could "rewind the tape" and start over?
- You've got 20 minutes to present. What are the characteristics of the best presentations you've seen? Of the worst ones? Use your experiences to guide you. Here are some quick things to keep in mind:
  - Don't read to us.
  - Make sure pictures and graphics are easily readable from a distance.
  - Speak clearly and concisely.
  - Practice with your team!!!!!!!!!! It is so painfully obvious when teams don't practice together and thus have no idea who is saying what. Please don't make this painful.
  - By the way, did we mention – don't bore us?

Good Luck and