

ME 588: **FINAL PRESENTATION**

END-OF-SEMESTER ITEMS

Second Peer Evaluation

- Due by Wednesday, April 29th at 5:00 pm

Project Presentation

- Thursday, April 30th at 6:00 pm in ME 1030
- Project Competition (first)
- Team Presentations (immediately following competition)
- Complete Questionnaire (before you leave)

Project Report

- Due by Tuesday, May 5th at 5:00 pm

PROJECT COMPETITION

Details:

- Round robin format
- One team at a time; three chances in all
- Starting order determined by random draw
- Between two and four “spheres” on the field
- Three “best” teams return for championship round
- Members of winning team receive up to 5% bonus on final grade

PROJECT COMPETITION

Process:

- To begin each trial, a team member places robot in starting corner, then activates robot (with a button or switch).
- Robot has 60 seconds to collect spheres and place in hole.
- If robot does not shut itself down after 60 seconds, a team member is to power down robot and remove it from playing field.
- Teams may make adjustments to robot while waiting for next turn, but must be ready to present their vehicle when turn is called.

PROJECT COMPETITION

Constraints:

- Spheres will not be located in the playing field corner where robot movement is to start.
- Spheres will be located at least one diameter from the outside perimeter of the playing field, and there will be a separation of at least 12 inches between spheres.

PROJECT COMPETITION

Scoring:

- For advancing to championship round, teams will be scored on the total number of spheres deposited into the borehole (within the allotted time for each round).
- Timing will begin with robot activation, and will conclude when robot shuts itself down following marking of final mine.
- Robot does not have to return to its starting corner (but that would be impressive!)

TEAM PRESENTATION

Immediately following competition

- No more than 6 minutes total, including questions
- Focus on what makes your robot unique, what worked well, what did not work well
- What would you do differently?
- Visual aid recommended for organization; will use large screen TV

Class will vote for “Best of Show”

- Which team (other than your own) impressed you with their solution/approach/presentation?
- Members of “best of show” team receive up to 3% bonus on final grade

Complete questionnaire

- Form will be provided by instructor after presentations conclude

PROJECT REPORT

Due by Tuesday, May 5th at 5:00 pm

Group Deliverables

- PDF copy of entire report
- 1 paper copy of report without appendices
- Photo of group with robot (electronic format)
- Photo of robot (electronic format)
- All lab purchased parts returned to cabinets
- Final Arduino code and drawings emailed to Justin in compressed electronic form (ZIP). Code should be clearly commented.
- Refer to Final Project Description for additional details.