Navigational Course (Robot Rescue)

DESCRIPTION: Team Driving involving a team of two or more with the whole team only seeing the monitors of the Mars Landing. The course will consist of a series of 4 locations of varying dimensions where the robot must complete a task. There will also be movable barricades that accompany each location. These may be altered between each team. The barricades for each location will remain in the same relative position at the location.
The team will be divided into two roles, pilots and winch operators.

Rules

1. Participants will have 5 minutes to complete the course. All team members must have hands on time in controlling the bot.
2. The team must not be able to physically see the driving course, but will see it through a on-site camera and monitor.
3. The pilot/navigator team must switch every 1-minute (if applicable)
4. The bot must navigate to the each location and complete a designated task. Teams may complete the tasks in any order.
5. Partial credit will be given for reaching the location but not having the bot fully complete the task.
6. To receive full credit the bot must stop fully on the location and complete the task.
7. In case of a tie of all items - total time will be used to determine a winner.

Size of field will be 20’ X 20’

Scoring		full	partial	
Location 1	12”x12”	10	5	points

TASK: Core Sample -- robot must retrieve a magnetic “core” sample and return it to the home base

Location 2	12”x12”	10	5	points

TASK: Explore Olympus Mons -- robot must scale the terrain for 10 inches and return safely.

Location 3	12”x12”	10	5	points

TASK: Take Only Pictures, Leave Only Footprints -- robot must navigate a landscape without knocking down obstacles.

Location 4	12”x12”	10	5	points

TASK: Explore the Conductivity of Rocks -- robot must complete a circuit to light a light bulb. (switch 2” off the ground to work with old and new CEENBoTs)