**Navigating Mars Obstacle Course Project Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Task:** Oh no! Your landing device safely landed your robot on Mars, but unfortunately your robot strayed a little far from the data collection point. NASA wants their data ASAP so your team is tasked with programming your robot to navigate the Martian landscape to safely arrive at the agreed up on data collection point. The faster, the better. Your robot must navigate somehow around Olympus Mons. You may choose one of two ways to program your path around the solar system’s largest volcano the size of Arizona, but each path has its perils!

You will be assessed on the following criteria (review the attached rubric for more specifics):

**Engineering Log (20%):** You will individually keep a running engineering log in which you will record in complete sentences:

* Your team’s goal for the day,
* Each team member’s assigned responsibilities or tasks for that day,
* What tasks were completed that day
* Which tasks were not completed and why, and
* A short reflection. What do you feel was a success that day? What was difficult? What are your ideas for resolving the difficulty?

Keep in mind that this log is to show your thought process and how you problem-solved through the project.

**Robot Performance (45%):** Your robot must successfully complete the obstacle course, use various sensors, avoid the five Martian obstacles, and do it in a timely manner. The fastest robot gets the most points!

**Reflection (30%):** After the completion of the obstacle course, you must complete a reflection answering the following prompts in complete sentences:

* What was your favorite part about this project? Why?
* What was your least favorite part about this project? Why?
* How did your robot do? Were you surprised at your robot’s performance? Why or why not?
* What did your robot do well? What would you improve on your robot? Why?
* What is something you wish you were given the opportunity to do with this project? Why?
* What is something you would change about this project? Why?

**Peer Evaluation (5%):** This is confidential. You will be assessed by your team on your responsibility, leadership, teamwork, work ethic, and reliability.