

Midterm Guidelines

1. The demonstration will consist of five parts:
 - **Calibration (optional)** – the blob will be initially placed at a distance from the robot such that the diameter of the object image is approximately half the height of the entire image. This will be your chance to recalibrate your robot to the color, distance, and image size of the ball for the following demonstrations, as these starting parameters will be the same for each task.
 - **Straight line following** – the ball will be moved 2 meters away from and then 2 meters towards the robot, twice. The second time the ball will be moved approximately twice as quickly, to test the responsiveness of your controller.
 - **Circular path following** – the ball will be moved in a circle with a radius of approximately one meter, in both directions.
 - **Long path following** – the ball will be moved along a winding path you will not know beforehand. This path will be different for each day.
 - **Lost target** – the ball will be moved horizontally and very quickly out of the field of view of the robot, and you will have to find it again.
2. Each team will have 20 minutes to complete the entire demo.
3. Each team will have 3 retries to complete the entire demo. Teams can choose to use the retry if they failed to complete an objective or move on to the other task. Your 20 minutes includes all retries, so if you are having problems, stop the demonstration and let the next team go while you debug, rather than waste your time.
4. Robots which exhibit erratic behavior will be disabled during their demo.