

EE346 - Mobile Robot Navigation and Control

Fall 2023

Laboratory #7 (4%)

Wednesday January 3, 2024, 2-4 PM

**TurtleBot3 Task Integration Competition
(DRAFT)**

Objectives:

- Evaluation of your solution in Lab #6 on the integration of previous robot motion control, target homing and autonomous navigation functions of your TurtleBot3 with ROS

Details:

In this lab, your solution to Laboratory #6 will be optimized and evaluated by comparing its time of execution with those by other robots in the class. *The lab will run between 2 PM and 4 PM with no extension beyond the lab hours.* In the two hours of the laboratory, the groups will take turns demonstrating their solutions. Each team will be given at least two attempts at this task and can have more attempts if time permits.

If you can complete the task specified in Lab #6 without errors, *i.e.*, starting from P1, visiting P2, P3, P4 and the three poles before returning to P1 autonomously, you will receive at least 80%. In addition, all the groups that can complete the Lab #6 task will be ranked according to time it takes for your robot to complete the task, with the top ranked team receiving 100%, the second place 96%, etc. in decrements of 4%.

