

# LEGO Robotics Third & Final Competition (Dec 9)

## Challenge

- Make a robot that accomplishes 3 tasks in the least amount of time. The tasks are: 1) stick piece of velcro to velcro wall; 2) move directly on top of black line, detect it, and reverse direction once detected; 3) take small plastic cup (2oz) to the top of an incline.
- The tasks and course are described in the drawing attached.
- In principle, this competition will be held in the college plaza (outside; concrete floor). However, in case of inclement weather, we will move it to the lobby of the Smithtown Science building.
- Robots must be first presented for a quick inspection by the judges.
- One robot at a time will be aligned and race. Time will be measured with stopwatches.
- The winner of the race receives 40 points; second place gets 25 points if robot completes the race; third place gets 10 points if it completes the race.

## Competition day

**BEFORE** the competition day, groups must make sure they have done all the necessary adjustments, and loaded all necessary programs into their robots. There will be no time for adjustments on the day of the competition. Make sure to leave your robot ready on top of the LEGO core box. This is how it will be transported to the competition venue.

Robots will be brought in by faculty.

Groups must be at the plaza OR lobby of the Smithtown science building (it is your responsibility to search for the groups) to present their robots precisely at 11:15am, no delays are accepted. Late groups will be **disqualified**.

One group at a time, the robots will be presented to the judges for visual and manual inspection, and questions to the team.

Once the inspection is over, groups will align their robots (one at a time) at the starting position, and prepare to click on their programs (to start motion) when Prof. Denicolo gives the signal.

The race accounts for 40% of the points in the competition. 60% of the points are received in regards to design and teamwork.

**AFTER** the competition, the groups are invited for pizza & beverage in room T12, when the winner will be announced. There is no prize for this competition, except for recognition, fun and food 😊

# 3<sup>rd</sup> competition

