

RoboPlay Challenge Competition Rule Overview

General Rules

1. You have 10 challenges to do in any order you like. Successful completion of each challenge earns your team points. The goal is to get as many points as possible.
2. The challenges must begin at one or more of the starting zones unless stated otherwise.
3. Teams may bring as many laptops as they have students to the competition and kept in their practice area (pit).
4. Only one laptop may be used at the competition table.
5. Use of other electronics during the competition, including other computers, calculators, cell phones, and other computing devices is not allowed.
6. Teams cannot use custom-made parts.
7. All challenge tasks must be completed using a computer program (no tilt drive or copy cat). Programs for controlling the robots must be written in Ch running in ChIDE from SoftIntegration, Inc.
8. There will be no internet access during the competition. If a team is caught using the internet during the competition, the team will be disqualified.
9. Once the competition has begun, the teams may speak to the Judges for clarification on problems, but should not talk to anyone else outside of their team.

Practice Information

1. All teams will be provided a designated practice area (pit) to place their practice board.
2. You are given two 17-minute practice periods to practice on the official board between 10am and noon. (17 minute periods can be found on the RoboPlay Competition schedule page.)
3. Each 17 minute period starts and ends when specified in the schedule. You will not be given 17 minutes from when you arrive. Please be prompt.

Competition Information

1. You are given three 17-minute competition periods to compete on the official board between 12:45pm and 3:45pm. (17 minute periods can be found on the RoboPlay Competition schedule page.)
2. In between each team's run, there will be a 3 minute passing period.
3. No robots may be run on the competition board during the 3 minute passing period.
4. Any challenge that is on-going when your 17 minute period ends will be immediately stopped and points will be calculated.
5. You are allowed to attempt each challenge as many times as you like within the allotted competition time.
6. If you attempt a challenge multiple times, only the points from the highest scoring run will be kept.
7. Challenges may not be "chained together" meaning you cannot do two challenges simultaneously with the same program.
8. Teams are responsible for setting up the board for each run of each challenge.
9. Teams may not use more than 4 I-bots and 1 L-bot simultaneously. Plus a I-bot, L-bot or dongle for wireless connectivity.

Reminders for Students

General

Phone: (530) 752-9082

Email: cday@c-stem.ucdavis.edu

- Measure everything with a measuring tape. Don't trust the given dimensions to be completely accurate.
- Read how assignments are scored to figure out the best strategy to get points.
- Ask questions if you are unclear about something.

Assigned Boards

- These will be the boards you will practice on and compete on.
- Make sure you know where your assigned board is at all times.
- Refer to diagram given or ask someone.

Practice/competition times

- 17 minute practice/competition times will be marked by a whistle being blown.
- Arrive 5 minutes early for your allotted practice/competition time and stand in the designated waiting area.
- Refer to packet if you don't know when your practice/competition times are.
- Keep your name tag on at all times. You will need it to gain access to the board during your 17 minute period as well as to your pit area.

Challenge Materials

Each team must have the following parts to complete the challenges.

Part	Quantity	Recommended/Necessary Accessories
Linkbot-I	4	Protractor
Linkbot-L	1	Writing Utensils
Linkbot-L or dongle	1	Compass
Snap Connector	15	Timer/Stopwatch
Caster	2	String
3.5" Wheel (new)	8	USB flash drives
4" Wheels (new)	2	Ruler & Measuring Tape (min. 8 feet)
Bridge Connector	2	Extension Cord
Gripper	1	Multiple port USB Charger (Qty: 2) (Skiva PowerFlow recommended)
Cube Connector	1	
Soccer Scoop	2	
Hacky Sack	1	

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Definitions and Common Terms

Whole Inch

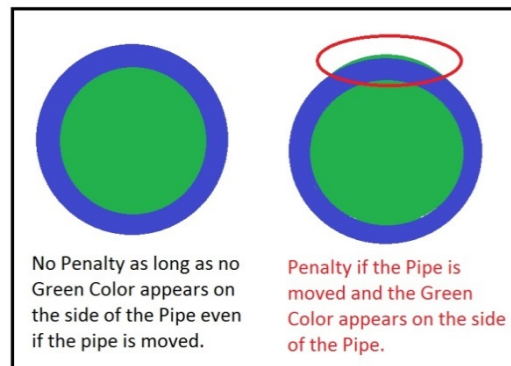
A distance/measurement rounded down to the nearest inch.

Examples:

- 3.75 inches = 3 whole inches
- 1.95 inches = 1 whole inch
- $\frac{1}{2}$ inch = 0 whole inches.

Nearest Point

The nearest point is a measurement taken from the nearest edge of the robot to the reference point by the shortest straight line distance. The measurement will be taken by placing a measuring tape on the table under the bot and placing a pipe on top of it, against the nearest part of the bot down to the tape.



Pipe Moved

Pieces of pipe are used as obstacles and pylons for some challenges. These pipes are placed on dots on the board. A pipe will be considered moved if it is knocked over or the dot is visible around the outer edge of the pipe.

Same Time

For the purposes of scoring, events which happen within one second of each other shall be considered the same time.

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