LOS ALTOS ROBOTICS TOURNAMENT

ANNOUNCEMENTS

- FIRST LEGO League (FLL) exists because of Dean Kamen. He created FIRST in 1989 to excite children about Science and Technology. FIRST worked with LEGO to create FLL in 1998. Thank you Dean Kamen and FIRST.
- This year's worldwide challenge is called "Power Puzzle". This year's Challenge calls for teams to use robotics to understand and create solutions for one of today's most critical environmental issues: energy management and conservation. With missions exploring solar panels on houses, hydro-dams, wind turbines and planting trees, teams will have to program their robots to find sustainable options to meet our planet's growing energy needs in environmentally sound ways.
- Teams start missions with their robots positioned in the base area at the center line of the playing field. The mission starts when the team releases the robot in the base and ends when they touch the robot or when the 2-½ minutes long match ends. If a team member touches a robot outside of the base, an oil barrel (if available) is removed. This encourages teams to program their robots to return to the base after each mission.
- Please help the Referees and Coaches they are all volunteers.
- Restrooms are to the right of the stage.
- Please eat food and drinks outside. OK to have water inside. There are picnic tables in the quadrangle in the middle of the campus.
- To avoid messing up other team's robots, teams must download their programs by using a USB cable or with the IR tower set to short range. Bluetooth is forbidden by FLL rules.
- The viewing of the matches has changed from the scrimmage. The bleachers on the stage are for those who want to sit down while watching the matches. Use the stairs at the RIGHT of the stage. DO NOT STAND ON THE STAIRS.
- In front of the match tables, standing is preferred. Please respect the control lines in front of the match tables. The front row is for KIDS ONLY. Tall people should stay behind the second control line.
- Thank you to Blach Intermediate School for the use of the building.

ARRIVAL

- Go to the check-in table when you arrive
- Get your handout with pit assignment, team schedule and map
- Get Power Puzzle pins for team members
- Check your match schedule and judging schedule.
- Turn in your Liability Release forms (one per team member).
- Give the volunteer your cell phone number for judging callbacks.
- Check the volunteer list for any unfilled tournament roles that you can help with.

TOURNAMENT SCHEDULE

- 10:30 11:30 Room setup by advance party.
- 12:15 12:30 Coaches meeting on stage of Multi.
- 12:30 Team check-in. Competition and practice table setup. Teams set up their pit area.
- 1:00 Opening ceremonies
- 1:05 Introduction to FIRST and all the teams. Overview of the rules
- 1:20 Round A (40 minutes)
- 2:00 Break (10 minutes) Botball and FRC teams introduced
- 2:10 Round B (40 minutes)
- 2:50 Break (10 minutes) Thanks to volunteers, Leslie Crane and Blach School.
- 3:00 Round C (50 minutes) Judging is completed by the end of this round.
- 3:50 Break. (25 minutes) Demonstration by FIRST High School Robotics teams.

Judges meet and determine award catagory winners. Some teams may be called back by the judges to settle close ratings.

- 4:15 Round D (35 minutes)
- 4:50 End of matches. Introductions of each team and presentation of participation award. Teams bring up their robots for the group photo. Certificates are prepared.
- 5:15 Robot demonstrations by best performing and note worthy robots.
- 5:25 Research project demonstration
- 5:30 Announce the winners after soliciting volunteers for next years board.
- 5:45 Take down the room
- 6:00 Depart
- 6:30 Tear down squad closes the building.

All day events:

- 1. Botball demonstrations will be going on during the competition near the entrance. Botball is a robotics program one step beyond FLL, but on a smaller table than FRC.
- 2. FRC (high school robotics) will have a robot and information materials near the Botball tables.
- 3. There may be a photographer taking team photos outside.

AWARDS

- Awards will be presented at the end of the tournament in several categories.
- Teams can win only one award, not counting the highest robot performance award.
- A Champions Award will be presented to the team with the best overall scoring in the Robot Performance, Research Project, Teamwork, and Design/Programming categories. Note that robot performance is only 25% of the overall score.
- Advancement to the state tournament will be decided by the top finishers in the Champion award category.
- Inappropriate behavior from team members or coaches may eliminate teams from advancement.

PIT TABLES AND PRACTICE FIELDS

For the use of each team for storage and working on your robots, a 6' length of table is assigned in the PIT area. The PIT number is the same as the team number posted on the information poster. The PIT area is tight so please do not block access to the tables behind you. Keep your chairs up to the table when not in use. The PIT areas are numbered from 1-28 starting at the front left.

Plug strips are available under the tables for you to plug in your laptop and/or battery charger. You may use additional cords or strips, but please keep the wires neat. There is limited power available in the room, so please reduce your laptop power when not using it by turning it off or putting it in hibernate mode. Do NOT use any other appliances – like cup warmers or fans – in the PIT area.

Between matches, teams are encouraged to work on their robots and use the practice fields. Please share the practice fields with the other teams and try to limit your use of a practice table to five minutes if some other team wants to use it. Please respect the practice tables as if they belonged to your team. Do not step on the tables and be careful to restore the loose pieces before you leave the table.

PACKING LIST

Remember to bring these things to the tournament:

- Team introduction sheets (4 copies) with team photo. Give one copy to each of the 4 judging groups.
- Signed FLL Liability release forms for every team member.
- Snacks / food / water / drinks (for eating outside)
- Robot, attachments, computer, download cable, software backup on USB
- Field and field pieces (if you are bring a field). Arrive before noon if you are bringing a field (so you have time to set up and still attend the coaches meeting).
- Extension cords and a plug strip. Please avoid overloading the plugs and creating trip hazards. There will be a plug strip within 8' of your pit area.
- While you can bring more than one robot to the competition, only one set of allowable parts can be brought to the table for each match.
- Please label everything you bring.
- · Cameras and video.
- Printout of this document (please verify your schedule when you arrive)

TOURNAMENT MATCH RULES

Each team will have three matches in the schedule. There are four rounds. During one round your team will be interviewed in the judging rooms on the other side of the Blach campus, around the lunch area with the picnic tables. During the other three rounds, you will have your three matches. Note that some teams may have two matches in one round, but you will have a reasonable delay between matches. The schedule shows the nominal time for your matches. Please be sure to check near that time to see if we are on schedule.

We have a lot of matches (39) in this tournament. A match is scheduled for every 4 minutes. There will be three sets of fields to accomplish this. While the teams are competing on one set, the teams on the previous set score their run and the teams on the next set are setting up their robot. This will require careful coordination; therefore,

READ THIS CAREFULLY.

- 1. Prior to the match BEFORE your match, assemble to the LEFT of the area in front of the stage labeled "TEAM PREP AREA". Your team will be instructed to assemble by the announcer. A volunteer a Queuer --will check that your team is ready. The number of the match for the teams to assemble will be on the flip display in the assembly area.
- 2. When the team ahead of you leaves the table, the Queuer will conduct you to the proper table to begin setting up your robot. There will be a box provided in which to keep your extra pieces.
- 3. The Referee will come to your table and check that you are the right team. Please tell him any problems that you have with the setup or questions about the match. Tell him when you are ready to run. Be prompt in getting your robot ready to go.
- 4. When you are ready to run, there should be only two team members actually at the table. These members may swap with other team members at any time. Members not at the table should stay back at the benches in front of the stage. The Announcer will check that you are ready and then countdown to the start of the match.
- 5. Start your robot and run it in accordance with all the rules governing the missions. The Announcer will count down the end of the match. Nothing happening after the end of the match counts.
- 6. Do not touch anything on the table until the Referee is finished scoring your match on his form. He will review the score with the team member that you select to approve his scoring. You have until the following match finishes (about 4 minutes) to complete this review. Once you are satisfied with his score, the Referee will release your team to pack up your robot and to leave to the RIGHT side of stage.

TOURNAMENT JUDGING

Four judging events are scheduled for each team, with each event no more than 8 minutes.

	Track 1 Room	Track 2 Roor
Research Presentation	B2	D2
Robot Design	B4	B1
Programming	B4	B1
Teamwork	B3	D1

The judging is done in classrooms at the west side of the campus. They are behind the office around the lunch area with the picnic tables. Please go to that area during the break before your judging. You will have 8 minutes with each set of judges and 2 minutes to go to the next judging event. The team should bring their robot, laptop and any additional pieces that they use in the competition (the pieces you take to each match), and any materials they wish to use in presenting their research project. Teams will be able to do the 4 judging sessions in one trip. After your round of judging you may return to the matches.

Programming. Your team should be prepared to show your programs to the judges, either on your computer or as printed listings. If you take your computer with you, make sure you have it started by the time your judging starts. Practice the startup before the event. There is no time to start up your computer once your judging session starts. You only have 8 minutes; If you have to wait 5 minutes for the computer to startup it will probably effect your score.

Robot design. Take your robot and any additional pieces that they use in the competition (the pieces you take to each match). You should have a box or container to safely carry your robot. This event shares a room with the programming event. There is a field setup to demonstrate your robot or its programming.

Research Presentation. This session is the time for the team to present their research project. Many teams have not worked on this; if your team doesn't have a presentation just alert the judge. If your team uses a laptop make sure you practice starting it up. You only have 8 minutes!

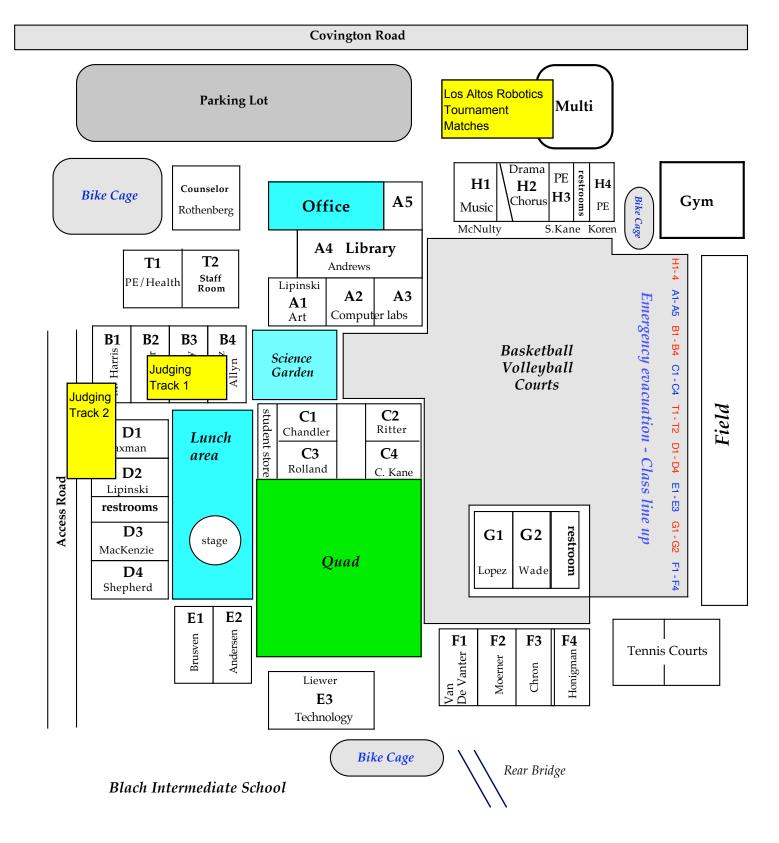
Teamwork. Judges interview the team about how the team is structured and other aspects of teamwork.

It will be your team's responsibility to get to each of your events on time. If you find any problem in your schedule, alert the Head Judge, Eitan Fensen, or the Scoring Coordinator, Tom Sartor.

The Judges are interested in learning what the team members have to say. Coaches and Parents can watch as long as the team members do all of the talking or the adults will be asked to leave.

Give a copy of your Team Introduction Form to each set of judges. The photo will help the judges remember your team. Write your cell phone number on the Form.

During the judging deliberations, we may find it necessary to call your team back to the judging area. If your team can be reached by cell phone, please make sure that the judging team has the cell phone number. Write it on your Team Introduction Form.





Event Schedule

	C	om	petition Round	Schedule
Round	Match	Time	Table 1	Table2
Α	1	1:20	Full Throttle A Corp	Starbots
	2	1:24	ExoStorm	Oak Rocks
3 1:28		1:28	Chaotic Contraptions	DogBots
			Electromonkeys	Puzzlenators
			Lords of the Legos	Mission Possible
7 1:44 Cos		1:40	Solar Super Stars	Puzzle Masters
		1:44	CostcoBots	Nanonerds
		1:48	Geek Squad	Electric Cheese
	9	1:52	Almond Roboteers	Atomic Puzzlers
	10	1:56	Starbots	ExoStorm
В	1	2:10	Oak Rocks	CostcoBots
	2	2:14	Lego Lords	Cerberus
	3	2:18	Bionic Builders	Bananas
	4	2:22	Bobcats	Technostuds
	5	2:26	Lego Royalties	Lego Legends
	6	2:30	Nanonerds	Geek Squad
	7	2:34	Electric Cheese	Almond Roboteers
	8	2:38	Atomic Puzzlers	Full Throttle A Corp
	9	2:42	Cerberus	Bionic Builders
	10	2:46	Lego Legends	Lego Lords
C	1	3:00	Bananas	Technostuds
	2	3:04	Bobcats	Lego Royalties
	3	3:08	DogBots	Electromonkeys
	4	3:12	Puzzlenators	Lords of the Legos
	5	3:16	Mission Possible	Solar Super Stars
	6	3:20	Puzzle Masters	Chaotic Contraptions
	7 3:24		Technostuds	Lego Lords
	8	3:28	Bananas	Lego Legends
	9	3:32	Cerberus	Bobcats
	10	3:36	Bionic Builders	Lego Royalties
	11	3:40	Chaotic Contraptions	Lords of the Legos
	12	3:44	Mission Possible	DogBots
D	1	4:15	Electromonkeys	Solar Super Stars
	2	4:19	Puzzlenators	Puzzle Masters
	3	4:23	Full Throttle A Corp	Nanonerds
	4	4:27	Starbots	Geek Squad
	5	4:31	ExoStorm	Electric Cheese
	6	4:35	CostcoBots	Atomic Puzzlers
	7	4:39	Oak Rocks	Almond Roboteers

Judging Schedule										
	Track 1						Track 2			
Round	Session	Time	Presentation Judging Rooms	Robot Design Judging Rooms	Programming Judging Rooms	Team Categories Judging Rooms	Presentation Judging Rooms	Robot Design Judging Rooms	Programming Judging Rooms	Team Categories Judging Rooms
A	1	1:20	Lego Legends	Lego Lords	Cerberus	Bionic Builders	Bananas	Technostuds	Bobcats	Lego Royalties
	2	1:30	Bionic Builders	Lego Legends	Lego Lords	Cerberus	Lego Royalties	Bananas	Technostuds	Bobcats
	3	1:40	Cerberus	Bionic Builders	Lego Legends	Lego Lords	Bobcats	Lego Royalties	Bananas	Technostuds
	4	1:50	Lego Lords	Cerberus	Bionic Builders	Lego Legends	Technostuds	Bobcats	Lego Royalties	Bananas
В	1		Chaotic Contraptions	DogBots	Electromonkeys	Puzzlenators	Lords of the Legos		Solar Super Stars	Puzzle Masters
	2	2:20	Puzzlenators	Chaotic Contraptions	DogBots	Electromonkeys	Puzzle Masters		Mission Possible	Solar Super Stars
	3	2:30	Electromonkeys	Puzzlenators	Chaotic Contraptions	DogBots	Solar Super Stars	Puzzle Masters	Lords of the Legos	Mission Possible
	4	2:40	DogBots	Electromonkeys	Puzzlenators	Chaotic Contraptions	Mission Possible	Solar Super Stars	Puzzle Masters	Lords of the Legos
С	1		Full Throttle A Corp	Starbots	ExoStorm	Oak Rocks	Nanonerds	Geek Squad	Electric Cheese	Almond Roboteers
	2	3:10	CostcoBots	Full Throttle A Corp	Starbots	ExoStorm	Atomic Puzzlers	Nanonerds	Geek Squad	Electric Cheese
	3	3:20	Oak Rocks	CostcoBots	Full Throttle A Corp	Starbots	Almond Roboteers	Atomic Puzzlers	Nanonerds	Geek Squad
	4	3:30	ExoStorm	Oak Rocks	CostcoBots	Full Throttle A Corp	Electric Cheese	Almond Roboteers	Atomic Puzzlers	Nanonerds
	5	3:40	Starbots	ExoStorm	Oak Rocks	CostcoBots	Geek Squad		Almond Roboteers	Atomic Puzzlers