
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.
- Thank you to all of the Parents and Coaches that make the teams possible. Thank you also to the many volunteers that put on this competition. The Los Altos Robotics Board had a huge role in planning what happens today and getting everything in place for the tournament. Thank you board members.
- This year's worldwide challenge is called "Food Factor Challenge". This year's Challenge calls for teams to use robotics to solve a set of Food Safety missions as well as research, develop, and share their innovative food safety solutions.
- Teams start missions with their robots positioned in the base at the southwest corner 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, a yellow bacterium (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.
- Here is a brief overview of the schedule. There will be four rounds. Teams will be judged during one of them and their robots will compete in the other three rounds. Teams will be judged on robot design, team work and their research project. We are on a tight schedule so teams are responsible for getting to the tables and judging rooms ON TIME. If you miss your scheduled time you will not be able to make it up. Some teams have already completed their judging and the rest of the teams will go to judging sessions this afternoon with the first judging rounds starting at 1:30. The times in rooms for the judging rounds are in this handout and also on the board on the right side of the auditorium. After the competition rounds and judging ends at 4:30, we will have demonstrations of two other youth robotics programs and have some demonstrations from some of today's best performing robots while the judging is finalized and an overall winner is determined. We will finish off with an awards presentation at around 5:00.
- Before the presentation of awards we will have a drawing from the raffle tickets team members received when they checked in. Through the fund raising efforts of the Los Altos Robotics Board, we are pleased to offer the following raffle prizes sponsored by LEGO Inc. The prizes are a LEGO Mindstorm NXT 2.0 Construction System, a LEGO Technic 8070 car model and twenty LEGO Gift Sets (1 notepad, 1 pencil sharpener, 2 pencils, and 2 erasers per gift set). Team members must be present at the time of the drawing to win.
- To avoid messing up other team's robots, teams must download their programs by using a USB cable. Bluetooth is forbidden by FLL rules.
- Spectators must stand behind the control lines to view the matches. Please respect the control lines in front of the match tables. **The front row is for KIDS ONLY.** Adults should stay behind the second control line.
- The bleachers on the stage are for those who want to sit down while watching the matches. Please don't stand in front of the bleachers. Use the stairs at the RIGHT of the stage. **DO NOT STAND ON THE STAIRS.**
- Only team members and one photographer per team are allowed inside of the competition area marked off by the control lines. No coaches and other adults (except volunteers) are allowed in the competition area. The team photographer should move to the square marked in tape on the floor

which is on near the East end of the table opposite the base where the teams start their robots. The photographer should remain on the marked square for the duration of the match.

- No flash photography of competition fields. Flashes can mess up the robots. We also ask that you do not photograph or videotape someone else's robot for the purpose of copying their designs unless they give you permission.
- Send your best photos this weekend or Monday morning to Michael@LosAltosRobotics.org for possible inclusion in Los Altos Robotics website and the newspaper.
- 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.
- Our tournament is supported by Playing@Learning in Fremont; they manage the Northern California program for First LEGO League (Nor Cal FLL).
- Thank you to Blach Intermediate School for the use of the building. Los Altos schools have been very supportive of FLL. In particular we would like to thank Leslie Crane, principal and Michelle Landrith of Blach school.

ARRIVAL

- Go to the check-in table when you arrive
- Check your match schedule and judging schedule.
- 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

- **10:00 Room setup by advance party.**
- **10:30 Judge sign-in**
- **11:15 First set of teams (Pit # 11-13) go to judging**
- **12:00 Second set of teams (Pit # 14-16) go to judging**
- **12:00 Referee and Volunteer sign-in (unless otherwise arranged with Mike Murray)**
- **12:00 Team welcome to come in and check-in. Competition and practice table setup. Teams set up their pit area.**
- **12:30 Coaches meeting – get your questions out for the referees.**
- **12:30 to 12:50 Each team has five minutes (see detailed schedule) on a competition table to calibrate their robots**
- **1:00 Opening ceremonies**
- **1:05 Introduction to FIRST and all the teams. Overview of the rules**
- **1:15 The first teams up must get to the tables and the judging areas.**

- **1:30 Round A (60 minutes and 15 minute break) Matches and Judging session start promptly.**
- **2:45 Round B (30 minutes and 15 minute break)**
- **3:30 Round C (40 minutes) Judging is completed by 4:30.**
- **4:30 Break and initial clean-up (15 minutes)**
- **4:30 Demonstration (15 minutes) by FIRST High School Robotics teams. Judges will meet and determine award category winners. Some teams may be called back by the judges.**
- **4:45 Robot demonstrations by best performing and noteworthy robots.**
- **5:00 Introduction of each team. Teams bring up their robots for the group photo and participation awards. Certificates are prepared.**
- **5:10 Project presentation by selected team.**
- **5:20 Raffle prizes awarded**
- **5:30 Announce the winners**
- **5:45 Ask for volunteers for next year. Thanks to the volunteers and Blach School.**
- **5:50 Take down the room**
- **6:30 Tear down squad closes the building.**

AWARDS

- Awards will be presented at the end of the tournament in several categories.
- Teams can win only one award in addition to robot performance awards for the highest performing robots.
- A Champions Award will be presented to the team with the best overall scoring in the Robot Performance, Research Project, Core Values, and Design/Programming categories. Note that robot performance is only 25% of the overall score. If there is a 1st place robot score tie in the robot performance competition, the 2nd and 3rd highest scores will be used to break the tie.
- The top finishers in the Champion Award category will advance to the Peninsula District tournament.
- Inappropriate behavior from team members or coaches may eliminate teams from advancement.
- Each team can pick up its feedback rubrics from the judging immediately after the awards.

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 1-16 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. Coaches are responsible for restoring tables to competition-ready condition when their teams are done practicing. 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

- 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 NXT and set of allowable parts can be brought to the table for each match.
- Please label everything you bring.
- Cameras and video. Please do not videotape other teams' robots for the purpose of imitating their designs without the team's permission.

Please label everything you bring. It helps us return it to you if it is found.

TOURNAMENT MATCH RULES

Each team will have five minutes (see the detailed schedule) between 12:30 and 12:50 to calibrate their robots and have a practice run on one of the competition tables. Each team will have three scored matches in the schedule. During one round your team will be interviewed in the judging rooms on the other side of the Blach campus. A schedule showing the times for your matches is attached. However, please re-check the schedule on the day of the tournament in case there are last minute adjustments.

We have a lot of matches in this tournament. A match is scheduled for every 5 minutes. There will be two 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 running match and the upcoming matches will be on the projected display between the pits and the competition tables.
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. Only teams members and one photographer per team are allowed inside of the competition area marked off with the yellow tape. Coaches and other adults are not allowed in the competition area. The team photographer should move to the square marked in tape on the floor which is on near the East end of the table opposite the base where the teams start their robots. The photographer should remain there for the duration of the match.
4. The Referee will come to your table and check that you are the right team. Please tell him or her any problems that you have with the setup or questions about the match. Tell him or her when you are ready to run. Be prompt in getting your robot ready to go.
5. 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 in front of the stage. The Announcer will check that you are ready and then countdown to the start of the match.
6. 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.
7. 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 2-1/2 minutes) to complete this review. We want perfect scoring so please check your match score carefully. 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

Three judging events are scheduled for each team, with each event no more than 15 minutes.

Judging Rooms:

Research Presentation	T2
Robot Design	A5
Core Values	T1

The judging is done in classrooms and staff rooms at the west side of the campus. They are behind and next to the office. Please go to that area during the break before your judging. You will have 10 minutes with each set of judges and 5 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 3 judging sessions in one trip. After your round of judging you may return to the matches.

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 10 minutes total! You should target 5 minutes for your presentation to allow time for the judges' questions.

Under a change in the rules from previous years, FIRST requires that Research Presentation judges must see that a team has fulfilled all three of "Identify a Real-World Problem", "Create an Innovative Solution", and "Share your research and solution" requirements directly from their presentations. It is not sufficient to cover these in the question and answer sessions with the judges. In other words, while our judges will have some leeway, it's best that each team goes into Research Presentation judging understanding that they need to be proactive and specific about each of the three areas *in their presentations -- and before Q&A*. Failure to satisfy this requirement disqualifies a team from ANY award.

Robot design (and programming). 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. There is a field setup to demonstrate your robot or its 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 10 minutes; If you have to wait 5 minutes for the computer to startup it will probably affect your score.

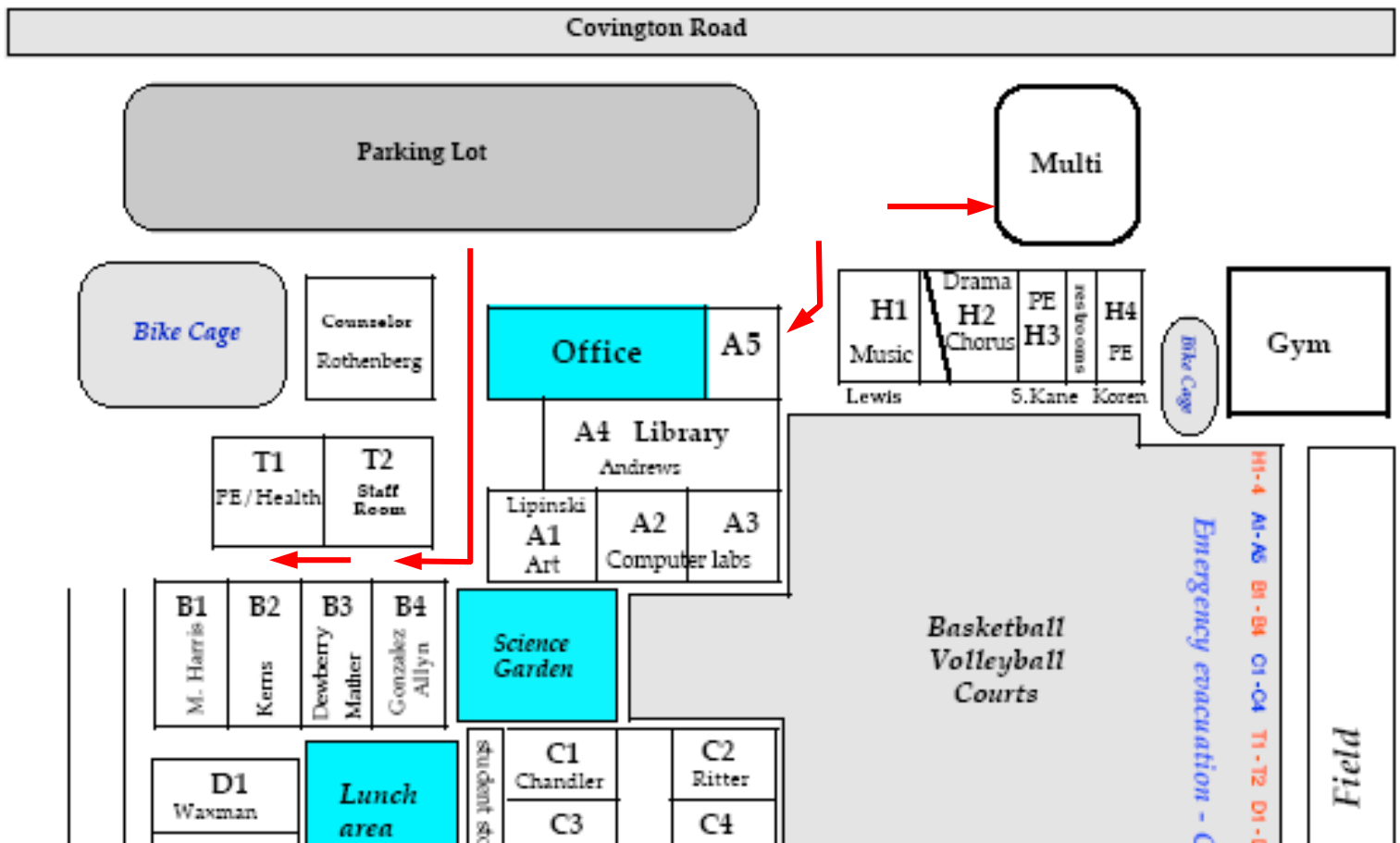
Core Values. Judges interview the team about how the team is structured and its observance of the FLL Core Values.

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, Steve Putz.

Coaches and Parents are not allowed in the judging rooms so as to allow the judges to focus more easily on what the team members have to say.

During the judging deliberations, we may find it necessary to call your team back to the judging area.

CAMPUS MAP



PIT ASSIGNMENTS AND SCHEDULE OVERVIEW

		ROUND A																				
		Coach Meeting				Opening Ceremonies																
Pit	Team	11:15 AM		12:00 PM	12:30 PM	12:35 PM	12:45 PM	12:50 PM	1:00 PM	1:30 PM	1:35 PM	1:40 PM	1:45 PM	1:50 PM	1:55 PM	2:00 PM	2:10 PM	2:15 PM	2:20 PM	2:25 PM		
1	The Cyborgs			Check In Teams #1-#10	A1	Practice Intervals			Opening Ceremonies	PR			CV			RB						
2	Mat Scientists				A2										PR			CV		RB		
3	Robotic Ravioli				B1								RB					PR		CV		
4	MINITW				B2								CV			RB				PR		
5	Gears						A1						A1							A2		
6	40 Loyola SAPlings						A2						A2								B2	
7	SAP0wer4						B1							B1						A1		
8	Androids						B2							B2							B1	
9	Kung Food									A1					A1							A2
10	Fantastic Lego Legion						A2								A2							
11	The Other Team Again	PR	CV	RB			B1						B1						A1			
12	Alien Calamari	RB	PR	CV			B2						B2							B1		
13	Pieceful Programmers	CV	RB	PR				A1							A1							
14	Extreme Kennedy			PR	CV	RB		A2						A2								
15	Hazardous Waste			RB	PR	CV		B1							B1							
16	Lightning Bots			CV	RB	PR		B2							B2							

Teams #11-13 arrive in time for 11:15 Judging
 Teams #14-16 arrive in time for 12:00 Judging
 Teams #1-10 check-in between 12:00 and 12:15

Coach meeting at 12:30
 Each team has an assigned 5 minutes to practice (12:30-12:55)

Judging Rooms			
Project	PR	Room	T2
Core Values	CV	Room	T1
Robot	RB	Room	A5

		ROUND B						ROUND C																						
		11	12	13	14	15	16	17	18	19	20	21	22	23	24															
Pit	Team	2:45 PM	2:50 PM	2:55 PM	3:00 PM	3:05 PM	3:10 PM	3:15 PM	3:30 PM	3:35 PM	3:40 PM	3:45 PM	3:50 PM	3:55 PM	4:00 PM	4:05 PM	4:15 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:00 PM								
1	The Cyborgs		B1							B2					A2			4:30 Demos												
2	Mat Scientists		B2						A2							B1			5:00 Participation Awards and Photos											
3	Robotic Ravioli			A1						B1						B2				5:30 Trophy Awards										
4	MINITW			A2					A1					A1							5:30 Trophy Awards									
5	Gears	PR			CV			RB			A1											5:30 Trophy Awards								
6	40 Loyola SAPlings	RB			PR			CV					B1										5:30 Trophy Awards							
7	SAP0wer4	CV			RB			PR					B2											5:30 Trophy Awards						
8	Androids					A1					PR			CV		RB									5:30 Trophy Awards					
9	Kung Food				B2						RB			PR		CV										5:30 Trophy Awards				
10	Fantastic Lego Legion						B1				CV			RB		PR											5:30 Trophy Awards			
11	The Other Team Again						B2											5:30 Trophy Awards												
12	Alien Calamari											A2							5:30 Trophy Awards											
13	Pieceful Programmers	A2									B2									5:30 Trophy Awards										
14	Extreme Kennedy				B1				A1												5:30 Trophy Awards									
15	Hazardous Waste	A1							A2													5:30 Trophy Awards								
16	Lightning Bots					A2					B1												5:30 Trophy Awards							

JUDGING SCHEDULE

<i>interval</i>	15	<i>min</i>	Pit	Project: Room T2	Pit	Core Values: Room T1	Pit	Robot: Room A5
11:15 AM		AM #1	11	The Other Team Again	13	Pieceful Programmers	12	Alien Calamari
11:30 AM			12	Alien Calamari	11	The Other Team Again	13	Pieceful Programmers
11:45 AM			13	Pieceful Programmers	12	Alien Calamari	11	The Other Team Again
12:00 PM		AM #2	14	Extreme Kennedy	16	Lightning Bots	15	Hazardous Waste
12:15 PM			15	Hazardous Waste	14	Extreme Kennedy	16	Lightning Bots
12:30 PM			16	Lightning Bots	15	Hazardous Waste	14	Extreme Kennedy
12:45 PM								
1:30 PM		A	1	The Cyborgs	4	MINITW	3	Robotic Ravioli
1:45 PM			2	Mat Scientists	1	The Cyborgs	4	MINITW
2:00 PM			3	Robotic Ravioli	2	Mat Scientists	1	The Cyborgs
2:15 PM			4	MINITW	3	Robotic Ravioli	2	Mat Scientists
2:30 PM								
2:45 PM		B	5	Gears	7	SAP0wer4	6	40 Loyola SAPlings
3:00 PM			6	40 Loyola SAPlings	5	Gears	7	SAP0wer4
3:15 PM			7	SAP0wer4	6	40 Loyola SAPlings	5	Gears
3:30 PM								
3:45 PM		C	8	Androids	10	Fantastic Lego Legion	9	Kung Food
4:00 PM			9	Kung Food	8	Androids	10	Fantastic Lego Legion
4:15 PM			10	Fantastic Lego Legion	9	Kung Food	8	Androids

ROBOT COMPETITION SCHEDULE

Round	Match #	Time	Table	Pit#	Team		Pit#	Team
A	1	1:30 PM	A1	5	Gears	A2	6	40 Loyola SAPlings
	2	1:35 PM	B1	7	SAP0wer4	B2	8	Androids
	3	1:40 PM	A1	9	Kung Food	A2	10	Fantastic Lego Legion
	4	1:45 PM	B1	11	The Other Team Again	B2	12	Alien Calamari
	5	1:50 PM	A1	13	Pieceful Programmers	A2	14	Extreme Kennedy
	6	1:55 PM	B1	15	Hazardous Waste	B2	16	Lightning Bots
	7	2:10 PM	A1	7	SAP0wer4	A2	5	Gears
	8	2:15 PM	B1	8	Androids	B2	6	40 Loyola SAPlings
	9	2:20 PM	A1	11	The Other Team Again	A2	9	Kung Food
	10	2:25 PM	B1	12	Alien Calamari	B2	10	Fantastic Lego Legion
B	11	2:45 PM	A1	15	Hazardous Waste	A2	13	Pieceful Programmers
	12	2:50 PM	B1	1	The Cyborgs	B2	2	Mat Scientists
	13	2:55 PM	A1	3	Robotic Ravioli	A2	4	MINITW
	14	3:00 PM	B1	14	Extreme Kennedy	B2	9	Kung Food
	15	3:05 PM	A1	8	Androids	A2	16	Lightning Bots
	16	3:10 PM	B1	10	Fantastic Lego Legion	B2	11	The Other Team Again
C	17	3:30 PM	A1	4	MINITW	A2	2	Mat Scientists
	18	3:35 PM	B1	3	Robotic Ravioli	B2	1	The Cyborgs
	19	3:40 PM	A1	14	Extreme Kennedy	A2	15	Hazardous Waste
	20	3:45 PM	B1	16	Lightning Bots	B2	13	Pieceful Programmers
	21	3:50 PM	A1	5	Gears	A2	12	Alien Calamari
	22	3:55 PM	B1	6	40 Loyola SAPlings	B2	7	SAP0wer4
	23	4:00 PM	A1	4	MINITW	A2	1	The Cyborgs
	24	4:05 PM	B1	2	Mat Scientists	B2	3	Robotic Ravioli