

Robotics Student Packet

2015-2016

Please bring this packet to
the student/parent meeting
on Thursday, October 22
at 7pm in the LGHS metal shop

LGHS Robotics Club Registration Packet

2015 - 2016 Season



FIRST® Tech Challenge



FIRST® Robotics Competition

FTC Team 6730
Banana Tyrants

FTC Team 9097
Batteries Included



Welcome to the LGHS Robotics Team!

We are very excited to see that your student is interested in the Los Gatos Robotics Team 2015-16 season. What will this entail? Your student will participate as a part of one of two FTC Teams (6730, Banana Tyrants, and 9097, Batteries Included) from now until mid February. Additionally, your student will have the opportunity to participate in FRC on Team 972, Iron Claw from January to May. Both seasons are extremely rewarding and teach both technical skills (programming, machining, CAD, electrical) and life skills (working on a team, leading others, finishing projects for deadlines, etc.).

What is FTC? FTC is the FIRST (For Inspiration and Recognition of Science and Technology, the organization that runs the robotics competitions) Tech Challenge, which is a light commitment season (about 4-6 hours a week) where each team will build and program an 18" by 18" by 18" robot that will compete in two small competitions in our area (will take up a full day on a Saturday). This is a great introduction to the world of robotics.

FRC (FIRST Robotics Challenge), on the other hand, requires more time commitment than FTC. Starting the first Saturday of January and running for 6 weeks, students will spend upwards of 20 hours a week building a robot that weighs as much as a teenager and is 4' by 2' by 7' (big!). Then, during the next 6 weeks, the robot will compete in one or two regional competitions that last from Friday to Sunday. Hundreds of colleges offer thousands of dollars in scholarships for seniors who have competed in FRC competitions. This season is challenging, rewarding, and extremely fun. Though it is tough, it is very worth it!

For FRC, we ask for a suggested donation of \$500 (or minimum of \$200) from each family participating on the FRC team (see financial support section for details). Additionally, we will need parent volunteers to help during both the FTC and FRC build seasons. The FTC season has already started, so a volunteer request will be sent shortly.

Robotics is an intense and rewarding experience that is open to anyone with an interest and some commitment. No experience is required - just show up and be ready to learn!

We are excited to work with your student this year.

Josh Anderson and Gautam Prabhu
Club Presidents

Student Contract

Behavior Contract (For both FTC and FRC):

I, _____ (name), as a part of the LGHS Robotics Team, hereby pledge to maintain a good image of the robotics team through respectful and safe conduct. I **understand that If I do not fulfill these requirements, there will be consequences for that choice, as outlined below in the conflict resolution document.**

Respectful conduct means that I will listen to and follow the directions of student leadership, teachers, and mentors in robotics club. I will not say derogatory things (judged by the recipient) or act disrespectfully to anybody else while a part of the team. I recognize that we are an inclusive community dedicated to learning more about robotics and having a fun time while doing so.

Safe conduct is required while working in the metalshop or around robots, their constituent parts, or tools outside of the metalshop. In the metalshop, it is a requirement that I wear closed-toed shoes and safety glasses, and tie back any loose hair or drawstrings on my clothing. While working around the robot, safety glasses are also required in the metalshop or in a public event. I understand that all tools and equipment must be treated with respect and will only use these items if I have been trained to use them safely. If I am working with the computers I will be careful to not harm the existing code or hardware, and will only use them for things related to robotics (Programming, CAD, Website Design). If I turn on or run the robot I will suitably notify everybody around me for their safety. I will also listen to and respect the safety rules laid out by Mr. Payne and other mentors, especially in regard to using metalshop equipment.

I also understand that participation in robotics is not an excuse to let my grades drop. If my GPA is at any point less than 2.5 or I have any D, I will not be allowed to participate in robotics until I bring my grades up again.

Above all, I recognize that the equipment, other students, teachers, and mentors all deserve my utmost respect.

Conflict Resolution:

In the Los Gatos Robotics Team, there are three main authorities for resolving conflicts: Student Captains, Mentors, and Teachers.

If a conflict arises between team members or if a student is acting irresponsibly, as judged by a student captain, the problem first should be solved by the captains. This

includes: pulling the student(s) aside for a talk (first warning), sending the student(s) home early for that day (second offense), or bringing to the attention of the mentors and teachers by the captains to aid in arbitration (continuing offenses). In unresolved cases, this may result in the student being asked to leave the program.

Signature:

I understand that if I fail to follow the terms listed in the behavior contract, the consequences outlined above will be activated.

Student:

Name: _____

Signature: _____ Date: _____

Parent:

Name: _____

Signature: _____ Date: _____

Guardian Statement

(For both FTC and FRC):

I, the legal guardian of _____ (student's name), hereby give permission for my child to participate in the LGHS Robotics Club, including FTC and/or FRC competition seasons (whichever seasons my child will participate in), in any part of the robotics production process. I understand that this includes driving to competitions in private vehicles and an overnight stay at one of our FRC competitions, with approved chaperones and mentors.

My student currently plans to join:

- FIRST Tech Challenge
and/or
- FIRST Robotics Challenge

My student is interested in the (check as many as apply):

- Programming Team
- Electrical Team
- Mechanical Team
- CAD Team (FRC only - pick any other option if in FTC)
- Graphic Design
- Website Design
- Business/Fundraising
- Documentation

Adult volunteers are needed! Place a check below how you would like to help:

- ____ become a mentor for the team.
- ____ provide snacks during build season.
- ____ provide meals during event days.
- ____ drive in a carpool.

I believe that my student is capable of participating in the activities described.

Medical Information (This will not be shared with anyone outside of mentors on the mentor council). Adult mentors and captains will be present to provide medical assistance if needed.

1. List any medical restrictions for my student:

2. List any food restrictions:

3. Emergency name and contact information:

4. Please list any additional information on a separate page.

I certify that all the information I provided in this packet is correct and agree to the stated responsibilities my student and I will face in this club.

Guardian Name: _____

Signature: _____

Relationship with student: _____ Date: _____

Email: _____ Phone Number: _____

Industrial Technology

General

SAFETY RULES

The following is a set of rules that are designed so that there is a safe environment for all of us to work. If everyone follows all of the safety rules then we can be as sure as possible that someone will not be injured. These are general rules that apply to everyone. When we begin using the machines and tools, there will be additional rules, and set-up procedures that are specific to that particular machine or tool that must be followed to help ensure the safety of all of the students in the shop. Serious injuries can happen. We do the best to prevent injuries by following the safety rules and procedures.

Behavioral Rules

1. There will be **NO** horseplay, or running around allowed. This is a serious offense considering you may injure yourself or others if you are messing around.
2. When you are operating a tool or machine you must pay attention to what you are doing. Do not be distracted and do not distract others (focus).
3. Safety glasses are mandatory and must be worn in the manufacturing and woods lab at all times, and in the classroom when necessary
4. Respect each other and your teachers. No name-calling or remarks will be tolerated.
5. Do not take anyone's materials or tools that they are using. We may be limited on some items, but you should be patient and wait your turn.
6. If there are any serious or repeated safety infractions, you will be removed from the room. A safe working environment will be maintained.

Procedural Rules

7. If you make a mess clean it up.
8. If you see some equipment that is damaged or not working properly let the teacher know right away. If damaged equipment is used, it may cause injury.
9. When placing something on a table or workbench, make sure that it does not extend over the edge. Someone might bump into it knocking it off. This may cause injury or damage the item.
10. When using knives and other cutting instruments, always be aware of where the point is (point it toward the ground and have a guard on it if possible). Also always cut away from yourself or anyone else.
11. When using tools that involve heat, be sure that they are safe before leaving them. There should not be anything flammable close to the heat source, and the tools should not be left so that someone going by would not accidentally touch them.

Consequences For failure to comply with these rules or any others presented in class

1. Minor Safety infractions will be met with a warning and loss of participation points for the day.
2. A second safety infraction during the same day will be met with loss of participation in the class, the student will sit out for the day and write a one page paper detailing why it is not safe to break the safety rules.
3. A third safety infraction during the day will be met with removal of the student from the laboratory and a call home to the parents
4. Any major safety or behavior infractions the instructor retains the right to remove the student from the classroom if the instructor feels necessary.
5. The instructor also retains the right to modify the consequences to what they may feel is appropriate for the infraction.
6. State Law -If a student fails to comply with wearing protective eye devices they may be temporarily suspended from participation in the course.

Technology Education

Safety/Course Fees

Parent Information Sheet

Safety

I have read and viewed the safety rules and procedures for the Los Gatos Technology Education laboratory and agree to abide by them. I can safely work in the Technology Education laboratory, and I understand that if I violate safety rules there will be specific consequences that could result in removal of me from the room.

Student Signature

Student

Date

I/We have read the safety* rules and expect that my/our student will abide by them, and all of the other rules and procedures that were gone over in class. It is understood that safety is important for the protection of all students who will be working in the Technology Education labs and classrooms, and that following the rules will help ensure the safety of everyone in the laboratory.

Parent/Guardian Signatures

Parent Guardian

Date

Parent/Guardian

If you have any questions or concerns about this or anything else, including other safety information, please get in touch with me:

Aaron Payne
Los Gatos High School
Industrial Technology Teacher
408-354-2730 ex. 220
apayne@lgsuhisd.org

Financial Support for FRC:

Our FRC Team, Iron Claw, requires \$15,000 by December 2015 and an additional \$10,000 by June 2016 for next year's season. Because we are a new team, we need family donations while we cultivate our sponsorships. If you work at a company that matches donations, then you and your company may qualify for a tax deduction for the donation because we are a nonprofit organization. Our EIN is 94-3118082.

A donation is not mandatory but is greatly needed.

Our family is able to contribute \$_____ at this time (recommended donation \$500, suggested minimum \$200). Checks payable to **Los Gatos High School**, with memo line **FRC Robotics T0504**.

Employer Name(s):

Does your company match donations? _____

Expected company match of \$_____ by _____ (approximate date)

Please list any foundations, local businesses, individuals, or corporations to which your family has contacts who may be willing to sponsor our FRC team: