

PATRIOT ROBOTICS

Program Information 2019/2020

www.beyerrobotics.org

FIRST

The Patriot Robotics teams compete in challenges through the FIRST Organization. FIRST is a non-profit international organization that aims to inspire young people's interest and participation in science and technology. FIRST releases challenges at the beginning of each team's season and the robots are built to complete specific tasks. Students and Parents will need to register on the FIRST website and parents will fill out a consent form at www.firstinspires.org

TEAMS

FTC – FIRST TECHNICAL CHALLENGE TEAMS (JV LEVEL)

PLASMA PATRIOTS #4157 AND TITANIUM PATRIOTS #5211

The FTC teams are a good introduction to robotics. The robots are built with Tetrax kits and some custom parts. Students are mostly self-led with guidance from coaches and student team leaders. Students also write business plans, keep an engineering notebook, and submit award essays. These teams are open to all Beyer High students.

Coaches: Charity Loche (loche.c@monet.k12.ca.us) and Karla Valencia Nunez (Valencia-nunez.k@k12.ca.us)

Meetings: Twice a week August-November, meetings are held in the Beyer STEM room and shop after school.

Competitions: One day competitions on Saturdays, usually within 1.5 hour drive. The teams typically compete in two competitions in November/early December.

Costs: ~\$10 for a team t-shirt

FRC – FIRST ROBOTICS CHALLENGE TEAMS (VARSITY LEVEL)

IRON PATRIOTS #4135

The FRC level team is a higher commitment and has an intense build season. Students work in sub-teams to design a 100+ lb robot with CAD, fabricate custom parts, design and install wiring, and program the robot including autonomous actions and light sensors. Students run the website and social media accounts, produce video and print materials, write a business plan, and submit award essays. Students also participate in fundraisers and outreach events throughout the year. The team is led by student captains and team leads with the assistance of adult mentors who are engineers, project managers, programmers, and mechanics. This team is open to high school students in the Modesto area.

Coach: Heidi Pagani (pagani.h@monet.k12.ca.us) and Charity Loche (loche.c@monet.k12.ca.us)

Meetings: Occasional meetings at lunch and evenings through the school year. During the January -March build season students meet Saturday 9-5, some Sunday afternoons, and two evenings a week at the Beyer Robotics Shop.

Competitions: The entire team will attend one multi-day competition (Wednesday night -Saturday) in March. Additionally, a travel team selected by the coach and team leaders will attend an additional competition in March/April – the team has competed as far away as Idaho. The travel team will also attend the World Championship in Houston if the team qualifies.

Costs: ~\$10 for a team t-shirt and \$80-\$100 per competition for hotel, plus their own dinner costs.

FUNDING

Our program is partially funded through Modesto City Schools, but we are responsible for raising much of our operating budget through sponsorships and fundraisers. Patriot Robotics is a non-profit organization, 501c(3) IRS# 47-1421220. Our annual budget is approximately \$30,000-\$35,000.

Program Costs - Estimates

- FTC registration and parts kit \$2,500+ (plus more if an additional team added)
- FRC first event registrations \$9,000
- Summer Camp & Outreach \$10,000
- FRC robot parts/supplies \$8,000
- Competition travel and lodging \$8,000
- Plus \$ for outreach, tools & materials

Income Sources – Estimates/Varies

- Modesto City Schools STEM Grants \$10-\$15K (doesn't all go to team costs)
- Spaghetti Dinner, Chipotle, Amazon Smile, Gift Wrap & Other fundraisers \$8-\$10K
- 2019 Boyet Grant for Beyer Robotics Summer Camp \$10K (One-time grant for camp)
- Grants from NASA and Brin-Wojcicki Foundation – amount varies
- Money and/or material donations from corporate and private sponsors, e.g. O'Briens Market, Hogan Manufacturing, Port of Stockton, DOT Foods, Racor – amount varies. **Sponsorship forms and letters are available on our website.**

BOOSTER CLUB

Parents and guardians support Patriot Robotics by organizing fundraisers, events, travel, and other logistics. We meet the third Wednesday of each month at 6:30pm in the STEM Room. The next meeting is September 18th. Contact the boosters at beyerschoolrobotics@gmail.com

Officers

President: John Fichtenkort jdfich@gmail.com
Vice President: Marie Price thepriceismarie@yahoo.com
Treasurer: Heather Haubrich hhaubrich@stancoe.org
Secretary: Tricia Rosenow rosenowtricia@gmail.com

ADDITIONAL INFO

FIRST LEGO LEAGUE TOURNAMENT

Patriot Robotics hosts a FLL tournament at Beyer which is a competition for elementary school age robotics teams. The tentative date for this tournament is November 15th & 16th. We need student and parent volunteers for this event. Please contact Heather at hhaubrich@stancoe.org to help with organizing.

MENTORS

Adult mentors are an important key to our success. Mentors are parents, grandparents, alumni, and other adults who have experience in project management, engineering, programming, mechanics, etc. We are always looking for mentors, especially during the FRC build season.

FOOD AND TRANSPORTATION

Sign-ups for parents to give rides to competitions usually go out a few weeks before a competition. Drivers need to fill out the MCS Driver Registration form each school year and return it to the Beyer office well before competition.

Parents are also asked to help provide hot lunches for students and mentors on Saturdays during the FRC build season (Jan-Feb). A sign-up sheet will be sent out in December. Snack and drink donations can also be brought to the shop anytime during the build season.

Team Sign Up and Information

Students and parents – Sign up for Remind to get updates and notifications from team coaches.

FTC: Text @ftcbeyer to 81010

FRC: Text @frc4135 to 81010

www.beyerrobotics.org/register - Join the team roster and find links for registering on FIRST and download permission slips and forms

Important Dates

Booster's Meetings: Third Wednesday of every month, 6:30-8:00

FTC Shop Time: Tuesdays & Thursdays, Aug-Nov/Dec 2:15-4:00. First meeting 8/29

FRC Off-Season Meetings: Wednesdays 1-3pm in the Shop, Sept-Dec on minimum days.

FTC Competitions: Two Saturdays in Nov or Dec, TBD late October

Beyer HS FLL Competition: Setup: Friday 11/15/19 Tournament: Saturday 11/16/19

FRC Kick-off: Jan 4, 10:00 AM (Video at 10:30)

FRC Shop time: TBD – a lot (e.g. 5:00-8:30PM two weekdays, 9-5 Sat, and occ Sun afternoons, January - March)

FRC 'Bag and Tag': TBD - no longer required, approx. middle February, end of build season

Open House Spaghetti Dinner Fundraiser: Thursday Jan 30, 2020

FRC Competitions: Tentative: Full team March 11-14 in Fresno (leave Wed. afternoon, return Sat. night). Travel team March 25-29 in Idaho (leave Wed. morning, return Sunday)

End of Year Awards: TBD – May 2020

End of Year FRC BBQ Swim Party: TBD – May 2020