

ROBODOX

January was a big month for the Robodox. Kickoff happened during Winter break, and the FRC season started off the new semester. Also, Highlander fest allowed ghchs students and families get a taste of robotics and operate protobots.

Starting with a bang!

by Michael Wong

It's that time of year again! January 5th, the team kicked off the new season with the new game, Ultimate Ascent. Students and mentors immediately tried to tackle the various challenges posed by the new game as they discussed strategic options. Team members attempted to find the best combination of attributes required to win the game. Should the robot be focused on speed or should it be focused on shooting-



The team gathers in K2, ready for the new FRC Challenge during Kick off



Derek works with our engineering mentors, Chris and Evan during a design discussion.

disks? Should we attempt to pick disks up off the ground or feed them into the robot through stations on each end of the field? After actually figuring out how to play the game, they divided up into groups pertaining to each different possible system of the robot. These "subsystems" were tasked with providing a design solution to achieve the required attributes agreed upon. Ambitious designs ranging from an Archimedes Screw to a disk flipper arose. After settling on some designs, the season had just begun and we will soon meet our newest robot, The Medic.

The Robodox go to Highlander Fest

by Sabir Muhammad and Dr.K

January 12 was a cold day, but the air in Granada warmed from all the excitement. It was day of the Highlander Fest which showcased Granada's teams and clubs. Seeing the community come together and enjoy what the school has to offer was the highlight of the month. During Highlander Fest the Robodox demonstrated their FRC basketball shooting robot Radiologist as well as a VEX game that allowed people to win prizes by driving small robots. The Robodox spent the whole day teaching children how to drive robots and showing the community what our robotics team works on. Throughout the day the team was able to draw in a crowd as they shot free throws and demonstrated how their proto-bots worked. The game became a big hit as people discovered the challenge of picking up the game objects. In addition to allowing the community to enjoy the creations of the team, the Robodox also educated visitors what engineering is. We gave the insight into what the team works on and how they implement simple concepts into complicated machines. The event was considered a success not because of money, but because the Robodox were able to touch the minds of people of all ages: elementary, middle and high school students as well as preschoolers and adults.

Team members, Ritvik and Lauren help demonstrate the protobots at Highlander Fest

The Radiologist shoots some hoops in front of some interested students.



The Build Season

by Michael Wong

As the new semester arrives, the Build Season begins! The Dox have six weeks to design, build, and program a working FRC robot. During build season, our day ends at 6:00 and attendance is required on Saturdays from 9:00am to 5:00pm. These hours seem long, but we need all the time we can get. The students in each subsystem are working tirelessly to finish and put together their designs. While our CAD (Computer Aided Design) team brings everything together in the virtual scape, parts are constantly being fabricated in the shop. The build season ends when we pack the robot up on February 20th. We have two weeks left so lets keep up the good work Dox!

Newsletter edited by Dr.K

Special Thanks to Fresh Donuts, Spudnuts, and Starbucks for donating delicious donuts and coffee for our Kickoff event! Thanks for the support!



The Dox are hard at work. Everybody is busy testing systems, and machining new parts to go on the robot.



Robodox Events:

Ship Date: The day when we end build season and when we can no longer work on the robot at school.

February 20th

RocketDyne: We will demonstrate our FRC robot, the Radiologist at Pratt & Whitney Rocketdyne Inc.

February 28th

For More Information, Contact:

Michael Wong (Spring PR Executive): pr.robodox@gmail.com

Dr. Koroleva: okoroleva@ghchs.com

Mr. Vanderway: jvanderway@ghchs.com