Osborn Knight Riders – Team 6099
2023 Season Newsletter

This year's Knight Riders, was basically a rookie team since last year's team was almost all seniors. But that just meant there were many opportunities for growth and to experience new things. Students who in the fall didn't know anything about hand tools, let alone power tools, by January were ready to dive into building their first robot.

"From the Bloomfield Hills girls' competition to the unveiling of the official First Robotics game, building our robot and finally to our first-year Robotics competitions…This season has given me tremendous insight." Travon

"The first year of robotics was great. We got to work on the robot, go to awesome events, meet new people, and clean up our new room and decorate it. I had so much fun this year and I would like to do this again next year. The mentors have welcomed me with open arms and they are really kind. I'm glad I met this group of people. I learned a lot of things like coding, changing bumpers and what parts you need to build the robot." Anton

To give our rookie team a taste of what competition is like, we attended the girls' competition at Bloomfield Hills in the fall.

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"At the girl's competition it was great to watch them play other girl's teams. I learned how they played last year's game and it seemed fun to do. From watching them play each other I learned how they work together to beat the other teams. The girls' competition was a great experience for me. I loved watching them. I am going to be in the girls' competition next year." Nicole

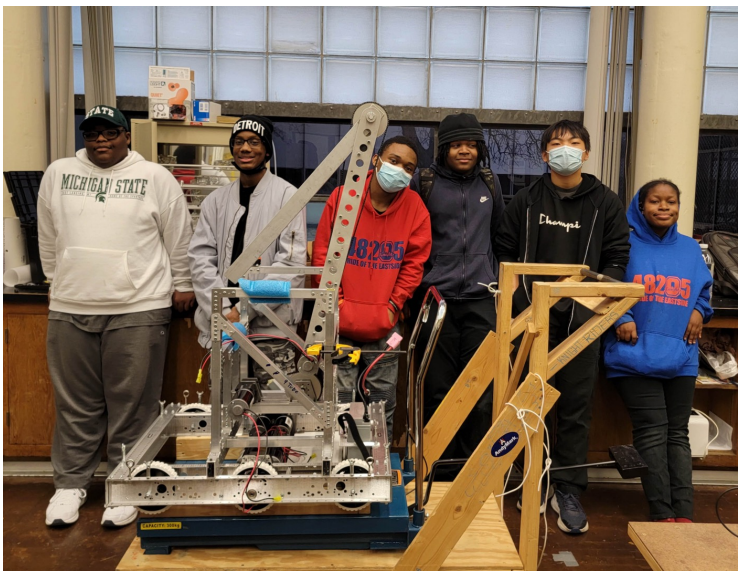
Build Season

"The build season was honestly fun and exciting. We all got to learn how to use tools properly, safely and most importantly, efficiently. But even if there was something we didn't know how to do, the mentors would take the time to teach us how to and let us experience it firsthand." Justin

"When we started building, I found myself making new friends and learning new things. I learned about tools and how to use them. I started to have a lot of fun working with everyone." Blake

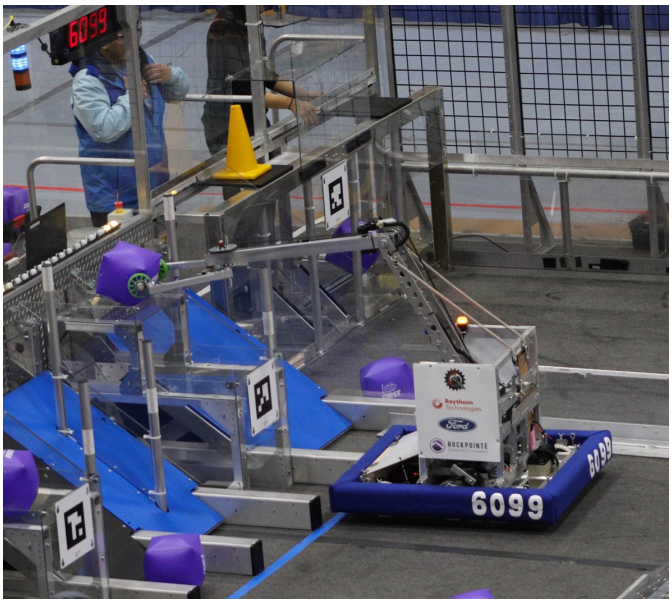
"What I like about robotics is building a robot from scratch and knowing how the robot works. It feels good building a robot for the team. I learned how to build as a team. I want to build another robot that can do different things." Nicole

"One thing I've learned from building the robot was how to work and communicate with a team. Before I joined robotics, I wasn't the best at working in teams because I thought if I did it myself, it would go faster. While that sometimes is the case, working with a team is sometimes more efficient." Savion



Competitions

The team's first competition was March 16-18 at Cass Tech High School. Our second competition was at Macomb Community College March 30-April 1.



"Everything got even cooler when we went to our first competition. I was scared at first because I did not know what I was doing. But as we went on, I got used to everything." Blake

"The Cass Tech robotics competition, being our first, was a fun yet challenging one. We had just recently finished building the robot and had to finish the coding while we were there. Our drive team had very little experience with driving and operating the robot. It was a lot to take in for most of our team. Despite that, we tried our hardest and did okay, placing 32nd. Although I was nervous at my fist competition, I still found that it was a good learning experience, fun, and a great way to get to know more people." Benjamin

"At Macomb I noticed that the venue was two times bigger than at Cass Tech and there were new teams we didn't see at the first competition as well as some we had seen. I got to walk around and greet some of the teams that were there and admire all of the amazing robots they built together. I was able to establish friendships with the teams, that is most important. On the last day I was proud of my team that we did better at Macomb than at Cass Tech, placing 26th. By next season we can improve our ways and rank higher than this season." Travon

Additional Experiences

This year's team had the opportunity to explore STEM related-fields outside of the classroom environment. Some of the highlights were…

We had the opportunity to tour LIFT, a national manufacturing innovation institute in Detroit. The visit included "hands-on" activities.

"The LIFT trip was a great trip to go to because of all of the things that they show and that we were able to try. There was a Circuit Design 'Hands-on' station, an Interactive Miniature manufacturing robot arm, an introduction to CNC (Computer Numerically Controlled) machine, and a 3D printer. They also have VR welding training for anyone who wants to learn how to do welding. The LIFT trip was so much fun." Devon

We were invited by Siemens, together with the other teams they sponsor, to have a table at the Manufacturing in America conference.

"When I first got to the Manufacturing in America conference, I was surprised at how many people and tables were there. There were engineers from different companies. One of the engineers came by our table and I got the chance to speak with her and tell her about what we do. Not only that but I told her about what our robot does. I also shared about our team's experiences in our first and second competition. I would definitely say it was a good experience and would love to go again." Blake

Looking to the Future

A big part of what we will be doing in the fall is working on our new workshop. There are many parts and tools to organize. We will be refining the set-up of our new workshop space, including the practice field donated by one of our generous sponsors, to improve flow and productivity.

One goal in the fall is to have a team compete in the girls' competition at Bloomfield Hills, not just attend the competition as spectators.

As we work on the game beginning in January, we want to focus on improving materials, the design of our robot drive and our working timeline.

"The Osborn Knight Riders Robotics Team has many plans/goals for next year. One of them is making a swerve drive robot. First, we are going to make a swerve drive base during the summer so we can learn about it and get most of the challenges that come with changing to swerve drive out of the way. We believe that using a swerve drive instead of a tank drive will make it easier to move the robot where we want it to go." Savion

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