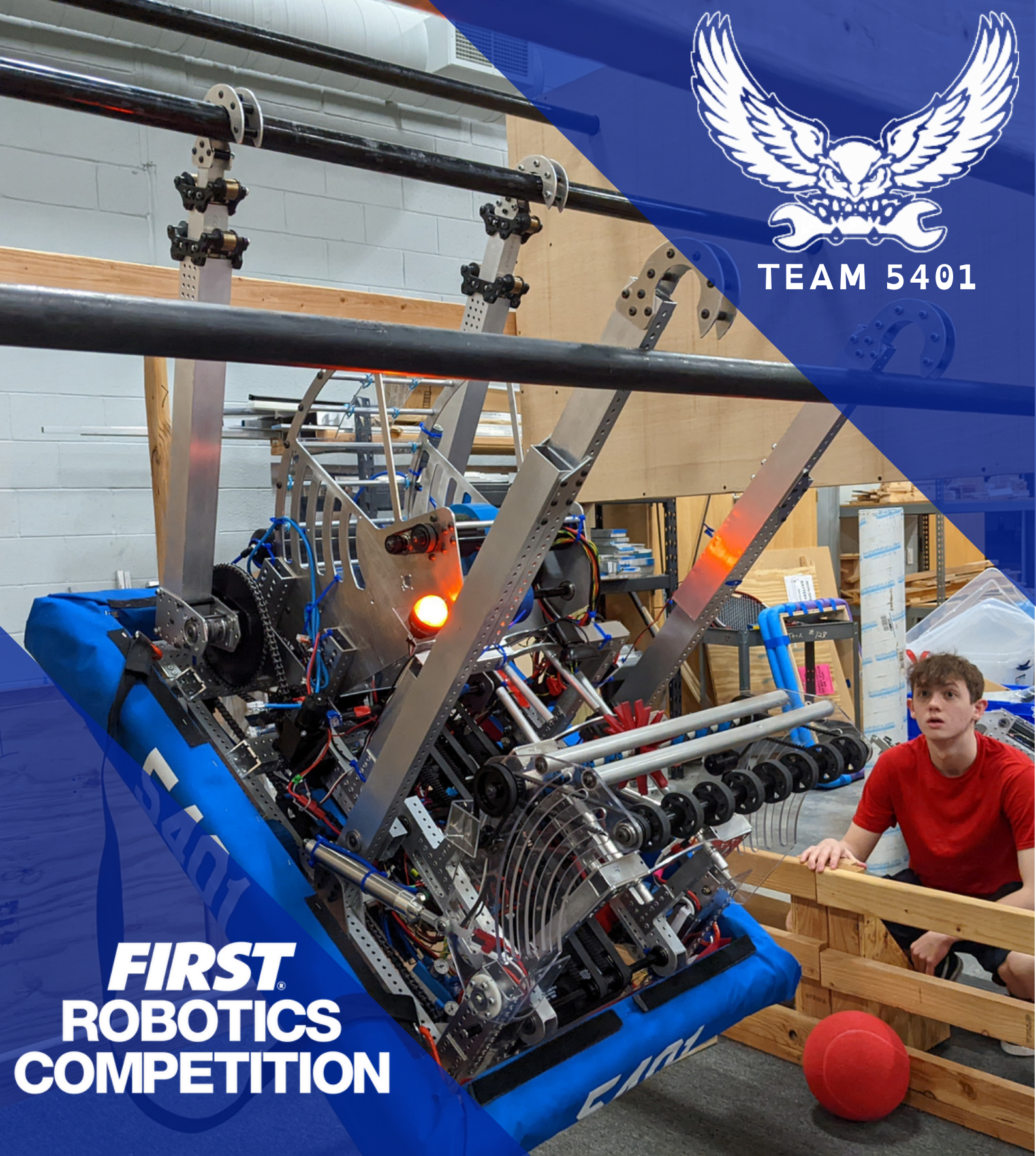




TEAM 5401



FIRST
ROBOTICS
COMPETITION

2023 BUSINESS PLAN

MISSION STATEMENT

- We enhance students' interest in STEM and business fields by engaging them with experienced mentors. Mentors challenge them with real-world situations that build character and foster a lifelong appreciation for teamwork.
- We believe that everyone is welcome on this team, no matter their ability or interest, they can find passion in something we do.
- We are not just an after-school club. We are a professional organization and competitive sport, preparing the next generation of engineers, entrepreneurs, and leaders for the bright future ahead of them.
- We choose to be a self-funded team so we are not a strain on our school district's financial resources. Additionally, we collect no dues from our team members because, as a Title 1 eligible school district, we do not want financial constraints limiting participation.
- We are committed to promoting and supporting STEM education at all levels, both in our school district and in our community as a whole.
- We participate in community service and outreach to show our team spirit, introduce others to FIRST, and give back to the community that supports us.
- We will continue to grow, mentor, and sustain a family of FIRST teams all throughout Bucks County.

TEAM HISTORY & GROWTH

Based out of Bensalem, Pennsylvania, The Fightin' Robotic Owls was formed in 2014, with a group of 19 students and 3 mentors. Over the past 8 years, our team has grown significantly and now we have more than 50 active team members and 8 mentors. During our 2019 season, we hosted our inaugural FRC-District Event and our team was the Tesla division winner in Detroit!

In the 2019-2020 season, we started six FLL teams at each elementary school and two FTC teams at our middle schools. Post-pandemic, we have pivoted to digital collaboration tools such as Slack, Discord, Google Docs, Monday, and On-Shape37. In the 2021-2022 season, we won the Engineering Inspiration Award and a Team Spirit Award. That year, we also started our sensory bag initiative that we have revamped this year.

Fall of 2022, we started a new approach for engaging Freshmen, the newcomer robot. They competed at HAVOC with their own independent team, gaining experience and confidence in how competitions work. While doing this, they won the "prize flower award." It was a rough first go, but with their determination, the judges saw something in them. We also started two more FLL teams.

COMMUNITY ENGAGEMENT

- STEM AMBASSADOR PROGRAM

Our STEM Ambassador Initiative is a program that we created that both mentors and assists the teams we launched throughout our years as a team. Within each of the nine FLL and three FTC teams, we have assigned groups of Team 5401 members to serve as Mentors to the students. Almost every member of our team that participates in the STEM Ambassador Initiative continues to meet with their teams up to twice a week through the FIRST competition seasons! While there, elementary and middle school students receive guidance from their Student Mentors who have a thorough understanding of the FIRST program. This program teaches students critical thinking, problem-solving, and taking ownership of tasks.

- SENSORY BAG

Sensory bags are toolkits that can help students, mentors, and anyone else who may have sensory processing issues. Our sensory bags include weighted snakes, headphones, fidget toys, sunglasses, as well as bookmarks for people to take home, which have a mindful breathing exercise on one side and sensory bag usage tips on the back. These can help drown out loud noises and bright lights, as well as help calm anxiety. We also have a quiet room at our event, where people can go if they feel the main competition area is too much for them. We offer these bags because we want everyone to be able to participate and have fun, and that is difficult to do if you are experiencing sensory overload. The bags and quiet room help create a safe environment for everyone to enjoy our event. The bags are freely available for people to easily be able to check out and return them.

- **EVENT HOST**

Team 5401 spreads FIRST Robotics while engaging with our community through our Bensalem District Event, which we've been hosting since 2019. Our members come together to donate soda and snacks that we sell at our event to make a sustainable profit. Along with helping our concession stands, our students also support FIRST volunteers as they assemble and disassemble the field. We even go as far as becoming temporary volunteers ourselves at the event!

SUSTAINABLE PRACTICES

The freshman team held its own mock kickoff and mock build season leading up to the off-season competition. The freshmen competed with their own robot at Ramp Riot. Their response to the robot was overwhelmingly positive. There was a sense among them that they actually gained something out of it, even though the robot was just a bare minimum drive base. The experience they gained, from the robot-building process to actually competing, engaged them in robotics in a way other approaches wouldn't have. They loved the experience and it taught them a lot.

ORGANIZATIONAL STRUCTURE

Team 5401 is a student-run team who collectively nominates our student leaders. Our five-core student leadership positions are Program Manager, Chief Engineer, Chief Marketing and Operations Officer, Chief Outreach Coordinator, and Chief Safety Engineer. To be nominated, these members must be active in their team, create a resume, give a speech in front of the team, and then win the student and mentor collective vote. Our other individual sub-team leads get nominated by their sub-team.

RISK ANALYSIS

Strengths:

- Commitment

People show up on time and leave at a reasonable time

- Alumni involvement

The team spends hours together and we become friends and work better.

- Recruitment

The team posted flyers all over the school to recruit new members to join, as well as looking at our social media platforms.

Weaknesses:

- Lack of support from STEM teachers

None of our stem teachers support our team in any way.

Opportunities:

- Pennsbury and Neshaminy High School partnerships

The team has recruited members from those schools because they do not offer a robotics program.

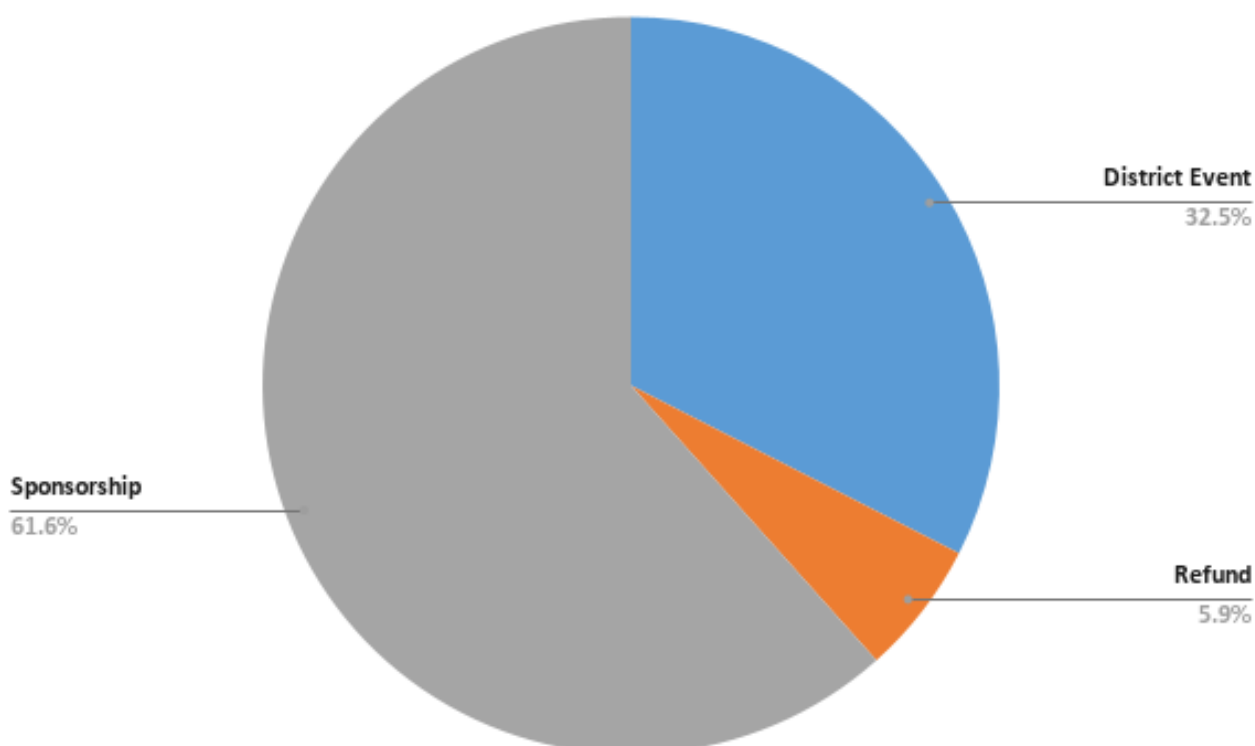
Threats:

- Lack of faculty advisors

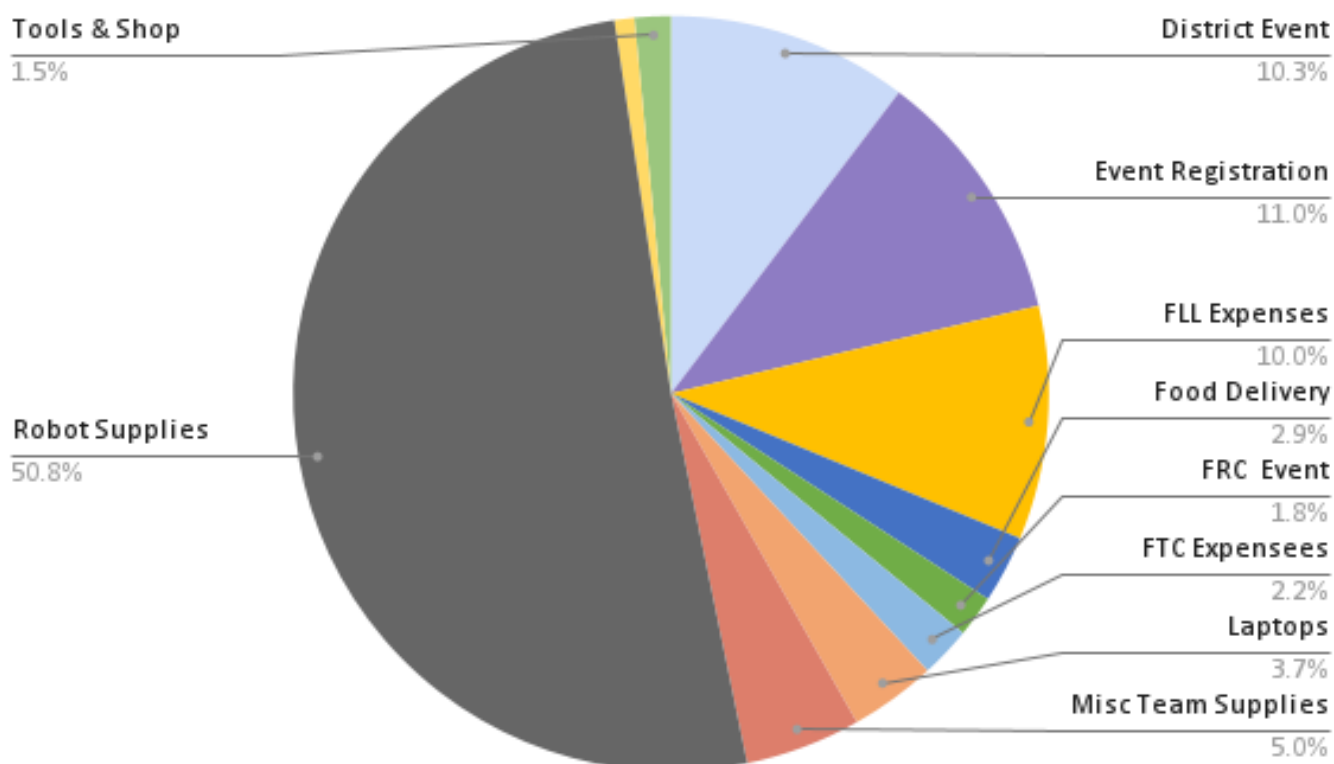
Our team is not organized by any teacher. Instead, it is run by volunteers/mentors.

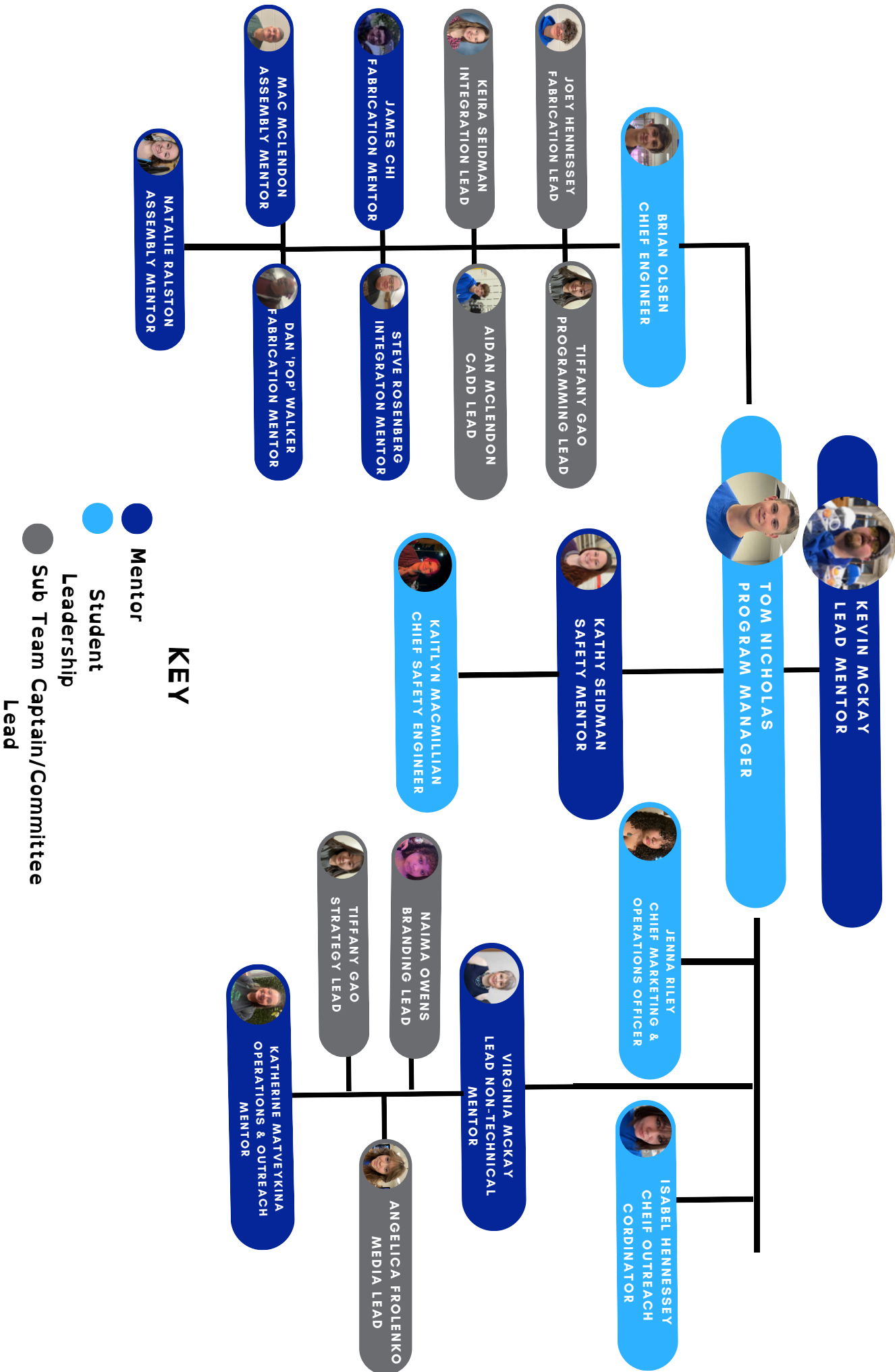
2022-2023 FINANCES

Income: \$43,682.41



Expenses: \$39,465.54





KEY

- Mentor
- Student
- Leadership
- Sub Team Captain/Committee Lead