



QUASICS

Team Handbook
2023-2024

Table of contents

Welcome to Quasics!	2
Quasics History	2
Quasics in the Community	2
2023-2024 Student Leadership Team	2
Coaching Staff	3
Important contact information	3
Team Member Rules and Expectations	3
1. School Work	3
2. Attendance and Participation	4
3. Communication and Social Networking	5
4. Behavior expectations	5
5. Student Assistance	6
6. Team Member Health	7
7. Dress Code	7
8. At The Events	7
9. Team Member Relations and Interactions	7
10. Disciplinary Action	8
Mentor Rules and Expectations	8
How Parents Can Help	9
Funding	10
Travel	11
Team Member Dues	11
STIMS	12
Safety glasses!	12
Eligibility for Varsity Letters	13
Acknowledgement of receipt of the Quasics Handbook	14

Welcome to Quasics!

This handbook is meant as an overall introduction to the rules and structure of our team. It contains valuable information for prospective team members, current team members, parents of team members, Coaches and mentors, community members, administrators, and sponsors alike. This handbook represents what we view as important, our team rules, and how our team is organized, funded, and supported.

Quasics History

Gateway High School's Robotics Club was founded in November of 2007, beginning a journey that continues today. The original team members named us "Quasics" (short for "Quantum Physics"). Our first event was the 2008 *FIRST* Robotics Competition, and FRC Team 2656 has competed at the FRC Greater Pittsburgh Regional each March since. With increases in our team's membership, Quasics added a *FIRST* Tech Challenge team in 2011, which competed for six seasons through 2016. Two VEX Robotics Competition teams were added in 2013, retiring after the 2020 season. A *FIRST* LEGO League program was started in 2020. Quasics won the Greater Pittsburgh Regional Competition in 2023 and traveled to the World Championship (for the first time) in Houston, Texas.

Quasics in the Community

Each year Quasics participates frequently in community events. These community events are an essential part of Quasics. Community outreach and STEM education are major priorities of our club because we believe this program is "more than robots." We encourage you to involve yourself in these events as often as your schedule allows.

2023-2024 Student Leadership Team

Each spring our team members can apply to be a part of our Student Leadership Team. Those selected will attend additional meetings, as well as help to plan our community events. They are also expected to serve as "first-line" volunteers for outreach events (especially when speaking as a public face for the team), and to serve as role models for the conduct expected from the team as a whole.

The 2023-2024 Student Leadership Team includes: James, Salma, Ishan, and Emma.

Coaching Staff

Head Coach: Sean McMahon
Assistant Coaches: Meg Gilmore, Matt Healy, Curt Hofmann, Jasdeep Sadam
Antonio Garcia-Smith, McKenzie Kolano

Important contact information

Team website: www.quasics.org
Team Facebook page: www.facebook.com/Quasics
Team Twitter: www.twitter.com/quasics
Team Instagram: www.instagram.com/quasicsrc
Team YouTube channel: www.youtube.com/user/FRC2656
Head Coach's email: Coach.SeanMcMahon@gmail.com
Head Coach's mobile number: (412) 334.1822

Team Member Rules and Expectations

Being a member of our robotics team is an honor and a privilege. Your position on the team carries great responsibilities, both to the team and to yourself. Our team members must meet the following criteria:

1. School Work

Your school work must remain a top priority. We expect you to maintain your GPA and class work throughout the school year. Being a member of a *FIRST* team sets you apart from your classmates, and as such, you will be held to higher standards.

GPA – Students **must** carry a 2.0 or higher GPA. Eligibility reports will be checked every 3 weeks for compliance. Team members under a 2.0 will be suspended from the team until a qualifying GPA is reached. This is a school rule and applies to all clubs and sports.

School days missed due to team activities – If your dues are paid and you remain in good standing, you will be invited to attend the competitions with the team. Depending on your team position, you may miss one or two days of school for each competition we attend. You are expected to notify your teachers in advance of your absence, then obtain (and complete) any work you may miss.

2. Attendance and Participation

Attendance and dependability – Attendance and dependability are keys to both personal and team success. Excused absences will be permitted; however, these absences cannot be excessive, should be on a limited basis, and Coaches must be notified ahead of time. If we do not see you without notice, for an extended period of time (2-3 weeks), we will assume you are no longer interested in being a part of our team, and you will be removed from the mailing list.

Commitment level – Robotics is a program that requires significant commitment. We work long hours during Build Season, and we participate in events outside of school. These events are often during the evenings and/or on the weekends. We expect you to assist when available.

Community Outreach - Team members will be required to participate in Community Outreach Events each school year before being eligible to attend competition. New team members will be expected to attend at least ONE event to be competition eligible. Returning team members will be expected to attend at least TWO events to be competition eligible.

Commitments to other clubs/activities/teams outside Robotics – We understand that some students will have commitments to other clubs, activities, or sports teams outside of Robotics. We are willing to work with you, provided we have prior notice of when your other events are taking place. You are expected to provide the team leadership with a copy of your schedule of practices, games, or meetings. If you have a myriad of other commitments, we may need to meet to determine if Robotics will be a good fit for you, and what your team role can be.

Workshops and build sessions – We expect members to attend team meetings as often as possible. Attending the competitions should be considered an opportunity to represent your team, community, school, and yourself in a positive and honorable manner.

Getting home – Outside of competition days, team members will be responsible for safe transportation to and from meetings. If you cannot attend a team function due to a transportation issue, please notify a coach or Leadership Team Member **before** the function is to take place. It is possible that another team member may be able to provide transportation for you. With friends and parents working together, some of the transportation issues may be resolved.

In the shop – Safety glasses must be worn at all times while operating power tools. Safe clothing must be worn in the shop (e.g., no loose clothing, ties, jewelry, hanging chains, etc. while near/working on moving or rotating machinery, etc.). Long hair must be tied back or otherwise safely secured. There will be no horseplay in the shop at any time. If you “don’t have anything to do”, it might be time to call it a day. It is not up to Robotics Club leadership to keep you busy.

3. Communication and Social Networking

While some information may be communicated through the school announcements, email is a fast and efficient means of team communication, and is the preferred method of team leadership.

As a result, all team members must have an active email address that they will provide to the team leadership and check often. You are required to read (and respond to) your email, *every day*. If you do not have email access at home, we can show you how to get it at school or even on a mobile phone. (Note that specific tools used by the team for some purposes may require an email address other than that provided by the school district.)

In order to remain up to date on trends within the *FIRST* community, get answers to questions regarding robot construction, team organization, and other issues affecting teams, members should become familiar with (and are encouraged to make use of) the Chief Delphi forums: these are an invaluable resource to seek advice or assistance from thousands of knowledgeable members and mentors of other robotics teams. (www.chiefdelphi.com)

4. Team Culture

We want the School District and other community members to see that Quasics members are the best of the best. As such, you must follow these guidelines to maintain a position on the team:

Integrity and respect – High levels of honesty and integrity will go a long way to making robotics a positive experience for everyone involved. Oftentimes, you will be interacting with adults, students, Judges, and members of other teams. The utmost respect must be shown to all coaches, mentors, team volunteers, teachers, team members, and event staff/volunteers.

Teamwork – Another key quality of a good team member is being just that: a good team member and teammate. You will treat your teammates with respect, as well as being mindful of the fact that you are a representative of your team, school, and sponsors.

Judgment and behavior – Robotics team members are expected to show good judgment and character, and behave as role models for the rest of the student body. Occasional lapses in judgment and behavior will be met with discussion of the incident.

School – Gracious Professionalism is a key concept of *FIRST*, defined as “a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community”. You are expected to exhibit Gracious Professionalism at all times while on school grounds (both during and after school) and at events. We will not allow our team reputation to be tarnished by offensive team member behavior.

Team events – All school and team rules will apply at any team-sponsored function outside the School District. When in public, you are representing yourself, your team, your school, and your sponsors. Be mindful of this, and behave accordingly. Understand that attending the competitions and other events is considered a privilege that can be taken away at any point during your time on this team for any reason deemed necessary by the coaching staff.

Social Media - Despite your freedom of speech, your comments are often public, and will reflect both upon yourself and those you are associated with, including this team. Misuse of social media will require a meeting with team leadership and could lead to disciplinary actions.

5. Student Assistance

We understand that team members may need assistance throughout the school year, with robotics and technology, academics, and other situations. Coaches and Mentors are willing to help you make positive changes and assist you in any way they can. You are encouraged to ask for assistance at any time. Also remember that it is everyone’s responsibility to report unacceptable behavior. If you have observed behavior that you think is dangerous or unacceptable, in addition to reporting to coaching staff, you can also report this behavior anonymously via [Safe2Say](#).

6. Team Member Health

If you are required to take any medication, or have any health issues we need to know about, please notify a Coach. We will keep medical forms on file, along with an allergy list. This information will be kept confidential.

Please note: as part of our safety plan, all team members must complete an Emergency Medical Form yearly. In addition to yearly Emergency Medical Forms, if there is overnight travel occurring, please be advised there will be additional forms sent for completion.

7. Dress Code

Quasics team members are expected to adhere to a dress code both at official competitions and at our community events:

- Team uniforms must be worn at all such events.
- Long pants or shorts can be worn depending on weather conditions, but they should be in complementing colors to our green shirts - black, khaki, gray, and jeans are acceptable.
- Closed-toed and closed-heel shoes must be worn at competitions per the rules, and should be worn at other team events for safety.
- Long hair should be pulled back.
- Safety glasses must be worn in the Pit areas and on the competition fields.

8. At The Events

Student safety is our top priority at the events. Students are NOT permitted to leave the venue unless (a) accompanied by an adult, **and** (b) two Quasics coaches have been notified and have acknowledged either by text message or verbally.

We also expect our team to be active participants when attending our competitions. Students will watch all of our matches, if at all possible. If available, they should make every effort to assist with match scouting as well. Make signs, cheer, be invested!

9. Team Member Relations and Interactions

As aforementioned, team members are expected to treat all team members with respect, integrity, and Gracious Professionalism. Inappropriate behaviors such as bullying, harassment, threats and/or physical altercations **will not be tolerated**. Offensive jokes, comments, or statements made by team members should be reported to coaching staff at the time they are heard, if at all possible. Disciplinary action will be

discussed between staff and will be handled on a case by case basis varying on severity of the situation.

Although the club cannot control what feelings may arise among members, we ask that if a relationship or issue should take place, please do not let it interfere with team activities. Whether this relationship may involve romantic feelings or negative feelings for one, it should not interfere with the team's efficiency, image, and overall copacetic atmosphere among its members.

Quasics strives to maintain its professional integrity and image among its fellow members and community. If you have any problems with other team members, please contact the coaching staff. Disciplinary actions are up to the discretion of the coaching staff.

10. Disciplinary Action

Code of Conduct and Disciplinary action – As a member of this team you are expected to adhere to the rules of Gateway High School. You will also be responsible for adhering to the safety protocols necessary for working in the shop, and observing the other expectations for members. We reserve the right to suspend you from the team upon failure to comply with these rules. Suspension from the team can last anywhere from one meeting to indefinitely, depending upon the offense. Depending on the severity of any offense, Coaching Staff may discuss the incident with the student's parent/guardian. If deemed necessary, the School District will be informed.

Something that the school deems to be a low-level offense or even a non-issue (e.g., if they happen outside the school, or aren't a violation of a specific part of the student code) might pose a more serious issue in the context of the team, or might need to be responded to by the team before they have been evaluated by the school's administration (e.g., due to concerns regarding member safety, etc.). As a result, evaluation of the severity of offenses will be handled by the coaching staff on a case-by-case basis, albeit with Gateway's policies serving to inform such evaluations.

Mentor Rules and Expectations

Quasics coaches and mentors also have rules to follow. Our volunteers must meet the following criteria:

- Former students will not be permitted to volunteer with our team until they have been out of high school for at least two seasons. This helps to put necessary

distance between the roles of student and volunteer, as well as allowing our alumni to continue to grow and mature prior to returning in their new role.

- Per district policies, mentors must obtain Gateway School District Board approval and volunteer clearances. The requirements are as follows:
 1. Pennsylvania State Police Clearance
 2. Pennsylvania Child Abuse History Clearance
 3. Federal Bureau of Investigation Clearance (Fingerprinting)
 - a. Alternatively, a signed Volunteer Clearance Exception Form (available on the district website listed below) may be submitted if you have been a resident of Pennsylvania for at least 10 years
 4. Tuberculosis Test (one time)
 5. Volunteer Application (Available on the district website)

Once those steps have been completed, the finished packet of information can be dropped off at the Administrative Office, and it will go to the School Board for approval. The clearances are valid for 5 years.

More information can be found at:

https://www.gatewayk12.org/apps/pages/index.jsp?uREC_ID=514582&type=d&pREC_ID=992892

- All Coaches will complete the [FIRST Equity, Diversity, and Inclusion training](#) as well as the *FIRST* Youth Protection Program
- Various events may have additional training/requirements for mentors/chaperones

How Parents Can Help

- Meals – During the long hours of building robots, the team often eats meals at school in the shop. A home cooked meal, or donation of beverages or other food will provide a change in the monotony of the food consumed (typically pizza).
- Travel and Logistics – The organization of travel and logistics for competitions outside of Pittsburgh will be a challenging task, requiring valuable support from parents and others. Also, providing transportation of the robot and various other team items to events could apply here.
- Public relations – When applicable, the team would appreciate the support of parents and other team supporters to represent the team. For example, they could provide their outlook on the impact of the program at a school board meeting, or help recruit mentors at work.
- Construction of Practice Field Elements – It is often necessary to construct mock-ups of what the playing field will look like in order to model and test robot

systems. This area is very open for parents to offer skills and time to aid in the construction of elements for practice.

- Fundraising/sponsorship – Funding a robotics team is an expensive, yet worthwhile, venture. Assistance with preparing sponsorship presentations, transporting the robot and presenters to business locations, and any other events the team organizes to raise money.
- Team Support – When the team participates in or organizes events to spread the message of *FIRST*, and awareness of the team, parental support will be encouraged and appreciated. Parents can often volunteer at these events.
- Parent Clearances - Due to schedule conflicts, individual Coaches are not always able to be present in the shop. As a result, we need parents to volunteer some of their time in the evening to come and monitor our students and assist them with their work if possible. Parents need to gain school and government clearances before this type of support is allowed, as discussed in "Mentor Rules and Expectations". (However, the other types of help described above do not carry this requirement.)

Funding

Working towards the goal of funding the team is not only expected of all team members, but required. This is a very expensive endeavor, and everyone needs to chip in for success. Team members are encouraged to find and pursue sponsorship opportunities within their families, friends, and community.

Sponsors – Sponsors support our team in a variety of ways. An important category of sponsor for our team provides donations of services and products. Examples of this variety would include welding services, or other machining capabilities.

In addition, some sponsors may provide mentors to assist in engineering, marketing, or other aspects of the team. Working with professionals enriches the experience for students involved in the program.

The final type of sponsor provides monetary backing for the team, allowing for competition registration, robot building, the purchase of tools and new technology to occur. This incredibly important resource for our team is what allows the program to flourish, with sponsors receiving recognition on our website, team promotional items, and T-shirts worn by team members at events.

<i>SPONSORSHIP LEVEL</i>	<i>DONATION</i>
Diamond	\$1000+
Platinum	\$500 - \$999
Gold	\$259 - \$499
Silver	\$79 - \$249
Bronze	\$75

Sarris Candies sales – Team members will be expected to participate in our Sarris Candies Holiday sale. Members will approach family and friends to sell items from the Sarris catalogs. When the orders arrive, team members will deliver the candies back to their customers. The team has raised over \$1500 per season by selling Sarris Candies. We expect to sell even more this year!

Travel

Quasics travels to various locations throughout the year, including official competitions, offseason events and community events. For official tournaments, there will be a bus to transport students to and from the competition. For community events and offseason events, transportation is normally not provided, and while Quasics leadership will try to set up carpools to allow students to attend events, students are expected to find a ride to and from community events and offseason competitions **before the event begins.**

- Lodging will be dependent on pricing, availability, locations, and/or other variables, and accommodation options considered may include VRBO, AirBNB, and or/hotels.
- There is a potential for Air Travel, depending on the nature of the event (e.g., attending the World Championships in Texas).
- The school van or district bussing may be used depending on availability/distance of travel required.

Team Member Dues

Team members are required to pay \$50 in dues in order to be a member of the robotics club. The main purpose of this fee is to help offset the costs of team uniforms, which can total over \$800, in addition to fees for annual competition registration (\$6,000 for FRC and \$375/team for FLL.) Requiring \$50 per team member is a good-faith payment to help offset these team costs.

The full, total payment of \$50 will be due by mid-November each year. We will accept payments totaling \$50 if that works better for the team member or their family.

If this fee will be a financial obstacle to your participation in the Robotics Club, please speak to a Coach before you decide on staying or not. We will work with every student to maximize their ability to participate, and waive the dues if needed.

STIMS

As required by *FIRST*, FRC team members **must** register in STIMS (an online consent form) before attending the FRC Kickoff event (usually the first Saturday in January).

Click to learn more:

<https://www.firstinspires.org/resource-library/youth-team-member-consent-and-release-form>

FLL team members **must** register in STIMS before attending their first event.

Parents must also create an account and approve certain areas in their child's STIMS account.

Safety glasses

The team has a bin of safety glasses; however, team members are strongly encouraged to purchase a pair of their own safety glasses. They are to be worn while in the workshop room with the power tools.

Safety glasses can be purchased at Lowe's, Home Depot, Harbor Freight Tools, online, or similar establishments for well under \$5 in many cases. For individuals who normally wear eyeglasses, Amazon.com carries "side shields" in multiple sizes (also generally under \$5) as an alternative for safety glasses.

Varsity Letters for Robotics

Beginning in the 2019-2020 school year, Gateway High School students became eligible to earn varsity letters in Robotics. Earning a varsity letter means that (as an individual) you have displayed a strong commitment to the team, assisted the team in our ongoing efforts to build a relationship with our community, exhibited an impressive work ethic, and have practiced Gracious Professionalism both on and off the field. Individuals that Letter have gone above and beyond routine expectations, and have earned their letter in their continued efforts to make Quasics a team we can all be proud of.

The requirements defined for earning a varsity letter in Robotics are as follows:

1. The staff advisor (currently Sean McMahon), with input from all team mentors, will determine which students receive a Gateway High School letter.
2. Students must be an active participant of the club (contributions to subteams, significant participation at team events is expected, as is communication with leaders and mentors).
3. Students must be a member in good standing for each of two years, to be defined as meeting all of the expectations outlined in the club handbook.
4. Students must maintain a "attendance or prior call-off" rate of no less than 75% for required meetings during each of the two years.
5. Students must participate in a minimum of five outreach events in each of the two years.
6. Students must attend a minimum of one competition (in its entirety) that has been approved by the faculty advisor, for each of the two years.
7. The faculty advisor has final discretion on all lettering decisions.

These requirements apply to students involved with the FIRST Robotics Competition team. Students qualify by virtue of two years' participation on our team.

Acknowledgement of receipt of the Quasics Handbook

My signature below indicates that I have received a copy of the team's 2023-2024 Handbook.

I understand that this document contains information regarding the team's history, rules, regulations, disciplinary policy, and other information which affects me as a member of Quasics.

I understand that without the return of this signed document, I will be ineligible for team events. Team events are defined as regular meetings, outreach events, and competitions.

I acknowledge that I have read and understood the team policies.

I also understand that the team may revise, supplement or rescind policies, procedures or information described in the handbook, with or without notice.

(Student) Print Name _____

(Student) Signature _____

(Parent) Print Name _____

(Parent) Signature _____

Date _____