

Team Theory

By: Catherine Du, HCHS for FTC Teams 32863 and 24661 and FRC Team 3419.

Part of the Phatdocx family.

This is a living document! Last edited July 3, 2026.

Table of Contents

Introduction, Preface, and Disclaimer.....	2
Rationale.....	3
Suggesting Edits.....	3
Co-Captains.....	4
Robotics as Education.....	4
Regrounding: You're Responsible.....	5
Logistical Work.....	5
Ideal Team Dynamics and Where You Fit In.....	6
Setting Team Norms.....	7
Pre-Season.....	9
Off-season.....	10
Avoiding Perfectionism.....	11
What is A "Good" Leader?.....	11
Balancing Team Members' Needs.....	12
Team Formation.....	13
Task Delegation.....	16
Motivation for Team Members.....	18
STEM Center Meetings.....	20
Branding.....	21
You are Part of a Team Too.....	22
Suggested Timeline.....	24
Other Board Members.....	25
Your Place in an Ideal Team.....	26
Roles and Responsibilities.....	26
Team Members.....	27
Viewing Robotics.....	27
Team Norms.....	28
Respect and Dignity for Leadership.....	28
Time Commitment and Responsibility.....	29
Behavior.....	29
Works Cited.....	30
Contact.....	31

Introduction, Preface, and Disclaimer

Background: This document was created by Catherine Du, part of Hunter College High School. As a proud leadership member of Hunter's FIRST Robotics Team Rohawkings2Gold since its rookie year in the 2025-26 season, she has seen the team go through tough times. She really loves documents that are phat (or, as some people would meanly call "fat"), and loves to write them even more!

Section 1: While this document was originally dedicated to robotics, many of the concepts outlined here apply to teams from all enterprises, including but not limited to: leading small businesses, becoming an entrepreneur, or leading a competition team.

Section 2: This document is by no means a set of strict guidelines, but rather a collection of suggestions. By continuing to read this document, you waive the right to sue and hold the author and affiliate(s) responsible for things, including but not limited to the document's contents and document affiliations. This document cannot be used as the legal basis of any lawsuit, complaint, petition, litigation, answer, or claim regarding the author or entities related to this document.

Section 3: By reading and receiving this document, you must agree to the following terms and conditions:

1. Do not blame the author or anyone affiliated with or associated with this document for any losses, damages, or other negative consequences that may arise from reading this document.
2. The author of this document is not responsible or liable for any losses or damages.
3. Do not suggest edits unless you have fact-checked them.
4. Use this document for the sole purpose of advancing the knowledge and capabilities of our team.
5. Do not do bad things.
6. Execute common sense.

Section 4: This document was not targeted toward any person, entity, or organization. Any writing in here is not geared or targeted, and any references to reality are coincidental and not intended. No portions of this document were made as paid advertisements. The findings outlined in this document are simply the result of research, experience, and the best available science and information as outlined in the "Works Cited" section of the document.

Section 5: This document does not intentionally infringe on the copyright of any works. Any potential infringement or correlations are completely coincidental and not the intent of the author of this work.

Section 6: This document was not created with the use of Artificial Intelligence. No ghostwriting, plagiarism, nepotism, or illegal help was used. By continuing to read this document, you waive your right to question whether this was written by Artificial Intelligence or with the help of anyone other than sources credited in this document. This document is a good-faith effort to improve the world. Any errors are accidental, unintentional, and should be pointed out so I may correct them.

If you believe you will not be able to adhere to the aforementioned facts and guidelines as outlined in sections 1-6, you are not the intended recipient of this document.

If you are not the intended recipient of this document, stop reading immediately, notify the sender of this document that you are not the intended recipient of this document, and permanently delete this document from all of your systems immediately.

For a partial set of more information on the copyright laws applying to this document, please visit [this website](#).

Rationale

Some people will ask, when they see a document of this length: why would someone write a document of this length?

This started as a meager research project for self-improvement when I was struggling with co-captaining 32863. Some really rowdy children didn't listen to me (they know who they are). Some people couldn't meet deadlines. The people were all within my age range of 7th-9th grade.

As a person, I was emotionally insecure. People wouldn't listen, but I also didn't want to be a tyrant. People tossed me into politics that I never prepared for. I became the hated one. I wanted to know where lines would be drawn, and how best to tiptoe on those lines.

I needed to know: Where does one draw the line between effective leadership, anarchy, and authoritarianism? Where is the difference between micromanagement, leadership, and mentorship? How do I avoid being manipulated by other people?

I found that many of the research results were surprising to me, and I hope they will be valuable to you as you move forward in your lovely season.

Suggesting Edits

Please suggest edits via [this form](#), and specify in the "What would you like me to know?" section of the form that you are suggesting an edit to the "Team Theory" document.

Accepted edits will be credited as follows:

[edited content] {Edit suggested by {Firstname} {First letter of Lastname}, {School, i.e. "HCHS"}} {last 2 digits of graduation year}

Co-Captains

This area gets a lot more specific to our team, but feel free to use this as inspiration for how you may structure your own team!

Robotics as Education

Robotics is fundamentally dedicated to education and expanding one's knowledge of today's (increasingly digitized) world. Education is important, especially given your identity as students. Think of it like this: If the people who invented the printing press, the dishwasher, and the cellphone didn't have the education they had, would the world be the way it is today? (Hint: the answer is... NO)

Today, as young people, we have the fundamental capability to change the world if we are equipped with the right tools. Robotics is one of those tools. Robotics is multidisciplinary, especially in the context of the FIRST TECH CHALLENGE framework of robotics competition. An FTC team needs to cover multiple disciplines, including but not limited to: Engineering, Computer-Aided Design, Building, Fundraising, Financial Accounting, Investor Relations, and Marketing. Robotics is about *mens et manus* (the Latin [MIT motto](#)), or in English, "mind and hand." It is about developing a forward-thinking and solution-oriented mindset and getting hands-on experience with robotics. Robotics is not a spectator sport (credit to my amazing 9th-grade English teacher for this saying!). The robot will not build itself by watching video tutorials or by reading long documents. The robot will not automatically apply all the concepts one person has learned about to create the ideal robot. The robot must be built, and all of its mechanisms must be incorporated through hands-on work.

Even if someone has no knowledge of robotics when they begin, if they put in the work necessary, they will leave the robotics space knowing more than when they first came in, in the ideal team.

Robotics is not about checking boxes. I've seen many people guided by the desire to "check boxes" of some sort—for their parents, for "college applications" (hint: the college one goes to does not matter that much over the long term as much as what one gets out of the available resources provided to them), for "aura" (aka social standing; this is something I'll never relate to...). If you don't like what you're doing, don't do it. Every second faster you quit is a second less you spend doing something you loathe. If one starts guided by checking boxes, they will find

themselves disappointed with what they leave the space with. Robotics is a time commitment, and it comes with a great ROI (return-on-investment) in terms of many things, but especially in the community and knowledge gained.

The best robotics teams are guided by the central mission of education, the enjoyment of robotics-related activity, and not by anything else.

Regrounding: You're Responsible

You've been through a very rigorous selection process when it comes to becoming the next co-captain for the robotics team. You are from a prestigious high school with some of the smartest students in the nation, and you are leading a team.

Don't ever doubt that you earned this job. There will be times when you feel unsure. There will be times when you feel the creep of imposter syndrome, hinting that you might not have been the best person for the job. There will be times when you feel like you don't live up to the role of being a co-captain. There will be times when you stumble. **It's okay.**

Some suggestions for you when you're feeling down (free, and I will *never* be bought out by anyone to suggest something bad):

- If you're thinking about suicide, read [this](#) first.
- Hop on [Flocus](#) – it's really beautiful (:
- Turn on more ambient music; pop songs are often not great at being calming
- Check out an animal live cam, such as with the [NY Aquarium](#) or the [Bronx Zoo](#)
- Cat! (how could you not love cats) (:

Logistical Work

- Waiver

It's a good idea to send out a waiver for off-campus activities to prevent legal liability and lawsuits.

- Sign-ups for the team

Having an open yet selective admissions process for the robotics team helps ensure you motivate teammates with the spirit of lively and fun competition and Gracious Professionalism.

- Communications with parents

Ensure parents are in the loop and in the know with all that is going on to avoid angry adults and unnecessary conflicts.

- Club chartering

Ensure you run your idea for your club by the administration, as well as any higher personnel, such as a Student Organization, to ensure you are able to run the club frictionlessly.

Fundraising

To ensure you have enough funds, we highly encourage that you run school bake sales and outreach to businesses with a lot of buying power. For an example of fundraising tiers, please visit our site at: <https://www.rohawkklings.org/donate>.

Delegation within co-caps

Stratification of roles isn't for bureaucracy or for superiority. It's for clarity and structure for the team. In a dysfunctional team, people with no defined roles would be all over the place. People would be on the wrong number of tasks for their respective capacities—becoming burned out or bored with what they have to do. People would be on tasks that they may not know how to do, with no clear person to ask for training and support. Roles are by no means rigid, but serve as a general guideline to team members' performance.

One of the ways to execute this is to create a list of all the responsibilities, whether it is about the overall FTC organization or your individual team's responsibilities. Then, have (peaceful) discussions about what tasks you all prefer to do. This helps to clear up uncertainties about whether to do something, making room for compromise without arguing every time a task comes up. Additionally, it helps ensure both people are on the same page about what they should do, what the idea of the team theory strategy will be, without arguing about it every single time, while on the fly. This also avoids people consistently complaining about “doing everything” simply because they cannot see what the other person is responsible for.

Ideal Team Dynamics and Where You Fit In

The ideal co-captain isn't someone who “carries” the team (though kudos to them for the effort!). That would mean nobody else learns, and that the entire structure is essentially not a team, but one person. This model also isn't sustainable as people scale up. Remember: the central tenet of robotics is to enhance education. Building these bad skills, such as doing everything for a team by yourself, will not help you learn to be a leader either. As you go into bigger corporations with larger teams, you'll find that among teams of hundreds and thousands, it's simply not humanly possible to match up the effort of all those people with one person. Also, you'll come to find that you're not necessarily the most talented out of all your team members, and that's okay. Imposter syndrome is real, but you have come to your position, and you must stop dwelling on whether you are better than the others and pivot to what you can do for the team.

The ideal co-captain isn't someone who just lies back and lets the team members "independently" explore, with, in fact, no guidance at all and no support. The ideal co-captain helps **guide team members as they learn and explore**. The truth is, how a team works together is more important than who is on the team, according to findings from Google's Project Aristotle. This means that people can learn and explore and be the most brilliant people on Earth, but still be outperformed by other people who may be less brilliant, but are in a more effective team.

Findings from Google's Project Oxygen found from over 10,000 data points that: "Teams with highly effective managers were more likely to achieve better results, be happier, and experience lower turnover." This is what you can change.

You can't change what others say or do. You can't force people to be more sane. You can't change anything except how **you** act.

Setting Team Norms

Teams are important because they are often where real work is being done, from being in school to being in the (scary) corporate world. Nothing will be perfect on your first try, and treat robotics as practice and a learning opportunity. I've made so many dumb mistakes, from having sent passive-aggressive emails to having pushed too hard on a countersink drill and ended up drilling through instead of countersinking. Yet, it's not the end of the world when such things happen. It's just a small mistake to learn from. Now I know I need to re-read my emails more and to put less pressure on a countersinking drill.

Strong and large teams need strong backbones to keep them up and running. Here are some basic community principles derived from [The Sunrise Movement](#)*:

*Note: This is not a political statement. In quoting their community principles, I do not communicate any message about the political stances of myself or affiliated entities. The sole reason for quoting The Sunrise Movement is due to their strong example of community norms in an organizational context.

1. We grow our knowledge through hands-on activities with robotics.
2. We are rooted in education and the fight for a better world. Not politics, not college applications, not resume-building. Educating ourselves is the first step towards our success in changing the world.
3. We are all on a journey to become better coders, CADers, designers, builders, thinkers, and people.
4. We rise to the challenge.
5. We transform ourselves to learn, and for learning.
6. We ask for help and give what we can.
7. We respect each other and our shared home.
8. We are a united front as a school. Not as individual teams or people.

9. We oppose nepotism, extreme involvement of others, and anything that is not our own best work.
10. We are in solidarity with other organizations aligned to our long-term visions (i.e., of education and growth), and express our solidarity through Gracious and Professional actions.
11. We are full of determination, passion, trust for each other, and hope.

A good team should not feel like:

- A competition for the loudest member on the team
- Only certain members from those who participate can really get to be known by the co-captains
- A battleground
- A war site
- A graveyard
- A ground for worshipping deities

Good team norms are great in theory, but you also have to set them. This is hard, but crucial to setting up a thriving team.

Act as the role model you are. These children look up to you a lot, and you can show them how it's done! Most people are good people, even if they don't show it. You can lead by example, *no matter what the other people do or say*. Distractions can be tempting, especially when it's your friends or something that you really want to react to. Try not to.

Set the guidelines. The best way to let team members understand is to explicitly tell them. You can even introduce this into your orientation meeting to get them to understand exactly what you expect from them: adherence to team norms.

Maintain strong team traditions and positive culture. This is one of the times when I say something I was proud of. At the end of each competition, I sent out an appreciation form to everyone, with each form response being a paragraph of appreciation to someone else on the team. Then, after all responses were collected, I'd read through them and summarize them (adding quotes too) and individually emailed it to each team member, making sure they all felt appreciated for all the work they did for the team. This is an overall good practice as well, as teams should have a strong sense of community and trust so that communication can be open and high performance is sustainable.

Be explicit. You are a co-captain, and do not necessarily need to cushion everything you say. Sometimes, when the going gets out of hand, you need to step in. Obviously, you should aim to be kind to your members, but there is a limit to which your kindness ought to extend.

Pre-Season

FTC season is timed exactly such that it is not the best for the way our school operates. But [success is 1% luck, and 99% hard work](#). The point of success is not who has the best school schedule, but rather who adapts to their imperfect school schedule the best. The teams who make it to the Championship are all so diverse, and it is not just based on the schools who have good schedules. Think about how you can leverage what you already have to create something better.

Things you can do before the season's rules are out:

- Legal work + Logistics
 - Write up the permission slips for things like STEM Center trips
 - Communicate with chaperones and adults on board to help!
 - Maintaining connections with adults and making sure they are fully on board is extremely important to your team's success and ability to compete!
 - Investigate helpful software options. Some examples below:
 - [when2meet](#) - very straightforward software that helps you coordinate *when to meet*. This is free and login-based. You can send this to get a sense of people's overall availabilities to plan things like team meetings after the rules come out.
 - [Group Carpool](#) - another straightforward software that helps you coordinate *group carpools*. This is free and login-based. You can familiarize yourself with its tools so that when competition season begins, you can have a good plan for people to get to the competition.
- Fundraising
 - You will need **a lot of funds** to pursue robotics. This is no joke. If you think a couple hundred will be enough, you are wrong. Just a few motors and servos will cost a couple hundred. Don't forget that robotics is an iterative design process. You will need multiple iterations to get the best design, and that will take raw materials to get. Let's not forget the importance of having backups in case life happens.
 - Suggested reading: [Murphy's Law](#)
- Outreach
 - Awards within FIRST are worth a lot within the competition. That said, the satisfaction and amazing mental health benefits of doing good for your community are clearly the winner.
 - There are so many things you can do! To start, I'd recommend:
 - Maintaining a strong social media presence (including more than just Instagram!)
 - Thinking of other school groups or local organizations you can collaborate with

- Thinking of the year's theme and how you can align to them
 - Thinking of local schools that you can start teams at!
 - Maintaining investor and alumnae/i relations
- Timeline
 - If the season reveal is at a known date, you can try to set up a quick timeline for your team to have strong milestones and checkpoints for a successful season.
 - Don't forget about **driver practice**! This can be driving with as little as a chassis as early on as possible so drivers can acquaint themselves with the robot.
- Learn
 - Education is the main purpose of robotics. You can take this time to learn something for the first time or again!
 - Suggested resource: [Brogan M Pratt](#)
- Create team infrastructure
 - *A team infrastructure package is coming soon! Updates will be posted here and on social media. Want me to email you when it's out? Join the mailing list here: <https://forms.gle/43fahtTDGfiNm4my7>.*
- Understand the game artifact well.
 - Often, the game artifact is released at Championships.
 - If possible, try to get a copy and figure out different ways to manipulate it in the offseason. Prototyping now beats prototyping after the season begins.

Things you can do before school starts:

- Record lesson videos and compile resource guides to share among your members to alleviate your burden of training!
 - *Resource guides coming soon! Updates will be posted here and on social media. Want me to email you when it's out? Join the mailing list here: <https://forms.gle/43fahtTDGfiNm4my7>.*
- Recruitment
 - Even though school hasn't started, you can still actively recruit by reaching out to members of your school even if you don't directly know them that well.
- Think about your robot.
 - If the game manual is out, I'd recommend thinking about the potential designs and necessary components for your robot. It's never too early to start prototyping!

Off-season

Even after the season, the skills of the team members shall not be allowed to rot in the tragic trenches of [summer slide](#).

The obvious best solution to this would be to work on off-season projects! I'm personally a fan of intersectional projects. This means projects that are not solely focused on robotics. Instead,

they can be aligned across everyone's diverse interests. Projects are the best way to learn, and you can do one or lead the team in one!

Simple web searches could turn up thousands of videos of others' projects that you can use as inspiration for your own projects.

Avoiding Perfectionism

Before we really jump into what makes a good team leader, I want to acknowledge a crucial fact first: **nobody is perfect**. I'm definitely not. This document is a whole phat doc about everything that I did wrong that I learned.

Reflection beats "perfection," because the latter is impossible to attain. Reflection builds you into a better human though! (:

What is A "Good" Leader?

Highly effective managers are **instrumental** in facilitating creativity, team member happiness, low turnover, and team success.

Google's [Project Oxygen](#) identified the following 10 key behaviors of good managers:

1. Be a good coach
2. Empower the team without micromanaging
3. Create a team environment that values everyone
4. Focus on productivity and results
5. Communicate effectively
6. Support career development and discuss performance
7. Implement a clear vision and strategy
8. Have key technical skills
9. Collaborate across the team and affiliated entities
10. Make strong decisions

**This is numbered for reference later in the doc, not in any ranked order.*

How does this translate into the act of actually being a leader?

Here are my recommendations:

- **Teach** – Something I'm proud of doing this year is preparing slideshows myself to teach students Java. I didn't start at it being perfect at Java, and am not perfect at it today. Yet I still took the move to make my own slideshows, unlike my peers who took others' slideshows and just made things up on the spot (some while laughing in front of students). That's definitely not the role model to follow here. Preparing adequately is the key to teaching well, not the prior knowledge that you built up beforehand. Teaching also

helps you to understand the material better so you can gain these key technical skills. **(1, 8)**

- **Use more than Discord** – Any one communication platform (i.e., Discord) doesn't necessarily work best for everyone. Some platforms, such as Discord, often have a lot of distractions embedded into them, which makes a lot of people want to try to avoid Discord for their own mental health. However, you want these kinds of people on your team too, not just the people who check Discord and are chronically on it. **(5, 9)**
- **Be Calm** – Mistakes and major slip-ups happen. Urgent deadlines are real. This doesn't mean that you lose it all and “crash out.” Even when the time is ticking, do not lose it. Maintain a calm demeanor and move on. It's not the end of the world, no matter how much it might feel like it is. Robot performance is only part of the competition. **(4, 10)**
- **Correct Each Other** – When someone makes a mistake, no matter how bad it is, the right reaction is not “WHO DID THIS??? WHAT WERE THEY DOING??? WHY DID THEY DO THIS???” but rather “What can we do to fix this?” This is something I have seen happen too many times, and I strive to avoid. Robotics is fundamentally not a murder mystery, not a whodunnit case, but rather a problem-solving engineering thought experiment. The correct response is hopping into fixing the problem, which actually solves problems rather than creating new ones and fostering an unsafe community. When people are afraid to make mistakes due to avoidance of shame for their “dumb” mistake, that leads to people taking fewer risks in doing things they are uncertain about, which leads to less work being done and less engaged members. Let's face it: **nobody is perfect**. So then why cultivate a culture where everyone is expected to be perfect and are shamed for not being perfect? **(2, 3, 6)**
- **Don't be Afraid** – Fear is an enemy, but what you do in response to the fear matters a lot. You have the power as a leader to change the world and change what happens on your team. **(10)**
- **Go to the meta** — and talk about it all. Your team members all deserve to know how what they do fits into the big picture of the team's operations. This helps them to understand and really be motivated by what they are doing, and understand *why* you decided something (especially the thought process behind your thoughts and decisions). **(5, 7, 9, 10)**

Balancing Team Members' Needs

Team members have commitments to robotics, but they also have lives around them too. **You cannot expect the same amount of commitment from a team member and a lead.** As a lead, part of your job is to balance the needs of the team members and their commitment to the team.

Here are some ways you can accommodate their needs:

- **Team building** — Before I explain how you build team character, I want to make a quick disclaimer that these events *are to be performed in moderation*. Too much “team

building” turns your team into a social group and is more counterproductive. So, team building can take many forms: sharing appreciations for each other, team meals/picnics, and collective trips.

- On team building, these should be *low-stakes* events! Encourage people to come at their own leisure—late, early, or not at all if they have other commitments.
- **Gouging Availability** — It helps to get an understanding of when your team members are available. One way you can do this is through [when2meet](#) or even a simple Google Forms poll for students to express when they are available for things like team meetings.
- **Compassion, but limited** — The robotics season is short, so you can’t give unlimited compassion to your team members for not doing the work they are here to do. That said, you still owe them some compassion because they have lives and other commitments too. Remember the golden rule: if you want your team members to give you compassion, you ought to give them compassion too.
- **Respect their time** — Don’t give them only the most tedious work to do. They are here to have a high ROI experience with their time and to *learn*, not to be doing useless things. That said, there are still some tedious tasks as part of robotics. You can try to rotate this out to different members while letting them know that *their work and time are very valuable to you and to the team*.
- **Food dilemma** — Often, STEM Center meetings will run into dinnertime. I don’t deny that it is *a financial burden* if you would like to buy food for everyone all the time. It’s also not the most effective, since eating outside includes labor costs in addition to the cost of the food, which makes it overpriced and expensive. You can ask members to bring their own food, to buy their own food before leaving for the STEM center, to pitch into a food deposit bank (make sure all records are transparent) for everyone, and/or host “dinner breaks” within STEM Center meetings to let them deal with their own lunch.
- **Psychological Safety** — If people are afraid of making mistakes, if people are afraid of asking “dumb” questions like the plague, they won’t. Build a culture where mistakes are okay, and questions are valued. When something bad happens, your first instinct might be to yell “WHO DID THIS?????” like that would change anything. The truth is, knowing who did this won’t help you fix the problem. When a mistake happens, you should be figuring out *what to do next to solve the problem*. You are a co-captain. You are a leader; you can lead this shift.

Team Formation

To start, team formation isn’t the most important part of the season. Google’s [Project Aristotle](#) found that the people who make up a team **mattered less than** how the team members worked together.

Even so, who makes up your team matters, and adding selectivity to it matters in fostering a good learning environment. Think of it like this: while having the best talent fight with each

other is counterproductive to creating a robot, having the best talent or the most motivated people work together will be better than having to deal with people who lack motivation.

Here are my recommendations on deciding who gets on your team. Don't be afraid of setting a high bar, because you want the people who can commit to the team and people that you believe will work well with each other and with you. Remember that having **5 motivated people is better than having 50 unmotivated people**.

Deciding who gets on the team:

- **Interview** — This is a less-explored way to learn more about your interviewee. Most teams just have written applications. Ideally, you'd know who the person is as a person as part of how you decide who gets in, not just what they do. Now, you don't have to ask the [absurd questions Google asks in their interviews](#). Here are some best practices:
 - **Don't send out the questions in advance and vary questions between interviewees** — You don't want to hear someone reading from a memorized script because they know the questions in advance, whether that's because someone told them the questions or because you sent them out. You want to hear how the student thinks, not the most polished version of them. Think of it like this: this student cannot realistically rehearse and memorize answers to every question they can possibly get asked, whether that's in a judge's presentation, pit scouting, or just how they act in robotics. So why would you set a precedent of learning from their most polished self?
 - **Smile** — I can't tell you how much stress you can invoke with that (amazing and beautiful) straight face of yours into young children just getting into robotics. Smile with your full face, not just a passive-aggressive I'm-smiling-because-a-random-document-said-I-have-to-so-there-you-go-child. Smile *because* you mean it, not like you mean it. If you can't get yourself to smile, think again about if you really like robotics and if you're really going to be co-captaining this team...
 - **Communicate** — Don't scare the people away before you even interview them! Frame the "interview" as a "get to know you" for students, and explicitly communicate that you want to get information about their *personality*, not their script rehearsal, acting, or technical skills. Your emails to them should also be relatively "chill" and kind. Try to avoid emailing them like you're emailing the administration. First impressions help to dictate the culture that you cultivate for your team.
 - **Ask genuine questions about them** — You definitely do not want to terrorize the student when you ask things like "WhAt Is YoUr ExPeRiEnCe In RoBoTiCs?" after you *just* sent detailed communications about how you want to hear about their *personality*. Their personality is also extremely important to how you will

decide the composition of the team. You want to choose people whose personalities can work well with you and each other. Please, stay true to your words. Here are some genuine things you can say/ask:

- Thank you {name} so much for joining me today on this beautiful {evening/morning/afternoon}. I'm so excited to chat more with you and learn more about who you are! This "interview" is really low-stakes and is just a way for me to learn more about who you are. Treat this more like speaking with a new friend, because I certainly hope to be like a friend to you! So to start, I wanted to learn more about {your question}
- What is the most non-technical hobby you have?
- If there's one thing you wished you said to an old friend before you came to Hunter, what would it be?
- Why do you want to join robotics?
 - Try to screen for people who have genuine answers to these questions.
- What do you think is the coolest application of robotics that you have witnessed?
- What's your favorite/least favorite part of your neighborhood?
- What's your favorite borough?
- What's one thing that you're grateful for that not many people have?
- What's one thing about yourself that you wish everyone could know?
- What do you aspire to change when you grow up?
 - I.e. What impact does your desired profession cause? Not just what you want to do, but what you want to do with your skills and profession.
- **Ask them for their questions** — Be welcoming! If someone has a lot of questions, this can be a telltale sign of genuine interest! This can also help to settle their fears and make them feel more comfortable around you.
- **Application (written)** — Here is where you can shamelessly ask for their experiences in robotics. You want to be welcoming of people with **all experience levels**, not just those who have spent 20 years of their 12-year life doing robotics. (Though in all seriousness, if someone says they have 20 years of experience in robotics, you might want to think twice about this person's honesty and capabilities in being a good addition to your team) Here are some questions that you might want to ask, along with what the question is scoping for:
 - How much mentorship do you wish to receive? What topics do you want us to help you learn through the course of this season? Why?
 - This can help you gauge the person's experience level by asking this question. More specific answers typically mean that someone is somewhat familiar with their aims and goals within the robotics space, which can be

a good start. Typically, you want people with a good mix of skills and weaknesses.

- Why do you want to join robotics?
 - Someone who has a burning passion for robotics cannot be mistaken, and even so, it's good to gauge the person's *why* of joining so you can revisit this later in maintaining people's motivation to do work in robotics.
- What is the project that you did that you are the most proud of? This can be anything: robotics-related or not. How did you go about making this project?
 - This can help you to understand the person's background beyond the mentorship they wish to receive and really understand their skills and how they go about applying them.

If you have enough people in the pool, you might want to think of creating distinct subteams to better organize the students based on their interests and areas in which they want to grow.

Here are some of the suggested subteams to create:

Mechanical
 Electrical
 CAD
 Fundraising
 Programming
 Media
 Driving

Of course, I want to emphasize that there is no one-size-fits-all formula. Depending on your team members' and your own strengths, you will need to adjust how you structure your team and where you put your people.

Task Delegation

As said before, the captain(s) of the team should not be doing everything for the team. To fill the gap, you will need to delegate tasks to the rest of your team. Delegating tasks also helps your team members be real team members: they will gain confidence, develop ownership, and develop their skills when they are given responsibilities.

The first times you delegate tasks will be essentially a test: both for you and for your team members. To delegate tasks, you will need the grit to both tell someone that they *must* do something, the ability to let go and trust your team members, the patience to teach them when they are going slowly, and the perseverance to follow through with enforcing that they must do something. Setting deadlines and following up with individual members can be tiring, but it is necessary. The task delegation is simultaneously a test of your team members. Essentially, you

are testing whether they can keep going when things get real and follow through with the facade they set up during applications.

Goals of Task Delegation

- Increase the spread and depth of training for team members
- Develop your leadership skills
- Achieve desired results
 - Don't force perfectionism on your team members! You should not expect a beginner to do as well as a seasoned member. In a sentence, you should be expecting growth, not perfection.
- Prevent burnout

What to Delegate

This ultimately, again, depends on the skillsets and desired growth areas of you and your team members. You should also prioritize what to delegate based on the urgency of the task as well as whether the person will enjoy doing it. Remember, robotics is about education and fun. Not about college apps, building up a profile, or masochism.

If you don't know whether someone knows how to do it or is interested in learning, please review your interview notes or just ask them. You can just shoot them a message or ask in-person something like "Hey {Name}, I was wondering if you were interested in developing your skills in [skill]?"

	Urgent	Not Urgent
In skillset or desired growth area.	<p>If it's in their skill set, that makes sense for them to be delegated it as long as they have the capacity to do so. Since your task is urgent, try to make sure that they are able and willing to take it on.</p> <p>If it's in their desired growth area, it would make less sense for them to take on this urgent task. If you have other people who have this task's necessary skillset, please delegate it to them.</p>	<p>If it's in their skillset, it makes sense for them to try the task, but only if you believe that the people you want to grow in the area won't be able to do so on time or at all.</p> <p>If it's in their desired growth area, it makes a lot more sense to delegate it to them with the right tools to learn and perform the task.</p>
Not in skillset or desired	Only let them do it if:	If possible, don't. Try to get

growth area.	<ul style="list-style-type: none"> ● You or someone else can teach it to them quickly enough to meet the deadline ● There is genuinely nobody else who can do this 	someone else who is interested in this. Don't try to force someone who doesn't want to be involved into doing this for no good reason.
--------------	--	--

After Delegation

Please don't micromanage your team members. It doesn't help anyone. You should check in with them, but please limit yourself to at most 2 times a day and less if the deadline is farther away.

Tips for checking in:

- Be friendly!
 - You don't want them to think they're in trouble when you're just checking in. (Obviously, if you always made them feel like they were in trouble, they would not feel anything new or be scared.)
- Keep your message short.
 - Face it. You want them to respond. Imagine if you got an email 5,000 words long, and you're tired, and on tight deadlines for your club(s). Would you choose to read the 5,000 words or pursue your true love of robotics? (The answer is obviously robotics)

Note: Sometimes you absolutely *will* need to clean up after your team member's task completion, but it's completely okay and normal. Nobody will do it absolutely perfectly the way you imagined it, especially if they're a beginner.

- There is a huge gap between following step-by-step picture-by-picture tutorials (as in what most CAD classes and learning spaces do) and designing something completely on your own. This makes it normal that a beginner designer cannot completely capture it the way it's needed.
- Here's how you can nicely do it:
 - **BE CALM** - I genuinely can't stress this one enough. Humans are social creatures, and we can often tell that someone is mad at them. Recall psychological safety? It's important to build that up in your team. Don't break it now.
 - If you're angry (potentially understandably): take an angry powerwalk/speedwalk, close your eyes, and breathe; write your feelings down (and rip up the paper),

Motivation for Team Members

Keeping team members motivated across a long, often grueling season is one of the (more) difficult tasks of leadership (and on grueling, I've been ditched in the STEM Center working

until 2 AM, sleeping 2 hours before school. If it happens, please don't murder your other co-captain). The initial enthusiasm of recruitment and acceptance fades quickly, especially once deadlines accumulate and technical setbacks arise. It is your responsibility to sustain momentum with concrete systems, not with vague encouragement (which, for your information, doesn't work).

Leaderboard and Points System

One specific way to maintain engagement is a leaderboard connected to a formal point system. Some examples of how you can earn points include attending STEM Center meetings, completing assigned tasks by their deadlines, contributing to outreach, and attending competitions. The value of a points system is not to build a competitive atmosphere—quite the opposite. It gives a concrete, objective record of contributions that levels the field and makes it hard for any one member to coast unnoticed or to feel unacknowledged. Crucially, this system is most effective when it is transparent and consistently applied. Every member should know where they stand, and the criteria should be set at the start of the season, not made up after the fact. People can tell when they're being tricked.

A leaderboard can also be a quiet (and loud) accountability mechanism. But when members know that their contribution is being logged and seen, the social cost of not participating becomes more visible to them, and you don't have to confront them about it directly, because confrontation doesn't work.

Give credit once work is done.

Acknowledge when a team member completes a task, quickly and specifically. Saying, "Great job on the CAD assembly this week," is a lot different than a generic "good job." Your team members can tell. Also, if you observe another member taking credit for work that they didn't do, correct this in a measured and matter-of-fact way. This is not about policing recognition, but about ensuring the culture of trust and fairness that is the foundation of our team remains intact. In addition, this avoids perpetuating the toxic corporate psychopathy of the productivity proxy of how loud they are. Louder doesn't mean leader, more talented, or better.

Members who feel like their work is being invisibilized will disengage quietly, and that's a much more corrosive impact than any one missed deadline.

A team with no more members is not a team.

Other Practices:

- Revisit the "why." At points of low morale, often mid-season, when the robot isn't working, and the competition feels impossibly close, it can help to return to the original statements of purpose from the application process (hint: the interview!!). Why did each

member say they wanted to join? Grounding the team in those stated reasons revitalizes their sense of investment and lets them do more.

- Celebrate non-robot wins. Outreach milestones, a well-executed fundraiser, team members' work outside your club, or a team member learning a new skill are all worth acknowledging. A team that only celebrates robot performance will feel demoralized whenever the robot fails (which will happen a lot, not because you're bad, but because engineering is an iterative design process!).
- Set micro-goals. Large goals like "finish the robot by X date" are too diffuse to motivate on a day-to-day basis. Breaking work into smaller, clearly achievable milestones—and marking them when they are met—gives members consistent experiences of forward movement.

STEM Center Meetings

STEM Center meetings are the engine of the season. They are where the robot *actually* gets built, code *actually* gets written, and the team *actually functions as a team*. Running them poorly is one of the fastest ways to hemorrhage members' motivation and time. Time is limited, and people don't enjoy it when their time is wasted, especially when they are busy.

Before the meeting

Send out a list of who is attending (preferably earlier in the day before). This serves multiple functions: it helps you plan for how many hands will be on-deck, it functions as a soft accountability mechanism for attendees, and it allows members to coordinate logistics such as transit or food. Alongside this, prepare a concrete agenda for what you plan to accomplish. Avoid the trap of arriving at the STEM Center with only a vague sense of "working on the robot." (Hint: you won't really end up doing much meaningful "working on the robot") Know what subsystems need progress, who is assigned to what, and what the minimum viable output of the session is.

Before the meeting, preview your own tasks. As a leader, please do not just sit back and scroll, be on Reddit, and whatever else. If you are leading a teaching session or demonstration, rehearse it briefly and make sure you really know what you are doing. If you are managing a build task, review the relevant CAD or documentation beforehand so you are not losing meeting time to orientation. A co-captain who visibly does not know what is happening in a meeting communicates to the team that disorganization and not being prepared is acceptable. Team members look up to the co-captain. If your role model is bad, they *will* disengage and start to leave.

During the meeting

Assign members to subgroups from the beginning, matching people to tasks based on your prior delegation framework(s). Ambiguity about who is doing what results in duplicated effort, missed

tasks, and members standing around (none of which you want). Maintain a working awareness of the room. You do not need to micromanage, but you should be able to identify at a glance whether each subgroup is making progress, stuck, or off-task.

Address blockers immediately: a member stuck on a problem for forty-five minutes without flagging it is a failure mode you can prevent by checking in briefly at intervals. Close each meeting with a brief review of what was accomplished and what the action items are before the next session. Ideally, keep a place for debriefs and explanations (exceptionally helpful to the portfolio/outreach teams as well). This does not need to be lengthy, as even five minutes is enough. It creates accountability for accomplishing tasks to report back (and add to your leaderboard!), ensures that nothing falls through the cracks between meetings, and gives members a concrete sense of what they contributed in that session.

Branding

Branding is the external-facing identity of your team: the visual and communicative vocabulary through which sponsors, judges, other teams, and the broader public understand and remember you. It is not vanity.

In a competition environment, a coherent and professional brand communicates organizational maturity to judges, makes award submissions more compelling, and supports fundraising and sponsor outreach. Think about it like this: if nobody can tell this post was from you just by looking at it, it might as well not have been, because you need to reinforce your presence in a crowded niche of thousands of robotics teams.

Establishing Brand Guidelines

Brand guidelines must be established early in the season—ideally before the season formally begins—and treated as foundational rather than flexible. At minimum, your brand guidelines should define:

- Primary and secondary color palette (specific hex codes, not vague color families—you need *memorability*)
- Typography (at most two typefaces: one for headings, one for body text)
- Logo usage rules (approved versions, sizing minimums, clear space requirements, and what not to do)
- Tone of voice (how the team communicates in writing: formal, approachable, technical, etc.)
- Social media standards (aspect ratios, caption style, hashtag usage, tagging conventions)

Overall, you also need a *rationale* for your choices. You need a cohesive narrative of *the personality of your team*, not vague and random decisions. Your team needs to have an essence. Do you want to convey a public image of a robot, a slop, or a human team? To create the image

of a human team, you need to have a clear image, and that's your choice. Every one of the brand guidelines needs to serve to reinforce that choice. Cohesiveness beats AI slop.

These guidelines should be documented in a shared and accessible location—a pinned document in your team's primary communication platform, or a dedicated page on your team website. Every member who produces public-facing content must be familiar with them and follow them.

Following Trends While Maintaining Consistency

It is tempting—and sometimes appropriate—to adapt content style to current platform trends. Short-form video, reactive content, news commentary, and trending audio all have legitimate places in a social media strategy.

However, surface-level stylistic adaptation should never come at the cost of brand consistency. Redesigning your visual identity to match a passing aesthetic trend undermines the recognition you have built.

Brand guidelines must not be revised year to year for aesthetic reasons alone. Iterative refinement is acceptable; wholesale reinvention for the sake of novelty is not. A team whose branding changes significantly every season never accumulates the visual equity needed for a judge or sponsor to recognize them at a glance.

You control this variable.

You are Part of a Team Too

All co-captains and the leadership board need to work together to have a successful season. Don't compete with each other and drag your entire team's hard work into the dumps. Help each other thrive.

Here's the truth: **no playing field is ever completely even**. There will be teams with exorbitant funds, alums who come back to coach them, parents who get involved at every step of the process (for a student competition), multiple paid coaches whose full-time job is robotics, and so on. That doesn't mean you don't try your best whether as a leader in this team or as a leader of a competitive team.

Politics and inter-team dynamics are real where they **simply shouldn't be**. Robotics should not have to devolve into 20% robotics and 80% politics. Robotics should be **100% robotics**.

YOU have the power to perpetuate robotics culture. **YOU** have the power not to perpetuate corporate psychopathy. Here's the truth: **There is no need to develop skills in corporate politics if you simply don't set a corporate psychopathy culture.**

But let's face it: sometimes you don't have the power. Sometimes when you are outnumbered and blatantly can't change it, you have to cope.

Corporate psychopaths thrive off of your suffering, your loss of innocence, your expression when you get tricked and see the consequences, your expression when they get the upper hand. **If high school is your highest point, the only place to go after that is down.** Remember that. Let that stick with you.

That mistake is not fatal or final.

I shall not share details, but I have first-hand experience with corporate psychopathy (no details will be shared), and it is **not something you want to replicate**. The raw frustration, anger, and desire to lash back at manipulation is also not something you want to feel. Someone you thought you could trust betraying and ditching you on all levels for their own gain. **So don't perpetuate corporate psychopathy**. It's like starting backstabbing competition (emphasis on *back-stabbing*). Before you know it, you will also be stabbed from behind as well. Don't start it.

Here are some ways to acknowledge the corporate politics that I've found useful (instead of venting and destroying everything):

- Do not bring it to an LLM or chatbot. Beyond the environmental cost of generative AI, there is a subtler problem: these systems are optimized to be agreeable. They will reflect your framing to you in a way that feels validating (surely you've heard of AI sycophancy by now?). You don't need a mirror, because you can just talk to yourself at that point.
- Journal. This is not a self-help yap. Writing down what happened, how it felt (especially how absolutely great in magnitude), and what you think about it (yes, every piece of your mind!) is so incredibly helpful. It fills the gap of being angry but having nobody to talk to (for whatever reason: friendlessness, loneliness, not wanting to be swooping to the level of slandering people behind their backs, etc.). Your journal is for you, yourself, and you only. It doesn't need to be filled with high-vocabulary words, real words, or even clean words. It just needs to be honest because if you can't even bear to tell yourself the truth, in your own journal, who will you tell the truth to?
- Keep everyone in the loop, ALWAYS. One of the most disorienting aspects of corporate politics in a team environment is the information asymmetry it creates—where certain people receive opportunities, updates, or decisions that others simply never hear about. Don't do that, because news spreads between team members whether you like it or not, and it communicates that you care about the others less and perpetrates a toxic corporate psychopathy mindset. Nobody appreciates hearing that they got the opportunity they (as an equal) has never heard of. And remember, the world is quite small. Before you know

it, they **will stab you back**. People will remember that *you have no morals* and, per the Golden Rule (drilled in since childhood), *you want to be treated with no morals*.

- **Clear Communication.** You want to avoid miscommunications, and by extension, the stab of blame. If you will be offline and cannot do something, let them know ASAP so someone else can. If you already acknowledged it, then they can only blame themselves. **Don't assume someone else is doing something without confirmation.**

Suggested Timeline

**This is a strong suggestion.*

Pre-season (Before season reveal)

- Finalize all legal and logistical documentation: permission slips, waivers, club chartering. Confirm chaperone and adult commitments in writing. Establish or refresh brand guidelines; update website and social media.
- Conduct recruitment: club fair, social media, application open, interviews scheduled and completed, team composition finalized.
- Complete co-captain role division: produce a written record of who is responsible for what domain.
- Launch or refresh fundraising efforts; set a financial target for the season, including a surplus to leave for the next season and an ideal buffer below which your bank account should not drop.
- Identify deputy leads within subteams. These are the members who will own a subteam area in the absence of co-captain oversight.
- Compile and distribute resource guides and lesson materials to members *before* the first meeting.

Early season (Weeks 1–3 after reveal)

- Hold a structured kickoff meeting: review game manual together, introduce season norms, establish meeting cadences and norms.
- Conduct initial brainstorming sessions for robot design; document *all* proposed mechanisms (including pros, cons, and other analyses).
- Begin driver selection and initiate chassis-only driver practice as early as a drivable chassis exists. Do not wait for a complete robot to begin driver training. Driver intuition matters more than the perfect robot to start with. Distribute first task delegations; establish the points system and make it visible to all members.
- Schedule regular check-ins with subteam deputy leads.

Mid-season (Weeks 4–8)

- First robot iteration should be functionally testable. Set a hard internal deadline for this. Begin outreach activities and document them thoroughly for award submissions.
- Revisit team norms at a meeting if necessary; address behavioral or motivational issues

before they compound.

- Conduct mid-season retrospective: what is working, what is not, what needs to change before competition.
- Ensure engineering notebook is being maintained contemporaneously, not reconstructed after the fact.

Pre-competition (2–3 weeks before first competition)

- Dedicate a *defined* number of practice sessions exclusively to driver practice with the most complete robot available.
 - Driver practice beats a complete robot that nobody knows how to operate (seriously).
- Finalize all competition logistics: transportation, chaperone confirmation, check-in times, signed legal forms, packing lists.
- Prepare pit materials: banner, team info sheets, spare parts inventory (you never know what can go wrong!), printed engineering notebook.
- Send competition brief to all members and parents: schedule, what to expect, and team norms for competition day.
 - Emphasize gracious professionalism, pit safety, and the possible penalties.
- Complete or substantially complete all award submissions that require *pre-submission*.

Post-competition

- Debrief within 48 hours: what the robot did well, what failed, what the team dynamics were like, what to prioritize before the next competition.
 - REFLECTION beats making the same mistakes every time. In addition, it enforces *psychological safety* and makes sure every member's insights can be heard. Stop putting your pride in the way.
 - This doesn't need to be neat. It can be a page in your native notetaking app or a scrawled page you can **extract action items from**.
- Send out the appreciations form and compile individual appreciation summaries for each member.
 - This is something I'm really proud of starting within the teams I've led. Make sure the team members feel valued and loved for everything they've done right!
 - I recommend leaving yourself out to avoid...people sucking up, but you do you.
- Adjust the timeline for the next competition based on debrief outcomes.
 - And write suggestions for next year if you have no more competitions next year.

Other Board Members

Face it: There are more leadership members than just co-captains.

Your Place in an Ideal Team

The leadership board of a robotics team is not a hierarchy of authority so much as a distribution of responsibility. You can all **delegate within each other** as **equals**, not rivals. Each board member occupies a domain in which they exercise genuine ownership—not because the co-captains have delegated it reluctantly, but because the team structure requires distributed expertise to function.

Your place, as a board member who is not a co-captain, is to own your domain completely: to make decisions within it, to surface blockers before they become crises, and to be the primary point of contact for team members working within your area.

You are not waiting to be told what to do. Take initiative. You are identifying what needs to be done and doing it, and then reporting back so the co-captains can coordinate across domains. Board members are also the cultural intermediaries of the team. Team members often feel more comfortable raising concerns with a subteam lead than with a co-captain. This is natural and should be welcomed rather than resisted. If you are a board member, you should be creating the conditions for those conversations to *happen*, and you should be escalating what needs to be escalated and resolving what can be resolved at your level.

You need to live up to your position, which is *not just a messenger*. (Trust us, enough software exists to be messengers)

Roles and Responsibilities

Here are just some suggestions and possible roles that can be filled

- **Programming Lead:** Owns the codebase, manages version control, leads code reviews, and is responsible for ensuring drivers have functional and tested autonomous programs *before* competition. Coordinates with the Mechanical and CAD leads to ensure software assumptions match the hardware.
- **CAD Lead:** Manages the master CAD assembly, enforces file naming and version conventions, and serves as the primary reviewer for design changes. Coordinates with the Mechanical Lead to ensure design intent translates correctly into physical builds.
- **Mechanical/Build Lead:** Owns the physical robot: structure, mechanisms, fastener inventory, and tools. Responsible for build quality, repair timelines, and maintaining a spare parts inventory ahead of competition.
- **Electrical Lead:** Manages wiring, power distribution, and sensor integration. Responsible for ensuring the robot meets all FIRST electrical rules and that the control system is reliably configured before each competition.
- **Outreach/Media Lead:** Owns all public-facing content: social media, website updates, and outreach documentation. Responsible for ensuring the team's public record of

outreach is accurate, timely, and sufficient for award submissions. Coordinates with the co-captains on brand guidelines and public communications.

- **Fundraising Lead:** Manages sponsor relationships, tracks income and expenses, and is responsible for ensuring the team has adequate funds at each phase of the season. All financial records must be transparent and accessible to co-captains at all times.
- **Driving Lead / Drive Coach:** Responsible for driver training, strategic preparation for each competition (make sure to read the manual closely!), and in-match decision-making. Works closely with the Programming Lead to ensure autonomous reliability and with the Mechanical Lead to understand robot capabilities and failure modes.

Team Members

Viewing Robotics

You are here because you chose to be here. You applied, you interviewed, and you were selected. That acceptance was intentional, and you shouldn't make it a mistake.

Robotics is not a passive activity. The team does not improve because people sit around and observe others building robots. The team improves because each member contributes something, whether that be code, hardware, documentation, outreach, and/or strategy, that the team would not have without them.

The members who leave the robotics space with the most are consistently the ones who treated their time here as active. Robotics is not a spectator sport (credit to my amazing 9th-grade English teacher for this saying!).

This also means that if you are here to check a box, whether that be for a college application, for a parental expectation, or for a social affiliation, you will find the experience disappointing, and you will consume resources (time, materials, mentorship) that could be directed toward members with a reason for being here.

This is not a judgment. It is a description of how motivation works. Make sure that you ask yourself honestly why you are here. Don't be a resource black hole.

Team Norms

You are expected to have read, understood, and internalized the team norms that your co-captains. They apply to you in full. Nobody is exempt. It doesn't matter how powerful your parents are, whether you're best friends with the co-captain, or how much you already know.

As a team member, you should:

- **Engage** with your subteam's work genuinely and with intellectual curiosity, *especially* when the work is difficult or unfamiliar. Your character is judged by whether you can execute when things get real.
- **Ask** questions when you are stuck. A question asked after 2 minutes of confusion is more valuable than forty-five minutes of silent struggle without understanding. There are no stupid questions in a learning environment. There is only wasted time and resources.
- **Contribute** to a culture of psychological safety by not mocking or dismissing others' questions, mistakes, or ideas. The team you are building with this season will *not* be the team you compete with. Treat it that way.
- **Complete** your assigned tasks *by their deadlines*, or communicate proactively when you cannot. Silent non-completion is the most corrosive pattern on any team. It does not just affect your work, but also everyone downstream of it. Your task is not in isolation. There is a whole robot.

Respect and Dignity for Leadership

The co-captains and board members of this team have taken on a significant and largely thankless organizational burden. Do you think every logistical thing they are organizing in the background is somehow *glorious*? They spend hours preparing lessons, managing logistics, navigating conflicts, and thinking about the team in hours that do not coincide with STEM Center meetings. This is their full-time mental burden, not a side activity. This work is invisible because when it is done well, it looks effortless. It isn't.

You are not required to *agree* with every decision leadership makes. Disagreement, expressed constructively and in the appropriate context, is healthy and often valuable. You can give suggestions; don't get me wrong. What is not acceptable is undermining of leadership: dismissing decisions in front of other members, refusing directives without cause or explanation, or treating co-captains with less respect than you would expect to receive yourself. This is a robotics team and a team effort, not your soapbox. Don't make the lives of your leadership harder than they already are.

If you have a legitimate concern about a leadership decision, bring it directly and privately to the relevant co-captain or board member. This is not a bureaucratic requirement—it is a functional one. Public disputes degrade team cohesion in ways that are very difficult to repair.

Time Commitment and Responsibility

Before you joined this team, you were given an honest description of the time commitment involved. By joining the team, you are affirming that you can meet that commitment. This is not a game.

The season is short. The work is concentrated. There is very little margin for sustained absence or partial engagement. There is no “grey area” to being on the team. You either are a full-time team member, or you are not.

Concretely, this means:

- **Attend** STEM Center meetings as scheduled. If you cannot attend, provide advance notice, not after the fact.
- **Respond** to team communications in a timely manner. The expectation is not that you are online and available at all hours, but that you do not leave communications unread for days during an active season. You should always respond within 24 hours during the competition season when you can. Check in the times you can squeeze in, whether that be in your commute or at another convenient time. Don’t be chronically online and let that interfere with everything else you do.
- **Complete** assigned tasks on or before their deadlines. If you anticipate a deadline will not be met, notify your subteam lead *as early as possible* so the work can be re-planned. Late notice is always better than no notice.
- **Attend** competitions as scheduled unless a *genuine conflict* exists. Competitions are where the season’s work is evaluated and where the team functions as a unified unit. Casual absences from competition are not compatible with team membership. Don’t go to avoid work like scouting or something else. Face it: Nobody can always only do the most interesting work. All work needs to be done, from the unglorious to the more glorious. You’re not exempt.

The team cannot function as a team if some members are carrying the work of others. Time commitment is not about punishing people for having lives, but about ensuring that the people who showed up for every meeting are not left holding responsibilities that were someone else’s.

Behavior

You are a representative of this team, of Hunter College High School, and of the FIRST community at all times during robotics-related activities, from competitions, outreach events, STEM Center meetings, to any communication conducted on team platforms or channels. Don’t post things that you would not send to your teacher.

The behavioral standard is not complex: treat every person you encounter, whether that be judges, volunteers, members of other teams, sponsors, adults, or your own teammates, with the same basic respect you would want extended to yourself. Gracious Professionalism is not a slogan or empty words. It is a description of how the *best competitors* in this space actually conduct themselves. Just because someone isn’t exhibiting Gracious Professionalism doesn’t

mean you can't. There's also often a *rule* (yes, a rule, not a suggestion) against weaponizing Gracious Professionalism.

Specific behavioral expectations:

- In contests: Accept *both* victory and defeat with Gracious Professionalism. Judges, other teams, and possible alliance partners are watching.
- On team platforms, communication should be relevant, appropriate, and not privileged. Group chat and shared rooms are team infrastructure, not social media feeds. Don't post random memes, harmful language, or random off-topic material in the wrong channels. Watch your mouth.
- Toward other teams: scout, learn, and respect. Robotics is, in many ways, a small world. The knowledge and goodwill you develop with other teams in this community will outlast any single season's results into overall team image and your career.

Any behavior below this standard will be addressed directly. Repetitive or serious violations are a reason for dismissal from the team and possible escalation beyond the team. Don't try the line.

Works Cited

**Errors in attribution in this bibliography are unintentional.*

Calderon, Sarah, and Debbie Newhouse. 2026. "Following the Data: The Research behind Great Managers." Google re:Work. March 31, 2026.

<https://rework.withgoogle.com/intl/en/guides/following-the-data-the-research-behind-great-managers>.

Martins, Julia. 2025. "How to Delegate Effectively: 10 Tips for Managers." Asana. February 14, 2025. <https://asana.com/resources/how-to-delegate>.

Sunrise Movement. n.d. "About the Sunrise Movement." Sunrise Movement.

<https://www.sunrisemovement.org/about/>.

The re:Work Editorial Team. 2026. "Understand Team Effectiveness." Google Re:Work. March 31, 2026. <https://rework.withgoogle.com/intl/en/guides/understand-team-effectiveness>.

Contact

I would love to help and mentor! Feel free to shoot me a quick message at this form:

<https://forms.gle/KDPvEXB7oUeqaquY7>.

For reasons relating to privacy and security, I will not publicly disclose my personal information, including but not limited to: social media accounts (including but not limited to: Instagram, Bluesky, Facebook, X (formerly Twitter), LinkedIn, etc.), email address, phone number, and address. This form is the most secure way for us to communicate and to help filter out spam. I will never ask you for your address or to meet in person through contact information I find only from this form.

Please keep yourselves safe in the precarious digital world.