

Team Handbook

VAHS *FIRST* Tech Challenge Teams:

- Tech Cat Robotics #20679
- Gear Hounds #22265

Introduction

***FIRST* (For Inspiration and Recognition of Science and Technology)**

FIRST Tech Challenge (FTC) is a unique sport of the mind, designed to help middle- and high school aged people discover how interesting and rewarding the life of engineers and researchers can be. FTC challenges teams of young people to solve a robotics challenge in a game competition format. Starting with a "kit of parts" and a common set of rules, teams build robots and enter them in competitions designed by Dean Kamen, Dr. Woodie Flowers, a committee of engineers and other professionals. Teams are challenged to design, build, program, and operate robots to compete in a head-to-head challenge in an alliance format.

Guided by adult coaches and mentors, students develop STEM skills and practice engineering principles, while realizing the value of hard work, innovation, and working as a team.

FIRST redefines winning for these students because they are rewarded for excellence in design, demonstrated team spirit, gracious professionalism, maturity, and the ability to overcome obstacles. Scoring the most points is a secondary goal. Winning means building partnerships that last.

We are proud of our ability to work as a team. Each team member should strive to apply this philosophy to his/her every action as a Tech Cat or a Gear Hound. The winners of *FIRST* competitions are teams, not individuals. Being a team means not fighting over who is right or wrong. Discussion and compromise are the foundation for a successful team. Our robots are to be student designed and student built.

What we do. What to and not to bring (physically and mentally).
What to expect.

The Vail Academy and High School (VAHS) FTC teams, Tech Cat Robotics and Gear Hounds, are participants in the annual competitions established by *FIRST*. We are a team-oriented environment. We welcome all who are enthusiastic, curious and hard working.

A common misconception about being on the robotics team is that you are only involved in the robot build. Many other aspects of the team exist and have heavy requirements; business, engineering notebook elements, outreach, and spirit are a few examples. We work in a sub-team environment, but will be expected to participate in an "all hands on deck" as gaps are determined in team needs. All sub-teams will learn in a hands-on environment.

Robot Design

Our philosophy is that our robot is student designed and student built. They must meet all rules set forth by *FIRST* which are modified every year. Mentors are there to guide and review issues, but it is ultimately the students' decision and hard-work. For better or worse, this will truly be a student designed and built robot. No exceptions.

Calendar

The Team Calendar is from August to March of the following year. We expect members to take part in all events. While we strive to have a regular build schedule, many issues can change this schedule.

Pre-competition meetings are necessary because training is accomplished then. Familiarity with the parts, tools, and software used will be established. Meetings are currently scheduled as follows;

- Fridays 3:30 pm - 5:00 pm
- Saturday 8:00 am - 12:00 pm

Attendance at team practices are crucial. Just like a soccer or basketball team, we practice and are innovative by relying on our teammates to bring "game". Missing team practices may result in not being considered as a Driver or Driver coach during competitions. Consistent absences may result in being asked to leave the team.

Expectations at Practices

It is your responsibility to come prepared for practice.

- Complete outside team requirements.
- Don't just jump in, if you arrive late – see what the team and sub-teams are working on and how you should fit in
- Closed toed/heelled shoes and safety glasses are required for every practice.

- Understand the safety requirements
- Enthusiasm and a positive attitude.
- Come prepared to pitch in and work hard.
- It is your responsibility to have your area cleaned and prepared to leave by practice end time.
- It is your responsibility to begin to wrapup 30 mins prior to leaving as this will enable us to have a debrief if necessary
- Pick up all snack trash in your area.
- Shut down and return computers to their backpacks or shelf.
- Return all notebooks and reference material to their appropriate place.
- Put away safety glasses.
- Put away tools
- Put away robot electronics and communication devices.
- Check with team lead, mentors, and Coach to see if there is anything else, prior to leaving. If the above is not complete, do not ask Coach if you may leave.
- Help move equipment to vehicles if necessary to pack up van for an upcoming competition.

Responsibilities

Students

Expectations

Students will put priority on their grades over any team's needs. Grades are important. Students must complete schoolwork before participating in teamwork sessions and activities. Read and understand all the rules of the competition. Understand our team's robot and competition strategy.

Ask for help! If you do not know what is going on or are unsure how to accomplish a task assigned to you, ask for help or clarification.

At the end of the day, students are required to help clean up. If a student needs to leave early they should clean up their own area and verify with a team lead mentor or Coach before leaving. Students may NOT wander the school and should not leave without notifying Coach.

Team members are expected to put away cell phones and netbooks during work sessions. Students caught playing video games, randomly surfing the internet, or any other non contributory actions will forfeit consideration for qualifying events.

Understand that since VAHS hosts the team, we are subject to the rules in the VAHS Handbook. This includes behavior and dress code. While our team's dress code does emulate that of VAHS, it is not to the letter, but following the team's rules should keep us all out of the limelight with VAHS.

Respect

Team members are expected to show Gracious Professionalism to everyone. Team members are there to have a good experience, and deserve to have that good experience. Members are to respect fellow team members, and themselves.

Not listening to adults on the team when they are trying to relay information or training is disrespectful. They are there to give knowledge, assistance, and training. They are volunteers, and are not being paid to be there helping you. Remember that, and acknowledge that when dealing with them.

Team members are required to pay attention to the leadership, either adult or student, while information is being disseminated. This applies to the update session when the CROs are providing information, or when team leads are performing training.

Students who are disrespectful and/or disruptive may be dismissed from the team by the Team Coach.

Eligibility

Success is an important part of FIRST and the team. It is not restricted to the robot, game performance, or how many trophies the team is awarded. Team members are successful when they succeed in the classroom, and then participate in team activities. All team members are expected to make schoolwork and individual academic performance a priority over any team event or activity.

Any student member of the team that is struggling with schoolwork can seek help. The team will have resources available to help students with schoolwork. You do not need to be ineligible or on probation to seek/receive help – just ask!

FTC Rules & Regulations

All team members are responsible for knowing and understanding the Competition manual for the season, which is released during Kick-off. Updates come at least weekly, which include changes to the rules of the competition. These changes can affect the design of the robot overall, or just a subsystem. The updates may have an effect on gameplay, strategy, or a myriad of things.

Having all team members able to participate in understanding the total impact of the updates is beneficial to the team, as some members may think of issues others did not.

Conflict Resolution

Conflicts will be resolved civilly and at the lowest portion of the chain. Preferably, they will be resolved within the sub-team. If that is not a possibility, then they will be resolved at the CRO level. If that does not happen, then the issue will be brought before the mentors for resolution.

We understand there are times when an individual may not be comfortable bringing issues up directly with the person they are having issues with, and therefore may need to bring it directly to the CROs, or even the mentors. This is acceptable, but not preferable.

Communication

Students are expected to check their listed email account, the team forum, Facebook, etc. to stay current on what is happening. Team communications go out in several formats, and it is the team member's responsibility to stay informed by checking the various sources.

If you cannot remember to check an email account or seek information, it is not the team's fault if you miss an event.

Team Coach

The Team Coach is there to oversee all aspects of the team, and as such, is a busy individual. They are the liaison between the team and the administrators of FIRST and the sponsors and the school administrations. They participate in the meetings, but are also called off to other meetings the team leadership and/or mentors may not be involved in.

The Team Coach acts as the presiding chair over the Mentor Council. Their goal is always the betterment of the team.

Mentors, Adult Members

Helping the students reach their full potential is the primary reason for participating in FIRST. We know that mentors have families, jobs, and other important commitments outside of the team. We ask that mentors properly inform us up front of how much time they think they will be able to contribute. Adult chaperones on team outings are not allowed to consume alcoholic beverages.

When dealing with the students, please remember that you are there to guide, not to do. Also remember that these students do not have your life experiences, and may not know all you do about a particular field. Take the time to get to know the students and their abilities/limitations. Respect them as well when dealing with them. We also expect adult members to follow all the guidelines stated in this handbook.

Parents

Yes, we even have a section in here for you. It is imperative that the team members have your full support. It is important that the team mentors have your support, as well. For those members that cannot drive yet on their own, please help make sure they are able to make as many meetings as possible.

The team needs your support in the terms of snacks being delivered during the season. The team will send a link to a sign-up sheet. It is greatly appreciated to have this sign-up sheet filled as soon as possible upon season starting.

Postitional:

Sub-Team Leads

Team Leads are responsible for the progression of their individual subteams, and the coordination between the CROs and the subteams. This means that they are responsible for the training of their subteam members. They are responsible for meeting schedule, or keeping the Coach apprised of difficulties being encountered with the schedule.

Chief Resiliency Officers (CROs)

CROs are responsible for insuring that the members follow safety rules, and to remind individuals who have forgotten. This includes making sure that the proper personal protective equipment is worn in the build room, or when performing tasks inside or outside of the build room. The CRO is responsible for insuring resiliency of teammates by monitoring stress levels and maintaining as much as possible, an engaged practice. CROs are responsible for informing mentors or Coach if a teammate may be self-isolating from the These individuals will also be involved in the Safety Training of the team members.

Competitions

Expectations at Competitions

- Team members traveling with the team to competitions are expected to participate at all times with a positive manner while on the trip.
- Team members are expected to cheer and do whatever is necessary to help the team be successful.
- Team members are expected to wear their team shirt, un-modified, at all times during events.
- Team members will be participate in intelligence gathering and strategy meetings
- Field team (Drivers, Drivers Coach, and Human Player) members will be selected by Coach and Mentors with input from CROs before attending competitions. Students may need to try

out for these positions. Teamwork, skills, knowledge of rules will be factors in choosing students for these positions.

- Team members are expected to help in the Pit. Some team member may be delegated as critical Pit Crew at any time before or during competitions. Critical Pit Crew will have priority in modifying robot and programming over other Pit responsibility. Team members that are not critical Pit Crew will focus on other jobs in Pit (housekeeping, outreach and strategy).
- Team members are required to follow all safety rules at competition.
- Team members will observe the following requirements for travel involving overnight stays:
 - Students shall not be in rooms of teammates of the opposite sex.
 - Teammates are not allowed to be in another room with a non-guardian adult.
 - Teammates will observe standards for room turnin and lights out.
 - Team members cannot leave with from the competition venue without checking out with the Coach.

Qualifications for Attending Events or Competitions:

- Keep up grades and attendance at school (no exceptions). This is a C average, with no F's. The requirement is a 2.5 GPA minimum with no F's.
- Exhibit and practice Gracious Professionalism at all times. This includes appropriate behavior within the classroom and school as well as at competitions or events. Remember that you are a representative of the school, the district, the team, and all of our sponsors and donors. We will conduct ourselves as Gracious Professionals.
- Complete and return all paperwork and make all payments in a timely manner.
- Participate in **quality** fundraising, outreach and presentations to attend competitions.
- Be certified by your team lead in your subteam.
- Participate with a positive attitude. Make practices **quality** practices.
- We would like your family to provide at least one team meal during the season. Feel free to work with other families and partner in putting on meals. Speak with the Team Advisor if you have any questions, issues, or need dinner ideas.

Please note that the word *quality* above in bold. Simply showing up, signing in, hanging out, and leaving does not constitute “quality”.

Team Member Conduct

All members of the team are expected to exhibit exemplary behavior and act as role models for their peers and other team members. Team members will be in the public eye both on and off the playing field. Knowing this, you must conduct yourself accordingly. The actions of a team member are a direct reflection of themselves, their team, their school, our sponsors, and their family. School rules do still apply.

As a team member you are expected to wear team jerseys and colors with respect and pride in what it represents. Gracious Professionalism consists of respect for others and cooperation with teachers, coaches, teammates, volunteers, and officials.

Depending on the severity and seriousness of a behavior issue the team member may be dropped from the team, put on probation, or given a verbal warning. In all cases the situation is expected to be rectified in a timely manner to the satisfaction of the Team Coach.

The Team asks that you treat everyone with respect. Students, please remember that all of the adults on the team are volunteers. Please respect and thank them for this commitment!

Dress Code

Students are expected to dress appropriately while on campus and during all team-sponsored activities as they are a direct reflection of the Tech CATs, the Vail School District, *FIRST*, and our sponsors. For participation on our team, it is also considered for safety purposes. The parameters for appropriate dress and grooming are set forth below. Students who violate the dress code will be asked to correct the situation or not to participate in that meeting. The team administration shall be the interpreters of proper attire.

All clothing must be neat, clean, and in good repair. Clothing and accessories may not display language/logos of a sexual nature, depict graphic images of physical violence, or weapons. At no time can clothing display profanity, profane/obscene gestures, or promote alcohol, drugs, or tobacco. Gang related clothing, accessories, or personalization are not permitted. All clothing must conceal undergarments at all times including boxer shorts and bra straps.

- Pants must be worn at the natural waist. No sagging. Shorts and skirts must reach mid-thigh or have a 4 inch inseam. Shorts and skirts worn over leggings or tights must still reach mid-thigh or have a 4 inch inseam.
- Cut-off shorts or skirts are not allowed. Ripped denim that allows skin to show is not allowed.
- Shirts may not expose the midriff or reveal any cleavage. Tank tops must be at least one inch wide over the shoulder. Halter tops and spaghetti straps are not permitted.
- Footwear must be appropriate for a fabrication environment, which means close-toed. Slippers, flip-flops, and sandals are not permitted.

- All clothing must be appropriately sized.
- Pajamas are not appropriate attire for team meetings or events.
- Jewelry should be worn in moderation. Piercings may only be worn in the ears. Gauges (tunnels or spikes) may not be visible on campus. NO JEWELRY while working with power tools.