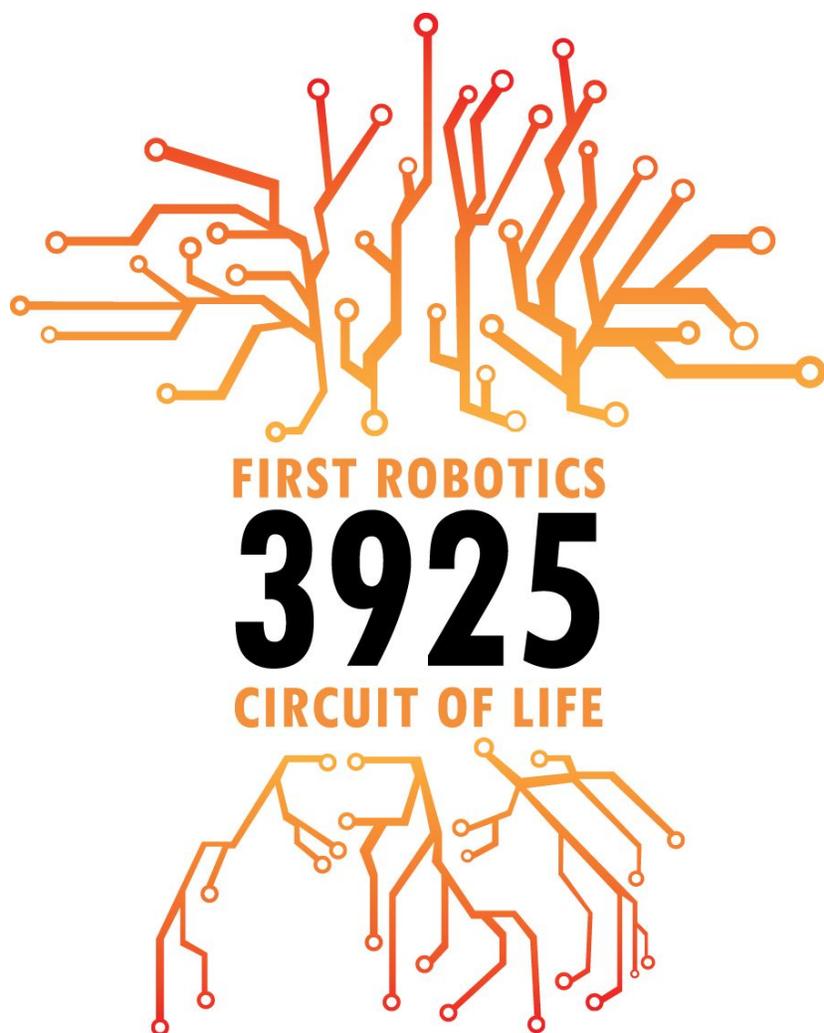


Ventura Unified School District / Ventura County Office of
Education

Robotics at Ventura High School



Handbook 2019-2020

The purpose of this handbook is to document the vision, mission, values, policies, rules, and expectations for the class VHS robotics and FRC Team 3925, Circuit of Life. The handbook is based on the history of the class and team, and its current state and future growth. As such, it is a living document which will undergo ongoing revision by the teachers of the class with guidance from Ventura County Career Education Center, Ventura Unified School District, and the team's mentors and student leadership. Questions or clarification regarding any part of the handbook may be addressed to the teachers of the class.

Vision, Mission, and Values

Vision

"To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders."

Dean Kamen, founder of FIRST

Mission

The mission of the VHS Robotics class is to inspire students to be science and technology leaders and innovators, by engaging them in exciting Mentor-based programs that build STEM knowledge and skills, that inspire innovation and that foster well-rounded life skills including self-confidence, communication and leadership. The mission extends in our class to include many other areas of STEM related student leadership including business, practical arts and social sciences.

Values

Building a "World Class" competitive robot is our teams goal each year. We include ALL students enrolled in the class in this endeavor. All students will engage in a wide range of instructional learning and practical skills related to this objective. We embrace the TEAM philosophy valuing a team effort with full student collaboration over individual or independent "heros" leading the way. Student leaders inspire, collaborate and lead - they do not "dictate". The class and team is a student lead, student run program with teacher and mentor oversight, support and guidance all of which are aimed to achieve our goals.

Team Structure

Teachers

VHS Robotics is a 10 credit multi-level course that is taught by two teachers. The teachers have the responsibility of setting the academic curriculum and approving lesson plans. They are responsible for establishing grading standards and weighting.

Mentors

Mentors are an integral part of VHS Robotics and Team 3925. The mentors consist of dedicated adults who are passionate about STEM and desire to help educate students and develop STEM related knowledge and skills. Mentors work with all students in the class providing engineering, manufacturing, leadership and administrative subject matter expertise and guidance. The team mentors teach and guide students but do not “DO”. The mentors work in collaboration with teachers and student leadership in fulfilling their individual roles.

Mentors must possess specific skills and/or knowledge that is integral to the needs of the students, class and team. Any person desiring to mentor VHS Robotics and Team 3925 must visit the classroom during class and submit a Mentor Application. The application will be reviewed by the teachers who will approve or reject based upon student learning needs or number of current mentors in that discipline. In addition all mentors must register as such with FIRST and pass all required background checks prior to starting their mentorship role.

Class mentors will primarily work with a specific department under that departments Lead Mentor. Each department will have a Lead Mentor who works directly with the class teachers. The Lead Mentors will work closely with their Department Managers and Directors.

Each mentor will have a specific set of responsibilities within a Department. Some mentors will have more general or specific responsibilities outside of the Departments. The mentorship needs of the team will be re-evaluated yearly at the start of each academic year.

NOTE:

Alumni of the class and team may not apply to become mentors for a period of 12 months following graduation. Following the 12 months the alumni may submit an application to become a Jr. Mentor for the class and team at the start of the following academic year. The application will be reviewed by the class teachers and Department Lead Mentor and a decision to accept or decline will be made. Jr. Mentors will work directly under a Department Lead Mentor or another assigned mentor for the academic year after which the teachers and their Lead Mentor will evaluate their effectiveness as a Jr. Mentor.

The reason for this rule is as follows:

- Recently graduated students by nature have a number of strong connections with the team. These connections are difficult to separate from and will interfere with a Jr. Mentors ability to be effectively perceived as an authority and mentor.
- Jr. Mentors must be able to mentor and interact with all the students of the team equally.

Directors

The team is led by two student directors, the Engineering Director and Operations Director during the competition season. The directors also work closely with the teachers and mentors during the academic part of the year. The Operations Director is responsible for all

non-engineering departments such as fundraising, graphic design, social media, outreach and operations. The Engineering Director is responsible for all engineering related departments such as robot design, prototyping, manufacturing, engineering documentation and competition. The Directors lead a team of department managers who are responsible for leading smaller groups of students throughout the year.

Managers

Managers are responsible for leading a specific department. Each department consists of a group of students interested in that specific discipline of the class and team. A manager's job is to work with their director to execute projects and tasks assigned to their department. Each manager's job is different in respect to workload and time of the year. For example, the Manager of Scouting & Strategies job is most demanding during the competition season. Therefore, during the Fall they might not be as busy as the Manager of Fundraising who is working on finishing grants and running fundraisers. There isn't one manager's position that is more important than the other. Each position is equally important to the overall success of the class and team.

Sponsors

Sponsors are an integral part of FRC Team 3925 - The Circuit of Life. Without their support, our team would not be as successful as it is today. It is important for all members of Team 3925 to remember that they are extremely fortunate to have the sponsor support they have and to not take that support for granted.

Students

While the handbook details the class and teams own requirements, rules and expectations for students, all school rules still do apply. For example, if something is not covered in this handbook, but there is a school rule or policy, the school rules and policies still apply.

Parent/Guardian Volunteers

Parent/Guardian volunteers play a critical role in the team aspect of this class. Volunteers are responsible for many varied team activities such as field trip planning, team support during competition and "build season", and organizing various team events.

Student Requirements

All students must maintain a passing grade to continue in VHS Robotics.

- Students who do not achieve a passing grade of a C or better by the end of the first semester will not be allowed to continue into the second semester. A passing grade must be achieved at the end of the school year to enroll in the class the following year.
- All students are required to thoroughly read and agree to the team handbook. If there are any questions on any parts of the handbook the student is expected to ask a teacher for clarification. All students are responsible for rules and expectations listed in the handbook at all times when representing the class or team. All students are required to bring a signed

copy of the last page of the handbook acknowledging the receiving and understanding of the Student Handbook by the end of the second week of class.

- Students must complete a minimum of 20 hours (10 hours by the end of the first semester) of community service through team events on an academic year basis. Students have ample opportunity throughout the academic year to complete this requirement at the numerous events at which we attend. All events are approved by the teachers. These events not only build team unity, but also help the team accomplish some of its 'big picture' goals of inspiring culture change, supporting STEM programs and growing awareness and appreciation of STEM. Failure to meet this requirement will factor into student grading.
- Class attendance is a vital aspect of each student's ability to learn the skills and knowledge inherent in a STEM education. Class attendance is mandatory and will be a factor into each student's overall grade.
- During the competition season the class will continue to meet on the scheduled class days and times however there will most likely be additional days during which work on the robot will take place. Attendance during these extra days is not mandatory however is strongly encouraged to show dedication to the team and may factor into decisions such as members of the travel team or extra credit earned.
- All students are encouraged to maintain an active Slack account. Slack is the online application with which the class communicates outside of class time. All students are required to download the Slack App and monitor messages on a frequent basis. If a student is unable to download or utilize Slack they must inform the teachers so that alternative methods of communication may be utilized.

Rules & Expectations

The following are the rules and expectations each student must follow in order to remain in the class and be a member of the team.

Behavior

- Students are to respect each other as well as the team's teachers, mentors, parents and sponsors at all times. Students who routinely disrespect one of the aforementioned will be dropped from the class. Students are expected to follow not only the rules and expectations of the VHS Robotics class but also the VUSD Student Code of Conduct. Examples of disrespectful behavior include, but are not limited to:
 - Speaking disparagingly about others listed above
 - Ignoring others listed above when they are speaking
 - Engaging in dialog that personally attacks others' values or beliefs
 - Ignoring directions of Teachers or Mentors
 - Posting "memes" or comments anywhere on social media that "make fun" of or disparage others listed above. This also includes other FIRST robotics teams.

- Students should conduct themselves in a professional manner at all times as they are representing the class, team and High School they are enrolled in. This means dressing appropriately for an event or meeting, using appropriate language, etc.
- Overall academic performance should be a priority for all students. On days when the team meets, the room may be open before class. Students are encouraged to take advantage of this time to do their homework or seek help from other students and mentors. Do not use robotics as an excuse for not turning in an assignment or turning in an assignment late. If you need to miss a robotics class or event to complete other class work, please let a student leader or teacher know as early as possible. Students who are traveling or competing with the team should notify their class teachers as early as possible to arrange completion of assigned work or tests upon return.
- Students are expected to have integrity. This means being honest with each other as well as the classes teachers and mentors and not trying to cover up mistakes or errors in judgement. Everyone understands that students, like all people, make mistakes and that's okay. However, students should own up to those mistakes. Being forthcoming and honest is always best. Stealing from each other or the team is not tolerated and could result in immediate expulsion from the team.
- Students are expected to maintain a team-first attitude. First and foremost, VHS Robotics and Team 3925 are a team and any successes or failures are a result of a team effort. Students are expected to put what's best for the team ahead of their own team-related ambitions. Students should always be asking themselves "What Can I Do To Help The Team Succeed?". In the end, people rarely remember individual performances. What people always remember is what the team accomplishes. Ultimately what the team accomplishes together will look far better on a college application or resume than what you personally accomplished on the team.
- Drug and alcohol use will not be tolerated and tobacco use is not allowed. It is important that the class maintains a safe environment for everyone on the team. Using or being under the influence at robotics puts not only yourself, but other people in danger. Any student who is caught using or being under the influence at class or at a team event will be expelled from the team immediately. If the incident happens while traveling, the student will be sent home at the parent's expense.
- Information about the current year's robot is confidential. Students should not release details (design, strategy, pictures, video, etc) about the current season's robot without the consent of the team's directors. This is to help build anticipation for the robot's release and maintain a competitive advantage by preventing copying before the end of build season. Releasing information can include posting to social media (Facebook, Instagram, Twitter, SnapChat, etc), emails or texts to friends on or connected with other teams, etc. Once the robot has been released publicly, feel free to post all the pictures and video you'd like as long as it presents the team in a positive manor (wearing safety glasses, no negative comments).

Communication

- Slack is used for a majority of team communication. Students are expected to have a Slack account that they check regularly. Notifications should be turned on as important time sensitive team announcements will be posted to Slack. When the team is really busy Slack may be updated numerous times in a given day with important information. Students should get in the habit of logging in and checking Slack once a day.

Safety

- All students are required to complete SP2 Safety certification at the start of every academic year. Each student will complete the online training and print their completion certificate which will be turned into the Operations Director by the date announced during class orientation. No students are allowed to work on any machines, robots or projects of any kind until they are SP2 certified and their certificate has been turned in.
- Students are not allowed to work within the metal shop without a teacher or mentor present. In addition no student shall operate an electrically powered manufacturing machine or welding machine until that student has received training and is signed off by a teacher or authorized mentor.
- While at class your safety and the safety of those around you should be a top priority. Most injuries at robotics come from not knowing how to use or misusing a tool. Anytime you are not sure how to do something, you should ask someone who does (veteran student, mentors, etc).
- Safety Glasses: All students, teachers and mentors, including visitors, are required to wear safety glasses at all times when in the classroom and all shops.
- Shoes: All students, teachers and mentors are required to wear closed toed shoes at all times within the classroom. Examples of shoes that are not closed toe include but are not limited to sandals, flip flops, moccasins and crocs.
- Hearing protection: All students, teachers and mentors are required to use hearing protection when working in an environment where sound exceeds 85 decibels.
- Respirators: All students, teachers and mentors are required to use appropriate respirators when working on tasks that may pose a respiratory risk.
- Visitors: VHS Robotics is a High School class and as such visitors are not routinely allowed. All visitors must check in with a teacher and receive permission prior to entering the classroom. This includes alumni of the class, parents and others.
- Students should report any injuries that happen at robotics to a teacher or mentor as soon as they occur. Depending on the severity of the injury, it may need to be reported to the school for insurance purposes. Please do not try to hide or cover up an injury that happened at robotics.

- If a student is sick, they should stay home from robotics. Students who come to robotics sick can easily get other students, teachers and mentors sick. Please be respectful of others and stay home. Any student who comes to robotics and is sick will be signed out and sent home.

Guidelines

Attitude Is Everything

Like with most things in life, your attitude will dramatically influence a situation. If you go into a situation with a bad attitude, you're probably not going to have a good experience. Go into an important match thinking you're going to lose, you're probably going to lose. Always keep a positive attitude.

“We Is Greater Than Me”

First and foremost this a team. What one or two people do isn't as important as what the team accomplishes together. Wins, losses, successes and failures are the result of the team's collective effort - not the effort of a single person or department. Likewise, every department/sub-team is dependent on each other. A few examples of this are:

- The Operations Department helps secure the resources needed to build a robot, but they don't have a product to demonstrate without the Engineering Department.
- The drivers depend on the pit crew to keep the robot fully functional and the scouts/strategists to provide a strategy. If one of these four plus sub-teams don't do their job, it's very difficult for the team to be successful on the field.

Never Rest On Your Laurels, Always Keep Improving

Never assume you know everything. Always keep an eye on ways to improve yourself and the team. Everyday is an opportunity to improve. Try something new, work in a new department, practice old skills, etc. Be proud of what you've accomplished in the past, but don't use it as an excuse to stop improving. Remember that when picking positions the teachers and mentors do not look at past accomplishments, grade or seniority. The teachers and mentors will pick positions based on who they feel is the best for the team. So even if you've held a position in the past, someone else can take over if they prove they can do the job better.

Compete With Integrity

Always compete the right way - by working hard to rise above the competition. Cheating and sabotage will not be tolerated. This extends beyond the playing field. When trying out for a position you should be actively trying to help your teammates get better, not trying to bring them down. Remember that this is a team.

Class Schedule

Regular class meets Tuesday and Thursday from 5:30 - 9:00 pm.

Classes are intended to be opportunities for instruction, learning, communicating, planning, interacting and becoming a team. Occasionally class days and times may be adjusted or cancelled based on school activities, holidays or forces of nature. It is important that students attend classes to gain the knowledge necessary to become valued members of the team and help in its success..

Build Season Classes

Build Season is the highpoint of the academic year. It is the culmination of all the prior skill and knowledge development manifested into the design, manufacture, programming and competing of a given seasons robot. Build season kicks off in January each year and lasts for 6 weeks. Due to the limited amount of time the team has to design, build, program, test and practice its robot, the team usually will meet everyday (including weekends) during build season. All scheduled extra class times are announced through Slack. While students are not required to attend every meeting, the more a student shows up, the more engaged and involved they'll likely be in the robot's design and build process.

Competition Season Meetings (Practices)

The regional competitions during which the team competes the robot occur in the 7 weeks following the end of build season. Just as a sports team practices between games, so does Team 3925. Unlike many teams, Team 3925 build a second (practice) robot that is used between competitions to train the pit crew and drivers, as well as test and implement improvements. In addition, students work on preparing for competition, packing before a competition as well as train to be scouts. In addition attendance at the Ventura Regional is mandatory for all students.

It is not uncommon, depending on the state of completion the robot is in following the 6 week build season, for the class to continue to meet much more frequently than the regular Tuesday and Thursday class times. All scheduled extra class times are announced through Slack.

Student Leadership

The Student Leaders of the class and Team 3925 are the students who comprise the Directors and Managers who oversee the operation of one or more departments on the team. On a bigger scale, the teachers and mentors on Team 3925 look to the Student Leaders as a voice for the other students, to be role models for other students to emulate and help build unity among the students, mentors and parents.

Being a Student Leader requires true dedication, a significant amount of extra time and a strong work ethic on the part of the student. However, being a Student Leader can be extremely rewarding. True life skills will be learned that will serve the student leader into their post high school education and post educational life no matter the path.

VHS Robotics and Team 3925 expect a lot out of its Student Leaders. In order to become a Student Leader you must meet the requirements listed under **Job Descriptions**. Student leaders will receive a regular performance review from the teachers, Department mentor and/or their director. For example, the directors will have their review with the teacher or Leadership mentor while the managers will have their review with their director and Department mentor. The purpose of these reviews is to provide positive feedback on how the student is leading, his or her effectiveness, how they can improve and become a more effective leader and better fulfill the responsibilities of their position.

Selection Process

Student leaders are selected in a two part process. Part one is selecting Directors, part two is selecting Managers.

Selecting Leaders: Selecting student leaders is not an entirely objective process. This means that there is no checklist or pathways that guarantees you a position. Our primary goal in selection is students that exhibit both a desire to be competitive, and recognize student learning is our primary mission and can work with all students to achieve this.

Student leadership selection begins shortly following the competition season. Timing will be dependent on if the team wins a regional competition and earns a place at World Championship, or other factors. Some unfulfilled positions may be filled the following new school year with students that demonstrate the aptitude and skills.

Student leadership begins with student elections of both the Engineering and Business directors, and then Individual Department Managers. Teachers will respect student decisions, and work with elected student leaders to ensure class learning success.

Note: The Teachers of the robotics class may approve exemptions from the expected leadership requirements on a case by case basis based on class/team needs. The Teachers are also responsible for ensuring that all students in the class achieve classroom learning objectives. Our expectation is that student leadership will provide learning opportunities for all students as appropriate. The teachers will ensure that all student learning objectives are met.

Job Descriptions

A student leader is a LEADER. A leader is a person who possesses specific experience, skills and attributes that assist him or her to lead a TEAM of people to achieve a common goal. That TEAM has a specific goal or set of goals to accomplish. Without effective leadership a team is like a ship without a rudder, destined to go wherever the wind and tides direct it. A leaderless team is unhappy, unmotivated and will fail to achieve its goal(s). A group of team members discussed at length the traits they believe a Circuit of Life TEAM LEADER should possess. These “Core Values” are as follows:

1. INTEGRITY – Honesty is a foundation of their beliefs. They “Walk the Talk” setting the example in all their actions and behaviors. Admit mistakes and accept blame without insult, as no one is perfect.
2. CONFIDENCE – Exhibits confidence in action and decision however open for discussion and ability to compromise.
3. CREDIBILITY – Actions and words elicit trust from their team. They are believable and dependable.
4. RESPECTFUL – Has respect for others opinions, thoughts and actions. An exceptional listener who considers others opinions and thoughts in making

5. RESPONSIBLE – Accepts the obligation of control. Is accountable for the actions of a person they supervise and/or the outcome of a project or goal.

6. COMMUNICATOR – Possesses outstanding communication skills. Has the ability to communicate difficult or complicated information in a clear and concise manner assuring the message was understood by all.

7. EXPERIENCE – Experience with or an understanding of the tasks their team work at and complete is desirable in most cases. It is difficult to make informed decisions or discuss specifics without a thorough understanding.

8. COOPERATIVE – Both Directors and Managers must be able to work not only with each other, but with the teachers, mentors and all the other students in the class on a frequent basis. All of the sub-teams are interdependent on one another to be successful. The ability of the Directors and Managers to work together and communicate effectively is paramount to achieving the goal(s).

General Prerequisites and Job Descriptions for Leads:

Minimum 2.5 unweighted GPA (standard progress report procedure)

Good time management skills

1 year of robotics (FRC) experience (in related department)

Responsible for creating and upholding the team's image

Exceptional verbal/written communication/interaction skills.

Present yourself professionally

MUST attend 80% of class / team activities. (Class and all competition events).

Responsible for assisting in the development and organization of workshops and curriculum.

Responsible for department meeting deadlines within parameters

Ability to instill knowledge in those they lead.

Ability to delegate tasks and responsibilities

Assign competition roles and placement in accordance with travel team guidelines

Document progress in workbook.

Note:

Class leaders are generally not part of the drive team except for the Strategy Manager who also serves as the Drive Coach. This allows student leaders to focus on their primary leadership role and also be available during competition to talk to competition judges.

- Directors and Managers lead their managers or departments. As such their time and attention must be on leading and managing, not on driving or fulfilling a role on the drive team.
- Student leadership are the representatives and voices of the class and team. As such they must be available to interact with and answer questions from competition judges, other teams and the general public about the team, robot, etc.

OPERATIONS DIRECTOR: (you are a teacher and leader, not a doer)

A minimum of 2 school year of team or related experience
Understanding of team finances and financial opportunities
Understanding, experience preferred, with digital and social media
Knowledge of FRC's mission, opportunities and activities
MUST attend 85% of team activities
Responsible for the fiscal management of the Team and all its departments
Responsible for ensuring productivity of their department leads
Responsible for managing a calendar
Responsible for ensuring their team leads meet all goals and projects are completed on time
Meet with their Engineering counterpart and the class teacher on a weekly basis to review current status and discuss issues and opportunities (more often if indicated)
Lead meetings with their Business Leads on a weekly basis (more often if indicated) to receive status reports and discuss issues and opportunities
In-depth understanding of all the available FRC awards, requirements, timelines and ensure timely submission
Responsible with Engineering director to appoint Safety Captain for competitions

MEDIA MANAGER:

Experience with website development or strong desire to learn
Knowledge and management of social media
Experience with Photoshop or similar software programs.
Possesses strong artistic aptitude
Responsible for the team's website and social media
Oversees recording of team events via written, photographic and video media (Business and Engineering)
Responsible for development and distribution of both internal and external communications and marketing
Responsible for both Chairman's and Safety videos to be completed by deadline

OUTREACH MANAGER:

Responsible for the management of the team event calendar and coordination of events with team member assignments and volunteers
Responsible for setting up mentoring of other FIRST teams
Ability and confidence in communicating effectively with adults in both verbal and written form
Responsible for coordinating community service events with other teams where applicable

STRATEGY/SCOUTING MANAGER:

Assists in evaluating and selection of Drive Team
Create/maintain/analyze scouting system
Research/evaluate/document other teams before and during matches
Continuously develop strategy/game plan prior to and during competition season
Assigns a student to act as Scouting Lead for coordination of scouting schedule, consolidation of scouting data and analysis

Coordinate design process through CAD
100% mastery of game rules
Coordinates driver practice

TRAINING MANAGER:

Responsible for FTC and VEX teams started within Team 3925
Ensures students are on track for FRC
Creates and manages calendars for FTC and VEX seasons
Coordinates training schedules between function managers and their mentors

ENGINEERING DIRECTOR: (You are a teacher and leader, not a doer)

Minimum 2 years technical experience on the team
Attend a minimum of 85% of team activities
Responsible for the fiscal management of the Engineering departments
Responsible for management of the safety standards of each department
Responsible for ensuring productivity of their department leads
Responsible for ensuring their department leads meet all goals and projects are completed on time
Meet with the Operations Director and the class teachers on a weekly basis to review current status and discuss issues and opportunities (more often if indicated)
Lead meetings with their engineering leads on a weekly basis (possibly daily during build season) to receive status reports and discuss issues and opportunities
Responsible for the project management schedule of build season
Lead design process through CAD
Confirms Department pit rotations/scouting rotations

ELECTRICAL MANAGER: (You are a teacher, not a doer)

Ability to teach and understand electronics
Design and coordinate implementation of the robot's pneumatic/ electrical systems working closely with the Strategy manager and design team
Ensures electrical requirements are considered throughout season
Document current wiring diagram
Troubleshoot wiring issues/damage
Ensures quality control
Create electrical competition pit rotations

MECHANICAL MANAGER: (You are a teacher, not a doer)

Teach, operate, and maintain machinery/tools
Coordinate the design, fabrication and building of the robot
Coordinate the prototyping of the robot
Works closely with the Engineering Director to assure the Program Management Schedule timelines are met by deadlines
Create mechanical competition pit rotations
Ensures quality of mechanical elements

Responsible for development and implementation of pre-competition packing lists and competition robot inspection checklists
Responsible for maintaining all demonstration robots in operational condition

PROGRAMMING MANAGER: (You are a teacher, not a doer)

Responsible for leading and coordination of all programming of the robot
Responsible for maintaining working code for all demonstration robotics
Maintain secure archive of code at all times
Create programming competition pit rotations
Ability to teach and understand current programming language

Travel / Competitions

Traveling and competing with the team is the apex of the season and is the culmination of everyone's hard work and dedication. Competitions other than the Ventura Regional require travel including multiple nights of food, lodging and adequate supervision. As such the extensive logistics required preclude the entire team from traveling to "away" competitions. For these reasons a Travel Team is formed which assumes all the responsibilities required during competition.

Travel Team Selection Process

For the sake of transparency, this section covers the thought process behind how students are selected for travel team positions. All students based on merit will have the opportunity to participate in out of Ventura County competitions. However, it is important to keep in mind that selecting students for a position is not an objective process and there is a fair amount of subjectivity involved in the process. There's not a magical list that will guarantee a student a specific position. It's also important for students to keep in mind that all of these positions are important to the success of the team.

Positions are selected by the team leadership, with input from the teachers and mentors. Voting is not part of the process since it typically indicates who is most popular - not necessarily who is the best fit for the position(s). Also keep in mind that positions are not set in stone for the entire season. As the season develops, positions may be added or removed based on the needs of the team. In addition, if a student isn't performing or meeting expectations, they may be replaced by another student. In conclusion, once a student has earned a position, they must still continue to earn that position everyday.

The total number of students who will travel for any out of Ventura County event is also determined by the number of "certificated" teachers who will be going on the trip. Generally, one "certificated" teacher is required for each 10 students traveling.

Assessment & Interest

Before any selection can be made, the leadership must know who is interested in the different positions. During build season, interested students are interviewed and evaluated for the different positions of the travel team.

Travel Team positions:

The travel team is comprised of approximately 20 students who fill a set number of positions within each department. These are the same departments under which the class and team are divided. The exception is the scouting team. While at competition there are several jobs that students will have. Each job is important in the team's overall performance at a competition. While students may be picked for a certain position, they still may be called to also fulfill the duties of another position such as scouting.

The class leadership, directors and managers, are expected to be members of the travel team and this fact should be considered prior to application for such a position.

Scouting

This is the group of students who are responsible for collecting information about other teams and developing a strategy for matches. During matches scouting collects data on every robot in every match. This data is compiled into a spreadsheet and is used to help form match strategies as well as guide decisions during the alliance selection process. While the drivers may control what happens during a specific match, the scouts and strategist control what the team does over the course of the entire event.

Requirements:

- Attend practices regularly
- Works with Scouting & Strategy department to practice scouting
- Pre-scout teams prior to a competition
- Attends a nightly scouting meeting while at competitions
- Sits in stands to help with the collection of match data
- Arrives to competition venue early to help secure seats with good views of the competition field.

Pit Crew / Pit Speakers

This is the group of students who are responsible for maintaining the robot at competition as well as talking to judges. Between matches the pit crew works on the robot to make sure that it is fully functional for the next match. During matches the pit crew works on keeping the pit clean. Students in this group must know how to maintain the robot as well as be well versed with all aspects of the robots design, function and other aspects of the class and team so as to expertly interact with judges.

Requirements:

- Attend practices regularly
- Works with drivers to make adjustments to the robot to improve performance
- Works with scouts and strategists to improve robot performance
- Long hours standing in the pit
- Knowledge of tools and robot mechanics and functions
- Maintain a clean and well organized pit
- Comfortable speaking to judges about robot and team

- Ability to work in a very noisy, busy environment under extreme stress
- Arrives early to competition venue to help secure seats for scouts and students

Drive Team

This is the group of students who drive/compete with the robot during matches. This is arguably one of the toughest jobs a student can have during competition since the team's performance at a competition depends on how well they perform. The drive team will normally consist of 4 to 5 students.

The driver of the robot will generally hold the position for two years (2 competition seasons including two off seasons). This is to maximize the experience gained over numerous matches and practice. By doing so the team maximizes the potential and competitiveness of the team. This is consistent with the practices of other high performing FIRST Robotics teams. Team members should also not be drivers during their senior year of high school.

Note: These requirements may be altered by the teachers of the class based on class/team needs.

Requirements

- Attend all practices
- Highly competent at driving robot,
- Works with pit crew to improve robot performance
- Works with scouts and strategist to improve their own performance
- Long hours standing
- Knowledge of how robot works
- Comfortable speaking to judges about robot and team
- Can maintain focus in high stress environments such as driving in front of larger crowds

Depending on the competition, the number of students at the competition and the needs of the competition we may have different jobs come up. These jobs could range from volunteering to make the event run smoother, assisting teams or escorting VIPs.

Travel Rules and Expectations

Gracious Professionalism: While at competition students are expected to be professional, work hard to be successful and exhibit good sportsmanship. Students who are competing with the team are representing the class, the team, the team's sponsors and themselves. The team prides ourselves on its professional appearance and demeanor during competition. In addition, the team also wants to compete in a way that inspires others. This means working hard to rise above the competition, instead of trying to bring down our competition.

Competition Dress Code

In order to maintain a professional appearance the team has a dress code for competitions:

Note: Team apparel worn at competitions cannot be ripped, faded or modified (frayed, fringed, sleeves cut, etc).

Shoes: It is mandatory that students wear **closed toed shoes** at competition. Students

who do not wear closed toed shoes will not be allowed in the pit and competition field. This is non-negotiable. Furthermore, students should consider their position at competitions. For example, if their position requires them to be standing for long periods of time they should consider wearing more comfortable shoes or even bring a second pair to switch in the middle of the day.

Accessories: It is preferred that any accessories match the team's primary colors (black, yellow, red, and orange) to show team spirit.

While traveling there will be additional rules for students to follow:

- Students who do not follow these rules may be sent home at the discretion of a teacher and/or not be allowed to travel in the future. Students travel as a group with the team. The team takes care of all airline tickets, hotel reservations, transportation, etc. Students who are traveling with the team cannot make arrangements on their own outside of the team.
- Rooms and room assignments will be announced prior to the team leaving for competition. Rooms will consist of 3-6 students per room (depending on the number of students, the size of the hotel rooms, etc). Under no circumstances will any male or female students share a room. Students who have concerns about sharing a room with a specific person should discuss those concerns with a teacher.
- Teachers and mentors will keep a headcount to make sure that no one was left behind while we are in transit. If someone is missing it should immediately be reported to a teacher or mentor right away.
- Students should never be alone in any part of the hotel with someone of the opposite gender. This is not only to prevent inappropriate behavior, but protect the students from possible accusations of inappropriate behavior. 'Hooking Up' with another person is not allowed. No one from outside of the team can be in a student's room at any time unless that person is hotel staff or with a team mentor. Students are not allowed to leave the hotel without teacher or mentor permission. Students who are allowed to leave the hotel must be in a group of 3 or more or with a teacher or mentor supervision.
- Students who are taking medication must inform the teacher. In accordance with school policy, some types of medication may be collected by the team teacher and given out per prescription directions. This is to prevent students from misusing or missing medication. Students who have food/medication allergies must tell a teacher prior to traveling.
- The certificated chaperones will have access to spare room keys and reserve the right to enter a student's room at any time (female chaperones in female rooms, male chaperones in male rooms). Students are not allowed to deadbolt doors unless it is after bed check.

Parents

Parent support is an important part of VHS Robotics and Team 3925. Parents can help in a variety of ways.

The following are expectations for the parents of student team members:

- Provide timely transportation for their student, making sure that they are on time and ready to Participate. It is important that students arrive on time for class and events. If a student has to come late, they should let a teacher or student leader know ahead of time. **Please be on time to pick up your student.** Class teachers or mentors will wait with students until they are picked up, but please be respectful of their time.
- Do not send a student to robotics if they are sick. It's easy for germs to pass from a sick student to other students and mentors. In the past Team 3925 has had illness take down many students, teachers and mentors, putting the team several days behind schedule during build season. Students who come to robotics sick will be sent home.
- Respect the team, the teachers, mentors, other students and the teams sponsors. It is important that parents are respectful of the team and its goals. Collectively the team's mentors spend a significant number of hours with the class and team. While you may not always agree with some of their decisions, please trust that they have the best interests of your child and the team in mind.
- Please bring concerns to the teacher as soon as possible. If you have any questions or concerns about the class, team or your child, please bring them to the attention of the teacher early on so they can be addressed and not compound into larger issues.
- Keep Robot Information Confidential. Team 3925 understands that you're proud of what your child is working on, but please respect the team's wishes to keep robot information confidential until its public release.
- Volunteering At Events. Some of the events VHS Robotics and Team 3925 run each year require adult volunteers such as judges, referees, etc. Prior to an event, a list of needed volunteers and the requirements for those positions will be sent out to the parents .
- Volunteering and supporting Class and Team events. Many of the events sponsored by the class and team require significant planning and volunteers. We rely on students' parents to fulfill many of these positions.
- Supporting the team at competitions. Another great way to help Team 3925 is to support the team at competitions. This can be in many ways including picking up lunch, cheering on the team, running errands, etc. If parents are planning on traveling to a competition, we encourage them to let the team know. In the event the team has extra hotel rooms, airline tickets, etc. the team is more than happy to let a parent purchase them from the team instead of cancelling the reservations or letting them go unused. When parents attend competitions, we ask that you respect their roles on the team. Every student has a job when we compete and it's important to the team's efforts that students are focused on their job.

- Parents should keep in mind that VHS Robotics and Team 3925 isn't for everyone. Some students do not like the team aspect, some only want to build a robot, some just aren't open to STEM or robotics. Some students find out that STEM is not as interesting as they may have thought or it's just not right for them at the moment. In any case the class and team desire students with a passion for STEM, robotics and FIRST and it is important not to force your student to stay enrolled in the class if they are truly not interested.

Competition Events

Competitions are held during the competition season following build season. The Ventura Regional, hosted at Ventura College, is a mandatory event which all students must attend. Unless discussed with the teacher, all students are expected and required to attend the Ventura Regional.

Authority of the Handbook

The rules and policies set forth in this handbook are established by the class teachers and the Career Education Center (CEC). All of this handbook contents are binding and must be followed by all team members. The handbook may contain appendices including the Team Identity Standards. These documents are binding as well. The teachers and/or VUSD/VCOE CEC have the authority to modify the handbook at any time. The class will be notified of any modifications. All students must acknowledge the Authority of the Handbook by signing the contract and form below.

Student Parent/Guardian Contract

By signing below I acknowledge and understand all points listed below:

- I have read the VCOE/VHS Robotics Class handbook and agree to comply with the policies outlined within.
- Participation in the program requires attendance at mandatory events, and I will comply with the schedule of said events.
- The equipment used during the construction of the robot can cause serious injury if not used correctly. I understand that students are not permitted to use any piece of equipment until they have been instructed on its safe use and are not permitted to use any piece of power equipment without adult supervision.
- As long as my parents have signed a liability release/consent form, I will only ride in a car driven by an adult mentor, faculty advisor, approved parent or myself to any robotics function.
- I agree and consent to allow my photographs, name, or comments to appear in media related to VCOE/VHS Robotics and Team 3925.
- I understand that violation of any of the policies above may result in up to and including dismissal from the class/team.

Student Name

Email

Student Signature

Date

Parent/Guardian Signature

Date