Chantilly Robotics
Team 612
Student and Parent Handbook

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Introduction

Chantilly Robotics, together with its Chantilly Academy and Chantilly High School academic affiliates and their business sponsors, has established a competitive high school team that inspires and prepares students to become the technological leaders of tomorrow. The team successfully follows the FIRST concept to design accessible, innovative programs that build self-confidence, knowledge and life skills while motivating young people to pursue opportunities in science, technology and engineering.

This document outlines the criteria and expectations for student participation on the Chantilly Robotics team.

Chantilly Robotics

Chantilly Robotics was first conceived as a class project in 2000 by classroom instructor and team advisor, Marty Rothwell. Applying principles learned in the classroom, the students applied their learning to a multi-disciplinary problem solving task of building a robot that would meet established objectives to successfully compete in the FIRST (For Inspiration and Recognition in Science and Technology) Robotics Competition (FRC). This nationally recognized robotics competition encourages and inspires high school students across the nation to design, build, program, and test a robot against and in collaboration with other teams in a three day tournament. The overall goal of the FIRST program is to generate enthusiasm for science and engineering and encourage students to continue their studies in post secondary programs.

The team has continued to expand and develop in numbers, community influence, and prestige. The team actively engages in local, regional, national and international activities aimed at building enthusiasm for study in the fields of science, technology and engineering and sharing the message of “cooperative competition,” the foundation upon which FIRST is based. The team has established a corporate based organizational structure that creates diverse opportunities for students of varying interests and disciplines to work together to get its “product to market.”

As Chantilly Robotics has developed and flourished, it has expanded its scope of focus creating opportunities for students to build skills in biomedical and aerospace engineering. The team created the not-for-profit organization, FIRST STEP (For Inspiration and Recognition of Science and Technology Students in Technology Expanding Possibilities), a design and fabrication organization that creates technological devices to enable individuals with disabilities greater independent access to the environment. In addition, the team developed Chantilly Robotics Satellite Laboratory, a satellite tracking and building laboratory to expand student’s knowledge base in the field of aerospace engineering.

Mission
Chantilly Robotics strives to exemplify the message of FIRST during the build and competition seasons as well as throughout the year by achieving the following goals:

Education
Chantilly Robotics' central goal is to educate and build excitement within its student body and the community about science, technology and engineering. Within the classroom, students are provided with the necessary knowledge base to succeed in engineering careers. Outside of the classroom, students build self confidence, leadership and life skills through a comprehensive training program, product development, public speaking, and community interaction.

Precision
Through design, prototype analysis, production, and testing, students create a robot that actively competes within a dynamic and cooperative environment to fulfill FIRST competition requirements. The team applies the principals of precision in its work to design technologically advanced mobility and environmental access resources for individuals with disabilities within in the community.

Application
Student participants on the Chantilly Robotics team apply their academic knowledge of engineering systems, programming, and logistics to the design, fabrication and testing of the competition robot. They are then challenged to apply their acquired knowledge to solve the complex needs of real life access and learning challenges in the community.

Innovation
The team leads the way in creating unique and innovative approaches to the game challenge for the FIRST Robotics Competition. These innovated approaches have won them recognition within their community as they find innovative solutions to real world problems.

Integration
Chantilly Robotics relies upon the integration of multiple sub teams and multidisciplinary organizational leadership. Communication is central to the team's success in facilitating a common goal in the areas of engineering (mechanical, electrical, programming, and website design and maintenance), financial (corporate sponsorship and fundraising), and marketing (publicity, spirit and awards). Through the combined knowledge of the team, Chantilly Robotics has created a successful outlet of resources for other area teams.

Inspiration
As a result of the team's success and community involvement, the team has inspired many in the local, regional, national and international community to become involved in the FIRST program, to pursue study in the fields of science, technology, and engineering, and to find creative ways to solve complex problems in the community.

Products

Chantilly Robotics is committed to excellence year round. The team has established several product lines that not only enhances opportunities for students to build their knowledge base but also provides valuable service to the community.

Academic Program
The cornerstone of Chantilly Robotics is its fully embedded academic program. Team members may participate in Chantilly Academy classes that support the development of basic engineering skills and explore careers in engineering. Students may take classes in engineering systems, electronics, engineering physics, robotics, and engineering and architectural drawing. Students may take many of these classes and receive college credit

FIRST Robotics Competition
During Chantilly Robotics' six-week build season, the team focuses on the design, fabrication, and test of a competition robot that participates regularly in the NASA/VCU Regional and Annapolis Regional Competitions and the Championship FIRST event. The team is lead by its dynamic corporate modeled leadership team under the guidance of Teacher of the Year Advisor Martin Rothwell and Lead Mentor and Woodie Flowers Winner Jerry Skene.

Plugged-In
Chantilly Robotics newsletter, Plugged-In, is published quarterly and distributed to team stockholders in the business and educational communities to share the message of FIRST and the accomplishments of the team, and to enlist the participation of the subscribers in meeting the needs of the organization.

Satellite Laboratory
The Chantilly Robotics satellite laboratory is built with the collaborative cooperation of the Naval Research Center at Carter Rock, Maryland. The laboratory is designed to track the FCAL satellite's progress through space and analyze critical emission data measuring free electron density in low earth orbit. Chantilly Robotics plans to build a satellite of its own which is set to be launched during the summer of 2008.

FIRST STEP
FIRST STEP is a not-for-profit organization that allows students the opportunity to design and build technology devices aimed at meeting the complex needs of individuals with disabilities in the community. Working together with the team's partners at George Mason University, the team continues to expand its technological expertise in creating devices that enable individuals with disabilities to more successfully and independently gain access to the environment. Products that the team has created include a switch activated motorized baby walker, a micro-switch-activated wheelchair, a voice-activated wheelchair, and a computer access device to allow students access to online curricular materials.

Children's Museum of Northern Virginia
Scheduled for opening in 2009, the Children's Museum of Northern Virginia (CMNOVA) has invited Chantilly Robotics to design a multi-million dollar exhibit that provides an interactive forum for families to explore the world of robotics. The mission of CMNOVA is to provide an interactive science and technology center accessible to families in the Northern Virginia areas as well as visitors to the nation's capital that integrates traditional museum exploration with cutting edge discovery experiences.

Smithsonian National Air and Space Museum Discovery Station Program
Many Chantilly Robotics students staff the discovery stations as docents and technical support at the Udvar-Hazy Center of the Smithsonian Institution's National Air and Space Museum. The team renovated and maintains the Mars Rover Exhibit at the museum. They introduce visitors to space artifacts, robotic systems and FIRST. They are annual participants in the museum's National Space Day and the National Air 'n Scare.

Awards
In 2006, the team was recognized at the regional level with FIRST's most prestigious Chairman's Award, the Engineering Inspiration Award, the Website winning development and was recognized again with the Regional Chairman's Award for its strong community partnership. In addition, the team was recognized for its entrepreneurial spirit and was awarded the Regional Kleiner Perkins Caufield & Byers Entrepreneurship Award. The team's competition robot was also successful in the 2007 Regional Competition, participating in the semi-final round at the VCU/NASA Regional, Richmond, VA and the final round at the Chesapeake Regional, Annapolis, MD.

Year Round Program

Chantilly Robotics is a year round program offering students an array of social, community service and fund raising opportunities throughout the school year. The Chantilly Robotics calendar, which can be accessed on the Chantilly Robotics website, is divided into four seasons: pre-build (September through December), build (January and February), competition (March and April), and post competition (May through the summer). Participation in the popular post-build competition season is dependent upon participation in the year round program. Four social events such as leadership building activities, barbecues, star light movies and field trips are held throughout the year. Four community service activities such as prop building for community theater are also held. Finally, four fund raising events are held to help build revenue for the Chantilly Robotics program. Chantilly Robotics Annual award ceremony, held in May, is a popular event for students, families, mentors and sponsors.

In the beginning of January build season officially begins with the satellite presentation of the challenge for the season in the celebratory "kick-off' weekend. Students are generally expected to have participated in planning, training and team building activities to prepare for the rigors of the build season. In late February, team members are selected to travel to one or more regional competitions and/or the International Championship in Atlanta, Georgia, depending upon their skill development and contributions to the team.

Team Member Commitment Expectations

Chantilly Robotics team members are expected to adhere to the following team commitments both within the school building and when in the community:

Team members shall commit to:

- Behaving in a positive and professional manner at all times,
- Treating oneself, other team members, team mentors, parent volunteers and visitors with dignity and respect,
- Respecting and showing responsibility for the resources made available to all students on the team,
- Using one's time wisely and in service to the goals of the team,
- Participating in all aspects of team functions (meeting, training, build, fundraising, community service, and social) to productively support the team's mission statement,
- Presenting oneself professionally by wearing the team's uniform and being prepared at all required events, and
- Maintaining good academic and behavioral standing within the high school and the academy.

Season Overview and Participation Requirements

Like all school sponsored extracurricular activities, new students are recruited for the team during the first few weeks of the school year and throughout the school year. Many students participate in the program only through the Engineering Systems and Engineering Physics classes. The team meets weekly on Wednesdays beginning in September in the Engineering Systems lab. *Active participation in school year functions is required for participation in team competition trips.*

During pre-season, students engage in interest assessment, skill development, team building, fundraising, community service, and social activities. Students are expected to participate in 50% of team meetings, community service and fundraising activities. In addition, team members are expected to choose a main sub-team to participate in by the beginning of November. During the school year, seniors are expected to plan at least one promotion of FIRST and/or Chantilly Robotics in the community with the help of the Marketing Group. All students are expected to plan and run one team event (training, community service, fundraiser, social or promotion).

From the first Saturday in January through mid February (the 6 week build season) team members meet immediately after school until five p.m. Monday through Friday and 8:00 am to 5 pm every Saturday. During this intense period of time, students are required to actively participation and contribute to at least 65% of this scheduled time (approximately 10 to 15 hours per week). Students falling below this level of participation may not be authorized to travel to competition to the team, unless extenuating circumstances preclude adequate participation. These circumstances will be evaluated by team advisors and team mentors. During build season, each family of team members is expected to contribute one meal to the Saturday build sessions.

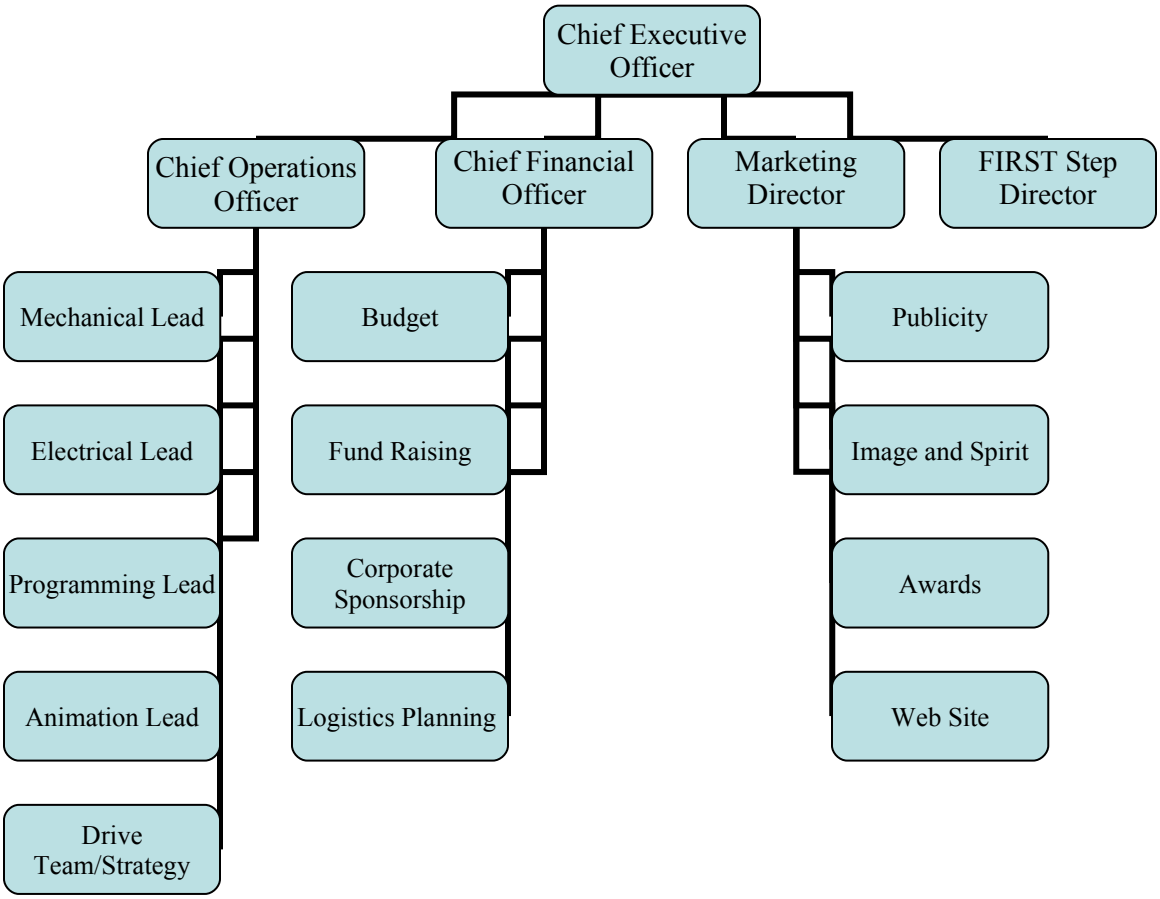
During the competition season, students are chosen travel with the team to regional and and/or the International Championship in Atlanta, Georgia. Team members are chosen based upon their participation, contribution and skill development. Participation, contributions and skill development will be monitored by team leadership.

During post season, opportunities are made available for students to participate in skill development, social, community service and fund raising activities.

Team Leadership and Management

The success of Chantilly Robotics has been built upon the management's team's ability to develop an innovative year round program designed not only to attract students and mentors to team participation but to build upon past success and reach for new heights for the team and its members. Chantilly Robotics management team and organizational structure is modeled after industry practices to ensure the team's ability to get its "product to market" within the six week build period. In addition, the organization has built extensive school and community involvement in activities that promote science and technology. Each student leader collaborates with a team mentor to form a cooperative partnership to meet the strategic plans of the team. The structure includes the following:

- Chief Executive Officer: Oversees team functions and acts as a liaison with team members, school, business, and community partners.
- Chief Financial Officer: Oversees financial considerations through corporate partnership and fundraising.
- Marketing Director: Coordinates image, publicity, spirit, awards, award ceremony, and ensures timely updates of relevant information to students, mentors and sponsors. The Marketing Director is responsible for overseeing web site design and management.
- Chief Operations Officer: Oversees the design and production of the robot through active communication with mechanical, electrical, programming and animation team leads.
- FIRST STEP Director: Coordinates community projects with team leads.



Job Descriptions:

Chief Executive Officer

In collaboration with the team advisors, team mentors, and parent support group, the team CEO is responsible for the oversight and management of the Chantilly Robotics year round program and robot competition. He/she is responsible for maintenance and update of team policy and procedure, team and production management, member recruitment, training, development and productive deployment, leadership team development, team publicity and community outreach, and the oversight of designing, engineering and fielding of a robot worthy of the legacy of Chantilly Robotics.

Chief Operations Officer Responsibilities:

The group working under the direction of the COO is responsible for the overall design, development, construction and operation of the robot based on the concept developed by the entire team. The Operations Group is the execution arm of the team. It is their job to ensure that the machine is built accurately reflects the entire team's brainstorming reflection of how best to solve the game challenge, adheres to all criteria established by FIRST, and it is able to effectively compete in competition. The COO serves as liaison between Operations group leads and the team CEO.

M*echanical Lead Responsibilities:*

- Develop an understanding what each of the mechanical components in the Kit Of Parts is and how they can be used
- Establish and support the development of mechanical team members and establish clear job expectations for mechanical team members through the build season
- Help set direction of design based on team's strategy
- With the support of the team members and the COO, establish and monitor a detailed design and build schedule to manage the project through the build season
- Liaison between mechanical team mentors, mechanical team members, and designers
- Interface between mechanical and electrical and programming teams and coordinate needs of controls team for software testing
- Support electrical and programming teams as needs arise (fabrication, installation, repair, etc. of add-ons such as brackets, mounting of sensors, relocation of components)
- Maintain a safe and organized work environment throughout the season
- Identifies a team safety captain
- Monitor work progress to ensure timely delivery of components

Programming Lead Responsibilities:

- Work collaboratively with the mechanical and electrical teams to ensure that all parts of the robot are correctly programmed to perform their designed functions
- Work with the electrical team to maximize autonomous and sensor capabilities
- Establish and support the development of programming team members and establish clear job expectations for programming team members through the build season

- With the support of the team members and the COO, develop and maintain the programs necessary to control the robot
- Liaison between programming team mentors and programming mechanical team members
- Interface between mechanical, electrical and programming teams and coordinate software efforts
- Ensuring that a working laptop is brought to all events and that all robot programs are backed up on multiple disks
- Monitor work progress to ensure timely delivery of components.

Electrical Lead Responsibilities:

- Develop an understanding what each of the electrical and control components in the Kit Of Parts is and how they can be used
- Establish and support the development of electrical team members and establish clear job expectations for electrical team members through the build season
- With the support of the team members and the COO, contribute to the robot power schematic design, design of the robot and use interface signal connection and pneumatic schematic design, and robot sensors design
- Liaison between electrical team mentors and electrical mechanical team members
- Interface between mechanical, electrical and programming teams and develop electrical solutions to design challenges
- Monitor work progress to ensure timely delivery of components.

Animation Lead Responsibilities:

- Using Autodesk 3DStudioMax, over the creation of a 30 second animation that documents an aspect of the FIRST experience
- Establish and support the development of animation team members and establish clear job expectations for animation team members through the build season
- In collaboration with team, develop story line, story board, animation, and submit for review according to FIRST game rules

Drive Team/Strategy Lead Responsibilities:

- Establish understanding of game rules and positioning for competitive alliance partnerships
- Creates team recommendations regarding maximum point play
- Collaborates with electrical and programming teams to facilitate the efficient and effective design of the control system
- Establish competition strategy
- Manage scouting efforts before and during competition to establish recommendations for best possible alliance partnering

Pit Crew Responsibilities:

The Pit Crew is derived from the team members of the operations group are responsible for ensuring that the robot is prepared to compete during each competition match.

- Ensure that all tools that are required for competition are identified and packed

- Organize pit area and properly store tools when not in use
- Oversee and adhere to all safety precautions
- Uncrate and crate robot at shipping and competition
- Ensure that the robot is fully operational for all matches
- Interface with drive team to ensure robot performs to expectations
- Run pre-competition operational test on robot and complete pre-competition checklist
- Run post-competition operational test on robot and repair or replace all defective components on the robot
- Articulate to visitors and judges how the team and the robot functions

Chief Financial Officer Responsibilities:

The group working under the direction of the CFO is responsible for the financial and organizational management and administration of the team. The Financial Group is the administrative arm of the team. It is their job to ensure that the team is able to register for competition, purchase necessary materials and parts, ship the robot, plan and run team events, and travel to events. They will establish and manage the team's budget. The CFO serves as liaison between financial group leads and the team CEO.

Budget Lead Responsibilities:

- Establish and manages team annual budget

Fund Raising Lead Responsibilities:

- Identify and run at least 4 student fundraising events through the school year

Corporate Sponsorship Lead Responsibilities:

- Develop and maintain relationships with team sponsors and partners through thank you cards, announcements of team news, competition dates and invitations to attend, and at the end of the year plaques with team photos to all sponsors

Logistics Lead Responsibilities:

- Plan and run Chantilly Robotics events such as training schedule, Saturday meals, annual awards banquet, community service activities
- Coordinate with the team advisors, mentors and parents to plan team travel and accommodations

Marketing Director Responsibilities:

The group working under the direction of the Marketing Director is responsible for the development, publication and distribution of marketing of team public relations material to aid in the expansion of the team's donor base and development of student opportunities within the team. The Marketing Group is the image and public relations arm of the team and the overseer of "cooperative competition" and "gracious professionalism," the foundations upon which FIRST is based. The Marketing Director serves as liaison between Operations group leads and the team CEO.

Publicity Lead Responsibilities:

- Document the team's activities via written word and photographs and manage the team's connection to the media
- Produce and distribute team' s quarterly newsletter *Plugged In*
- Produce and post meeting minutes/notes.
- Work with Awards/Recognition teams to identify specific items needed for award submissions

Image and Spirit Lead Responsibilities:

- Develop, maintain and promote the team's identity
- Design and order team uniforms
- Develop promotional and marketing materials for community outreach and competition events
- Establish pit display
- Encourage the team's spirit and energy in support of drive team at competitions
- Design and produce annual Chantilly Year Book

Award Lead Responsibilities:

- Develop an understanding of each FIRST award and what the requirements are for award submission
- Keep track of team activities that contribute to award criteria
- Prepare award and submit award applications

Web Site Lead Responsibilities:

- Production and maintenance of the existing website
- Ensure that the web site conveys the team's identity on the internet
- Maintain liaison between web team and other team sub-groups
- Develop additions and/or enhancements to increase site's utility to the team as well as a resource to other FIRST teams
- Assist in securing computer accounts for new team members and review existing accounts

FIRST STEP Director Responsibilities:

The group working under the direction of the FIRST STEP Director is responsible for ….. The Marketing Director serves as liaison between FIRST STEP group and the team CEO.

Travel

Team members travel together to and from team events and competitions based upon the travel arrangements made collaboratively by the team advisors, mentors, parent volunteers and the logistics lead in the Financial Group. All students must adhere strictly to the code of conduct while traveling to events and competitions.

Financial

Chantilly Robotics maintains an annual operating budget of approximately $30,000 dollars per year. Funds are raised through a combination of corporate sponsorship, school support, and fund raising events. All students are expected to participate in the numerous fund raisers throughout the year to support team functions such as craft fairs, dry cleaner card sales, food sales, and car washes.

- Although many expenses are subsidized by fundraising efforts, students are responsible for registration and some competition expenses. These may include transportation, meals, incidentals, and general spending money.
- Students experiencing difficulty with expenses are encouraged to speak to the faculty advisor. No student will be denied team participation due solely to financial constraints.

Discrimination

Discrimination based upon race, sex, religion, or sexual orientation is strictly prohibited. Discrimination is unwanted and persistent harassment behavior that hurts another's dignity or creates an intimidating, hostile or humiliating atmosphere. Harassment includes unwarranted or invalid criticism, fault-finding, derogatory comments, inappropriate jokes, gestures, leering or staring, and/or hostile or aggressive touches.

Sexual Harassment is any unwanted and/or inappropriate sexual language and/or touching that makes the school environment feel unsafe and hostile. Sexual harassment affects self-esteem and interferes with an individual's ability to learn, study, work, and participate in school activities in a comfortable atmosphere and will not be permitted.

Alcohol, Tobacco, and Drug Use

The team will not tolerate the illegal use of alcohol, tobacco, or illegal substances. All team members are to abide by all school, city, and state regulations regarding these areas.

Computer Usage

The use of any Chantilly Academy and Chantilly High School computer equipment or network access for purposes other than those directly related to FIRST activities and educational activities is prohibited. Acceptable uses of computer resources include:

- Accessing the Internet for obtaining competition updates
- accessing the Internet for researching FIRST related subjects
- designing robot components and systems
- creating video animations
- building the team web pages and media activities
- software development for use in the FIRST competition

Unless material or use is directly related to FIRST, unacceptable use of computer resources includes:

- checking personal email
- playing games
- downloading files

Appendix A:
Chantilly Robotics Student Information and Interest Survey

Student Information:

Name: _____ Grade: _____

Address: _____

Email: _____

Home Phone: _____ Cell:_____

Parent/Guardian Information:

Father:	Mother:
Name: _____	Name: _____
Work Phone: _____	Work Phone: _____
Company: _____	Company: _____
Email Address: _____	Email Address: _____

Team Interests (Check All that Apply):

- ❑ Mechanical
- ❑ 3D Animation
- ❑ Electrical
- ❑ Programming
- ❑ Webpage
- ❑ Strategy/Drive
- ❑ Awards/Comm Service
- ❑ Business
- ❑ Marketing
- ❑ Photography
- ❑ Videography
- ❑ Fundraising
- ❑ Spirit
- ❑ Logo/Art
- ❑ Team Leadership
- ❑ Other: _____

Questions:

Why do you want to be on the team?

What are your other Hobbies/Interests? What other activities or clubs are you involved in?

What are your current Career Aspirations? Are there colleges you are considering yet?

Do you have any past experience with any activities related to our subteams? Any experience that might help us (Mechanical, Webpage, Programming, etc)?

What does FIRST mean to you?

What area of Robotics or Business are you interested in?

Do you think you will be able to meet the student requirements?

Do you have any other comments, questions or concerns?

Appendix B:
Chantilly Robotics Skill and Requirement Inventory

Name: _____

- 50% Preseason Team Meetings, community service and fundraising
- 65% Build Season Activities
- Declare Main Sub-team by 11/1
- Promote One Social, Community Service, Training, or Fund Raising Activity
- Family Brings One Meal for Build Season
- Parent Attends Info Session & At least One Team Event
- Pass Game RulesTest
- Acceptable Behavior
- Code of Contract Signed and Submitted

SC – The team member must "Show Competency" to either someone who is already checked off for this task or by a mentor
C – The team member takes a formal or informal course and it is marked off at the end of the course
W – The team member completes a worksheet showing competency

SC	C	W	Operations Group	SC	C	W	Financial Group	SC	C	W	Marketing Group
			Software				Budget				Website
			Intro to Programming				Microsoft Excel				Cascading Style Sheets
			Programming Control Systems								HTML, XML
			Programming Sensors								Dreamweaver
			Programming in Autonomous								PHP
			Understanding of Last Year's FRC Default Code								Flash
			Proper Code Documentation								FIRST Webpage criteria
			Software Design and Lifecycle								
SC	**C**	**W**	**Hardware**	**SC**	**C**	**W**		**SC**	**C**	**W**	**Awards**
			Measuring Devices								FIRST Award criteria
			Hand Cutting Tools								Microsoft Publisher
			Basic Fastening Tools								Microsoft Powerpoint
			Basic Finishing Tools								
			Drill Press								
			Band Saw								
			Table Saw								
			Chop Saw								

SC	C	W	Operations Group	SC	C	W	Financial Group	SC	C	W	Marketing Group
			Grinder								
			Belt/Disc Sander								
			Tap and Die								
			Metal Lathe								
			Metal Brake								
			Milling Machine								
			Spot Welder								
			Pneumatic Wiring								
			Different Materials and Usages								
SC	**C**	**W**	**Computer Aided Design/Manufacture**	**SC**	**C**	**W**		**SC**	**C**	**W**	
			Inventor 11								
			Tool paths and Master CAM								
			Operation of CNC Machine								
SC	**C**	**W**	**Electrical**	**SC**	**C**	**W**		**SC**	**C**	**W**	**Marketing**
			Soldering/De-soldering								Marketing Concepts
			Crimping/Stripping Wires								Marketing Strategy
			Basic Wiring Diagrams								Marketing Environment
			Voltmeter								Marketing Branding
			Oscilloscope								
			Wire gauge–amperage								
			Robot Specific Electronics								
SC	**C**	**W**	**Project Management**	**SC**	**C**	**W**		**SC**	**C**	**W**	
			Systems Engineering Lecture 1								
			Systems Engineering Lecture 2								
			Basic Documentation of a Project								

SC	C	W	Mathematical and Scientific Skills	SC	C	W		SC	C	W	
			Matlab Basics								
			Basic Trigonometry								
			Stresses and Strains								
			Graphing Calculator Use								
			Excel Spreadsheets								
			Understanding of Gear Ratios / Drive trains								
SC	**C**	**W**	**Tasks**	**SC**	**C**	**W**	**Tasks**	**SC**	**C**	**W**	**Tasks**
			1 Joystick Drive								Team Shirts
			2 Joystick Drive								Team marketing materials
			Wall Following								Quarterly Newsletter
			Algorithm								
			Basic Pneumatics								
			Programming								
			Create Wheel or Similar								
			Object from CAD, CAM to CNC								
			Develop Algorithms for Shaft Encoder								
			Develop Algorithms for Yaw Rate Gyro								
			Develop Green Light								
			Following Algorithm								
			Create Code for Limit Switch								
			Reading and Constructing a Gantt Chart								

Appendix C:
Chantilly Robotics Code of Conduct and Student Contract

All students will know, understand and comply with this Code of Conduct, with FCPS Code of Conduct, and FIRST team policies of fair play and 'gracious professionalism'.

All students will comply with requests made by teachers, engineers and team coaches at school, at all FIRST competition sites and any FIRST related activities.

All Chantilly Robotics, FCPS and FIRST safety precautions must be followed at all times, including the proper use of safety goggles in all specified areas.

Prohibited behaviors during any and all FIRST related activities:

- Inappropriate language toward adult and student team members
- Disruptive or inappropriate conduct
- Arriving late for group activities and travel
- Inappropriate dress/attire (revealing or sexually suggestive clothing, clothing that has any reference to alcohol, drugs, sex or weapons)
- Noncompliance with curfew and bed check rules
- Leaving premises or assigned hotel rooms without permission from adult team member
- Romantic involvement involving physical contact may not take place during FIRST activities. Harassment of any type, including sexual, gender-based, or ethnic slurs.
- Vandalism of any type at school, hotels, venues or at any FIRST related location
- Using, possessing, selling or being under the influence of any and all illegal drugs, controlled substances, alcoholic beverages, or tobacco products (Violations of drug, alcohol and tobacco rules will result in immediate travel home, at parents' expense.)

I agree that I understand the information presented in the Team Handbook and understand the requirements outlined in this cod of conduct. I understand that I must act responsibly and respectfully at all times, and that schoolwork comes before team work. I must maintain good academic standing in order to remain on the team.

Student Signature: _____ Date: _____

Parents/Guardians

I understand that my student has chosen to be an active part of this team, and that while any level of participation is encouraged, my student must meet the team requirements in order to participate in team travel. I also understand that I am part of those requirements and agree to attend the parent information meeting, at least one team activity, and provide at least one meal for the team during the build season. I understand that parents can be a vital part of the team, and are a big help in getting many of the team activities accomplished. I will do my best to support my student and the team in this endeavor.

Parent Signature: _____ Date: _____