

Camdenton 4-H **FIRST®** LASER  
(Laker Afterschool Science, Engineering Robotics)  
Team Handbook



Camdenton, MO

A special thank you to Broncobots Team 1987  
for sharing your handbook

## 2012-2013 LASER Handbook Contents

Section 1: Introduction to the Robotics Program .....	3
1.1: <i>Introduction to FIRST®</i> .....	3
1.2: <i>About Camdenton 4-H LASER</i> .....	3
1.3: <i>Membership</i> .....	4
1.4: <i>Proposed 2011-2012 Calendar</i> .....	4
Section 2: Team Structure and Procedures.....	4
2.1: <i>High School Leadership Positions, Qualifications, and Duties</i> .....	4
2.2: <i>High School Officers</i> .....	5
2.3: <i>High School Election Procedures</i> .....	5
2.4: <i>High School Areas to Participate</i> .....	6
2.5: <i>Selecting an Area to Participate</i> .....	6
2.6: <i>FLL Positions</i> .....	6
2.7: <i>Robot Design Process</i> .....	7
2.8: <i>Other Decision Making</i> .....	8
2.9: <i>Expenditures</i> .....	8
2.10: <i>The High School Competition Team</i> .....	8
2.11: <i>Fundraising &amp; Financial Obligations</i> .....	9
Section 3: Expectations.....	9
3.1: <i>Enjoy Yourself... Learn &amp; Experience Science &amp; Technology Teamwork!</i> .....	10
3.2: <i>Academic Standing</i> .....	9
3.3: <i>Group Participation</i> .....	9
3.4: <i>Attendance</i> .....	9
3.5: <i>Acceptable Behavior</i> .....	10
3.6: <i>Self-Motivation</i> .....	10
3.7: <i>Meeting places</i> .....	10
3.8: <i>Communication</i> .....	10
3.9: <i>Parental Involvement</i> .....	11
3.10: <i>What Students Receive</i> .....	11
3.11: <i>Failure to follow the Handbook</i> .....	12
3.12: <i>Trips</i> .....	12
3.13: <i>Recruitment</i> .....	12
Section 4: Agreements .....	12
4.1: <i>Internet Usage</i> .....	12
4.2: <i>Events outside the Program</i> .....	12
4.3 <i>Transportation with Adult Mentors</i> .....	12
4.4: <i>Robot Transportation for Off-Season Events</i> .....	12
4.5: <i>Snow Days during Robotics</i> .....	13
4.6: <i>Publicity</i> .....	13
4.7: <i>Volunteer release</i> .....	13
Section 5: Medical Release Form .....	14
Section 6: Team Handbook Agreement.....	16

# **Section 1: Introduction to the Robotics Program**

## **1.1: Introduction to FIRST®**

The *FIRST®* (For Inspiration and Recognition of Science and Technology) was founded by Dean Kamen. The *FIRST®* Robotics Competition is a national contest founded in 1989. In 2011, *FIRST®* reached well over 250,000 students. In addition, the *FIRST®* program and its supporting universities, institutions, and corporations awarded almost fourteen million dollars in scholarships to its participants. The competitions are high-tech, spectator sporting events and the result of lots of focused brainstorming, real-world teamwork, dedicated mentoring, project timelines, and deadlines. It is an opportunity for the students of Camdenton to work closely with engineers and business professionals from local, national and international businesses to get a hands-on, inside look at the real-world competitive environment. The teams then compete in a spirited, no-holds-barred tournament complete with referees, cheerleaders, and time clocks. To learn more about this nation-wide program, please go to [www.usfirst.org](http://www.usfirst.org).

## **1.2: About the Camdenton 4-H LASER Team**

In 2009, Mr. Mitch and Mrs. Sherry Comer were contacted by 4-H about a grant that provided start-up funds to start a *FIRST®* robotics team, thus commencing their dynamic relationship with the *FIRST®* Robotics program. Since its founding in the 2010 school year, our team continues to grow and change including our sponsors, our goals, and our mentors. In terms of knowledge, teamwork, leadership, and community activities, we've come a long way but still have many more goals and objectives to achieve.

There are four levels of *FIRST®* Robotics in the Camdenton School District:

- *FIRST®* Robotics Competition (FRC): High School Team 3284 Grades 9-12
- *FIRST®* Tech Challenge (FTC): Camdenton Middle School Grades 7-8
- *FIRST®* Lego League (FLL): Hawthorn Elementary, Osage Beach Elementary & Oak Ridge Intermediate Grades 4-6
- *FIRST®* Jr. LEGO® League (JrFLL) Dogwood Elementary Grades 1-3

The Camdenton 4-H LASER FRC team 3284 was named "Laker Afterschool Science Engineering & Robotics" as the main bulk of our funding is provided generously through the Camdenton R-III Afterschool Services program. At the heart of the program, the 'six intense weeks', students and engineers work together to brainstorm, design, construct, and test their "champion robot". With only six weeks, all jobs are a critical part of the process. Each year, the competition is different, so returning teams always have a new challenge to explore. However, the details are kept secret until the unveiling at the Kickoff Event in the first week of January. This provides a high level of excitement as everyone sees the new challenge for the first time and ideas immediately begin forming in people's minds.

*FIRST®* Tech Challenge was implemented at Camdenton Middle School in the fall of 2012. FTC is designed for those who want to compete head to head, using the sports model. Teams design, build and program their robot to compete with alliance partners against other teams. The robot parts are reusable from year to year. A variety of programming languages are used to program the robot. LASER uses RobotC or LabView.

*FIRST®* Lego League (FLL) introduces elementary and middle school students to real-world engineering challenges by building LEGO-based robots to complete tasks on a thematic playing surface. FLL teams, guided by their imaginations and adult coaches, discover exciting career possibilities and, through the process, learn to make positive contributions to society. The students will design, build, test, and program robots using LEGO® MINDSTORMS® technology while applying and researching real-world math and science concept challenges facing today's scientists. The students learn critical thinking, team-building, and presentation skills both during practice and while they participate in tournaments and celebrations. The FLL build season starts the beginning of September, and the students have until the beginning of November to create their solution to the current theme and design, build, and program their robot for the new field kit.

*FIRST®* JrFLL is focused on building an interest in science and engineering in young children. This is a hands-on program designed to capture young children's inherent curiosity and direct it toward discovering the possibilities of improving the world around them. This level of *FIRST®* features real world challenges that are to be solved by research, critical thinking and concepts and present them for review.

## **1.3: Team Membership:**

The number of team members varies due to funding, facilities and staff size yearly. All teams are formed using a lottery system after students meet specific criteria developed by Camdenton R-III Afterschool Services, Administrators, and FIRST® coaches. Each building has criteria in place deemed age appropriate.

For more detailed information on our team history, please visit our website at [www.team3284.org](http://www.team3284.org).

## **1.4: Proposed Calendar**

All teams meet throughout the school year. There will be team meetings during the school breaks and other days when school is not in session. Being on the team is a commitment. Dates will be provided as soon as FIRST® posts competition schedules.

**High School Team** - In the fall, the Camdenton 4-H LASER spends most of their time building the team, training, and creating and establishing operational norms. After the team returns from Christmas break, we have a week to gear up for the FIRST® Kick-Off Event which is usually the first Saturday of January. This is the start of the 'six intense weeks' known as "build season". The regional competition typically is held on a Thursday, Friday, and Saturday, resulting in the students having the obligation to make up any missed school work. In addition to planned local regional competitions in St. Louis and Kansas City, there are four other weeks of regional competitions and a championship competition that we may or may not attend depending on regional outcomes. We will only be able to attend a second regional and championship event if we successfully raise enough funds to cover the expenses the previous summer and fall.

**FTC and FLL** – The FTC and FLL season starts right away at the beginning of school in August with research of the theme. The new robot game will be announced at the beginning of September. The students have about eight to ten weeks to design, build, and program a robot to complete the various tasks outlined by the new robot game. Regional Competitions are on weekends in Late November and Early December for FLL and typically in February for FTC. If teams qualify for the Championships, they will be held on a Saturday later in the spring. MU offers a competition in early April, and students MAY be able to attend at least one day of the World Championship Competition, depending on available funding and the location of the championship events.

A current calendar for each team can be found:

- [www.laser3284.org](http://www.laser3284.org)
- [www.camdentonschools.org](http://www.camdentonschools.org) (Go to Afterschool Services page under programs)

## **Section 2: Team Structure and Procedures**

Team positions were created by the students. The team constantly strives to update and improve its team structure; therefore, structure and positions are subject to revision as needed. Our current team structure:

### **2.1: High School Leadership Positions Qualifications and Duties**

#### **President**

**Qualifications:** Candidates must be a team member for at least two years, possess good public speaking skills, organizational skills and possess leadership traits

**Duties:** Schedules, organizes, presides over leadership and team meetings, and represents team where singular presence is required.

#### **Vice President**

**Qualifications:** Candidates must be a team member for at least one year and have good organizational skills speaking skills and leadership potential.

**Duties:** Assists president and assumes duties of the president in his/her absence, maintain good relationships with the team, and communicate information and advice from team to president.

#### **Public Relations**

**Qualifications:** Candidates must be a team member for at least one year, possess good public speaking skills, and be very organized.

**Duties:** Preside over spirit committee, fundraising team, and press team. Inspire spirit team development and participation and also responsible for sponsor relations and letters.

<b>Treasurer</b>	
<b>Qualifications:</b>	Candidates must be a team member for at least one year, possess good financial/mathematical skills, good communications skills, have knowledge of spreadsheet or financial software, be a good public speaker, and have great organizational skills.
<b>Duties:</b>	Works with adult mentor and team president, keeps accurate record of receipts and disbursements, and maintains team budget and reports at team meetings.
<b>Secretary</b>	
<b>Qualifications:</b>	Candidates must be a team member for at least one year, possess good organizational skills, knowledge of word processing software, and have Internet access.
<b>Duties:</b>	Takes accurate minutes of all team meetings and disseminates information to team members and guardian/parent(s) through either mass emails, team Facebook page, or the website forums. Candidate would also be responsible for documentation of team procedures along with the official attendance.

## 2.2: High School Officer Requirements

All officers must be present at all team meetings and will serve a term of one year school year. If an officer must miss a meeting, they should notify the coach prior to the meeting. Elections will take place in September at an announced team meeting once the team application process is completed. Re-election is possible.

## 2.3: High School Election Procedures

The adult coach shall request nominations from the voting members (a valid election is only held when 75% of the team has completed their vote) once the team membership is decided. Typically this will be the first of September. Each team member may nominate one person for each position (self-nominations are allowed).

The adult coach will review the candidates and ask them for acceptance of their candidacy. A series of meetings and debates will be held before the end of October; elections will then be held prior to the Cerner Corporation Cowtown Throwdown (CTTD) held in early November. Only student team members are allowed to vote (members are defined as students on the attendance roll sheet with filed paperwork and application acceptance). The winners of the election will be notified prior to the CTTD event. Officers shall serve a one year term, though re-election is possible. New officers shall assume their duties as soon as the elections are completed and the management team is announced.

## 2.4: High School Areas to participate

The team offers a wide range of areas in which students can participate. Team members can and are expected to help in multiple areas. Each area offers its own unique challenges and rewards, and students will often be assisted by skilled mentors. Such areas include (but are not limited to):

- **Fundraising:** Plans and organizes fundraisers for the team.
- **Publicity:** Responsible for team flyers, writes newspaper articles, and communications with the community.
- **Spirit:** Responsible for team's overall appearance, including t-shirts designs, signs and other accessories, establishes and maintains positive morale and attitudes at competitions. Arranges and coordinates for food and refreshments for our weekend build sessions and assists with our end of year banquet activities. Also works toward achieving the regional Team Spirit Award.
- **Awards:** Responsible for organizing the team's community outreach programs and spreading gracious professionalism throughout the *FIRST®* community through writing, presenting, developing video presentations, and etc.
- **A/V/Graphics:** Responsible to takes pictures, records video with both cameras and video feed at competitions, organize and place raw photos and video to computer/network drive, and documents the team's activities. Will also help edit video and pictures as needed by other areas.
- **Safety:** Helps ensure safe behavior by team members, and safe conditions in our build room at all times. A member will be honored as Safety Captain at regional and championship events.

- **CAD:** Models the current year's prototypes and robot, working closely with the mechanical team to create an effective robot. Also works toward submitting material to achieve the Autodesk Award and the Excellence in Control Award.
- **Mechanical:** Brainstorms, designs, fabricates, assembles and maintains the robot, and work toward achieving the Industrial Design Award and the Quality Award by Motorola.
- **Electrical:** Works with the mechanical team to design and implement the electronics of the robot.
- **Programming:** Programs the robot control interface and autonomous mode. Work towards attaining the Innovation in Control Award and knowing the game rules.
- **Rules/Updates:** Team experts on current year rules. Keep fully updated copies of the competition manual.
- **Drive Team:** Team members selected to participate in the competitive activities at the Competitions. Members of this group will consist of drivers, coaches, and the human players. Members of the Competition Team can come from any of the sub-teams. The coaches will decide team members and may use a skills test in making decisions.
- **Scout/Strategy:** Formulates game strategy and reviews matches, scouts opponent robots to benefit strategy, and work closely with drivers and human players. This team is also responsible for working closely with drive team at competitions. It is expected that this group will also work very closely with the rules team and thoroughly understand the points system developing scouting program techniques for competitions.
- **Website Design:** Maintains and updates the team website and works toward achieving the Website Award.

## ***2.5: Selecting an Area to Participate in***

During the months of September through December, students are welcome to explore all aspects of the team. After this period, students typically select one or more of the above areas as a major area to work in. Though it is suggested that each student remain working in the area of his/her selection, it is not required. For the remainder of the season (January through April), students will participate in the area of their selection. They will be allowed to vote and make decisions in their major area, but not in others. The elected student officials will ensure communication between the major sub-teams to ensure synchronized and smooth operations.

## ***2.6: FLL Positions***

- **Researching:** Gather information about the Challenge Theme, related, real-world problems, and existing solutions. Invite professionals to share their knowledge with the team.
- **Community Sharing:** Consider who in the community might be impacted by or interested in your team's problem and arrange to share your findings with them.
- **Presenting:** Design a creative presentation to show the judges your team's work on the project.
- **Strategy Analysis:** Analyze the robot playing field and formulate various methods for accomplishing the missions. Lead the effort to establish a consensus on the final strategic plan and think about risks and rewards of different strategies.
- **Building:** Make decisions about building and work to form consensus on the mechanical design of the robot among team members.
- **Programming:** Make decisions about programming and form consensus on programming for the robot.

- **Robot Operators (2):** Operate the robot at a tournament. Two robot operators are permitted at the playing field at any given time (see **Tournaments** Chapter [www.usfirst.org](http://www.usfirst.org). Teams can have more than two robot operators at the tournament; members just have to switch.
- **Project Management:** Get everyone focused, make sure everyone's ideas are heard, find compromises, and keep everyone on schedule with a timeline.
- **Quality Control:** Conduct independent tests of the robot's performance to identify potential opportunities for improvement. Test for functions that do not work reliably and make recommendations for improvements.
- **Marketing:** Design and create the team logo, T-shirt, or banner. Write a press release and contact the local media to increase public awareness of the team and how the team benefits from the FLL experience. See the Media section [www.usfirst.org](http://www.usfirst.org) for branding information.
- **Documentation:** Record and document the teams history, strategic plan and press.

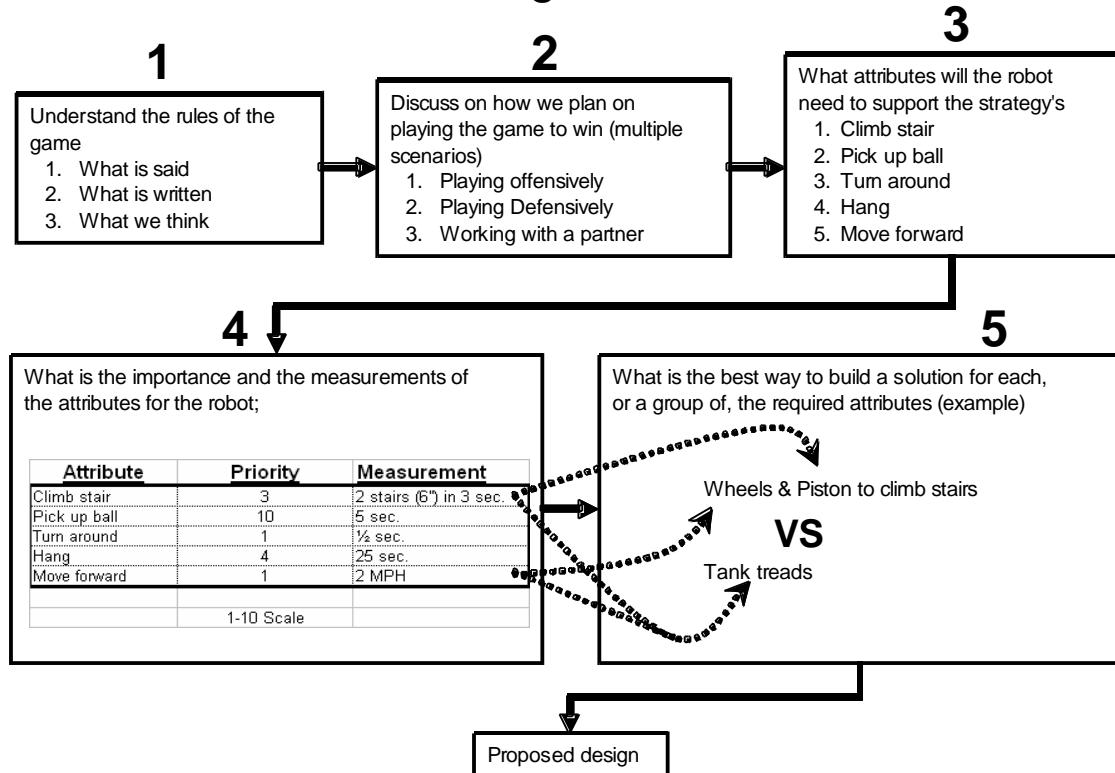
## 2.7: Robot Design Process

Decisions on how the robot is designed will be made by the Build Team and the mentors. Any student may elect to be a member of the Build Team. This team will be encouraged to make their decisions after considering the voice of the entire team. The team utilizes the steps outlined below to ensure all input is heard, and they are able to develop a winning strategy and robot.

Steps one, two, and three will be developed by the entire team. Full team participation is encouraged to ensure a rich diversity of concepts and ideas.

Steps four and five will be led by the Build Team, once again seeking team advice and buy-in as appropriate.

### Robot Design Flow Chart



It is anticipated that an objectively based decision making process similar to the process above will be used in other areas of the team as well, for example: selecting t-shirt designs, logo choices, etc.

## **2.8: Other Decision Making**

It should be clearly communicated that this is a competitive, learning environment and that not every idea by a student (mentor or parent) may be realized. Based on the time and funding constraints, as well as the dynamics of the challenge, some decisions may be made with less than the ‘entire team’. Mentors, at all times, are the responsible party to ensure that all decisions (including, but not limited to, robot design, student participation levels, and work group makeup) are made in the best interest of the majority of the students and the team as a whole. It is anticipated that an objectively based decision making process similar to the above process will be used as often as possible.

## **2.9: Expenditures**

All sub-teams need to contact the head coach or financial director for required items for purchase with team funds. Estimates of anticipated purchases must include shipping and handling. Any purchases made out of pocket by a mentor, parent, or team member will not be reimbursed by the team’s funds without prior consent. In all cases, proper documentation of the purchase and receipts must be promptly remitted to the team head coach or financial director.

## **2.10: The Competition Teams**

The competition teams will be picked once the robot(s) are built. Anyone who wants to be on the team that travels will be put on a list for a chance to practice/drive the robot(s). A team of judges (including selected mentors) will watch students throughout the build season to determine who is best suited for each role on the team. Judges will look for various characteristics including how well they work as a team with other students, mentors and coaches, if they have studied the game rules and have obtained enough knowledge to compete, how they exhibit FIRST® and LASER core values at all times, discipline issues and attendance.

Requirements for competition team positions:

- **Student Coach:** Must have been on the team for one year, attended two competitions, have an excellent understanding of the rules, and be able to clearly communicate with others.
- **Drivers and human player:** Must have participated in at least one competition and showed proficiency at practices and tryouts.

Two teams will be chosen. The primary team will drive at competitions. The secondary team will mostly work on fundraising such as driving the robot at demonstrations. The secondary team may fill in if the primary team wants a break or has demonstrated that they can no longer operate in a competitive environment. While these are the typical requirements of a drive team, the situation may vary from person to person; the final decision of the make-up of the competition team is the responsibility of the head coach.

## **2.11: Fundraising & Financial Obligations**

Students are required to participate in team fundraising activities throughout the year. Fundraising is an important obligation, as it not only helps the team to bring in necessary financial resources, but it also spreads awareness of our organization and helps to bring in potential sponsors/donors who could be useful partners in the future. All fundraising must be coordinated with and approved by the head coach and/or Financial Director, as well be in accordance with the Camdenton R-III Board of Education policy on fundraising. These obligations are stated as follows:

1. The Financial Director and head coach will evaluate team funding and decide which competitions that Camdenton 4-H LASER will participate each season. This will be decided by the first part of September and reported at the LASER team recruitment and orientation evening presentation.
2. Once a student has been accepted as a member of the LASER team they will be required to pay a **NON-REFUNDABLE** membership fee. Checks can be made out to **Camdenton R-III LASER Robotics**. Payment can be delivered to head coach or Financial Director. The fee structure is as follows:

FRC (grades 9-12) \$100  
FLL (grades 4-6) \$50

FTC (grades 8) \$75  
Jr.FLL (grades 1-3) \$25

3. Historically, team members of LASER have not been burdened with much cost associated with travel, meals, and lodging at competition events. Finances of team will be evaluated and team members will be notified at the orientation event of anticipated expenses for student team members. Rates can change yearly depending on sponsors, grants and other funding sources available to the teams.

Fundraising events sponsored by Camdenton LASER are group fundraisers. The group fundraisers are used for team expense (tools, robot parts, necessary equipment, travel, food expenses and lodging). Students are required to participate in as many fundraising activities as possible, as it helps the team along with the individuals themselves. Students that do not participate may be removed from the team or required to pay for competition expense associated with travel, meals, and lodging. A team member needs to contact the head coach if they can't afford travel to team events.

4. Most food and incidentals at competitions are additional personal out of pocket expenses, unless otherwise specified. Funds raised through either individual or group fundraising activities are not to be used for the purchase of food or beverages at the weekend build sessions, this will come from out-of pocket sources or family or local vendor donations.
5. Team members are expected to play an active role in a team and take responsibility for their schedule. This includes learning to work effectively as a group, developing personal relationships, fundraising, and attending scheduled commitments or notifying coach prior to event if a major conflict arises that prevents participation. ALL Team members are expected to participate in fundraisers. Examples of past fundraisers are as follows: Drive One 4 UR School sponsored by Ford. Please share any fundraising ideas with the head coach.

*Note that the team is always looking for major sponsors or contributions of any kind. If you know of a person or business wishing to sponsor or donate to the team please contact the head coach or financial director at 573-346-9233 or [scomer@camdentonschools.org](mailto:scomer@camdentonschools.org). Please do not represent the team as there are specific branding and marketing criteria from FIRST® that must be adhered to.*

## **Section 3: Expectations**

### ***3.1: Enjoy Yourself... Learn & Experience Science & Technology Teamwork!***

### ***3.2: Academic Standing***

- To participate in the program, students must maintain eligibility as defined for extracurricular teams and clubs by Camdenton School District policy or as determined by the head coach and the student's guardian/parent(s).

### ***3.3: Group Participation***

***Team members must earn the chance to participate at events with Camdenton 4-H LASER. This distinction will be determined by the head coach and mentors based on the students participation, contribution, and school standing prior to each event.***

***Students are required to participate in all workdays, competitions, presentations and other events as directed by FIRST® coach(es). Students who have not logged the required amount of hours, produced quality work or have not met all policies as directed by coach(es) will not be eligible to attend competitions, regionals, and nationals.***

### ***3.4: Attendance***

- Students must maintain a good standing on the team in order to attend Competitions and Scrimmages. Good standing is determined by your participation, attendance. Each student/parent is required to sign in and out of every meeting or have attendance taken. The hours are tracked for grant data and to track the hours of commitment of the team members.
- School always comes first. If you have a challenging conflict, please see one of the mentors or officers as soon as the challenge arises. Communication with teachers and coaches is important.

- In the event of severe weather conditions, we may cancel sessions, or we may meet if the school is open. In these cases, it is then up to student's guardian/parent(s) whether to allow the student to attend. In these instances, attendance is optional and will not be counted against the student.
- Sunday afternoon meetings/builds are optional. Those who attend will gain extra attendance percent.

### **3.5: Acceptable Behavior**

- Students must conduct themselves in a manner consistent with Camdenton R-III School's policy and procedures. The Camdenton 4-H FIRST® LASER code of conduct must be adhered to at all times in the regular school day and during robotics classes, meetings and at competition.
- The head coach reserves the right to remove a student from the team at any time, as long as they have reasonable cause. (Safety of all students is a key priority)
- While at Camdenton schools, trainings, or competitions, students are expected to behave respectfully of the other students, adults, and facilities. This means keeping the facility clean and generally picking up after yourself at all times.
- Students are expected to be responsible for their own behavior, especially while using the team or school's property, and while in the computer room (no food/drink is allowed in the CHS CAD room or other computer labs).
- Students are expected to follow safety guidelines at all times.
- During meetings, students are expected to behave properly and respectfully toward any person at the meeting or running the meeting; side conversations are not acceptable.
- Students (as well as mentors and coaches) are required to demonstrate gracious professionalism at all times. If any adult has asked a student to perform a task, the student is expected to respond respectfully and complete the task. Students are also expected to be respectful and polite to anyone who they encounter.
- The head coach also reserves the right to send any student home from a competition, at the student's expense, if they are behaving inappropriately. All mentors present will make the final call on such a drastic measure.
- Students will be removed from the team if physical or inappropriate behavior occurs. Physical incidents or behavioral situations may be deemed serious enough to ban a student from participating in future seasons. This is at the discretion of the Head Coach, Afterschool Director and district Administration combined.

### **3.6: Self-Motivation**

The students who learn the most are the ones who ask questions and observe the engineers frequently. Those types of students will develop the most knowledge and growth. It is suggested that you are eagerly engaged and participating. Students will not be forced to participate. This is a "self-motivating" program, and while our mentor volunteers will make every effort to encourage involvement by all students, the student makes the ultimate decision on their involvement, progress, and knowledge gained.

### **3.7: Meeting places**

The robotics team currently utilizes these locations for its regularly scheduled meetings:

- Camdenton High School – workshop area, LCTC, and the CAD room
- Camdenton Middle School – robotics classrooms
- Oak Ridge Intermediate – lower computer lab and robotics room
- Osage Beach – Library
- Hawthorn Elementary – Science lab and adjoining computer lab
- Dogwood Elementary - Library

The student and/or guardian/parent(s) are responsible for transportation to and from all LASER robotics team activities. In addition, in the event that a school bus is chartered for a Robotics team activity, students must ride the bus there and back, as per school policy. If a student requests to ride home with parent/guardian the parent must sign the official sign out sheet that the head coach will have. If a request is made for a student to ride home with a non-custodial adult prior written consent must be given by the student's building principal in writing.

### **3.8: Communication**

All communications with regard to the team, such as team meetings (time & location), extra-curricular events (fundraising, practice driving sessions, etc.) will be accessible to the students and the guardian/parent(s) on the team. E-mail and Facebook will be the primary mode of communication, and all student, guardian/parent(s), and mentors are encouraged to

have an e-mail account. The team website [www.laser3284.org](http://www.laser3284.org) will be monitored for announcements, along with the robotics bulletin boards at school, school announcements/CSTN, and/or Facebook.

Everyone is encouraged to sign up and provide contact information to the head coach for any and all information they believe may be useful in supporting the mission and vision of Camdenton 4-H LASER. During the winter season, with sudden weather changes, the schedule of the meetings may change with little notice, in those cases, it will be important to keep up with your e-mail and possibly the team website or Facebook for updates. Students are responsible for being aware of all school-posted meeting notices, information regarding field trip dates and times, and other information deemed important to team members, guardian/parent(s), and mentors. All members of the robotics mentor team are always open for feedback. Please do not hesitate to provide feedback as required. As this is a student run team, it is highly recommended and encouraged that the initial conversation be started with the student leaders (defined earlier). Student leaders of the team will share information with mentors and coach.

We value your input and communication. If, for any reason, you have a concern with the robotics team, please call and set a time to meet with head coach of your child's team. The head coach of the team is ultimately responsible for problem resolution and can be reached via e-mail:

- **High School** – Mitch Comer - [mcomer@camdentonschools.org](mailto:mcomer@camdentonschools.org)
- **Middle School** – Jane Noyes – [jnoyes@camdentonschools.org](mailto:jnoyes@camdentonschools.org)
- **Oak Ridge** – Jane Noyes – [jnoyes@camdentonschools.org](mailto:jnoyes@camdentonschools.org)
- **Osage Beach** – Anna Leezer – [aleezer@camdentonschools.org](mailto:aleezer@camdentonschools.org)
- **Hawthorn Elementary** – Denise Richardson – [drichardson@camdentonschools.org](mailto:drichardson@camdentonschools.org)
- **Dogwood Elementary** –Candi Schmidt – [cschmidt@camdentonschools.org](mailto:cschmidt@camdentonschools.org)

### **3.9: Parental Involvement**

We strongly encourage the guardian/parent(s) of students to participate whenever they can. There are many ways for guardian/parent(s) to participate such as: chaperoning, assisting with fundraising, providing food and refreshments for our weekday or weekend build sessions, planning trip itineraries, etc. While the team can always use more support from the technical/engineering perspective, we are in need of other talents such as organizing, fundraising, spirit activities, and publicity, and we welcome any and all additional support. All guardian/parent(s) should be prepared to help and support the efforts of the parent support group as required.

As the Camdenton 4-H LASER team grows, it may be necessary to organize and create a "Parent Support Group" similar to the likes of the band boosters or sports boosters. In the meantime, it is important that all guardian/parent(s) of team members become familiar with the team mission and mission of FIRST® Robotics.

Guardian/Parent(s) support of Camdenton 4-H LASER is essential for this young organization to grow and be accepted in our community and school. There is an important role in communication between this student run organization, school administration, and community that can, from time to time, require guardian/parent(s) support. While the students (along with the coach & mentors) will make every effort to communicate the importance of this program and will attempt to stand up for their rights. Our democratic importance is often measured by numbers involved and its overall contribution being shared throughout the community. Especially in these difficult financial times, parental support may be critical in ensuring that this program continues to grow.

### **3.10: What Students Receive**

- The experience of teamwork with peers and adults.
- The experience of establishing and following a schedule and meeting a project deadline.
- Exposure to the field of engineering and professional engineers, as well as marketing, artwork, computers, and financing.
- Exposure to all facets of a program that designs, delivers, and uses a "real-world" product (the robot) to perform to set goals and specifications.
- Useful knowledge in choosing a career path.
- A challenge to explore their aptitudes, skills, and limits.
- A great team bonding experience.
- Life skills, such as problem solving, teamwork, and commitment.
- Friendships that will last a lifetime.
- Exposure to a source of college scholarships.

- Lifetime connection to a US FIRST® Alumni Group.

### **3.11: Failure to follow the Handbook**

While clearly the purpose of the program is to be inclusive and afford every child the opportunity to learn and grow, in some rare instances the program must reserve the right to limit the participation of a child (or mentor) who's actions are:

- 1) Jeopardizing the health and/or safety of anyone – violating the safety program.
- 2) Disruptive to the program, as determined by a consensus of mentors.
- 3) Inconsistent with the behavioral policies of this handbook as well as those of Camdenton School District. This will be determined by the team's head coach and/or school principal responsible for disciplinary action.

In the instance of violation of the codes of conduct outlined in this handbook, one written warning will be issued to the student as well as the guardian/parent(s). During which time the student's ability to participate may be limited by the coach. Further infractions may result in the person being ineligible to participate in the program. Any such decision, which would be made by both the coach and the Camdenton School District representative responsible for disciplinary action, would remain in effect for the remainder of that season.

### **3.12: Trips**

In the event of any type of team trip, participating team members are expected to have all permission slips, medical forms, money, and any other necessary items handed in on time. Failure to do so may result in the offending student not being allowed to participate in the event.

### **3.13: Recruitment**

The team is always looking for interested and fun students to join our ranks. In addition, we also look forward seeing former members return year after year for yet another action-packed season. Team members are always encouraged to recruit new students to the program if they demonstrate interest in the team. Primary recruitment occurs the first two weeks of school followed by open application process which starts with the LASER robotics orientation night TBD in early September.

## **Section 4: Agreements**

### **4.1: Internet Use**

Students participating in the Camdenton Robotics program will be exposed to and have the use of internet. The school district monitors and blocks inappropriate internet usage. Student members must have a "Technology User Agreement" (TUA) signed and recorded with school district. While mentors will be present during student's internet use, mentors or adult coaches are not responsible for student's use of internet. It is the student's responsibility to utilize the Internet properly, and to access websites and obtain materials that are legitimately related to the robotics program. Any improper use of the Internet, as with all other tools in the program, will be grounds for dismissal from the program. As with all tools (Internet included), it is the student's responsibility to know how to use the tool properly or to request instructions by a mentor. By signing the handbook, the student agrees to use the internet appropriately and responsibly as a tool to supplement their learning in the robotics program.

### **4.2: Events outside the Program**

The team chooses to participate in off-season competitions like the Missouri State Fair in addition to the "FIRST® Regional Competitions". Expectations at these events are the same as a sanctioned FIRST® event. Team and school rules will always apply to any Camdenton 4-H LASER organized events.

### **4.3: Transportation with Adult Mentors**

Adult mentors or coaches may offer to provide transportation to students using their personal or school owned vehicle. In such instances when students agree to ride with an adult mentor or coach in his/her car, the student is responsible for his/her own safety and well-being, and by signing the handbook, guardian/parent(s) and the students recognize this and release adult mentors and coaches of any liability if injury occurs when a student is riding in a mentor's car.

## **4.4: Robot Transportation for Off-Season Events**

Transporting the robot to off-season competitions is handled with the team trailer and a capable adult coach or mentor. All equipment the team feels necessary for an event should be packed into the trailer prior to the event, locked in the school parking lot, and retrieved the day of the event. If possible, all of the team's equipment would ride in the trailer and not in a mentor's vehicle, or off school property for longer than necessary.

## **4.5: Snow Days during Robotics Functions**

There may be occasions when the LASER 3284 team is away from school at a robotics function, such as the regional competition, when school gets cancelled for reasons relating to weather or otherwise. In such an event, the team will stay at its current location and continue with the trip as a school-sponsored function, returning home at the originally scheduled time, ***if travel*** is safe to do so. By signing the handbook, guardian/parent(s) agree that the student may stay with the LASER 3284 at their event as initially planned. If guardian/parent(s) wish for their son or daughter to return home, they must provide transportation and notify the head coach that they are taking their son or daughter home and officially sign out their student.

## **4.6: Publicity**

The Camdenton Robotic Teams frequently take team and individual photographs to commemorate our accomplishments and preserve our team heritage. These team and individual photos often appear in media related to the Camdenton Robotic Teams. By signing and agreeing to this handbook, guardian/parent(s) and students agree and consent to allow their photographs, name, or comments to appear in media related to the Camdenton 4-H LASER Robotic Teams and FIRST®.

While guardian/parent(s) and friends are encouraged to help spread the word of the LASER Robotic Teams, any and all references to the Camdenton 4-H LASER Robotic Teams team which will be displayed through public media (newspaper, radio, TV, cable, etc...) must be approved in advance by the head coach. In addition, any publicity released that specifically references individuals on the team must be authorized in advance by the head coach. There are strict FIRST® branding policies that must be adhered to at all times.

## **4.7: Volunteer release**

While the guardian/parent(s), mentors, and the coaches of the Camdenton Robotic Teams will do their best to ensure the safety and well-being of every member of the team, they are volunteers and cannot be everywhere at all times. It is the responsibility of the students of this program to follow all instructions, safety procedures, and common sense. By signing this agreement, guardian/parent(s) and students in the program agree to hold harmless the volunteers of this program, including the adult coach and mentors, from any and all liabilities associated with the Camdenton 4-H LASER program, and to indemnify said volunteers for any losses or damages suffered by reason of any claims asserted against them resulting from their actions taken with the scope of their duties.

## **Section 5: Medical Release Form**

Please sign and return.

Team Member's Name: \_\_\_\_\_ Date: \_\_\_\_\_  
(Please print)

To the Parent or Guardian:

In case of accident or serious illness, I request that Camdenton 4-H LASER to contact me. If the school/coach is unable to reach me, I hereby authorize Camdenton 4-H LASER to make appropriate arrangements. Camdenton 4-H LASER has no liability for medical costs.

Known allergies to Medicine/Food:

---

---

Known Medical Conditions (such as diabetes, seizures, epilepsy, asthma, heart, kidney, etc.):

---

---

Please list any medications being taken:

---

---

Please list any dietary restrictions:

---

---

Family Physician: \_\_\_\_\_

Family Physician Phone Number: \_\_\_\_\_

Insurance Company: \_\_\_\_\_

Insurance Phone Number: \_\_\_\_\_

Policy Number: \_\_\_\_\_

Hospital Choice in Case of Emergency: \_\_\_\_\_

*In Case of an Emergency, Contact:*

Guardian/Parent(s) Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Business Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Would the participant be able to have the following medications administered?

Acetaminophen: Yes \_\_\_\_\_ No \_\_\_\_\_

Aspirin-free analgesic: Yes \_\_\_\_\_ No \_\_\_\_\_

Student may receive first aid for minor injuries: Yes \_\_\_\_\_ No \_\_\_\_\_

---

Parent/Guardian Signature

Date

## **Section 6: Camdenton 4-H LASER Team Handbook Agreement**

Please sign and return

I \_\_\_\_\_, as a participant on Camdenton 4-H LASER hereby agree to abide by all the rules and consequences stated in the team handbook provided to my student. I certify that I have read the handbook and understand all the rules/regulations/releases that were set in it.

---

Student Signature

Date

I \_\_\_\_\_, as the Parent/Guardian for a student on Camdenton 4-H LASER hereby agree to abide by all the rules and consequences stated in the handbook provided to me by my student. I certify that I have read the handbook and understand all the rules/regulations/releases that were set in it.

---

Parent/Guardian Signature

Date