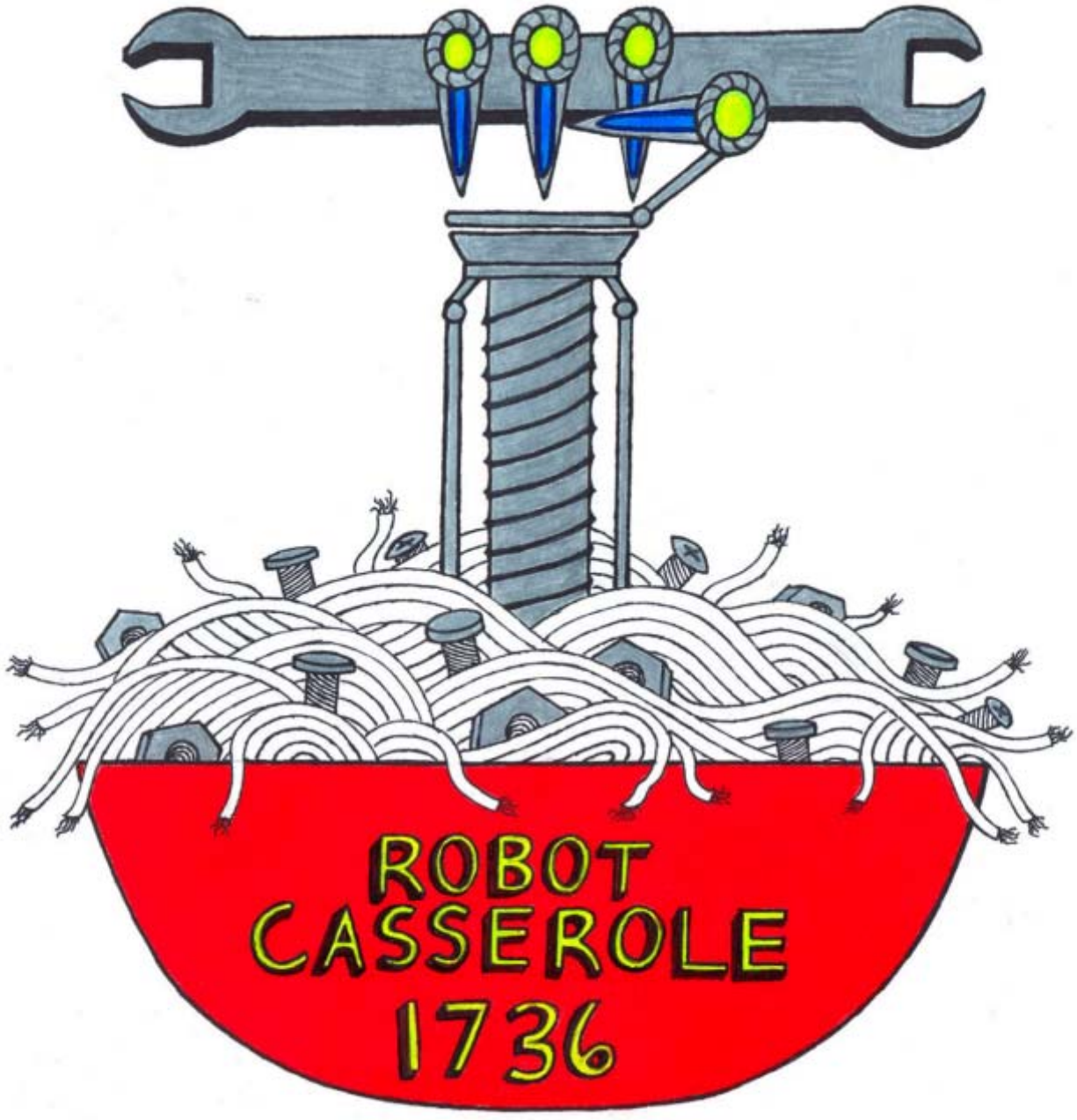
2011-2012 Team Handbook



Sponsored by:

Caterpillar Inc.

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ROBOT CASSEROLE SPONSORSHIP

Robot Casserole is a Caterpillar Inc. FIRST Robotics multi-school team inclusive of all Peoria Area Schools physically housed at Richwoods Highschool.

2011 members of the Robot Casserole Robotics Team include:

- Caterpillar employees
- Axis Engineering employees
- United States Navy Member
- ATS employees
- WEEK-TV employee
- Illinois Valley Central (IVC) High School
- Richwoods High School
- Limestone High School
- East Peoria High School
- Peoria Area Home Schools
- Peoria Central High School
- Dunlap High School
- Brimfield High School

Caterpillar Inc. Provides

- Engineer/Professional mentoring
- Vehicles (transportation to some events)
- Program Leadership
- Materials and supplies
- Complete financial support

ROBOT CASSEROLE'S VISION

Students, parents, and the community will regard Team Robot Casserole as the premier local extracurricular activity. Robot Casserole will promote continuous learning and development throughout the students' educational career.

ROBOT CASSEROLE'S MISSION

Team Robot Casserole will provide mentor support and leadership to focus and foster students' natural curiosities and ingenuity on a technical challenge that requires teamwork, commitment, and personal growth. By building a competitive robot in a compressed time frame within real life constraints, students will gain an understanding and respect for engineering and technical pursuits. These experiences will teach the students that technical challenges are not only fun but also extremely rewarding.

ROBOT CASSEROLE'S TEAM GOALS

- Inspire students to explore, experience, and appreciate technology, math, science, and engineering through hands-on participation in team activities
- Prepare students for leadership roles through shared decision making on our team
- Promote the ideals of FIRST in all that we do
- Increase community and state awareness of engineering education opportunities
- Promote teamwork skills
- Introduce students to positive role models
- Compete annually for the Chairman's Award (the highest award within FIRST)

TEAM CREDO

Robot Casserole Robotics Team

The function of this Team Credo is two-fold. First, it delineates the necessary personal character traits of all team members. Second, it identifies those things that are of great importance to Robot Casserole as a whole that will lead to a cohesive team and a successful season.

Robot Casserole team members will exhibit the following traits at all times:

Respectful

- of all students on our team.
- of the engineers, mentors, and teachers on our team.
- of the sponsors who graciously provide us with the resources we need.
- of yourself, both as an individual and as a member of this team.
- of the team as a whole and its image as a veteran member of the FIRST Robotics community.

Well Behaved

- by acting in a safe and appropriate manner at all times.
- by exhibiting a positive reflection of yourself, the team, FIRST, your school, and our sponsors.

Dedicated

- to learning as much as possible while a member of the team.
- to participation and being a fully engaged member throughout the season.
- to creativity in every aspect of your involvement with FIRST and the team.
- to team work by providing ideas and contributing time and energy to the success of the team.
- to having fun in all that we do as a team.

Enthusiastic

- by being motivated to excel on the team while encouraging others to be the best they can be.
- by being supportive of the team as a whole both at home and at competitions.
- by spreading the word about FIRST and all that it has to offer.

Inspired

- about science, technology, and engineering.
- about learning and sharing our knowledge with others.

I agree to abide by this team credo and will do my best to model those traits that embody the vision of FIRST and reflect positively on the Robot Casserole and its sponsors.

FIRST OVERVIEW

WHAT IS FIRST? FIRST (For Inspiration and Recognition of Science and Technology) is a non-profit, organization that was founded to inspire and excite young people about science and technology by bringing together professional mentors with high school students from around the US and several foreign countries.

THE ORGANIZATION: FIRST was founded in 1989 by inventor and visionary Dean Kamen. In the first year 28 teams participated in the only competition which was held in a high school gymnasium in New Hampshire. In 2012, there are projected to be approximately 2,300 teams from 48 states and 12 countries (with over 3,000 corporate and institutional sponsors) which compete in 44 regional events and the Championship event at the Edward Jones Dome in St Louis. FIRST also sponsors Junior FIRST LEGO League, FIRST LEGO League and FIRST Tech Challenge competitions along with a series of education-related projects and programs. FIRST is a 501 (c)(3) organization headquartered in Manchester, New Hampshire.

THE VISION: Dean Kamen, founder of FIRST, imagines a day when the act of invention – that is, the work of scientists, engineers and technologists – is as revered in the popular culture as music, athletics and entertainment are today. The FIRST vision is to inspire in young people, their schools and communities, an appreciation of science and technology and an understanding that mastering these can enrich the lives of all.

HOW IT WORKS: Through a large, successful and growing community of educators, parents, community leaders, engineers, volunteers and sponsors, FIRST builds alliances to support its vision. A part of that vision is to inspire and prepare the future talent pool, workforce, and leaders to become capable, technologically literate citizens of tomorrow. FIRST designs accessible, innovative programs that build self-confidence, knowledge and life skills while motivating young people to pursue opportunities in science, technology and engineering.

FIRST ROBOTICS COMPETITION

THE GOAL: The FIRST Robotics Competition challenges teams of students and their mentors to design and build a robot in a six-week timeframe, using a standard "kit of parts". The team has to analyze the game and strategize what type of robot would perform well. Typical teams meet months in advance of the building period to learn basic skills and be better prepared. The goal isn't simply to build a robot; the robot is a vehicle for learning much more. The real goal is building a collaborative team, a supportive community and a solid strategy for problem solving during the competition.

TEAMS: The average team competing is comprised of about 25 students and 6-12 adult mentors; however, entire schools, school districts and communities are involved with FIRST. Typically a corporate sponsor assists in funding the team. In the case of Robot Casserole, that corporate sponsor is Caterpillar Inc.

WINNING: FIRST redefines winning. Winning comes through excellence in design, demonstrated team spirit, gracious professionalism, and the ability/maturity to overcome obstacles. Winning comes through the building partnerships with other students, professionals, and between schools, business, and communities.

FIRST 2012 The 2012 FIRST Robotics Competition season begins with the release of the kits and game rules on Saturday, January 7, 2012, and will involve over **2,000 teams** from every state across the U.S., as well as 12 other countries. The teams and competition bring together students of different levels of achievement, different racial and social backgrounds, boys and girls, from inner cities across America as well as from rural communities. Joining the high schools and colleges/universities participating on teams will be over 3,000 sponsors representing some of the most well-known and highly regarded companies in the world.

THE EVENTS: There are 44 regional competitions scheduled to take place in February thru March, 2012 across the U.S., Canada, and Israel. In addition, a Championship Event will be held in St Louis, Mo, in April 2012. The Championship event draws participants from across the country and around the world and includes the competition itself, a FIRST Hall of Fame that spotlights model teams, and a conference that provides educational seminars for both students and mentors. Teams, fans and spectators will number well over 30,000 for this single 3-day event.

FIRST: POSITIVE IMPACT AND MEASURABLE DIFFERENCE

FEEDBACK: Studies undertaken by several universities as well as thousands of stories support the positive impact of FIRST. The results of hard work and serious play include lives changed forever and minds opened to new knowledge and opportunities through participation in FIRST programs. The evaluation work is producing important data about the impact of the FIRST program on high school students, including:

- ***ATTITUDE***: Improvement in student attitudes about science, math, teamwork and the working world.
- ***SELF-IMAGE***: Improvement in students' self-image, particularly among underrepresented groups.
- ***TEAMWORK***: Highly positive attitudes about teamwork, including increased respect and support students accord one another.
- ***SELF-CONFIDENCE***: Student self-confidence improves after their FIRST experience.
- ***CAREER PLANNING***: Student attitudes about the working world are significantly more positive.
- ***PROFESSIONAL RELATIONSHIPS***: Two-thirds of student participants indicate interest in working for one of their team sponsors and one fifth actually had plans to work for one of their team sponsors in a summer internship or a part-time job.

HIGHER EDUCATION: In 2011, **over $13 million in college scholarships** were available to students participating in FIRST. In many cases, whether or not scholarship is the key, FIRST provides students with the inspiration and confidence they need to consider college and to pursue educational and professional opportunity. Several of our graduated students have taken advantage of the FIRST scholarships and are currently enrolled in engineering/science/technology curriculums in college.

ROBOT CASSEROLE 2011 SEASON

Team competed in 2011 game "Logomotion", a game at the Wisconsin Regional in Milwaukee. We were awarded the Chrysler Team Spirit Award for enthusiasm, spirit, through the use of colorful signage, and display of partnership and gracious professionalism for the second year in a row!

Team Award History In Brief Summary

2006 – Chicago Regional	Xerox Creativity Award
2007 – Wisconsin Regional	GM Industrial Design Award, Semi-Finalist
2008 – Wisconsin Regional	Judges Award
2009 – Wisconsin Regional	Chrysler Team Spirit Award
2010 – Wisconsin Regional	Chrysler Team Spirit Award
2011 – Wisconsin Regional	Chrysler Team Spirit Award

FALL, 2011 ACTIVITIES

Preseason: 10/4/11 thru 12/15/11

- Meeting at Richwoods High School (room 412)
- Monday thru Thursday 6 to 8 PM
- Additional times and days may be needed – TBD

- **Practical Robotic Skills Development**
  - Structural and Chassis Design and Manufacturing (Don Gurik)
  - Computer 3D Design (Asit Patel)
  - Robot Programming (Nick Krupka)
  - Drivetrain Research and Design (Badri Balasubramanian)
  - Pneumatic and Electric Circuits Design (Karl Kirsch)

- **Media and Photography Training (Kathy Dittmeier):**

- **Web Page Training:** At the same time as the Practical Robotic Skills Development, sub teams of Robot Casserole will meet to learn more about animation and web design. Students interested in these activities will learn about the topics through hands on coaching from real life experts. Then in the spring the students will get to apply what they have learned as they design their own animation and web pages for the FIRST robotics competition challenge. (Mark Hill)

- **Animation Training:** This sub team develops various animated video shorts using Autodesk's 3ds Max & Maya animation software. During the Fall season students learn or brush up on the animation software and plan the animations for the coming robot build season. Animations include promotional shorts, media trailers, and the FIRST Safety Video. (Gary Spadin)

- **Safety and Fabrication Training:** Safety is job #1 at Robot Casserole. As such, before we begin the build season we will dedicate two sessions to shop safety and fabrication skills. The team will review best practices and get hands on training with hand tools and power tools. (Don Gurik)

- **Team Building Activities:** Robot Casserole has established a reputation as a close-knit group of ordinary individuals who come together to do extraordinary things. Working as a team is essential to our continued success. Members are encouraged to participate in team activities outside the bounds of FIRST robotics. These activities will be done on an ad hoc basis, times, dates, and locations are TBD

WINTER/SPRING 2012 SCHEDULE

Spring semester is the busiest time for Robot Casserole Robotics Team. With the build season kicking off in early January and competition events taking place throughout the following months, it is important that the momentum continues.

During the build season: 1-7-12 thru 2-21-12

- **Kick off (1/7/12) – Bradley University College of Engineering and Technology @ 7:30 AM to 10:45 AM, lunch break, then move to Jobst Hall or Richwoods Highschool 12:00 PM to 3:00 PM**
- **Build Week 1 – 6:**
  - Meeting at Richwoods High School (room 412)
  - Monday thru Thursday 6 to 9 PM
  - Saturday 8AM to 2 PM
  - Additional times and days may be needed – TBD
  - Meetings may be scheduled at Caterpillar Building H
  - The team will not meet on any days when Richwoods is closed due to weather
- Build Week 1: Game unveiling, student designs and prototype creation
- Build Week 2: Concept down selection and detail design creation
- Build Week 3: Fabrication of components
- Build Week 4: Fabrication and integration of Robot Assembly
- Build Week 5: Testing and validation of Robot Performance
- Build Week 6: Driver training and minor robot modification (Generally held at Caterpillar Building H, though some activities will still be at Richwoods)

Post Build Season: 2/22/12 to 3/10/12:

Design modifications, gathering and building spare parts, preparing the pit structure, travel and competition planning, driver and pit crew training.

- **Post Build team meetings:**
  - Meeting at Richwoods High School (room 412) and Caterpillar Building H
  - Tuesday and Thursday 6 to 8 PM
  - Additional times and days may be needed – TBD

Milwaukee Regional: 3/22/12 to 3/24/12

- Competition will take place in Milwaukee, Wisconsin at the US Cellular Arena.
- Details about departure, arrive, and other travel details TBD
  http://www.wisconsinregional.com/

Championships: 4/26/12 to 4/28/12

- Competition will take place in St Louis, Missouri at the Edward Jones Dome.
- Participation is dependent on success at the regional competition
- Details about departure, arrive, and other travel details TBD

GRADE REQUIREMENTS AND TEAM OPPORTUNITIES

Students are required to be passing in their studies to join the team. Students must not fall behind on their grades to continue to be a part of the team. **Students will be required to have a signed excused absence eligibility form from their school counselor to travel with the team.**

ASSISTANCE

In order to help the students meet this requirement, study time and peer/mentor tutoring will be available for students who are in need of assistance during practice time. If students need to miss a meeting to study for a test or improve their grades, that is understood.

OPPORTUNITIES

There are many **REWARDS** for being a committed Robot Casserole team member:

1. Travel Opportunities
   - At a minimum the team will be traveling to one regional event which could be as close as Chicago or further away (last 4 years have been in Milwaukee.)
   - Potentially the team will travel to St Louis, Mo for the championships

2. Scholarships
   - There are MANY scholarships available for FIRST team members. Check out http://www.usfirst.org/scholarshipsearch.aspx for details.
   - Last year > $13 million in scholarships were available to FIRST students only.

3. Internships
   - The experience students are exposed to opens doors for internships within Caterpillar and other high-tech companies. See your guidance counselor and www.cat.com and select the “Careers” tab.

4. Experience
   - Many corporations across the nation are participating in FIRST and want to hire FIRST students. Being on a FIRST team will expose students to these corporations, provide them with opportunities to meet some of the mentors who work for these corporations, and help teach the students skills that these companies desire.
   - Additionally some colleges (Purdue, University of Illinois, etc.) offer college credit to engineering students who help mentor FIRST teams.

REQUIRED STUDENT INVOLVEMENT

Robot Casserole students have many ways to be involved with the team. They are encouraged to participate in community events, and during the fall they participate in the team events, training, and meetings. During the build season, January 7 – February 21, students are required to become full time active members of the team and attend all activities.

In order to travel with the team, students are not only required to meet the grade requirements, but they also must be active members as defined below.

Active Member Status:

- **The primary factor determining whether a student is eligible to travel with the team to the regional and championship event will be ACTIVE PARTICIPATION.** Just physically being at the meetings is not enough, students must contribute their ideas and energy to the team, if students don't know what to do, they can ask any mentor for help. Team leadership will have the final say as to who is eligible to travel, students who are not actively participating will be notified by the leadership, and if the behavior continues, will be removed from the team.

- **Students are expected to attend all team meetings during the build season, be engaged, and fulfill their commitment on the team unless they agree to another schedule with the team mentor. Student attendance will be tracked** to ensure students are accountable for their commitment to the team. Please notify the team lead by email or notify your subteam mentor and record the absence in the attendance database at a team meeting. Students are responsible for signing into the attendance database every meeting and recording absences.

- **Cell Phone Usage:** Cell phones may be brought to the meetings, but must remain in the student's pocket, backpack, or purse unless an emergency call is required. **Students will not text, call, share videos or music during team activities. Additionally, only approved members of the media team are allowed to capture or distribute any images or descriptions of team activities per the data privacy policy.** Cell phone breaks will be scheduled during the meetings to allow students to use the phones, when breaks are over; phones go back in the packs, purses, pockets. 6 weeks is not enough time to design and build a robot, but it is all we have, so we must make effective use of meeting time. **Texting is not considered active participation on the team.**

In Summary:

Student priorities should be family, school, FIRST, in that order.
Students are expected to fulfill their commitment and obligation on the team, but if you have higher priority obligations or extenuating circumstances, please communicate with the team lead or subteam lead to excuse your absence.

TEAMS WITHIN THE TEAM (STUDENTS AND MENTORS)

ADMINISTRATION

- Develop a team budget and approve expenditures
- Coordinate event logistics including transportation and lodging
- Team and robot documentation
- Shipping

COMMUNICATION

- Coordinate community relations events and develop PR materials
- Document team activities through photos and video
- Create and update team web site

COMPETITION AWARDS

- Create Chairman's Award submission
- Develop Animation Award submission
- Develop Inventor Award submission
- Assist with the student scholarship applications
- Design and develop peer Awards
- Develop and practice materials for the Spirit Award

COMPETITION MANAGEMENT

- Design and develop pit management framework
- Develop and implement scouting software and hardware
- Develop game strategy and team playbook
- Select and purchase team promotional items

SOFTWARE AND CONTROLS

- Develop software for robot control and human interface
- Design and develop electrical systems for robot and controllers
- Design and develop pneumatic systems for robot
- Assist in the assembly and troubleshooting of robot and controls

MECHANICAL

- Develop design solutions based on game strategy
- Convert sketches to solid models to assembly models to working drawings
- Fabricate parts
- Assist in the assembly and troubleshooting of robot

PARENT/MENTOR INVOLVEMENT

Parents and adult mentors are strongly encouraged to help out in any way they can. **This is a very important time in your child's life as they start searching for a future college major/career and you can be a big part of that decision by participating on the team.** The efforts of these mentors must be student-focused and within the spirit of FIRST. There are many opportunities to mentor our team's students such as:

- Mechanical Machine Design
- Software Development & Programming
- Animation
- Metalworking & Part Fabrication
- Project Coordination
- Video & Graphic Publications
- Machine Shop Management
- Travel Coordination
- Electrical Design & Wiring
- CAD – Design, Drafting
- Carpentry & Construction
- Communication & Public Relations
- Event Planning
- Strategy Development & Coaching
- Scholarship coaching and submission

COMMUNITY INVOLVEMENT

Robot Casserole keeps active in the local community, as they host and participate in events, make demonstrations and support other math and science-related programs for the area's students. Examples of these events and activities include:

- FIRST LEGO League mentoring (Aug.- Dec.)
- FIRST LEGO League Regional Tournament (Dec.)
- FIRST Robotics Competition (Jan-April)
- Indiana Robotics Invitational (Summer)
- Peoria Chiefs Baseball Events (Summer)
- The Sun Foundation's Art & Science in the Woods (Summer)
- Relay For Life (Summer)
- Peoria Rivermen Hockey Game – Robots on Ice
- Habitat for Humanity build day (Summer)
- Central Illinois Robotics Club (CIRC) Bot Brawl (April)
- Peoria Academy of Science Treasure Hunt (Summer)

For more information about Robot Casserole and demonstrations, please contact Nick Krupka at 309-360-2298 or email at krupka_nicholas@cat.com

REGISTRATION AND FORM REQUIREMENTS

1. Robot Casserole Application Form
2. Interview
3. Enrollment, parental consent, general liability release and medical release
4. Student Travel Rules & Expectations
5. STIMS registration <https://my.usfirst.org/stims/site.lasso>

PRIVILEGES, RESPONSIBILITIES, CHOICES AND CONSEQUENCES

Robot Casserole FIRST Robotics Team

The Robot Casserole Robotics Team Handbook identifies and explains a wide variety of activities and events that the team engages in. It also lays the foundation for the level of commitment and conduct that is expected of a member of the Team. It is up to the student to read this handbook and understand their privileges, responsibilities, choices, and consequences.

Participation in the Robot Casserole Robotics Team is a privilege, not a right. As such, there are certain responsibilities that fall on the shoulders of the student. This is an opportunity for students to demonstrate a desire for learning, leadership, cooperation, peer mentorship, and teamwork. It is also a time when students need to be responsible for their actions on both an academic level and an interpersonal level.

Students who choose to abide by the guidelines established in this handbook will experience the pride and camaraderie of being involved in a robotics team. Those who choose to ignore their responsibilities as a member of this team will be advised according to the steps that follow.

Robot Casserole (RC) Disciplinary Procedure

Step 1 The student will be advised by a mentor as to the unacceptable actions and asked to make appropriate changes to remedy the situation. If changes are not made, proceed to the next step.

Step 2 The student's parents will be contacted and a meeting will be scheduled with the parents, student, and appropriate mentors/administrators to discuss the situation. The student may not return to the team or participate in team activities until the meeting has taken place.

Step 3 The student will be suspended from the team for the next 2 team functions/events or a period of 2 weeks, whichever is longer. During this time they may not participate in team meetings, team competitions, or any other activities the RC engages in.

Step 4 The student will be removed from the team.

Addendum: If offenses are gross enough in nature, some steps maybe skipped to the point of immediate expulsion from the team.

ATTENDANCE

Unexcused absences will follow the disciplinary steps above for each occurrence.

ROBOT CASSEROLE TEAM CONTACTS AND INFORMATION

Robot Casserole	Website:	http://www.robotcasserole.org/

2011 Leadership Team

Nick Krupka	Work Phone	309-675-0119
Team Leader	Email	krupka_nicholas@cat.com
Sarah Krupka		
Team Leader		
Asit Patel	Work Phone	309-675-9171
Team Leader	Email	patel_asit_@cat.com
FIRST	Website:	www.usfirst.org
	Phone #:	800-871-8326 or 603-666-3906
	Regional Director	Susan Lawrence
		sklsumgrad@comcast.net
Discussion Forum:		www.chiefdelphi.com (make sure to register!)
Deborah Lewellyn	Work Phone	309-578-3134
FIRST Program Manager	Email	Lewellyn_Deborah_A@cat.com

Resources:

www.firstatcat.cat.com
http://www.andymark.biz/
www.smallparts.com
www.industrialprofile.com
www.mcmaster.com
www.grainger.com
www.torrington.com
www.bimba.com
www.bostongear.com
www.innovationfirst.com

STUDENT/PARENT ACKNOWLEDGEMENT FORM

Robot Casserole FIRST Robotics Team

By signing this sheet I verify the following:

I have read through the handbook and understand the privileges and responsibilities that being a member of this team involves.

I understand that participation on the Robot Casserole Robotics team is a privilege.

I understand that I am required to actively participate and be respectful of the mentors and other team members and the consequences of my actions can ultimately lead to my removal from the team.

I understand that being a part of FIRST Robotics can provide me with knowledge and skills that will benefit me for a lifetime.

I understand that I have a wide variety of opportunities available to me while on this team and I am welcome to take advantage of them.

I agree with the philosophy FIRST upholds – “FIRST inspires in young people, their schools and communities an appreciation of science and technology, and of how mastering these can enrich the lives of all.”

I understand that, as a member of the Robot Casserole, my actions reflect on not only myself and my family, but also my School, Caterpillar, and other sponsors and supporters of our team.

I agree to act with gracious professionalism in all that I do while a member of this team.

_____	_____	_____
Student’s Signature	Parent’s Signature	Date

TEAM MEMBER APPLICATION FORM

Team Membership
Being a member of Robot Casserole Team 1736, either as a student or mentor, provides certain privileges and responsibilities.

Student Responsibilities

1. Students must maintain compliance to the RHS Student Code of Conduct at all times.
2. Students must be enrolled as a full time student.
3. Students must maintain strong grades in all classes.
4. Students must obtain approval from their high school before each travel event.
5. Students are expected to be role models in the school and at any Robot Casserole event. Students represent their team, their school, and their sponsors.
6. Students must maintain 80% attendance during the build season.
7. Unless agreed in advance, students are expected to participate in spring and summer team activities, such as fund-raisers and demonstrations.
8. Students must handle & operate all tools and equipment with care and in a safe manner.
9. Students must not use machine tools before being trained on how to operate them.
10. Students should approach team membership as an opportunity to learn, to share and to grow while developing strong friendships with teammates, mentors, and other *FIRST* persons.

Team Application and Interview Process

1. Students must submit an application and complete an interview process to become a part of Robot Casserole. Returning students are also required to apply and complete an interview process each fall to continue to be a part of the team.
2. The application is included with this packet. Sample interview questions are included as Fig. 5.
3. Robot Casserole employs this "Application and Interview" process for several reasons:
    a. Students gain valuable real life experience by completing a team application and an interview with adult mentors.
    b. Students receive formal feedback on their performance in previous years and areas for growth and improvement.
    c. Students have a formal opportunity to provide feedback to the team mentors.
    d. Students must think about what they have accomplished (or plan to accomplish) as part of the team, and what steps need to be taken to reach those goals
4. The interview process allows the mentors to learn information about the students, especially new students coming into the program. This helps with initial sub-team placement of new members.

5. The interview process shows students that there are both great benefits as well as great responsibilities associated with team membership. Students know, in advance, what the expectations are for attendance, participation, grades, and behavior.

Interview Period

1. In the fall of each year, returning students can apply for membership on the team for the upcoming season. During the fall interviews, students are invited to apply and interview. Team member decisions are made quickly and the new team is announced before January kick-off but most likely during fall activities. Candidates begin working as Robot Casserole during fall activities.
2. In the fall of each year, new students can apply for team membership. These students also complete an application and interview and become part of the team following a successful application process.

Removal from Team

1. In rare occurrences, students may be removed from the team or potentially not allowed to be a part of the team following their application and interview.
2. Situations that can cause removal from the team include: * Inappropriate behavior, in direct violation of the school Code of Conduct
    a. Grade / Academic issues
    b. Extremely poor attendance
    c. Limited / no participation in team activities
    d. Unsafe or disruptive behavior
3. Limited Participation / Probation
4. In some cases, students may be offered a limited level of participation on the team. This is normally due to academic performance, where the team leaders and parents agree that the student can still participate, but on a few nights and possibly with no school time travel.

Robot Casserole team 1736 Application: 2011-2012

Thank you for your interest in Robot Casserole, the *FIRST* Robotics Team 1736 that meets at Richwoods High School. As a member of the robotics team, you must be willing to donate much of your time to assist in "promoting" the program and "creating" the robot.

- The teams meets starting mid-fall semester 2 nights per week to prepare team for January kickoff.
- There are many team meetings at which attendance is required including the Saturday January 7, 2012 kickoff.
- You will be required to give time during the summer and school year to help promote the team and participate in fund-raising activities.
- From early January through the 3rd week of February, you will be required to meet almost every weekday evening and several weekends to design, manufacture, and create our robot and prepare our team for competitions. The team normally meets M-Th 6-9 PM and Saturday 8AM- 2PM. Team meets at Caterpillar Mossville Bldg. H prior to 3rd week of February to test and update the robot before shipping to a Regional competition.
- This program will provide you with a great challenge as well as a great opportunity.
- Applications can be turned in during fall meetings at RHS to the team leader.
- Questions? Lead Mentor – Nick Krupka, email krupka_nicholas@cat.com or Asit Patel, email patel_asit_r@cat.com

Personal Information (print clearly)

Name _____

Current Grade Level _____ E-mail Address _____

(you will be contacted by email – be sure this is legible)

Home Phone # _____ Cell Phone # _____

1) The robotics team is more than "building a robot" and traveling. Number the following groups from 1 to 8 according to your interests and skills (1 is the highest).

____ Web-Site Design

____ Public Relations, Administration, Marketing (bi-monthly newsletters, videos, Chairman's Award)

____ Pro-E/SolidWorks (computer drawings)

____ Mechanical design (design calculations, power, forces, strength, etc)

____ Electrical design (design calculations, component selection, etc)

____ Programming (C++, JAVA, or LabView)

____ Robot Fabrication (cutting, drilling, assembly, hand tools, etc)

____ Animation (Create safety video)

2) List all activities (and years of participation) in which you have been involved while in high school.

_____ _____
_____ _____
_____ _____

3) List all activities in which you will be participating this year (2011/2012).

_____ _____
_____ _____

On separate paper, provide a short explanation of:

1. Why you are interested in the robotics team.
2. Why you are qualified to be a member.
3. Tell what special qualities and/or skills you possess that would make us a stronger and more productive team.
4. How you became interested and/or heard about the team.
5. What have you found interesting on USFIRST.org website?
6. What have you found interesting on ChiefDelphi.com website?
7. What have you found interesting on robotcasserole.org?

IMPORTANT INFORMATION – STUDENTS AND PARENTS

** Students must meet team and school academic requirements and obtain agreement from their high school before traveling with the team to competitions.

I understand these expectations if my son/daughter (student) is accepted as a member of Robot Casserole team 1736.

Parent / Guardian Signature_____ Date_____

Student (Applicant) Signature_____ Date_____

Parents: Mentors are volunteers; most have full time jobs, and give their time freely. Students tend to excel when parents are involved. It is recommended that Robot Casserole parents be active in supporting the team either by occasional attendance at meetings, helping to manage activities, mentoring, or just parenting. Please provide your email address below so you can be added to the parent distribution list.

Parent(s) name and Email address(s) _____

Turn in APPLICATIONS at a team meeting
Or email to: krupka_nicholas@cat.com or patel_asit_r@cat.com

YOU WILL BE CONTACTED BY EMAIL TO SCHEDULE AN INTERVIEW

Sample Interview Questions

New Applicants:

1. **Who do you most admire? Why?**
2. **Describe a project that you previously completed where you went beyond the expectations of the project.**
3. **Which teacher would give you the best reference? What would this teacher tell us about you?**
4. **What interests you the most about the robotics team?**
5. **How do you feel you can help the robotics team next year?**
6. **How do you feel the robotics team can help you next year?**

Previous Members:

1. **Identify one specific contribution you will make for the (next) season.**
2. **How did you help with community outreach during last season?**
3. **Why do you think we want you to post on Chief Delphi?**
4. **What was your favorite moment from the (last) season?**
5. **Who is the most important member of the robotics team?**
6. **Who do you think would be best as Team Captain? Why?**

(Fig. 5 – Sample Interview Questions)

REVISION HISTORY

Rev. 2 Nick Krupka 2011/2012 season updates, added application.