**FIRST Team 1699 Robocats Business Plan**



Bacon Academy High School Robotics

611 Norwich Avenue

Colchester, CT 06415 USA

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2015 Team Photo

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**Executive Summary**

**Mission Statement:**

The mission of Bacon Academy RoboCats Team 1699 is to educate and prepare the students for the challenges and problems that they will face in their future jobs and in their life. Each game that FIRST® provides gives the students the opportunity to build a robot that is all their own through the use of technology and leadership skills. With the acquisition of these skills, the students become well-rounded and knowledgeable future engineers.

**Team Began**:

Colchester Robotics Club was founded in November 2004 as an extra-curricular academic program in the Colchester Public School system. Since our formation, club membership has increased and we have established a positive trusted reputation within the local community.

**Team & Program Summary:**

**Team Summary:**

The team was founded by Mr. Ellis, the head teacher, Keith Deslandes, who is a parent and sponsor, and Chris Deslandes, the student who originated the team at Bacon Academy. Chris was joined by Mark Gatesman, Matt Ruziski, Peter Csere, Derek Rockwell, Ben Ryan and Jim Ryan.

Today we have nineteen male and four female students (a total of twenty three) and twenty-one mentors including past students who have come back to help mentor the team. Our team is made up of Bacon Academy. Previously, our school system has not supported us or recognized us as a team or even given us the facilities to build a robot. Now, however, we have total access to the technology wing at our high school as our senior mentor is now a paid employee of $1 at the school. We are also now recognized by Bacon Academy as a school team.

**Program Summary:**

FIRST® was founded in 1989 to inspire young people's interest and participation in science and technology. FIRST designs accessible, innovative programs that motivate young people to pursue education and career opportunities in science, technology, engineering, and math, while building self-confidence, knowledge, and life skills.

The mission of FIRST® is to inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership.

Currently FIRST® encompasses 400,000+ students from 38,700 teams if you include FIRST® Lego® Robotics and FIRST® Tech Challenge. This year, 2015, over fifty regional competitions will be held in the United States, Canada, Brazil, New Zealand, Israel and Australia.

The FIRST® Robotics Competition consists of a six-week build season to accomplish conceptualization, design, fabrication and testing of a 120-pound robot that accomplishes a series of competitive sports-like tasks for points.  The robot is operated both autonomously through its internal programming and by radio control.

**Location of the Team & Current Sponsors**:

FIRST**®** Team 1699 RoboCats are located in Colchester, CT USA. Our current sponsors are Dominion Millstone Nuclear Power Station, United Technologies and Colchester Lions Club.

**Team Impact/Outreach:**

The team helps mentor the four FLL teams in our community every season. They also help judge the FLL championship at Central Connecticut State University. In addition to mentoring other FIRST**®** teams, our team shows off our robot and makes a presentation of our current year and next year plans to the Board of Education. We also participate in our community as well by promoting STEM with our robot. In the past years we have had a PTO March Madness Math/Literacy Night where we show off our robot to elementary school age kids, where they get to drive the robot and learn how it works. Every year we also display our robot at our town’s 57 Fest where the entire community learns about FIRST**®** and our robot. Team 1699 also hosts a blood drive every year in memory of a mentor who recently passed away.

**Relationships & Information regarding current sponsors:**

* Dominion - provides funding & kickoff venue for local teams
* United Technologies – provides funding, extra funding if we win a district regional

**Summary of Team Growth**:

Moving to Bacon Academy High School from a mentor’s garage generated new growth in participation, increasing it from just 7 students in 2004 to 19 students in 2016. The school began recognizing the team at school assemblies, which both spread the word of FIRST**®** and recruited new team members. The wood, automotive and metal shop as well as the computer lab also provides a comfortable, effective, and easily accessible environment to attract new students. Mentors were recruited to help train students on the technology, which increased the number of mentors from 2 to 21. As a result of these changes, the team has become infinitely more structured which has benefited the team’s productivity and success. They also have more hands-on experience, actively learn more skills, and stay on the team longer.

**Summary of Future Team Plans:**

In addition to increasing in size and participating in various community activities, Team 1699 plans to run a FIRST**®** Lego® League (FLL) summer program for the many students in Colchester who are interested in Lego® Robotics. We also are working on gaining new sponsors, getting more students involved, and giving our community a greater understanding about FIRST®.

**Team Overview**

**Team History:**

In November 2004, FIRST**®** Team 1699 RoboCats was formed by Chris Deslandes with the help of six other students along with Mr. Ellis, the school teacher, with the intention of competing in the 2005 FRC season. The team was formed in Colchester, CT USA in cooperation with our sponsors: Dominion. In March 2005, the team made its debut at the FIRST**®** Robotics Competition in New Jersey. Our team stayed at the school until 2007 when we were forced to move to our Senior Mentor’s garage where we proceeded to take over his whole house. It was not until 2010 when we were able to go back to the school to use the facilities, which is where we are currently now.

Over the past ten years, Bacon Academy RoboCats Team 1699 has competed at several regional competitions including the Hartford Regional, Virginia Regional, New Jersey Regional, Boston Regional, District of Columbia Regional, New Hampshire Regional and the Baltimore Regional. We have also competed at the Atlanta, Georgia, Championship in 2008.

Team 1699 only started receiving awards in 2009 and has become more successful as the team gets older; Team 1699 has received the following awards:

* + - **2009 Industrial Safety Award Runner up, District of Columbia Regional**
    - **2010 Industrial Safety Award, Hartford Regional**
    - **2011 Regional Champion, Chesapeake Regional**
    - **2011 “The Boss” Award (from Team Beta #2836), Hartford Regional**
    - **2012 Industrial Safety Award Runner up, Harford Regional**
    - **2012 Industrial Safety Award, Virginia Regional**
    - **2012 Entrepreneurship Award, Hartford Regional**
    - **2013 Industrial Safety Award Runner up, Baltimore Regional**
    - **2013 “Safest Pit” Award (from Team Rocketeers #20), Hartford Regional**
    - **2013 CIAC State Champions**
    - **2014 Granite District Winner**
    - **2014 CIAC State Championship Finalist**
    - **2014 Industrial Safety Award Runner Up, Groton District**
    - **2014 Industrial Safety Award Runner Up, Southington District**
    - **2015 Industrial Safety Award Winner, Hartford District**

**Student Team Members**:

The students of the RoboCats represent a number of diverse backgrounds with students coming from Bacon Academy High School. This has brought together students from different communities and creates a melting pot of ages, genders, talents, interests, and geographical locations. Through FIRST**®**, these students learn to work together as a single team, despite their differences. Of particular importance are the changes in the team’s gender ratios.

The figure below shows how the team constituency by gender has changed over time. As can be seen here, the proportion of girls on the team has increased over the past years.

Another factor in maintaining an experienced student membership is the team’s replacement policy. The students must teach the new team members skills the graduating student has mastered. This has helped the new students in adjusting to not only being a member of the RoboCats but the intense work schedule many of the team members endure throughout the year.

**Team Mentors:**

Mentors currently are almost equal with the number of student members who include Dominion employees, United Technologies employees, Electric Boat employees, Colchester school system employees, junior mentors (Team 1699 alumni) and parents.

Of the 21 mentors currently working with the team, 5 are junior mentors and 16 are adult mentors, only six are parents of current team members. All six parent mentors are Science, Technology, Engineering and Mathematics (STEM) professionals and they are employed by United Technologies and Dominion.

Our other mentors consist of employees with no students or students who have graduated from the team as well as junior mentors, who are “RoboCats” alumni. This year we have seven RoboCats alumni who are mentoring, five are engineering and two are non-engineering.

As you can see by the figure below every year we gain more mentors in both engineering and non-engineering fields.

**Team Sponsors**:

**Dominion Millstone Nuclear Power Station**

Dominion Resources, Inc., commonly referred to as Dominion, is a power and [energy company](http://en.wikipedia.org/wiki/Energy_company) headquartered in [Richmond, Virginia](http://en.wikipedia.org/wiki/Richmond,_Virginia) that supplies electricity in parts of Virginia and North Carolina and supplies [natural gas](http://en.wikipedia.org/wiki/Natural_gas) to parts of West Virginia, Ohio, Pennsylvania, and eastern North Carolina. Dominion also has generation facilities in Wisconsin and Connecticut.



**United Technologies**

United Technologies Corporation (UTC) is an [American](http://en.wikipedia.org/wiki/United_States) [multinational](http://en.wikipedia.org/wiki/Multinational_corporation) [conglomerate](http://en.wikipedia.org/wiki/List_of_conglomerates) headquartered in the United Technologies Building in [Hartford](http://en.wikipedia.org/wiki/Hartford,_Connecticut), [Connecticut](http://en.wikipedia.org/wiki/Connecticut).[[3]](http://en.wikipedia.org/wiki/United_Technologies_Corporation#cite_note-3) It researches, develops, and manufactures high-technology products in numerous areas, including [aircraft engines](http://en.wikipedia.org/wiki/Aircraft_engines), [helicopters](http://en.wikipedia.org/wiki/Helicopter), [HVAC](http://en.wikipedia.org/wiki/HVAC), [fuel cells](http://en.wikipedia.org/wiki/Fuel_cells), [elevators](http://en.wikipedia.org/wiki/Elevator) and [escalators](http://en.wikipedia.org/wiki/Escalators), fire and [security](http://en.wikipedia.org/wiki/Security), building systems, and industrial products, among others. UTC is also a large military contractor, producing missile systems and military helicopters, most notably the [UH-60 Black Hawk](http://en.wikipedia.org/wiki/UH-60_Black_Hawk) [helicopter](http://en.wikipedia.org/wiki/Helicopter). [Louis R. Chênevert](http://en.wikipedia.org/wiki/Louis_R._Ch%C3%AAnevert) is the current CEO.



**Colchester Lions Club**

Colchester Lions Charities, Inc. is a chapter of the [International Association of Lions Clubs](http://www.lionsclubs.org/EN/), and a 501(c)(3) non-profit organization. The primary mission of Lions Clubs is to help the visually impaired, locally and around the world. It provides funding to various organizations in Colchester, CT.



**Colchester Learning Foundation**  
The Colchester Learning Foundation, Inc. (CLF) is a non-profit 501(c)(3) corporation founded in  
2008 by a diverse group of community members who share the common priority of promoting  
educational opportunities for all Colchester residents. All donations are tax-deductible to the  
extent allowable by law. The CLF is one of a growing number of similar education foundations  
set up in towns across CT to enhance educational opportunities.

Indirectly our sponsors interact with other teams, including potential customers, partners, future employees, and suppliers. While it’s possible to gain the “FIRST® experience” through other associated teams, we feel it is beneficial to look into our team. We believe we provide an exceptional opportunity and take FIRST® ideals to new levels and encourage our members to reach beyond FIRST®.

**Team Management**

**Team Structure:**

FIRST**®** Team 1699 is led by a Dominion sponsor employee, Keith Deslandes. The team leader is supported by mentors comprised of engineers, teachers, and business leaders. Additional leadership is provided by junior mentors, who are Team 1699 alumni. The students elect a Team Captain, Co-Captain and Project Managers that will be the go-between for student members and all mentors.

In the beginning of the school year before the build season begins, team members meet, and nominate potential candidates for the position of “Team Captain”. These candidates are given one week to prepare a speech that they will present at the next team meeting where the election occurs. In general, to be able to vote or to be able to nominate someone for the position of “Team Captain,” “Co-Captain” or “Project Manager” a team member must have participated in the construction of the previous season’s robot.

The season starts out with team building and new students learning their way around the RoboCats workspace. In September, TQR (Task Qualification Requirements) training is started where new and returning students are exposed to the basic skills in all the following areas: metal shop, wood shop and automotive shop. Each student regardless of what year they are, are required to learn how to use the most basic tools including a hammer all the way up to a lathe before they can start build season. After the basic training students are given the opportunity to choose between the 18 sub-teams during the build season. Our team also has Project Managers. These students work directly with mentors and students to make sure deadlines are being met and problems that arise are brought to the attention of mentors.

The students sign a Duties and Responsibilities Agreement stating that they understand the commitment involved with the team along with a safety contract.

Our sub-teams are broken down into two sections: managerial and technical. Students are free to choose whichever sub-teams they wish to participate on, but not to spread themselves to thin.

Team 1699 feels students should have an opportunity to experience as many operations of a business as they are able to fit in during a season. The Team Captain, Co-Captain and Project Managers work with the two structures to make sure deadlines are being met and team members are accomplishing their groups’ responsibilities.

This year our Captain is Connor Henley, our Co-Captain is Collin Maynard, and our Project Managers are Collin Maynard and Johno Boski.

**Sub-Teams**:

**Managerial**

MANAGERIAL

STRUCTURE

Structure

**Sub-Team Structure Descriptions (Managerial):**

**Travel and Business**

Oversees the financial operations of the club.  The travel and business responsibilities include budget management, travel arrangements, restaurants, and team activities.

Mentor – Katie Deslandes

**Safety**

Oversees all safety precautions of the club, ensures that all safety rules from the FIRST® safety manual are followed in the shop, on the road, and at all competitions. He/she is also responsible for ensuring crucial systems are in place for all robot functions, ALL tools are properly stored away and safety training to team members (i.e. lifting with legs not back). There will always be a safety captain at all competitions.

Mentor- Kevin Graham, Becky Yankowitz

Students- Joe Musinski, Joe DeFossess, Nathan Marks Dustin

**Social Media**

Designs, and updates Team 1699’s website, Facebook page and forum, twitter, Instagram and tumblr.

Mentor – Kevin Graham, Sharon Murphy-Boski

**Team Attorney**

The responsibilities of the team attorney are to read and know all the rules of the game when asked about them by team members and mentors and for competitions.

Mentors – Kevin Graham, Brad Graham

Students – Connor Henley, Linda, Jarod

**Awards and Grants**

The responsibilities are to pick and write about one specific mentor who has moved the team, and to submit for the Woodie Flowers Award as well as the Chairman’s award which requires an essay, presentation and video.

Mentors – Sharon Murphy-Boski, Nina Boski

Students – Joe Musinski, Eli Terranova, Brandon Speight, Madeline and Johno

**Public Relations/Spirit**

Informs the community, and teams at regional's, about our team and what FIRST® is all about. Cheers on the team and other teams during competition and boosts team morale

Mentor – Sharon Murphy-Boski

Students- Joe Musinski, Eli Terranova, Caleb, Bethany Lacey

**Scouting Team**

Responsible for providing competitive information for the competition team prior to and during competition

Consists of:

* Strategy lead
* Data input
* Collectors

Mentor- Sam Melton

Students- The entire team participates in scouting at the competitions

**Outreach Team**

Responsible for building relationships with the schools, the local community and other FIRST® teams in order to promote the vision of FIRST® and to assist other teams.

**Sub-Teams:**

**Technical**

TECHNICAL

STRUCTURE

**Sub-Team Structure Descriptions (Technical):**

**Design Team**

Oversees all the robot designs of the club.  The design leader’s responsibilities include design prototype, and create.

Mentors – Theo Ball, Rob Esteve, Brad Graham, Mark Noniewicz, Edward Leitkowski, Ryan Creaturo

Students – Collin Maynard, Johno Boski, Connor Henley, Joe DeFossess

**Programming**

Oversees all software creation.  The programming responsibilities include learning and teaching software development tools, writing and testing code, and coordination with other team members.

Mentor – Sam Melton, Chris Deslandes

Students – Connor Henley, Jakob Misbach, Nathan Marks, Dustin, Jarod, Greg Leitkowski, Joe Desfosses.

**Appendage Design**

Oversees the design, prototype, and creation of an appendage that will benefit that robot’s ability.

Mentor – Rob Esteve, Mark Noniewicz, Theo Ball

Students – Johno Boski, Joe Musinski, Joe Desfosses

**Electronics**

The responsibilities of the electronics are to wire the robot correctly and safely so that the robot functions properly, while teaching other kids how to wire a robot.

Mentor- Sam Melton, Chris Deslandes

Students – Students – Connor Henley, Jakob Misbach, Nathan Marks, Dustin, Jarod, Greg Leitkowski, Joe DeFossess.

**Chassis Team**

Designs, and builds a chassis that will work for that year’s game, while teaching others how to build a chassis and weld a chassis.

Mentor - Brad Graham

Students - Adam Ciesinski, Brandon Speight, Dustin, Joe DeFossess, Alex Grant, Collin Maynard

**Crate/Cart/Temp Field/Crib/Trailer Team**

Designs, and creates a crate for the robot to be shipped in, a cart for the robot to be put on, and temp field for the robot to play on, a crib for the robot to stay in during school hours, and a trailer to hook on to the robot.

Mentor – Frank Goodrich

Students – Alex Grant, Adam Ciesinski, Collin Maynard

**Machine Shop Coordinator**

Oversees the fabrication of robot components either within the existing capability of the school shop or solicits outside resources to support the robot design and build teams.

Mentor – Theo Ball

Students - Collin Maynard, Adam Ciesinski, Jarod, Nathan Marks, Linda

**Drive Team**

Responsible for competing at the competitions

Consists of:

* Main (chassis) driver
* Robot accessory operator
* Human player(s)
* Back-up crew

**Pit Crew**

Responsible for fixing any damages that may have occurred during the matches at the competition.

Consists of:

* Mentor
* Pit boss
* Safety Captain
* Mechanical
* Electrical
* Programming
* Runner

**Build Season**

The robotics team has just started its design and build phase for the FIRST® competition. We have just started our build season and are preparing for our competition season. Every year is a special year due to the fact that each game design is unique and requires unique ideas of students to be a smoothly integrated robot machine. Every year our build season schedule is as follows:

Tuesday and Thursday- 7-9pm

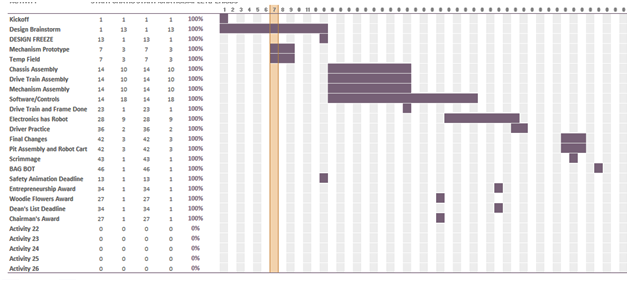
Friday – 7-10pm

Saturday - 9am-9pm

Sunday - 10am-4pm

On Saturdays a team of two families make dinner for the entire team during build season. This ensures that our students and mentors are fed a warm home cooked meal on a long twelve hour build day. Every Saturday and Sunday there is also snacks for everyone to enjoy throughout the day including, soda, chips, hot chocolate, coffee, water and whatever else parents bring in that day.

The figure below is our build season timeline that our project manager enforces upon each sub-team. As you can see the timeline is very rigorous and has time constraints, although there is some leeway.



**Strategic Planning Process / SWOT Analysis**

The SWOT Analysis was used to evaluable the **S**trengths, **W**eaknesses, **O**pportunities, and **T**hreats to FIRST Team 1699 RoboCats organization. The strengths and weaknesses refer to internal factors of the team. The opportunities and threats refer to external factors the team may encounter.

STRENGTHS

* Use of school tech wing
* Wood, metal & automotive shops
* Interested Students
* Dedicated mentors
* Team reputation/image

WEAKNESSES

* Recruiting students with graphics/animation knowledge
* Funding
* Fundraising

OPPORTUNITIES

* Securing sponsors
* Recruiting more mentors
* Coordinate STEM with FIRST
* Community outreach

THREATS

* Losing student interest
* Loss of school shops
* Loss of sponsors
* Snow days
* Natural Disasters

## 

## Risks and Opportunities of FIRST®

The major risk we foresee is potential floundering such that we are not as successful in the competitions as we would like to be. However, we manage these risks effectively. The opportunities before the members of this team are significant and many. We have a potential to become effective contributors of the technological community.

The opportunity for advertisement within this program is substantial. The benefits of sponsorship include: better company visibility within the community, the establishment of a strong relationship with the student body for services and/or potential employees. As we advance through the tiers of the competition (local, regional, national, international) your visibility will also increase.

Even if we are not as successful as we would like to be in the arena, all team members will still have learned important skills and learned important life lessons. The opportunities before the members of this team are significant and varied. We have a potential to become effective contributors of the technological community.

Members gain experience in real-world teamwork, project timelines, construction, engineering, management, mathematics, and many other useful skills for years to come. In addition, members are exposed to dedicated mentors, deadlines, corporate structure, legal burdens and economical demands.

# Risk and Opportunities Involved with Building a Robot

Our primary risk is the loss of invested funds and physical bodily harm to a student or mentor in the machine shop. Our team offers our students experience, leadership skills and knowledge for their future jobs as engineers in the workforce.

**Risk of Losing our Sponsors**

There is always a risk of losing our sponsors or our sponsors donating a lower amount due to a company’s hardships, especially in these hard economic times. If we were to lose all of our sponsors, our team would do more fundraisers throughout the year to try and raise the money we lost from our sponsors as well as look for other sponsors in the area and in the community. If the team fails to gain new sponsors and or raise enough funds, the students and mentors will be responsible to contribute the funds necessary to build a robot and compete in two district events. In the event the cost to compete and build is too much for the students and mentors our team would not compete that year due to hardships.

**Team Impact / Outreach**

**Team Impact:**

Team 1699 has impacted many students over the years, but the most impressive aspect about our students is that every student has been accepted to college, some with scholarships. Most of our students who have graduated from the program decide to come back during their college breaks to help mentor the team. It’s their way of giving back to the new students. Our college aged mentors also come to all of our competitions to either volunteer at them, cheer us on, or to help the team compete. Most of our graduated team members have decided to major in a STEM field; however some of our students have chosen different majors as well including, Business, English, Music, Theatre and Writing. As for our older graduated students who have entered the workforce their choice of fields ranges from aircraft mechanics to cyber security.

**Team Outreach:**

Every year Team 1699 strives to accomplish more with community outreach. These past four years our team has been involved in the community in the following ways:

* Hosting a blood drive to honor a fallen mentor
* Showing our robot off to elementary school kids at Family Fun Night
* Displaying our robot off at our town’s 57 Fest
* Showing off our robot at school prep rallies
* Throwing 1699 Frisbees into the school stands during our school’s First day of school prep rally to recruit new members
* Our team members help mentor the 4 FLL teams in our community after school
* Display and explain our robot and the FIRST program to the Board of Education every year, along with getting permission to go on our trips to compete
* Our team members volunteer to help out at the FLL State Championship at Central CT State University
* Showing our build season, robot and workspace to the local FLL teams to gain more new members in the future
* Mentored FIRST Team 4557 from Middletown, CT and FIRST Team 1991 from Hartford, CT

Team 1699 will always strive for community outreach, however knowing your market and how to market your team through social media helps. Our team’s market could be best defined as containing:

* Anyone who attends a FIRST® Regional or Event that we are attending
* Anyone who sees a team member wearing their team shirt in public
* Anyone who views our team website / social media sites
* Anyone who attends the same off-season events as the team
* Anyone who attends the Board of Education meetings that we present at

Team 1699 is very involved in social media during the off season, build season and during competitions. Our team’s modes of social media are:

* Facebook private group forum - https://www.facebook.com/groups/114994885247086
* Facebook page - https://www.facebook.com/Team1699Robocats
* Twitter - https://twitter.com/Robocats1699
* Webpage - <http://robocats.wix.com/team1699robocats>
* Tumblr – http://www.robocats1699.tumblr.com

**Future Plans**

Team 1699’s goals currently as a team are as follows:

* Provide a hands-on engineering experience for local high school students
* Excite students to engineering and technology careers
* Allow students to work side-by-side with positive role models
* Promote the ideals of FIRST®
* Provide skills which will promote success; leadership/teamwork/creativity
* Increase community awareness of FIRST® Robotics and FIRST® Lego League
* Develop a focused design
* Build a winning robot
* Empower students
* Have fun!
* Improve communication between team members
* Focus efforts on an award, and
* Be safe all year!!

In addition to increasing in size and participating in various community activities, Team 1699 plans to run a FIRST**®** Lego® League (FLL) summer program for the many students in Colchester who are interested in Lego® Robotics. We also are working on gaining new sponsors, getting more students involved, and giving our community a greater understanding about FIRST®. The team also plans on hosting a “Robo Prom” for all of the CT teams. Since New England has gone district this year, the events no longer have socials. To remedy this, our team would like host a social in the form of a prom.

**Team Budget**

|  |  |
| --- | --- |
|  |  |
| **Team Income & Expenditures**:   |  |  | | --- | --- | | **Team 1699 Robotics Budget** | **Cost** | |  |  | | FIRST**®** Regional and Kit of parts | $5,000 | | Robot parts | $4,000 | | Buttons, safety shirts, etc. | $1,100 | | Team Shirts (10 new people) | $1,550 | | Bus to Redding, MA. & back for 2 days | $600 | | Redding, MA. lunch 2 days ($10per/30ppl) | $650 | | Hartford District lunch 2 days ($10per/30ppl) | $650 | | Bus to Hartford District 2 days | $550 | | Team Banquet | $700 | | Mentor dinner | $200 | | District Championship-Hartford, CT. | $4,000 | | Lunch 3 days ($10per/30ppl) & Dinner | $3,000 | | Bus to Worchester, MA. and back | $1,000 | | Truck to Redding, MA. | $1,800 | | Hotel for Redding, MA. | $8,000 | | CIAC State Championship | $200 | | Bus Transportation | $300 | | Lunch ($10per/30ppl) | $300 | | Team Snacks | $1,500 | | Field Parts | $500 | | Pit equipment | $500 | | Sponsorship mentors & truck drivers | $2,400 | |  |  | | **Total Expenses** | **$38,500** | |  |  | | **Sponsorship** |  | | Dominion Nuclear Power Station | $15,500 | | United Technologies | $5,000 | | Students & Mentors ($600, 30ppl) | $18,000 | |  |  | | **Total Sponsorship** | **$38,500** | |  |  | |  |  | | **Total Income** | **$38,500** | | **Total Expenses** | **$38,500** | |  |  | | **Net Income** | **$0** | |  |
|  |  |
|  |  |
|  |  |

Funding of the team comes in three sources, major sponsors, minor sponsors, and team member contributions.

These contributions are funds supplied by team members to help cover the costs of the team. This contribution is used for purchase of food, travel and lodging for competitions. Each student and mentor is expected to contribute $600 if they participate in both trips. However, if financial difficulties are preventing a team member from contributing, he/she should consult with the senior mentor since no student will be denied from the team due to lack of funds.

**Assets and Liabilities:**

The Bacon Academy RoboCats Team 1699 uses a drill press, band saw, belt sanders, and power and non-power tools including taps, dies, and drills. Some of the programs we use are Solidworks, Inventor, PTC ProDesktop, and 3D Studio Max. We have two robots from previous years, one of which is still fully intact. Our mentors’ contributions to the team and its members are assets to the team.

In 2008, Bacon Academy RoboCats Team 1699 purchased a bright red trailer to transport our robot, tools, and promotional materials.

Every team has liabilities. We have never had an incident, but we do run the risk of an incident of large bodily harm because of the tools used in building the robot. We promote a safe workplace by requiring safety glasses in all shop areas as well as safety gloves when handling metal or wood away from rotating tools. We also provide training sessions in order to use each tool properly. Along with that, we have all students work with another student and with a mentor to keep a watch on the build.

Based on our projections, we feel an investment in the Bacon Academy RoboCats Team 1699 is a sound investment in the future by insuring this experience to future Bacon Academy High School generations. We have given a great foundation for many students and are proceeding to keep that tradition for years to come. In order to proceed, we would greatly appreciate a donation of any of any monetary amount and mentoring from any industry.

**Additional Opportunities for Support: In-Kind Donations**

The team can always use donations during build season, it’s another way of supporting our team without monetary sponsorships. Some donations the team would appreciate are:

|  |  |
| --- | --- |
| Item | Cost |
| Snacks for build season | $300 |
| Building material for temporary field | $500 |
| Bus to travel to events | $2,000 |
| 2016 field pieces | $200 |
| Robot parts cost | $4,000 |

**Additional Opportunities for Support: Mentors**

We welcome anyone who would like to help out FIRST® Team 1699 during the season; however our weak areas of where we need mentors are as follows:

|  |  |
| --- | --- |
| Mentor Roles | Role Description |
| Graphic Design | Helps students create team banners, signs and t-shirts |
| Website | Teach students how to manage and update a website |
| Animation | Help students create a safety animation |
| Fundraising | Help students fundraise money for building the robot and going on trips for competition |

**Sponsor Benefits**

**Brass and Silver Contributors**

**(Brass is <$50, Silver is $50-$149)**

Team thank-you letter

Name on website

**Gold Contributor ($150-$499)**

Team thank you letter

Name and image on website

Framed photo of team with robot

**Platinum Contributor ($500-$999)**

Team thank you letter

Name and image on website

Framed photo of team with robot

Decal on robot transportation cart

**Ruby Sponsor ($1000-$5000)**

Team thank you letter

Name, image and link to sponsor website on website

Framed photo of team with robot

Decal on robot transportation cart

Decal on robot

Sign in Pit

**Diamond Sponsor (>$5000)**

Team thank you letter

Name, image and link to sponsor website on website

Framed photo of team with robot

Decal on robot transportation cart

Shirt with Company Name and Sponsor

Large Banner in Pit

Decal on Robot

**Team Fundraising Opportunities**

**Current Team Fundraisers:**

**Car Wash**

In September 2012 the team hosted a car wash at one of the local businesses in our town. The team contacted the business, who offered to supply the water for the car wash. The team set up the car wash in the parking lot. The car wash was advertised on all of our social media websites. Posters were made before hand to hold up during the car wash to entice more people in the community to help us raise funds. The team even got to wash a corvette, which was very exciting. About 20 cars were washed.

**Candy Sales**

In September 2012 the team ordered boxes of candy. Each box contained 100 bars of candy ranging from Kit-Kats, M & M’s and Starbursts. Each candy bar was sold for $1. The team split up into teams of two and went around to the community’s neighborhoods to sell the candy. A portion of the money raised by the students was given to them to help defer the cost of participating in the competitions. The candy sales were advertised on all of our social media websites. The team sold two boxes of candy, about $200.

**Indiegogo**

In January 2015 the team created an Indiegogo fundraiser. The fundraiser is solely online where people can read about who we are and what we do as well as donate money. The donations are tax deductible since we are non-profit. The fundraiser will run for three months at which time we only get the money raised if we reach the original we had set for ourselves. The team hopes to raise at least $2,000 for this fundraiser.

**Future Team Fundraisers:**

**Dodge Test Drive**

In the coming future the team hopes to host a Dodge Test Drive fundraiser. The fundraiser would be held during another school event to draw into more people. The fundraiser would be advertised on all of our social media sites and posters will be made to direct people to the test drive. Dodge would bring three or four different cars for customers to test drive for three hours and they would drive around a roped off area away from the crowd. Each test drive would bring in $20. The team hopes to draw in at least 30 people for this fundraiser.

**RoboProm**

In the coming future, hopefully this year the team hopes to host a RoboProm social that would also be a fundraiser. The social would be for all the teams in CT. The teams would be required to wear their uniforms to the event. The social would be held at the school gym before the District Championship. For the fundraiser side of the social, the team would sell tickets beforehand and at the door for a set price. There would also be treats available for an additional cost. The team hopes to have all the CT teams participate in this social / fundraiser.

**Team Rules& Responsibilities**

**Code of Conduct**

All students participating on Bacon Academy RoboCats Team 1699must obey the following rules:

* Students will display “Gracious Professionalism” (the motto of FIRST®) at all times and promote the ideals of FIRST®.
* Students will follow the same rules as dictated by Bacon Academy, including those in regards to alcohol and chemical substances.
* Students will not violate the racial/ religious / harassment/ violence / and hazing rules specified in the Bacon Academy Student Handbook.
* Students are expected to behave in a courteous and cooperative manner.
* Students are expected to be respectful of others and behave in a way that protects the health and safety of themselves and others.
* Students shall be respectful of the facilities, tools, equipment and all things being used by the team.
* Students shall not use profane, obscene or vulgar language in written, gestured or verbal form.
* Students working at corporate sites are guests of the corporations and must be courteous and respectful. While at a corporate site, students are expected to follow the general rules and safety rules posted at the site.
* Students should be well behaved and represent Bacon Academy, Dominion, Pratt & Whitney, and foremost their team, Bacon Academy Robocats Team 1699, positively when on any Team 1699 trip/ activity such as at the competitions, on a train or bus, at a hotel, or at a restaurant.
* It is expected that each team member be responsible for the tasks that he/she has agreed to complete. It is very important to the team that all of the members are reliable when they say they will do something. If they cannot fulfill a commitment, it is imperative that they bring this to a mentor’s attention as soon as possible.
* Students are requested to cooperate at all times. This is to mean that if a mentor or team captain requests you to do something you will comply with the best of your ability. Ignoring the directions or request is not in the team’s best interest. If you feel a request is out of order, you are encouraged to complete the task then speak to the mentoring staff at a later more appropriate time. Disrespect towards any mentor will not be tolerated.
* In the event that a boyfriend / girlfriend relationship develops or is ongoing, there are certain guidelines that must be adhered to at all times when engaged in team activities, local and away. *Hugging, kissing, and other expressions of affection are prohibited at all times.* The couple must also travel in a group at all times. Couples may not wander off or sit alone. In other words, they should not appear as a couple, but as part of the team. Common sense should prevail at all times.

**Eligibility for Traveling with the Team**

In order for a team member to be able to attend regionals or any other event with the remainder of the team, the member must meet all of the following conditions:

* Students must **ACTIVELY** participate on the team. This can be accomplished by attending meetings, contributing to team activities, and maintaining a good attitude.
* Student has a “C” average and no “Fs” in their courses. Students are to turn in a grade verification sheet to the mentors monthly during the pre-season and weekly during the build season.
* Students must participate in at least one additional Bacon Academy RoboCats Team 1699/Dominion sponsored activity. These include Bash on the Beach, FLL Tournament, Memorial Day parade, or some other event sponsored by the team.
* Students must participate in at least one fundraiser.
* Students must attend mandatory team meetings and must have contributed at least 30 hours of quality work during the build season. Simply showing up, signing in, hanging out, and leaving do not constitute “quality” hours and may be dropped from your total hour count.
* Students must help in shop clean-ups or otherwise equivalent work and dinner clean-ups.
* Student’s family must provide at least one team meal during the season.
* Students must be able to demonstrate an understanding of FIRST® and the 2014game, an understanding of Bacon Academy RoboCats Team 1699history and goals, and an understanding of the 2014 robot, strategy and design.
* Students must have joined the team by no later than December 1st.
* Students have paid the balance of their travel expenses necessary to travel with the team.
* Students traveling on school days will have to arrange ahead of time with their teachers to make-up any work missed.
* If a team member is not approved for team travel, they are still encouraged and welcome to participate on Bacon Academy RoboCats Team 1699, but they will not be permitted to travel with the team.

**Competition Rules**

* All eyes are on you during every minute you are at an event. Your behavior has a direct reflection on your character and on your team. A judge or a member of another team may over hear what you say and how you say it. Even the expressions on your face and body language may bring unwanted bad attention and bad impressions.
* Students who are selected to travel with the team must be ready, willing and able to execute their jobs or tasks with dispatch. Students must adhere to all competition center rules. They are not to trespass into off limit areas, nor tamper with competitors belongings. They must be ready to join in on short notice to gathering points and cheer for their team.
* Wearing of personal music devices is forbidden while in uniform or at an event.
* Students may not play cards or any other games at the event.
* Our team will not engage in negative behavior toward another team or team member.
* Our team will not display displeasure over any decision made by a referee or judge.
* Team members will not exchange negative remarks to one another no matter what the situation.
* Students will not leave the group in the airport, train station, hotel, competition facilities, or city without a mentor’s permission and must be with a buddy.
* Students must obey hotel quiet hours and pool rules.
* For competitions attendance will be taken three times, twice in a roll call fashion, and once by having members report to their mentors from the build season.
* Roll call will be used upon departure from the high school and upon leaving the competition.
* The mentor reports any missing students to the faculty advisor immediately.
* If a student leaves early, they must inform the faculty advisor and have a parent/guardian present.

**Disciplinary Ladder**

Offenses are separated into three main categories:

**Minor offenses** such as lack of participation (including, but not limited to, the use of gaming systems or personal music players which will be confiscated for the duration of the competition), are handled by the team captain and/or a mentor.

**Major offenses** such as curfew violations or being away from assigned locations, are handled by a mentor, in consultation with the team captain. Penalties for such offenses may include, but are not limited to, increased Scouting assignments and assignment to the Team Leader as their personal assistant.

**Severe offenses** such as substance abuse or law-breaking are to be automatically referred to the senior mentor. Possible consequences may include, but are not limited to, sending the offender home, expelling the offender from the team (the permanence of which is at the discretion of the senior mentor), and possible school board administration Disciplinary Referral. Offenders who are sent home incur the entire cost of the return trip.

Offenders do have one chance with which to lessen the sternness of their punishment. An offender may, before suspicion of wrongdoing is aroused, “confess” to any mentor the details of their offense(s). This confession, provided it occurs before external disclosure, will strongly influence the conveying authority to be lenient.

**Mentor Responsibilities**

* Mentors are responsible for motivating and engaging students in the meaningful activities in the designing, building, marketing, and operating of the robot.
* Mentors are responsible for creating an atmosphere of open communication where students feel free to think independently, voice their opinions, and take risks, as long as they do not impose a safety hazard. Mentors are expected to be active listeners and they are expected to make sure that everyone understands what is being said.
* Mentors are responsible for making sure that students are completing tasks on time. This includes providing a timeline for activities and trusting students to complete tasks while holding them accountable for their assignments.
* Mentors are responsible for creating an atmosphere of trust and respect.
* Mentors are responsible for making sure that a safe environment is maintained and safety procedures are being followed. If there is an unsafe condition, mentors must step in and restore safety to the situation.
* Mentors are expected to be positive examples to the students. This includes controlling offensive language as well as following safety procedures such as wearing safety glasses and using power equipment properly.
* Mentors are expected to facilitate instruction and have students do as much of the work as possible. They are to coach, teach, and observe students while remaining ready to step in as needed.
* Team Travel Eligibility requirements are applicable to mentors.
* Mentors are encouraged to read the FIRST® Mentoring Guide available at the FIRST® website ([www.usfirst.org](http://www.usfirst.org))
* Mentors must remain alert to vulnerable situations that they could be placed in. They are not to transport students in their own vehicle without written parental permission. They are not to be alone with a student in a vehicle or in a hotel room unless there is another student or adult present.
* Refer any student behavioral problems to the senior mentor and Team Advisor.

**Why is Your Team Unique?**

Team 1699 is very unique because we have girls on the team that are very involved in hands on work with the robot as well as the machine shop. Our team also welds the robot in its entirety by themselves once taught.

We have a spirit team that is in the process of building our own mascot outfit.

**Dissolution& Conclusion**

**Dissolution**

In the event of dissolution, any assets of the team that remain will become the property of the Town of Colchester, Connecticut.

**Conclusion**

We believe that our team benefits its members by giving them opportunities to develop skills for future education, innovation, and career opportunities. The contributions of our investors, teachers, and mentors are greatly appreciated.

**Team Contact Information**

Website: http://robocats.wix.com/team1699robocats

Team Email: team1699robocats@gmail.com

Facebook: https://www.facebook.com/Team1699Robocats

Twitter: https://twitter.com/Robocats1699

Tumblr: http://www.robocats1699.tumblr.com

**Main Contacts:**

Mentor Name: Keith & Lisa Deslandes

Title: Senior Mentor (s)

Email: deslakd@gmail.com

Phone: (860) 537-2957

**Team Meeting Information**:

Location: Bacon Academy High School; Colchester, CT

Times: Tues & Thurs: 7-9 pm, Fri: 7-10 pm, Sat: 9 am – 9 pm, Sun: 10 am – 4 pm

**Sponsorship Information**:

Checks should be made payable to: Bacon Academy Student Activity Fund

Donations may be tax deductible; please contact the team for more information.

**Mailing Address**:

Attn: Keith Deslandes

10 School Rd

Colchester, CT 06415