

Bedford eXpress

“Engineers on Track”

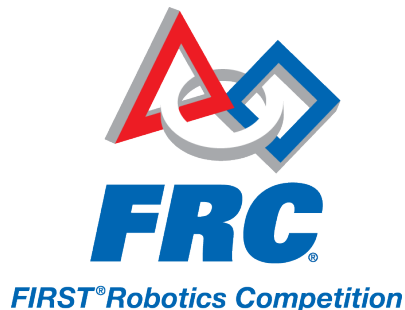
Team 1023



10th Anniversary

Team Handbook

2011-2012



Bedford eXpress

“On Track”

Team 1023

Mission Statement:

To provide Bedford High School students with an opportunity to learn and prepare for future STEM careers, to learn from mentors, to always have and exhibit gracious professionalism, and to reach out and involve the community in our journey.

CONTENTS

What is FIRST?	1
Gracious Professionalism:.....	1
What is STEM?	1
What is F.R.C. (FIRST Robotics Competition)?	2
Team Goals:	2
Team History:.....	3
Team Structure:	4
Student Leadership Committee:	4
Team Roles & Descriptions:	4
Major Roles:	4
Minor Roles:	5
Practice Schedule:.....	6
Expectations:.....	7
Meetings:.....	7
Competition Behavior:	7
Team Uniform:	7
Dress Code:	8
Respect and Gracious Professionalism:	8
Disciplinary Action:	8
Boyfriends/Girlfriends:.....	9
2012 Competitions:	9
Team Policy For NON-BPS Students:.....	9
Fundraising & Finances	10
Students Graduating or Leaving 1023:.....	10
Travel:.....	11
Parental Involvement:	11
Opportunities to Help:	12
Safety:	13
Mentors:	14
Student Awards:	14
Bedford Express Contacts:	14
Acknowledgements:	14

WHAT IS FIRST?

F.I.R.S.T. stands for **F**or **I**nsiration and **R**ecognition of **S**cience and **T**echnology. FIRST was founded by Dean Kamen in 1989. He wanted kids to see the rewarding aspects of careers in science, math and technology. He wanted to create a "sport for the mind" that combined engineering aspects with a sport-like competition. Dean Kamen realized that kids needed more inspiration to strive for careers in STEM fields and that these fields need recognition. These observations led to FIRST.

GRACIOUS PROFESSIONALISM:

The FIRST handbook states that a large part of the success of many teams and FIRST itself is the somewhat unique emphasis and approach to teamwork. The respect for peoples' ideas and methods is the foundation for overflowing brainstorming, innovation and invention which are all huge elements for scientific success.

Dr. Woodie Flowers, FIRST National Advisor and MIT Professor, states:

In FIRST, one of the most straightforward interpretations of gracious professionalism is that we learn and compete like crazy, but treat one another with respect and kindness in the process. We try to avoid leaving anyone feeling like they are losers. No chest thumping barbarian tough talk, but no sticky sweet platitudes either. Knowledge, pride and empathy comfortably blended.

In the long run, gracious professionalism is part of pursuing a meaningful life. If one becomes a professional, and uses knowledge in a gracious manner, everyone wins. One can add to society and enjoy the satisfaction of knowing that he or she has acted with integrity and sensitivity. That's good stuff!

WHAT IS STEM?

STEM stands for Science, Technology, Engineering, and Mathematics. STEM fields are any area of work, either academic or professional, that falls under one of the disciplines described by the acronym. FIRST robotics prepares its students for a job in STEM fields through hands-on experience and by working with mentors that have jobs in STEM fields.

WHAT IS F.R.C. (FIRST ROBOTICS COMPETITION)?

FIRST Robotics Competition is a unique competition. It combines all aspects of a sporting event with gracious professionalism and an academic challenge. Students must use science, math, CAD, and other technological skills to solve the yearly challenge. Also in order to succeed students will need to learn and use respect, leadership, budgeting, time-management, strategy, teamwork, problem solving and many other useful skills. These are skills that students will use no matter what career they choose.

Students are given six weeks to design, build, program, and test a robot that will perform given tasks. Students must also take care of several other things including a presentation and an essay for the Chairman's award, the highest award. Even though this is the highest award, it has nothing to do with a robot.

FIRST is not just a robotics competition. Students learn hands on with professionals in careers that the students may choose to study. Students learn mostly about gracious professionalism and see firsthand that winning is not everything. Most teams include around 30 students. Those students must figure out a way for all of them to work together and accomplish several tasks before the six weeks are up. FIRST is a competition unlike any other.

TEAM GOALS:

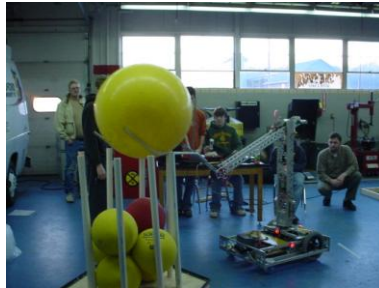
1. Provide a hands-on engineering experience for Bedford High School students
2. Show students careers in STEM fields
3. Allow students to work side-by-side with positive role models
4. Provide skills which will promote success (i.e. leadership, teamwork, creativity, time management)
5. Increase community awareness of STEM & F.I.R.S.T. Robotics
6. Promote Gracious Professionalism and other ideals of F.I.R.S.T.
7. Prepare students for leadership roles within their team and community
8. Support and mentor area J.F.L.L.(1st-3rd), F.L.L.(4th-8th), F.T.C.(7th-8th) and F.R.C.(9th-12th) teams
9. Have fun while learning

TEAM HISTORY:

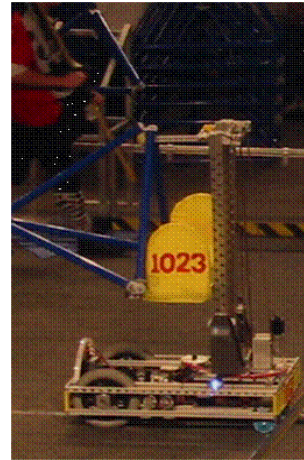
Bedford Express Team 1023 was founded in 2003 by several members of the Dana Unicorns F.L.L. team. They wanted to continue with FIRST but there was no team in the area. These students dedicated time to create Bedford Express. They presented to LaZBoy and received start up money. They convinced a teacher to become the coach. The Bedford Express was born. In 2003, Bedford Express won the Rookie All-Stars Trophy at both the Great Lakes Regional and at Nationals, crowning them the best rookie team of 2003.



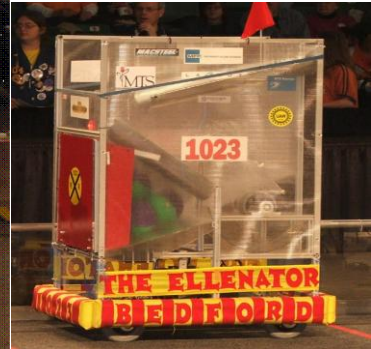
2003 - "Thomas"



2004 - "The Yellow Dart"



2005 - "Hurricane Bacon"



2006 - "The Ellenator"



2007 - "Shake 'N' Bacon"



2008 - "Baconator"



2009 - "Lingle Lander"



2010 - "Ringo Express"



2011-"POSKARBINATOR"

TEAM STRUCTURE:

STUDENT LEADERSHIP COMMITTEE:

Student Leadership is led by our captains and consists of our captains, secretary, treasurer and class representatives. Any team member interested in a leadership position may attend leadership meetings.

Captains:

Senior Captains: Shelby Beavers and Dan Smith

Junior Co-Captains: Bekah May and Logan Smith

Build Captain: Chris Sommers

Leadership Board:

Secretary/Treasurer: Kailey Doherty

Representatives: Alan Reed (Seniors), Andrew Gin (Juniors), Taylor Schafer (Sophomores), To be elected(Freshman)

TEAM ROLES & DESCRIPTIONS:

Team members take part in different roles for the team, but should consider time requirements for each role. Committees are responsible for leading the said activity. The entire team is responsible for completing the tasks. When possible, decisions that affect the entire team should include input from the team.

MAJOR ROLES:

Students will pick one major role as their specialty.

Student Mechanical Engineers – Team members who design, build, maintain, and improve the robot from a mechanical engineering perspective. Student team members are responsible for the robot chassis, manipulator design and robot build. Competition pit crew members are pulled from this group.

Student Electrical Engineers – Team members who design, build, maintain and improve the robot from an electrical engineering perspective. These team members maintain control systems, electrical systems, and robot programming. Competition pit-crew members are pulled from this group.

Culture Change Leaders – Team members working on creating and mentoring new FIRST teams, maintaining team sustainability, completing mentor and community outreach, spreading the values of FIRST in the community, and applying for awards. This group works closely with the Student Entrepreneurs Group. Competition pit-crew members and Chairman’s Award presenters are pulled from this group.

Student Entrepreneurs –This group, led by our treasurer, helps plan and implement our team budget. They help maintain accurate financial records. Students plan and help lead events such as 200 for \$20 and Sponsor Scavenger Hunt. This group will help prepare the PowerPoint for our business presentations and will be leaders during these presentations. They will reach out to area businesses to form partnerships. This committee is also in charge of brainstorming and leading all fundraising events and ideas.

Communications Specialists – Along with the Culture Change Student Leaders, this group works hard to “put our name out there.” They must write, email, or call newspapers, television stations, and other media sources, and let them know about upcoming events, including fundraisers and competitions. This group also plans social events for the team. This includes setting up the unveiling. For the unveiling they must set up speakers (from the team, sponsors or other), decide on decorations, refreshments, and media. This group must also plan the end of the year banquet and the team dinners after competition. Students also plan and help lead events such as Adopt-A-Road and Relay for Life.

MINOR ROLES:

Students may work on one or more minor roles.

Field Build: This group builds the practice field so that the drivers can practice driving the robot before competition. This takes place the first week of the build season. This group also makes sure our playing field is correctly set up for practices.

Safety: This group must make sure that all members of the team are following the safety rules stated in this handbook. They may also need to make logical decisions that are not stated outright in this book. If it seems unsafe, it probably is! Students from this group will be chosen for Pit Crew Safety Captain.

Rules/Updates: This group is in charge of maintaining a team copy of the rule book. They may be asked at any time by team members or mentors about a specific rule. The rules committee must be able to answer in a timely fashion so that the building process is not delayed. They must also check the FIRST website (www.usfirst.org) for updates to the rules. They are the only students who should be asking for clarification on rules on the Chief Delphi forums.

Drive Team: This group is made up of students that will be driving the robot during competitions, the human player/strategist and the drive coach. They must be able to attend all competitions and all practices especially the unlock times right before competitions. They need to be able to think fast on their feet, work well together, listen and operate the robot. Attendance and participation are considered as well the ability to follow coach/mentor instructions in a high-pressure/high-stress environment.

Strategy/Scouting: This group is in charge of creating the pit and match scouting forms before competition. They must also create a scouting schedule for competition. They also must enforce the schedule at the competition. Data entry and number crunching of collected data is performed by this committee at competitions.

Spirit: This group picks out and creates any trading items, team awards, good luck charms, and gifts to other teams. They also help create or design all banners, posters, fliers and other things that promote our team at competition. These things must be done before competition.

Pit Layout: This group plans out the layout of our pit at competition. They must decide on tablecloths, things to display, organization of parts and so on. It is vital to balance judges displays with safety with build so that we can address everyone visiting the pit.

Webpage: This committee is responsible for designing and maintaining the team website (www.bedfordexpress.org) & the district page (www.bedfordrobotics.com)

Animation: This group learns about animation and creates a short video that will be judged by other teams that submit an animation.

Photography: This committee takes pictures during meetings so that we can send them to our high school yearbook, newspapers, and create items for the team. In addition to just taking the pictures, the group must establish a place to share the photos with the team and other groups.

PRACTICE SCHEDULE:

Pre-season: Meetings will be every Thursday from 7 – 8:30 during September & October and 6:30 – 8:30 during November & December.

Kick-off begins in Novi, MI and ends at BHS..... Jan. 7, 2011 (all day)

Build Season: Mondays through Thursdays from 6:30 – 9:00 pm

Saturdays: 10 am – 2 pm, full team, 2 pm - ? as needed

ALL JV and Varsity team members must attend Thursday and Saturday practices unless arrangements have been made with a coach.

*Optional Sunday practices may be scheduled throughout the build season and are completely optional.

Unveiling: BHS Cafeteria..... February 16th, 2011 7:00 pm

Competition Season: Mandatory team meetings will be Thursdays from 6:30 – 9 pm (**Tuesdays on competition weeks**). Additional meetings will be scheduled as needed.

Banquet: Thursday, May 10th 7 – 9 pm – BHS Cafeteria

Post-season: TBA

Lunches: During Build season, we do team lunches on Saturdays. Each team member will be asked to provide part of a lunch on one Saturday in January or February. Lunch sign up will occur in pre-season. Parents are needed to help coordinate the lunches.

EXPECTATIONS:

MEETINGS:

1. Sign-in: All members must sign-in with the secretary at the beginning of the meeting. Failure to sign in may result in unrecorded hours. Unrecorded hours may limit your chances of traveling to competitions and earning your varsity letter.
2. Members are expected to attend all mandatory meetings and meetings within their committees. Members should notify the coach via email (bxcoach1023@gmail.com) prior to the meeting if they are unable to attend.
3. Members are expected to follow the BHS handbook at all practices. Disrespect to coaches, mentors or other team members will not be tolerated.

COMPETITION BEHAVIOR:

All members expected to fully participate in all required competitions. At all times during the competitions a team members actions are a direct reflection of themselves, their team, their school, their sponsors, and their families. At competition all team members are expected to show good sportsmanship and gracious professionalism.

During competitions, team members are expected to be completing team activities. Electronic devices that are not being used for team use, games, cards and other distractions will not be allowed at competitions.

If a team member cannot attend a competition due to financial hardship, or any other reason, please notify the coach as far in advance as possible. The coach will work with you to find any assistance needed.

TEAM UNIFORM:

At competitions and events, assigned team uniform must be followed and team uniform must be worn with pride and respect for what it represents. Any time you are wearing your Bedford Express t-shirts or sweatshirts you should be representing yourself in a manner that reflects positively on our team. At no time during competitions or public events should your team uniform be covered by a non-team cover-up.

Competition Uniform:

Thursday & Friday General Team: Bedford Express T-shirt & blue jeans, blue jean shorts, blue jean skirts or blue jean capri's.

Saturday General Team: Bedford Express 10th anniversary T-shirt

Drive Team: Bedford Express T-shirt, bottoms to be determined/Coordinated by drive team

DRESS CODE:

All robotics activities, including fundraising events, will follow the school dress code policy. If it is not appropriate for school, please do not wear it to practice. Also, consider safety requirements when dressing for practice.

RESPECT AND GRACIOUS PROFESSIONALISM:

1. Every team member is expected to act with gracious professionalism at all times.
2. Gracious Professionalism refers to respect for all people and belongings, being on your best behavior at all times, showing good sportsmanship, a positive attitude, speaking with a clean vocabulary, being polite and friendly at all times, and dressing in appropriate attire.

DISCIPLINARY ACTION:

1. If a problem arises with the behavior of a student, he/she will be asked to explain the events and circumstances surrounding the situation to the coaches. Depending on the severity and the seriousness of the behavior, the student may be given a verbal warning, put on probation with a plan of assistance, or dropped from the team. In all cases, the situation will be rectified in a timely manner to the satisfaction of the school administration and coaches.
2. The coach and mentors reserve the right to discipline a team member as necessary for safety and the overall good of the team. Parents will be informed of any severe or continual disciplinary actions as soon as possible.
3. Membership on the Bedford Express Team is a privilege. All members are expected to take membership seriously. As a member everyone is expected to pitch-in at all times. No one should have to seek out a team member and ask them to participate. If a team member is asked to do a task and/or help and they hesitate or do not want to comply they may need to consider if they want to continue as a team member. If they continue to be uncooperative they will be placed on probation. Anyone placed on probations will not be eligible to be on the team during build season.
4. Please note that students may be ineligible to attend competitions if they have poor grades, excessive absences (both school and team), and/or other discipline referrals. Grades, attendance and discipline records will be checked periodically.
5. Decisions are final. Although the team is an academic team with a focus on engineering, it will be operated similar to an athletic team. Decisions made by the team leaders will be considered final. Questioning these decisions should be done in a private setting. When making difficult decisions, the goal will be to consider all viewpoints and make a decision based on the different views and what best helps the team. When a decision involves a team member, that person's overall contribution to the team will be part of the decision.

BOYFRIENDS/GIRLFRIENDS:

If a relationship develops or is ongoing during robotics season there are certain guidelines that must be adhered to at all times when involved in team activities. At all times (including practices), handholding, hugging, kissing and other expressions of affection are prohibited. In other words, a couple should appear to an onlooker as part of the team, not a couple.

2012 COMPETITIONS:

BX has registered for the following tournaments. District tournament acceptance does not happen until later this year. These dates may change.

Detroit District: March 16-17--The Pit Crew will be setting up on the evening of the 15th

Livonia Churchill District: March 30-31--The Pit Crew will be setting up on the evening of the 29th.

State Championship Tournament, EMU: April 12-14--If we qualify, the pit crew will set up on the evening of the 11th and will attend Thursday to set up and practice. The full team will attend Friday – Saturday. Please note this tournament is during SPRING BREAK. If you wish to be excused from this competition because your family has vacation plans, you MUST let us know by Dec. 1, 2011 to remain eligible for Varsity credit.

World Championship Tournament, St. Louis: April 26-April 28. We would travel to St. Louis via charter bus on the 25th and travel home on the 29th. Travel cost is \$500 based on Quad Occupancy. A \$100 non-refundable deposit will be due on Dec. 1st. \$100 payments will be due Jan. 12th, Feb. 2nd, March 2nd and March 30th. Fund raising is available to offset travel expenses. In the event we do not qualify for Worlds, all cash paid will be refunded and all travel funds money restored to your account for next year **after** any non-refundable fees have been paid.

MARC Tournament: Summer Off-Season Tournament (Late June)-The purpose of this tournament is to train new drivers, introduce rookies to the FRC and to get more experience with our robot. This is an optional tournament. If you are interested in driving you should try to attend.

TEAM POLICY FOR NON-BPS STUDENTS:

1. Admission of outside students will be made at the discretion of the coach and the administration of Bedford Public Schools.
2. Non-BPS students allowed on the team, or visiting the school for mentoring, will be subject to the same school rules applying to Bedford students.
3. If students from schools choose to leave Team 1023 all team assets remain with the Bedford Public Schools. These assets include the team number, team name (long, short and nicknames), team logo, tools, materials and funds.

FUNDRAISING & FINANCES

Funding of the team comes in four sources; major sponsors, minor sponsors, fundraising and team member contributions. Please support our business sponsors whenever possible.

1. Major Sponsors: They are companies, groups or individuals who contribute at least \$1,000 in funds, supplies, &/or services to our team. They supply Bedford Express with the majority of the funds used by the team. Major sponsors are solicited through team members, parents and other current sponsors. 2011 Major Sponsors of Bedford Express include RD Tool & Die, La-Z-Boy, Promedica, Avaya, OTP Solutions, and The Sommers Family.
2. Minor Sponsors: They are companies, groups, or individuals who contribute at least \$500 in funds, supplies, &/or services to our team. Minor sponsors are solicited through team members, parents and current sponsors. Minor Sponsors of Bedford Express currently include CCI Systems, Frogtown Books, Dave White Chevrolet, VDS, ORT, and Emmett Beavers/Sylvia Clark.
3. Fundraising: Bedford Express relies heavily on fundraising as a mean to raise money for competitions and parts. Fundraisers are opportunities for the community and others to help out by purchasing items or donating to the team. Basic Bedford Express Fundraisers include candy sales, pizza sales, scrip, Kroger Cares Reward Program, Elder Beerman Community days, Light Bulbs, car washes, and any other ideas that students come up with. ALL members are expected to assist with team fundraising. Fundraising activities occur often throughout the year. Fundraising is a vital step in the team's success.
4. Team Member Contributions: These contributions are funds supplied by team members. These contributions are used for purchase of food, team shirts, and travel/lodging to competitions. Each team member is required to pay for their travel, food and uniforms. However, if financial difficulties are preventing a team member from participating on Bedford Express, he/she should consult with the coach. No student will be denied membership due to lack of funds.

STUDENTS GRADUATING OR LEAVING 1023:

When a student leaves the team through graduation or by choice, any remaining funds in travel accounts will be transferred to the team budget for the following year. This will happen on September 1st of every year. If you are graduating but have a younger sibling coming to the team, you may request your balance be transferred to them. An email request MUST BE MADE prior to Sept. 1st to retain your funds. Money transferred to the general budget will not be pulled back out.

TRAVEL:

Travel Behavior:

Team members are responsible for their actions during competition. Always remember that an individual's behavior reflects on the team, the sponsors, Bedford Public Schools, and him/herself. Whether a team member is at the competition facility, an amusement park, a hotel, or at restaurant, team members should remember that they are an integral part of Bedford Express Team 1023 and their behavior should reflect the respect they have for him/herself, the team, Bedford Public Schools and for others.

Travel Requirements:

1. Completion of varsity/JV membership requirements will determine a team member's eligibility to travel with the team. Grade point average and school attendance will also be factors. Team members will be notified after the 6 week build season which competitions they are eligible to attend.
2. Travel fees must be paid or arrangements made with Ms. May by the due date or the team member may become ineligible to travel with Bedford Express Team 1023. If you prepay for a competition, and are ineligible to attend it, the money you paid will be reimbursed to you. Any fundraising done for said trip will default to future 2012 travel or default to the team budget.

PARENTAL INVOLVEMENT:

Team 1023 encourages all parents to participate with the team when possible. Some parents will become team mentors due to their involvement. Others will serve as volunteers for special projects. All parents make a commitment to our team just by providing transportation to our practices.

1. Parent Mentor: Parents who fulfill all expectations of team membership, including meeting attendance, active team participation, and associated financial requirements. Team Mentors must attend the majority of the meetings and will get full team membership privilege. Parent Mentors roles are outlined under the category Mentors.
2. Parent/Adult Volunteer: Parents who assist the team on a certain project, but do not meet team member requirements. Examples may include building the field, obtaining sponsorships, food deliveries, supporting the team, etc. Team volunteers do not enjoy full membership privileges, but are awarded team affiliation. Volunteers are welcome to attend meetings whenever it is convenient for them.
3. Parent/Adult Team Supporter: Parents who attend events to show support for the team are considered Team Supporters. Support includes simply cheering for the team at competition events or participating in team volunteering and fundraising activities, and transporting your student to and from practices.

OPPORTUNITIES TO HELP:

- **FIRST Volunteers:** We must provide 2 volunteers per competition we attend. Volunteers work for most of the tournament but are provided with lunch, an inside glimpse at competitions, a t-shirt and a chance to leave your post to watch our matches.
- **Chairman's Award:** Help the Chairman's group work with the Chairman's Award.
- **Spirit:** Help with spirit orders, button making, and various spirit items.
- **Sponsor Banner:** Help update and maintain our sponsor banner
- **Travel Snacks:** Help with snacks for travel
- **Unveiling Planning:** Help plan the unveiling/media night
- **Banquet Planning:** Help plan the banquet
- **PIT Chaperone:** Watch over our pit during some of our matches to make sure nothing is stolen and to encourage judges to come back when the kids are here
- **STANDS Chaperones:** Watch over our stands between some of our matches to make sure nothing is stolen and to help us keep our seats
- **SCOUTING MENTOR:** Watch over our scouting process during competitions and help coordinate information coming in from the team and going out to the coaches
- **DRIVERS:** Transport team members to and from competitions.
- **Competition – School Signs/Locker Signs:** Create, print and hang locker signs before competitions
- **Little Caesars Pizza Pick Up:** Pick up our pizza orders twice a year at Toledo Tech Academy and help pass them out
- **Lunch Coordinators:** Help plan the build season meals with the students that are bringing food that week

SAFETY:

- Wear safety goggles at all times when in the shop, in the pit, working on the robot, or whenever tools are being used
- You must be supervised while using any and all tools (no matter how simple the task or how experienced you are) Students are NOT allowed in any shop area unsupervised.
- Always ask for help whenever you need it (lifting heavy equipment, lifting the robot, using tools, etc.)
- Do not use broken or damaged tools! If you damage a tool, please let a coach know immediately so that a replacement can be purchased for the shop teachers.
- If you are injured, get help immediately! All injuries should be reported to a coach no matter how minor they may seem.
- First Aid kits should be out and readily available at all times when working with any tools.
- Always use the proper tools for the specific job at hand (don't use a screwdriver as a hammer, cut PVC with an X-Acto blade, etc.)
- Always wear close-toed shoes when working in or around the robot, in the shop, and in the pit.
- Make sure to always wear proper safety equipment for the job at hand (safety glasses any time you are near the robot or tools, gloves when working with Kevlar or lifting the robot, etc.)
- Be aware of your surroundings (take care when carrying long pieces of 80/20 etc.)
- Make sure you are operating under ideal working conditions (don't work on the bot in the dark or in a dirty, unorganized area)
- Do not eat or drink near the robot, electrical/delicate equipment, or dangerous chemicals
- No horseplay (don't ride, jump on, or do stunts on equipment)
- Always clean up your workplace when you are finished in order to maintain a safe, clean working environment for the next person or group
- Keep hair tied back (and if needed, tied up to prevent long pony tails from getting tangled with equipment)
- No rings or dangling jewelry or loose clothing can be worn when working on the machines or with the robot

- **Always use good judgment; it's just common sense!**

Each team member must abide by the above rules. Failure to do so could result in ineligibility.

Please remember that responsibility of safety does not only lie with the safety captain, it lies in each and every member of Bedford Express.

MENTORS:

Team mentoring provides for a vast amount of rewards but it also requires a high level of responsibility. Since the actions of mentors are reflected onto the students whom they mentor, appropriate conduct is an absolute must. Patience and professionalism are key characteristics of mentorship. The primary role of a mentor is to provide the opportunity to share bits and pieces of knowledge and experience that each has gained in through life. It provides an excellent opportunity to improve skills, learn new things, and be challenged. The official F.I.R.S.T. mentoring guide will be handed out at a mentor meeting and can be found on the F.I.R.S.T. website (www.usfirst.org).

STUDENT AWARDS:

Bedford Express strongly supports positive reinforcement and at the end of each season, at the team banquet, awards will be presented to students possessing extraordinary achievement.

Varsity and Junior Varsity awards will be presented to those that have earned them along with other team awards.

BEDFORD EXPRESS CONTACTS:

Coach, Debbie May – bxcoach1023@gmail.com

Coach, Nick Poskarbiewicz – nick.posk@gmail.com

Assistant Coach, Hannah May – hannah.may@rockets.utoledo.edu

ACKNOWLEDGEMENTS:

Team 1023 would like to thank the following teams for sharing their handbooks with us!

- Warren Robotics Team 829, Digital Goats
- Visteon Team 862, Team Lightning Robotics
- Mingo County Robotics Team 1249
- Shrewsbury Public Schools Team 467, Duct Tape Bandits
- Goddard Robotics Team 1719, The Umbrella Corporation