Robotics Handbook

Robotics Guidelines: 2015-2016 School Year

Below you will find an outline of your responsibilities as a Robotics parent and student, important dates and events, areas where we would greatly appreciate your help, and other informational items.

Part 1: Information for Parents

I. Parent Responsibilities

While students are the active members of the Notre Dame Robotics Team, parents are crucial to the success of the Robotics program. We consider parents to be part of the team, providing support to students and mentors.

A. **Program Fee of $100:** This fee covers a T-shirt, workshop fees, end of the year gifts and other team activities for each student.
Fees are to be paid on-line. Link is located on Robotics page under Student Affairs submenu on the Notre Dame Website

B. **Forms and Paperwork:** Parents need to fill out general permission forms that allow students to participate in a variety of activities involved with robotics for the year. Specific permission slips and release forms will be needed for each competition or travel activity outside our local area. These will be available on the school website. Look for Robotics under the Student Affairs menu.

C. **FIRST STIMS:** Parents need to do an electronic waiver for their student on the FIRST Website. This registration must be completed by October 9.

D. **Food:** This is Notre Dame! Somehow Janksters always have healthy appetites on weekend work days during build season and competition season. We rely on parents to provide meals for students and mentors.

    1. **Meals:** During the build and competition season we provide a community meal for the students and mentors. The responsibility for meals is shared by two people. We ask each family to contribute to three meals during the year, including the build and competition season.

Nutritious food is vital to keeping brains and bodies functioning at their best. Please do your best to provide food that is healthy. A list of suggestions and idea for meals will be made. We try to be conscious of dietary restrictions and we will let you know of any. Sign-up for meals will be posted on ND's iVolunteer with other occasional requests made by email. If you are unable to provide a meal we ask for a monetary contribution so we can purchase food.

2. **Potluck contribution:** In addition each family will be asked to contribute a potluck item for one of the Jankster community events.
3. **Snacks:** Students can always use extra energy at the end of the school day. We welcome fruit or non-perishable food items during the regular meeting times. Please keep sugar items to a minimum.

E. **Transportation:** Students will need to make arrangements to attend events away from Notre Dame. We do our best to arrange carpools and share driving duties. Requests for drivers will be made by email or during team meetings.

F. **Supporting Your Daughter:** Build and competition season can be demanding on a student's time. As a parent you can help your daughter with time management, rest and stress. You know your daughters best, but you can contact Ms. Carrillo if you have any concerns.

G. **Supporting the Team:** Notre Dame Robotics is a growing program that depends on parental support. There are a variety of support tasks that parents will be asked to assist with. Please plan to join and support us at competitions and other team events.

H. **Donations and Connections:** The team is always in need of supplies, tools and resources. As parents you may have resources available via employers, business associates, family or friends. We can use direct donations, donations in kind, or use of space and materials.

I. **Open Communication!** Please be sure to contact the Coach or Mr. Bracco with any questions or concerns. Clear communication in a timely manner will help the coach and mentors to work most efferctively with students. The coach will send regular e-mail updates, so be sure that we have your correct e-mail!

II. Informational Items

A. **Meeting Schedule:** During the Fall, the team meets Tuesdays and Thursdays from 3:00 – 5:00pm in D107. All attempts are made to keep to this schedule except when we need to work around a presenter's schedule or there are special events at ND. In the fall there are additional Friday and Saturday training workshops, competitions and outreach activities.
The schedule changes during build and competition season but returns to Tuesdays and Thursdays after all building is completed.

B. **Build Season Schedule, January 9 - February 23:** Students are given six weeks to design and build their robot. With 43 days to complete a working machine, maximizing

the times to work on the robot is crucial. As such, the team will meet on Tuesdays, Thursday evenings, Fridays, Saturdays and Sundays during the Build Season. The team will also meet on weekdays that school is not in session. The participation of each team member is vital during this time.

There will be days that the meeting time is extended or changed in order to accommodate training, usage of special equipment or looming deadlines. Every effort is made to schedule study time during long work weekends.

C. **Competition Season, March and April:** The team competes twice during the six weeks following the Build Season. During this time the team will modify the Build Schedule based on the tasks that need to be completed in preparation for Regional Tournaments.

D. **Workshops and Training:** We do our best to use the Fall to prepare students with skills that will help them during the build season. Some of these trainings are held during regular meetings, as well as Fridays and weekends at Notre Dame. Additionally, other workshops offered at other schools and locations will be available to the team. There will be opportunities for some students to be trained on specialized equipment, as is needed by the team, which might be scheduled outside regular meetings.

E. **Cal Games:** This event is a Bay area competition in the off season, usually in October. It is an opportunity to train new members, make modifications to last season's robot and try new strategies. It is also a good way for new members to experience a Robotics competition. Students are required to attend and will have active roles during the competition.

F. **Kick-Off:** Students will attend a Kick-Off event either at SJSU or Notre Dame on January 9, 2016. This is where the team learns the challenge for the 2016 season. All students are required to attend.

G. **Robot Reveal Night:** On the weekend before we "bag and tag" our robot, the team hosts an evening for family and friends. The team shares the process of building our robot and reveals the robot for all to see. All students are required to attend.

H. **Silicon Valley Regional**: We consider this our "home" competition since it is held at the San Jose State Event Center. All students are required to attend. This is a celebration of all the hard work students put in during the build season. We encourage parents, family and friends to come and cheer for the team. This event is generally the first weekend in April.

I. **SVR Team Social:** On the Friday of Silicon Valley Regional the team has made it a tradition to invite some teams that have traveled from out of the area. In the past we have hosted teams from Mexico, Brazil, Columbia, China and Madera. We will ask for food contributions to accompany a pizza dinner for all the students, coaches, mentors and other guests.

J. **Away Regional:** The team will travel to a competition outside of the San Jose Area sometime in March. This competition allows our team a second opportunity to compete, work through problems and challenges, and make improvements to the robot.
The away regional involves many logistics: transportation, lodging, and food. We ask parents to help with driving, chaperoning, food organization and other aspects of the trip and event. The costs associated with this second regional will cover food, lodging, and transportation for the students as well as the costs for the coach and mentors to accompany the team.

K. **Demos:** Throughout the year, especially in the off season, the team is invited to demonstrate our Robot at various venues. Students who are invited to attend these opportunities will be determined by the Coach. Students must, however, help support 2 demos including an FLL demo at Intel in November.

L. **World Championships:** Qualification to the FIRST World Championships is achieved by the team winning a regional or receiving either the Chairman's or Engineering Design Award. The Championships are held in St. Louis, MO at the end of April.

M. **Travel guidelines**: Students wishing to travel to an away tournament must be in good academic standing. Students are responsible for covering the cost of travel, food and lodging for the event. The amount will vary depending upon the distance to the event ($200 to $400 for a Regional event, World Championships $1200).

We try to make lodging arrangements as early as possible to ensure the best possible rate. Students are required to meet the deadline for informing the coach of her attendance and making a deposit for the trip. Students missing the deadline will need to make their own arrangements.

Part 2: Information/Guidelines for Students

I. **Communication:** Email is the primary method to notify students of team activities and annoucements. Students should check their school email on a regular basis. Students are expected to respond to email within 24-48 hours when requested in the email.

II. **Attendance:** Robotics is a year round activity that takes a lot of dedication. The team depends on the regular attendance of members to make decisions, complete projects and plan activities.

A. **Meeting Schedule:** Pre-build season meetings are held on Tuesdays and Thursdays from 3:00pm-5:00pm in D107. Friday and Saturday activities are also scheduled, approximately one per month.

B. **Absences:** Students are responsible to inform the coach and student leaders of significant absences or changes in schedule.

C. **Build Season Schedule**
Tuesday: 3-6pm
Thursday: 5-8pm
Friday: 2-6pm
Saturday: 9am - 5pm
Sunday: 10am - 5pm
The team will also meet on days when classes are not in session such as holidays and semester break.

C. Students are responsible for signing in and out of each meeting. Documentation of attendance is handled by the Team Administrator. The student sign in sheet will be used to determine which students are eligible for class credit.

D. Attendance is one factor used to determine a student's opportunities for leadership, Pit crew and Drive team roles.

E. Students must have a **minimum attendance rate** of 50% for meetings and workshops during the semester to be qualified as a team member. Inability to meet this requirement must be discussed with the team coach.

F. Students' participation in 75% of meetings and workshops during the semester are eligible to receive school credit.

G. If a student plans to be involved less than 70% of the time, she should work out a regular schedule with the coach.

III. Competition

A. Students participating in competition(s) will miss 1 or 2 days of class, occasionally 3. It is the student's responsibility to notify teachers about her absence as well as be up to date on class work, tests, quizzes and homework. Teachers will allow students time to make up school work and tests in a reasonable time frame.

B. <u>All students are required to attend CalGames at Lynbrook High School and Silicon Valley Regional at San Jose State.</u> Inability to meet these requirements must be discussed with the team coach.

C. All students are expected to be active participants at the competitions. There are many tasks that students do during competitions. Tasks are assigned based on need, experience and learning opportunity.

D. Assignments of tasks will be determined by the Coach, mentors and student leaders.

E. Students participating in any overnight competition are required to cover their own travel costs.

IV. Pit Crew and Drive Team Members

A. During the competitions there is a limit to the number of people allowed in the Team's pit area. A set number of students will be selected to be part of the Pit Crew.

B. A Drive Team is selected for operating the robot on the competition field. This is usually made up of four students: Student Coach, Driver, Game Controller and Human Player.

C. Selection to the Drive team and Pit crew is determined by several factors in the best effort to ensure the Team can handle the various situations that arise during the competition. Among the factors used to determined selection are attitude, attendance, teamwork, special skills or roles.

D. The Coach will make the final determination of the members of the Drive Team and the Pit Crew.

E. Students not on the Pit Crew or Drive Team will be assigned roles related to scouting, team representation or competition support. All students are engaged in tasks during competitions.

V. Behavior Expectations

A. Students are expected to follow the Notre Dame Student Handbook regarding conduct at all times during meetings and outside activities.

B. Students must sign in and out at all meetings.

C. Students are expected to be focused and active participants during meetings and workdays. Students who are distractions or seen engaged in non-robotics activities during meeting will be asked to speak to the Team Coach.

D. **Safety**: Students must use safety protocols at all times. These will be explained by Coach and Safety Captain. FIRST holds safety as a high priority not only to prevent injury and damage but to encourage good work habits.

E. Students are expected to show Gracious Professionalism with teammates, mentors and towards other FIRST teams and students.

VI. Student Leaders

A. Leadership: Part of being a student leader is being an example to others. Student leaders are expected to demonstrate positive attitude, reliability, and adhere to safety practices. Student leaders set the tone for the team.

B. Student leaders train and guide students in their committee or area of competency.

C. Student leaders work closely with the Coach and mentors to determine committee or team objectives and agenda.

D. Student leaders will be asked to attend extra meetings and do work outside of regular meeting times. Student leaders will make sure classrooms, workroom and pit are left in a clean and organized condition at the end of the meetings.

E. Student leaders will be expected to represent the team and school at events such as Open House, Information Meetings and other FIRST events.

VII. Robotics Class Credit

A. To receive credit on Transcript students must attend 75% of meetings and workdays, attend 3 Training Workshops, help facilitate 2 demos, attend CalGames and the Silicon Valley Regional, and maintain a Robotics Notebook.

B. 2.5 units of credit is given for each Semester. Each Semester is independent of the other.

C. Students will be asked to keep a Robotics Notebook documenting the work they are doing during meetings. This can include notes from research, experiments, brainstorming notes, meeting notes as well as speakers and workshops.

D. Students will be asked to turn in their notebook to the Team Coach, at least once during each of the three grading periods of the semester.

Thank you for your whole-hearted support of Notre Dame Robotics! I look forward to all the great things we will be doing in the 2015 -16 season!

Sincerely,
Marta Carrillo
Robotics Coach
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