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**2017 AWT RoboBots Program**

**Basic guidelines for company sponsorship:**

* Assign one main point of contact that will keep communication flowing between the school, the teacher, the company and the AWT. This person is responsible for completing paperwork and distributing notices to the team.
* Assign a hands-on mentor (or mentors) that will work directly with the kids (for ideas, manufacturability, drawings, prints, etc – will also work on the floor with the kids, procure material, set machines up, supervise kids while they are on the machine, assembly, testing, safety throughout the program.

Procure (and pay) materials for the project:

* Raw materials: electrical components, wheels, materials used in building the bot, drive units, programming of drives.
* Some processes of manufacturing may need to be outsourced depending on the company’s capabilities. Please be sure to allow time and cost for outsourcing. Involve the students in the outsourcing process as much as possible.
* After kick off meeting, host a ‘first nighter’ within the next few weeks. **Important**: be sure to invite parents for a company tour and discuss schedule and expectations for the year. We found that by allowing the parents to come in to the facility to see where their child will be working and meet the people they will be working with, any concerns parents may have had about their child’s participation were addressed before the start of the program.
* Assist and coordinate design and procurement of competition t-shirts, displays, documentation, etc.
* The company sponsor is responsible for teaching the students about their company’s safety policies and procedures and ensure they are being followed at all times \*\***Bots must be contained in a test cage when operated**– **NO** **EXCEPTIONS**!. Bots must stay on company property and cannot be taken to school (or off premise) to be worked on by the student.

**IMPORTANT THINGS TO REMEMBER:**

* Emphasize teamwork – utilizing each team member’s unique skills for the benefit of the group. Maximum recommended number of students per team is 6-10. Each team member is expected to be fully involved in every step of the process.
* Set expectations for attendance and be sure the students know the consequences of poor attendance. These expectations and consequences should be discussed with the teacher/coach so that everyone is on the same page prior to telling the students.
* Keep up the enthusiasm throughout the process – kids can get ‘burned out’ if they get stuck on a problem. Help them work through things but don’t give them the answers – let them figure things out on their own.
* The machining and troubleshooting stages will take longer than you expect. Try to keep the project moving forward from the very beginning and keep the team on task.
* Feel free to assign homework to the kids to work on at school or between work sessions. Be sure to let the teacher/coach what has been assigned so they can follow-up and make sure the kids get the work done on time.
* Encourage kids to photograph/video process for their end project.
* Be sure to test drives and weapons as soon as possible to identify any problems early on. All testing must be done in a test cage – no exceptions!
* Review NRL rules to ensure students understand the guidelines and regulation of the competition.
* Make sure students are able to assemble, reassemble, repair, etc. their bot. Adult sponsors/coaches are not allowed to touch the bot during the competition – in the pits or the cage. You can watch and advise but they are the ones doing the work.

**Make sure the team hits the following target dates!**

**ASAP** – (*first session*) discuss design types, attempt to narrow down to 2 chassis styles and 2 weapon styles. Encourage students to study past AWT or NRL competitions to see how different styles of bots perform.

**November** – have initial plan/design complete (suggest having backup ideas for components in case the initial plan is unrealistic.

**December** – have all the materials purchased. Be sure to include extra materials when ordering for spare parts or mistakes.

**January** – 70% complete (build)

**February** – 100% complete (build) and begin testing phase

**March** – test and trouble-shoot, fine tune weapons

**April** – practice operation of the bot

**April 28th** – bring bot to Lakeland for check-in and safety inspection. The bot cannot be removed after it is approved by the safety inspection team (they will be secured at the competition site). Team documentation will be presented at the team interview.

**April 29th**  – work in pit with the team – plan to be there all day and guide any repairs caused by battle-damage!

**Basic guidelines for the school coach:**

*\*Remember: you do not need to be knowledgeable about manufacturing or engineering*. The company sponsors will take the lead. However, we ask that you be an active participant at the on-site visits so you can assist with any questions the kids may have during the time between sessions or homework.

* **Remind students that they are making a 6-7 month commitment when they join the team!**
* **Make sure students realize how much time and money the company sponsor is donating to support the team. Students need to show their respect and gratitude by following through with tasks, completing homework on time, attending all work sessions and put in the effort to move the project forward. This is the students’ project, not the company sponsors’ project.**
* Attendance expectations should be similar to a job – they need to be on time and ready to work when they are scheduled. This team should be a priority above other commitments or activities and all team members should make every effort to attend each weekly meeting unless they have made arrangements with their teacher or company sponsor.
* Just as with any club or sport they may be involved with, they are participating in this program as representatives of their school and should conduct themselves accordingly.
* Make sure all members of the team are involved – help them identify each team member’s strengths. Encourage the team to assign a lead person per task(s); the lead will be held accountable for the completion of their task(s). Create a spreadsheet with each team member’s name, the area they are accountable for and any action items they need to follow up on. Share this list with the company sponsor - as well as parents - to make sure everyone is aware of their duties and engaged in the process.
* Ask students to bring their school/sports/activities calendar to the first-nighter at the company site to assist in scheduling.
* Make sure the students work on any assignments or tasks in between on-site sessions so they are prepared and ready to work. If they are not doing assignments or showing up prepared at the company site, there should be a consequence. They made a commitment to the team and they must take responsibility for themselves by completing tasks assigned to them on-time.

*Please note:*

*\*Rich Ditto (AWT RoboBot Co-Chair) will be making contact with the team throughout the year to make sure target dates are being hit. If your team runs into any problems or any issues come up that requires immediate attention, please email him directly (*[*Rich.Ditto@fredon.com*](mailto:Rich.Ditto@fredon.com)*) or call (440) 951-5200.*

*\*This list of expectations should be used for reference only.*