Coach's Goal Tracker

FIRST® is a global robotics community that prepares young people for the future.

Revision History		
Revision	Date	Description
1.0	10/15/2024	Initial Release

Contents

Introduction

What is FIRST® Tech Challenge?

FIRST® Tech Challenge is a student-centered program that focuses on giving students a unique and stimulating experience. Each year, teams engage in a new game where they design, build, test, and program autonomous and driver operated robots that must perform a series of tasks. Participants and alumni of *FIRST* programs gain access to education and career discovery opportunities, connections to exclusive scholarships and employers, and a place in the *FIRST* community for life. To learn more about *FIRST*® Tech Challenge and other *FIRST* Programs, visit www.firstinspires.org.

Gracious Professionalism®

FIRST® uses this term to describe our programs' intent.

Gracious Professionalism® is a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community.

Watch Dr. Woodie Flowers explain Gracious Professionalism in this short video.

What is the Coach's Goal Tracker?

The Coach's Goal Tracker has been designed to guide your rookie team through the *FIRST* Tech Challenge Season!
- Coach's Goal Tracker contains a 6-week plan to help keep a rookie team on track for competitions.
- It assumes that you will meet 90 minutes, twice a week for a total of 6 weeks. The average team meets for more hours than this so please use this as an outline of your weekly meeting and add to this, as needed.
- Your timeline may vary depending on your region's event schedule. You may need to make adjustments to the Coach's Goal Tracker in order to be prepared for your team's competitions.

Pre-Season Activities

Before the season begins there are a few steps you will need to take as a new coach. Please see the checklist below:
- Register with *FIRST*. Directions on registering can be found here.
- Order robot kit by May or June to ensure that your team receives it before the start of the season.
- Familiarize yourself with the resources available to you through the FIRST Tech Challenge Resource Library.
- Review the Mentor Manual.
- Plan and begin student recruitment.
    - You can find resources for team outreach and marketing here.
- Identify a workspace for the season.
    - This can be a classroom or another designated space that allows access to tables, electrical outlets, internet access, and storage space.
- Add important season related dates to your calendar (i.e. Season Kickoff and event dates).
- Be creative! Create a team identity!
- Take some time to discuss the *FIRST* Core Values and *Gracious Professionalism*® as a team
- Brainstorm potential sponsors with team and begin to reach out to them.
    - Fundraising resources, including Team Grant Opportunities can be found here.

During the Season

Week 1
- Read the Competition Manual found on the Game and Season Materials page. This must be read before your team competes, as it contains information on how events are run and competition rules. Students can be assigned the reading and debrief the rest of the team.
    - Updates to the Competition Manual will be made bi-weekly. Be sure to check into the Game and Season Materials page to keep up to date.

- o [Sign-up](#) for team update emails
- Discuss season and robot building goals.
- Begin to build robot
  - o [Robot Building Resources](#)
- Remember to have team members take notes on their progress and plans for their Engineering Portfolio
  - o Teams should read about the different [judging awards](#) to better understand and identify what awards they would like to focus on.
- Carve out some time to celebrate your team's successes!
  - o Celebrate the start of your season, good teamwork, and your team's progress on building the robot!

Week 2

- Continue to read [Competition Manual](#) and check on any new updates to the Competition Manual. This must be read before your team competes, as it contains game specific information and rules. Reminder, students can be assigned the reading and debrief the rest of the team.
  - o You can find all the Game and Season materials [here](#).
- Continue to build robot
  - o Begin programming. Programming will depend on the robot build's status, but it is important to begin researching and programming as soon as possible to stay on track for competition.
  - o Programming Resources can be found [here](#).
  - o For new teams, we suggest using the [programming blocks](#).
- Celebrate the end of week 2 and all your team's accomplishments!!!

Week 3

- Continue to build robot
  - o Brainstorm ideas for customizing your robot for the season's game.
- Continue to program
- Be sure to check out the Q&A forum:
  - o [Q&A for game rules](#).
  - o [Q&A for technical questions](#).
- Begin working on your Engineering Portfolio. You will need an Engineering Portfolio in order to be considered for the Think, Control, and Inspire awards.
- Share team's successes with sponsors.
  - o It is important for the team to give updates on their progress to encourage a sustainable relationship with their sponsors.
- Celebrate the end of week 3 and all your team's accomplishments!!!

Week 4

- Be sure to check out all the [team updates.](#) These updates can also be found on the [Game and Season Materials](#) page.
- Check out the [Weekly Tech Tips](#) for extra helpful robot building tips!

- Continue to build robot.
- Continue programming.
  - As the robot build is completed, programming the robot should be prioritized. You should aim to complete initial robot programming by the end of this week or the beginning of the next week to have sufficient time to test code and debug.
- Reminder: Be sure to check out the Q and A forum:
  - [Q&A for game rules](#).
  - [Q&A for technical questions](#).
- Begin working on your judging presentation.
  - This is only necessary judging is included in the event you are competing in.
- Celebrate the end of week 4 and all your team's accomplishments!!!

Week 5
- Begin to check over robot functions
- Review Competition Preparation Resources.
  - Visit the "[Preparing for Competition](#)" page.
  - Use the [Inspection Checklist](#) to verify your robot is competition ready
- Create your team identity with accessories for team members and the robot!
- Celebrate the end of week 5 and all your team's accomplishments!!!

Week 6
- Do last minute test and check on you robot
- Engineering Portfolio should be completed.
- Practice judging presentation.
- Robot should be ready for competition by this week!
  - Visit the "[Preparing for Competition](#)" page.
- Plan and gather supplies and tools to bring to the competition.
- Optional: review volunteer roles to understand event structure.
- Set aside time to discuss your team's achievements while building the robot and to celebrate all team members' contributions and successes! Building a robot is no small feat!

Post-Season Activities

- Outreach to sponsors.
- Assigning responsibilities to learn new skills for the next season.
  1. Identify areas of improvement, this may be programming or something more specific such as building personalized robot components.
  2. Research different skill building activities. (Ex: [CAD Resources](#).)
  3. Remember to document these new skills as they can be used in the Engineering Portfolio (skills can be from public speaking course to engineering, anything that benefits the team).
- Begin to recruit new team members.
  - Experienced robotics students can now train new students.

- Place orders for supplemental supplies and tools for the next season.