



FIRST Tech Challenge August Coaches Corner

Trisha Thompson

Program Manager | FIRST Indiana Robotics

Adapted from material developed by Louis Rubbo, FIRST Nevada

Agenda

1. Introduction to FIN, FIN Staff & *FIRST* Senior Mentors
2. Season Schedule
3. FIN Resources for Coaches
4. *FIRST* Resources for Coaches
5. Recruiting Best Practices
6. Practice Schedule Suggestions
7. Questions





Chris Osborne

Vice President of Programs

Trisha Thompson

FLL & FTC

Program Manager

Ashley Robbins

President

Dan Leathers

Operations



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FIRST Senior Mentors



Lori Langley



Kyle Heaton

What do *FIRST* Senior Mentors do?

- Raise awareness about *FIRST* programs and events in their local community
- Support coaches, mentors, and volunteers
- Provide technical and non-technical support to *FIRST* teams
- Recruit rookie teams
- Help strengthen existing teams and enable year-to-year growth

FIRST® Core Values



DISCOVERY

We explore new skills and ideas.

INNOVATION

We use creativity and persistence to solve problems.

IMPACT

We apply what we learn to improve our world.

TEAMWORK

We are stronger when we work together.

INCLUSION

We respect each other and embrace our differences.

FUN

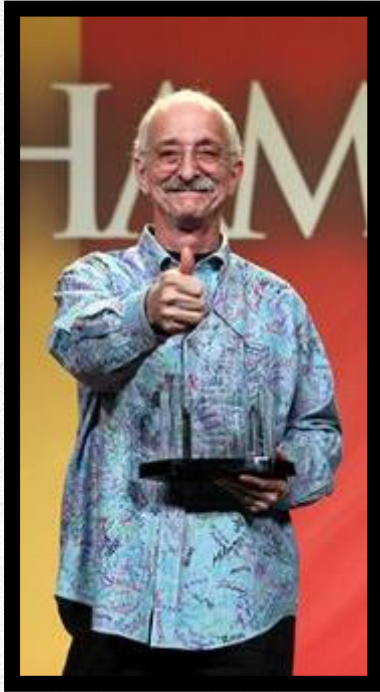
We enjoy and celebrate what we do!

GENERATORS

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 **FIRST**
TECH
CHALLENGE

Gracious Professionalism



Gracious Professionalism®

[Dr. Woodie Flowers](#), (1943 - 2019) EAB Chair Emeritus & Distinguished Advisor, coined the term "*Gracious Professionalism*®."

Gracious Professionalism is part of the ethos of *FIRST*. It's a way of doing things that encourages high-quality work, emphasizes the value of others, and respects individuals and the community.

With *Gracious Professionalism*, fierce competition and mutual gain are not separate notions. Gracious professionals learn and compete like crazy but treat one another with respect and kindness in the process. They avoid treating anyone like losers. No chest thumping tough talk, but no sticky-sweet platitudes either. Knowledge, competition, and empathy are comfortably blended.

In the long run, *Gracious Professionalism* is part of pursuing a meaningful life. One can add to society and enjoy the satisfaction of knowing one has acted with integrity and sensitivity.

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Coopertition

Coopertition®

Coopertition® produces innovation. At *FIRST*, *Coopertition* is displaying unqualified kindness and respect in the face of fierce competition. *Coopertition* is founded on the concept and a philosophy that teams can and should help and cooperate with each other even as they compete.

Coopertition involves learning from teammates. It is teaching teammates. It is learning from Mentors. And it is managing and being managed. *Coopertition* means competing always, but assisting and enabling others when you can.



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FIRST and FIRST Indiana Robotics



Development of annual challenges



Delivery of annual challenges

FIRST Indiana Robotics (FIN) is a *FIRST* Partner Organization which means we exclusively deliver all *FIRST* programs in Indiana. *FIRST* and FIN are separate, federally recognized 501(c)(3) non-profit organizations.



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Administrative Tasks: Consent & Release



Development of annual challenges



Delivery of annual challenges

The *FIRST* programs are made available to teams because of an agreement between the two separate non-profit entities. In the past, because there are two non-profits involved, any participant in the *FIRST* programs needed to complete two different Consent & Release forms. [Not anymore!](#)



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Event Schedule



September 9 – CENTERSTAGE Season Launch

Event Preferencing: October TBD

October 21 – Purdue Forums

Qualifying Tournaments – December, January, February

March 9 – Indiana State Championship, The University of Indianapolis

April 16-20 – World Championship, Houston, Texas

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 **FIRST**
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Kickoff!

11:00 am - Doors Open

11:30 am - Giveaways

12:00 pm - Game Reveal Video, Field Examination

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FIRST Tech Challenge

Kickoff Locations

Career Academy

3801 Crescent Circle, South Bend

Class of 1050 Lecture Hall, Purdue University

648 Oval Drive, West Lafayette

Avon High School

7575 E County Road 150 S, Avon

MESH, Indiana University

2425 N Milo B Sampson Ln, Bloomington

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FIN Resources for Coaches

FIN Website: www.firstindianarobotics.org

- Calendar
- Blog
- Event Pages

FIN Social Media

- Facebook: <https://www.facebook.com/FIRSTINRobotics>
- Instagram: <https://www.instagram.com/firstinrobotics/>
- Twitch: (event livestreams, when available) <https://www.twitch.tv/firstinrobotics>
- Flickr: <https://www.flickr.com/photos/indianafirst/albums>

FIN Playbook <https://playbook.firstindianarobotics.org/>



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
FIRST Resources for Coaches: Game & Season Info

<https://www.firstinspires.org/robotics/ftc/game-and-season>

Quick Links




- Game Materials
- Season Calendar
- Robot Building Resources
- Programming Resources
- Team Management Resources
- Youth Team Member Registration
- Awards
- Event Results
- FIRST Alumni
- Season Content & Logos
- Class Pack
- Volunteer




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Game & Season Info

Check out all of the latest information to get started

   #CENTERSTAGE



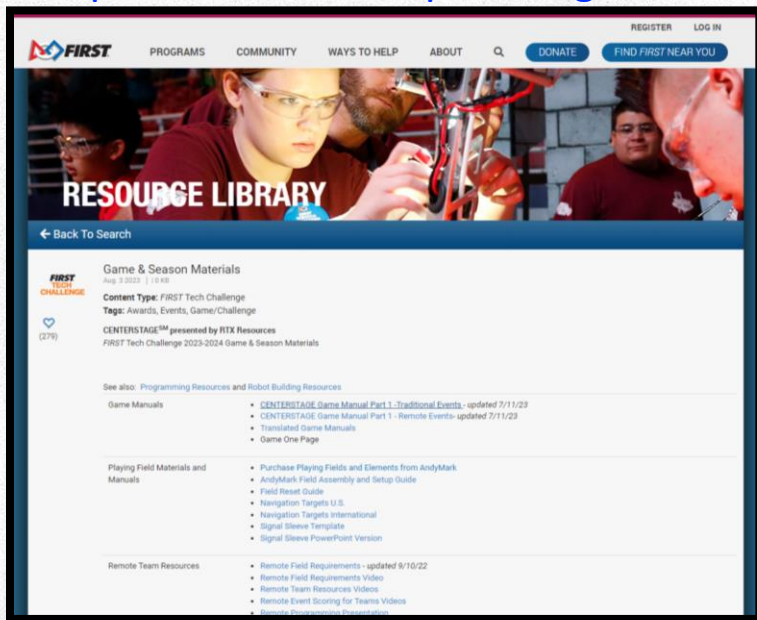
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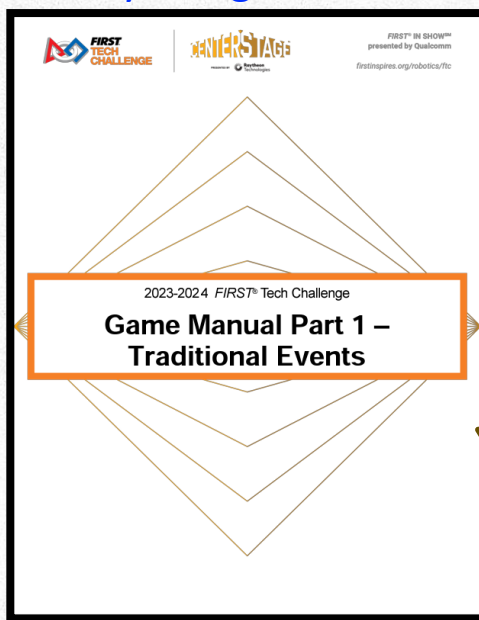
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FIRST Resources for Coaches: Game & Season Materials

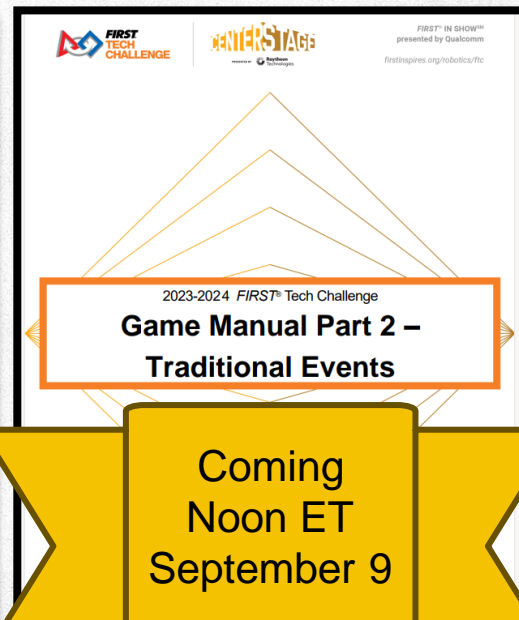
<https://www.firstinspires.org/resource-library/ftc/game-and-season-info>



The screenshot shows the FIRST Resource Library website. The header includes the FIRST logo, navigation links (PROGRAMS, COMMUNITY, WAYS TO HELP, ABOUT), and utility links (REGISTER, LOG IN, DONATE, FIND FIRST NEAR YOU). The main content area features a 'RESOURCE LIBRARY' banner with a photo of students working on a robot. Below the banner, there is a search bar and a list of search results. The primary result is 'Game & Season Materials' for the 2023-2024 FIRST Tech Challenge, presented by RTX Resources. It lists various resources such as Game Manuals, Playing Field Materials and Manuals, and Remote Team Resources.



The cover of the 2023-2024 FIRST Tech Challenge Game Manual Part 1 - Traditional Events. It features the FIRST Tech Challenge logo, the CENTERSTAGE logo, and the text 'FIRST™ IN SHOW™ presented by Qualcomm firstinspires.org/robotics/ftc'. The title '2023-2024 FIRST™ Tech Challenge Game Manual Part 1 – Traditional Events' is centered in a large orange-bordered box.



The cover of the 2023-2024 FIRST Tech Challenge Game Manual Part 2 - Traditional Events. It features the FIRST Tech Challenge logo, the CENTERSTAGE logo, and the text 'FIRST™ IN SHOW™ presented by Qualcomm firstinspires.org/robotics/ftc'. The title '2023-2024 FIRST™ Tech Challenge Game Manual Part 2 – Traditional Events' is centered in a large orange-bordered box.

Coming
Noon ET
September 9

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FIRST Resources for Coaches: Robot Building Resources

www.firstinspires.org/resource-library/ftc/robot-building-resources



The screenshot shows a web page titled "RESOURCE LIBRARY" with a sub-header "Robot Building Resources". It includes a "Back To Search" link, a "FIRST CHALLENGE" logo, and a "Content Type: FIRST Tech Challenge" label. The page lists various resources categorized into Build Guides, Design Resources, Programming Resources, Technology Resources, and Wiring Resources.

RESOURCE LIBRARY

← Back To Search

FIRST CHALLENGE

Robot Building Resources
Aug 2, 2022 | 1:49:00

Content Type: FIRST Tech Challenge
Tags: Robot, Build/Assembly, Robot Kit, Team, Technical

This section contains resources for FIRST Tech Challenge teams specific to designing and building the robot.

Build Guides

- Basic Bot Guide - REV
- Game Specific Basic Bot Guide - REV
- Basic Bot Guide - TETRIX
- Game Specific Basic Bot Guide - TETRIX
- Hardware Video Tutorials
- Rev Electronics Video Tutorials
- 2023-2024 Legal and Illegal Parts List
- Power to the Ability
- Robot moves labels
- Legal and Illegal Parts

Design Resources

- 3D Printing for FIRST Teams Blog Series by PFC
- PFC Software and Training Resources
- SOLIDWORKS Resources
- XYZ Design Brief

Programming Resources

- Programming Resources Page
- Software Development Kit Download and Resources

Technology Resources

- Robot Reliability Checklist

Wiring Resources

- Robot Wiring Guide
- Robot Wiring Video

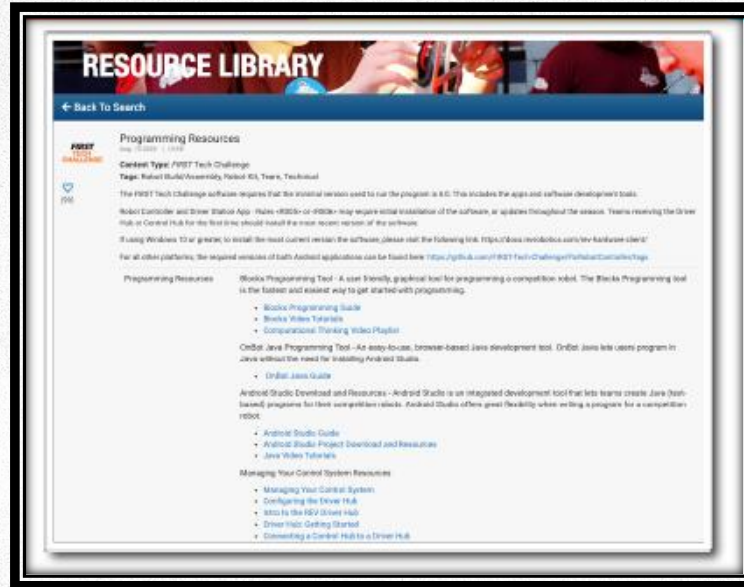
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FIRST Resources for Coaches: Programming Resources

www.firstinspires.org/resource-library/ftc/technology-information-and-resources



The screenshot shows a webpage titled "RESOURCE LIBRARY" with a sub-section for "Programming Resources". The page includes a "Back To Search" link, a "FIRST Tech Challenge" logo, and a "9/6" indicator. The main content area is titled "Programming Resources" and includes a "Center Type: FIRST Tech Challenge" and "Topic: Robot Skills/Technology/Robotics, Teams, Technical" classification. The text describes the FIRST Tech Challenge software requirements, mentioning the Android Studio and Java IDE. It lists several resources for programming, including "Blocks Programming Tool", "Credul Java Programming Tool", and "Android Studio Download and Resources".

RESOURCE LIBRARY

← Back To Search

FIRST Tech Challenge

9/6

Programming Resources

Center Type: FIRST Tech Challenge
Topic: Robot Skills/Technology/Robotics, Teams, Technical

The FIRST Tech Challenge software requires that the original version used to run the program is 8.0. This includes the app and software development tools. Robot Controller and Driver Station Apps (Risks #R200-1 or #R200-2) may require minor installation of the software, as updates throughout the season. Teams receiving the Green Hub or Control Hub for the first time should install the most recent version of the software.

If using Windows 10 or greater, to install the most current version of the software, please visit the following link: <https://docs.revrobotics.com/rev-hardware/clients/>

For all other platforms, the required version of both Android applications can be found here: <https://github.com/FIRST-Tech-Challenge/Platform-Central/blob/master/>

Programming Resources

Blocks Programming Tool - A user-friendly, graphical tool for programming a competition robot. The Blocks Programming tool is the fastest and easiest way to get started with programming.

- [Blocks Programming Guide](#)
- [Blocks Video Tutorials](#)
- [Computational Thinking Video Playlist](#)

Credul Java Programming Tool - An easy-to-use, browser-based Java development tool. Credul Java lets users program in Java without the need for installing Android Studio.

- [Credul Java Guide](#)

Android Studio Download and Resources - Android Studio is an integrated development tool that lets teams create Java (non-native) programs for their competition robots. Android Studio offers great flexibility when writing a program for a competition robot.

- [Android Studio Guide](#)
- [Android Studio Project Download and Resources](#)
- [Java Video Tutorials](#)

Managing Your Control System Resources

- [Managing Your Control System](#)
- [Configuring the Driver Hub](#)
- [SDU to the SDU \(Green Hub\)](#)
- [Driver Hub Getting Started](#)
- [Connecting a Control Hub to a Driver Hub](#)

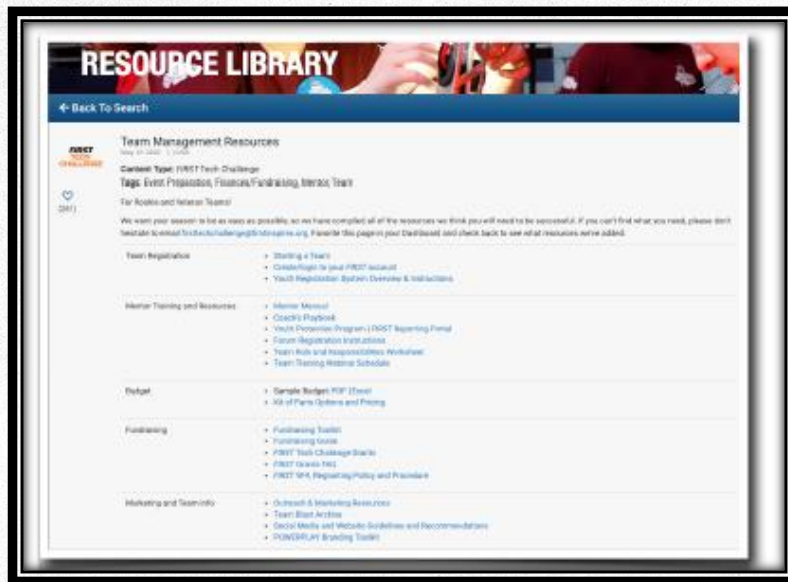


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FIRST Resources for Coaches: Team Management Resources

www.firstinspires.org/node/5226



The screenshot shows a web page titled "RESOURCE LIBRARY" with a sub-header "Team Management Resources". It includes a "Back To Search" link, a "FIRST" logo, and a "Content Type" filter set to "FIRST Tech Challenge". The page lists various resources categorized into: Team Registration, Mentor Training and Resources, Budget, Fundraising, and Marketing and Team Info. Each category has a list of links to specific documents or guides.

RESOURCE LIBRARY

← Back To Search

FIRST

Team Management Resources

May 27, 2022 1:34PM

Content Type: FIRST Tech Challenge

Tags: Event Preparation, Financials, Fundraising, Interest, Team

For Academics and Related Teams

We want your season to be as easy as possible, so we have compiled all of the resources we think you will need to be successful. If you can't find what you need, please don't hesitate to email techchallenge@firstinspires.org. If you like this page, you can bookmark and check back to see what resources we've added.

Team Registration

- Starting a Team
- Coach Login to your FIRST account
- Youth Registration: Britain Overview & Instructions

Mentor Training and Resources

- Mentor Manual
- Coach's Playbook
- Youth Protection Program (YOPP) Reporting Portal
- Fairm Registration Instructions
- Team Role and Responsibilities Worksheet
- Team Training Meeting Schedule

Budget

- Sample Budget: FRC 11 team
- All of Parts Orders and Pricing

Fundraising

- Fundraising Toolkit
- Fundraising Guide
- FIRST Tech Challenge Grants
- FIRST Grants FAQ
- FIRST M4: Reporting Policy and Procedures

Marketing and Team Info

- Outreach & Marketing Resources
- Team Brand Assets
- Social Media and Website Guidelines and Recommendations
- PONSURAH Branding Toolkit

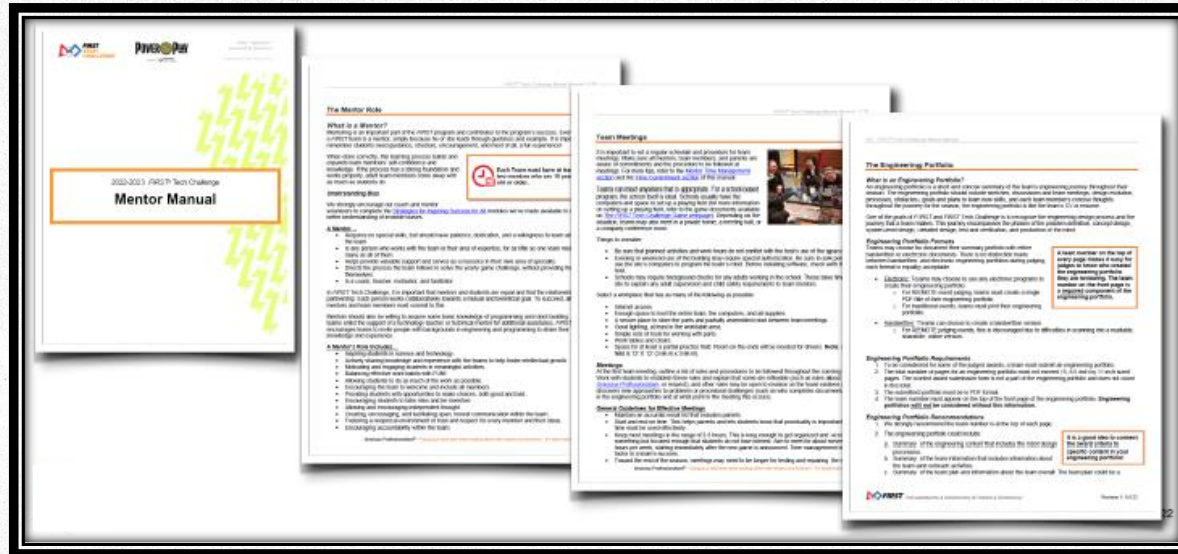


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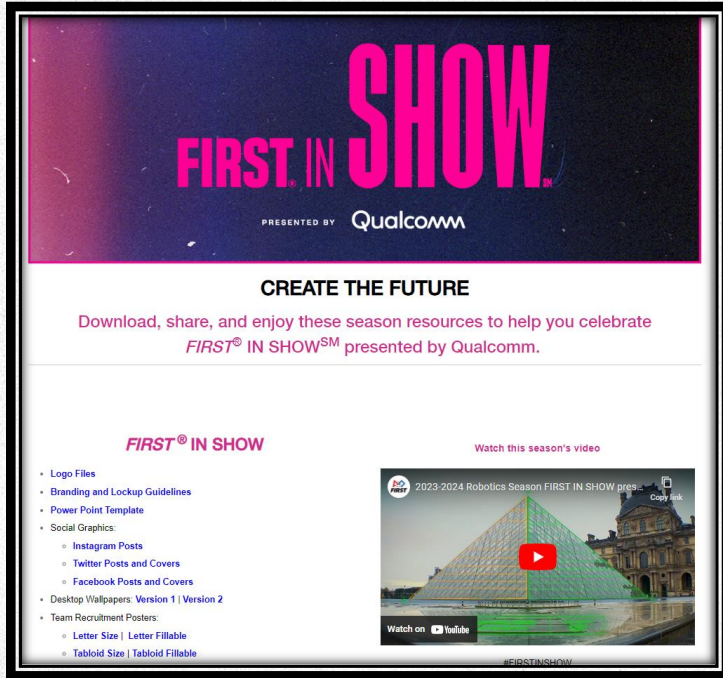


FIRST Tech Challenge: Mentor Manual

https://www.firstinspires.org/sites/default/files/uploads/resource_library/ftc/mentor-manual.pdf



FIRST Tech Challenge: Recruiting Basics



The image shows a promotional page for the FIRST IN SHOW event. At the top, it says "FIRST IN SHOW" in large pink letters, with "PRESENTED BY Qualcomm" below it. The main heading is "CREATE THE FUTURE". Below that, it says "Download, share, and enjoy these season resources to help you celebrate FIRST® IN SHOWSM presented by Qualcomm." There is a list of resources on the left, including Logo Files, Branding and Lockup Guidelines, Power Point Template, Social Graphics (Instagram Posts, Twitter Posts and Covers, Facebook Posts and Covers), Desktop Wallpapers (Version 1 | Version 2), and Team Recruitment Posters (Letter Size | Letter Fillable, Tabloid Size | Tabloid Fillable). On the right, there is a video thumbnail titled "2023-2024 Robotics Season FIRST IN SHOW pres" with a "Watch on YouTube" button and a "Copy link" icon.

- An FTC team can have up to 15 members in grades 7-12
- How members are selected is up to the coaches
- Teams can be composed of students at multiple schools
- Teams do not have to be affiliated with a school
- FIRST* provides editable recruitment materials at <https://info.firstinspires.org/free-season-content>



FIRST Tech Challenge: Recruiting Basics

- Recruitment starts with awareness
- Club recruitment days
- School events
- Present to STEM classes
- Posters and flyers
- Community outreach
- Open team meetings



FIRST Tech Challenge: Meeting Tips

- A set, consistent meeting schedule is recommended.
- Veteran teams often meet for about 4 hours/week.
- Setting attendance expectations is highly recommended



Questions?



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