WE FIRST LEGO LEAGUE (FLL)  
4TH – 8TH GRADE INFORMATION SESSION

AUGUST 11, 2015  
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INTRO TO FIRST / FLL

FIRST (founded 1989)
For Inspiration and Recognition of Science and Technology

Dean Kamen, prolific inventor & entrepreneur
(Segway, Luke Arm, Slingshot H2O purification system, iBOT mobility System, DEKA)

Woodie Flowers - MIT Prof.

FIRST FRC
FTC
FLL / Jr. FLL
FIRST IS ROBOTS AND...

Culture

- Coopertition®
- Gracious Professionalism®
- Respect

Promotes Science, Technology, Engineering, Math (STEM) as...

- Exciting Sporting Event
- Life Long Learning
- Enriched Experience
WHAT IS FIRST?

https://youtube.googleapis.com/v/i1QyM9WTF18?hl=en_US
WHY JOIN FLL?

Core Values

Project

Robot

Starting a Business = logo, vision or mission statement, what team values, community service

Engineering Design

Process = Capstone, team experience about theme

Design = research, learning, notebook
WHY JOIN FLL?

• Increase awareness for engineering and technical careers
• Hands-on experience
• Teaming Practice
• Leads to High School robotics programs and PLTW
• Understand Growth Mindset – learning placed on student, not adults or teachers
• Getting into College
• Scholarships!!
WHY JOIN FLL?

Not Just Robotics!!

Building a team identity and creating logo
Practicing core values & gracious professionalism
Mentor guided, student driven team!

NOT Just FLL!

Work with project partners
Experience researching & writing
Professional Engineers
Professional Business Owners
2015 THEME

ROBOT MISSION PROJECT

Coming August 25, 2015 (12:00pm EDT)
SUPPORT NEEDED FOR TEAMS

Overall formation & registration of teams
also regional challenge... district and above
is “invitation only”

Pay for kits and equipment (care for parts, motors)
Logistics (location, meeting times, parent interactions)

Working with Partners & Funders
Creating and maintaining Google Sites

Working with vendors / order t-shirts and provide presentation materials

Attend meetings (not always) and general support / assistance / answer questions

http://firstlegoleague.org/challenge/teamresources
TEAM RULES

• Minimum of two (2) and a maximum of ten (10) children.

• Team with more than ten (10) children will not be eligible for awards at an official FLL tournament.

• Children may be members of only one (1) FLL team per season.

• No team member may be outside the maximum allowed age in your region prior to January 1 of the year the Challenge is released.

• Two coaches per team

• http://firstlegoleague.org/challenge/participationrules#sthash.mxMGwrYx.dpuf
TEAM MEMBER EXPECTATIONS

Attend **ALL Meetings**

**ON TIME!**

Be Prepared for **Leadership**

**Student Directed ... by KIDS!!**

Be Prepared for **Assignments**

Use **Google Sites** to communicate w/ team members and assemble info.

Have a **Good Attitude**

**ALL students MUST participate** in attaining team goals

**Parental Involvement IS Required!**
ANY QUESTIONS?

2015 THEME

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ROBOT MISSION REQUIREMENTS

2.5 minute mission challenge to acquire as many points as possible!

Impossible to get everything (FIRST does this ON PURPOSE)

Have three attempts to score the most points at the challenge

Team presentation on robot design / programming / and mission strategy

Team needs information sheet / notebook for documentation and robot executive summary / poster (optional)
Field Mat Overhead View

Scott’s Mission Explanation:
https://www.youtube.com/watch?v=po9j6vpuW7A&feature=youtu.be
NXT Tutorial
http://www.stemcentric.com/nxt-tutorial/

Kid-Produced Overview to the EV3 Programming Environment
http://www.youtube.com/watch?v=QsksyDPrNkQ

EV3 Tutorial
http://www.stemcentric.com/ev3-tutorial/
ANY QUESTIONS?

2015 THEME

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CORE VALUES

We are a team.

We do the work to find solutions with guidance from our coaches and mentors.

We know our coaches and mentors don't have all the answers; we learn together.

We honor the spirit of friendly competition.
CORE VALUES

What we discover is more important than what we win.

We share our experiences with others.

We display Gracious Professionalism and Coopertition™ in everything we do.

We have FUN!

http://www.firstlegoleague.org/mission/corevalues
2015 THEME

PROJECT

Coming August 25, 2015 (12:00pm EDT)
FLL Project

Trash Trek is topic!
Engineering Design Process
Brainstorming
Research Topics
Give Homework & Report Back
Refine Ideas
More Research!!
Use Google Group!
Build Prototype!
FLL Project

Nature’s Fury Project Video
http://www.youtube.com/watch?v=FN&feature=youtu.be

Food Factor Example Presentation
http://www.youtube.com/watch?v=_eROM1zV0us
Tips for Teams - Calendar Planning

- Carpool / transportation / meeting attendance
- Snacks!
- Meeting Logistics – rooms / set-up / materials / phone numbers or contacts, etc.
- Leader Responsibilities – three areas for FIRST / Google Groups / documentation
- Deadlines or projected deadlines for work
- Homework assignments
- Plan first three meetings!
Tips for Teams - Success Means . . .

- Commitment from team members to do their best
- Do ALL THREE areas well!
- Effort = Return *most successful teams meet daily and on weekends
- Kid Run — team members lead team (not adults)
- Coaches/Mentors/Parents — let kids make mistakes and learn on their own!
- Parental Participation and Gracious Professionalism noticed during competitions!
ANY QUESTIONS?

2015 THEME

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