Practice Schedule recommendation for FLL

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Challenge:

http://firstlegoleague.org/sites/default/files/Challenge/FoodFactor/FLL2011 Complete Challenge.pdf

Tasks:

http://www.youtube.com/watch?v=SvdTbTf4G0k

This is based on a 6-week practice schedule, mid-September to the end of October. Teams generally meet 2 times a week for 2 hours. I do not recommend going longer than 2 hours/session.

Pre-Season:

Build several robots: Build for Speed, build for torque (power), rubber band car, automobile car. Go through the programming tutorials. Build and rebuild robots as often as possible to make the team members comfortable with building and rebuilding.

Week 1: Get organized (Captain in Charge)

- Put parts and field together
- Put together a board
- Determine a team name
- Collect email addresses from everyone
- Hand out liability wavers
- Set ground rules
- Develop[a design for team T-Shirts

Supplies: Field of parts, 24 ft of 2x4s, 4x8 plywood sheet, black spray paint

Week 2: Develop a strategy: (Lawyer in charge)

- Brainstorm the strategy and the robot building
- Carefully look over the rules
- Where are the loopholes in the rules? What are the easy points? Hard points?
 (Far from base=Hard, small target area=hard)

- Play game without robot
- What will the presentation be about, research, music, multimedia?
- Who will do what tasks?
- Everyone should take a job or two.
- Schedule your tournaments, qualifiers and finals

Week 3: Building (Master Builder)

- Build chassis: Decide on wheels or treads, 2, 3, 4 wheels, skids?
- Gather all measurements for ultrasonic, rotation, and light sensors (use view mode on your NXT)
- Programmers should be able to find a line, follow a line, understand all clues on the way to each mission
- Lawyers should check Forum for rule clarification
- Attachments should understand a latch, bulldozer, gripper, and crane attachments.
- Storyboard presentations, complete research, and organize project

Week 4: Attachments (Attachments Chief)

- Determine game strategy, driver or drivers for each task, assistant or assistants for driver
- Build all attachments
- Robot should be able to consistently do all easy tasks
- What tasks are overlapping? Program flow charts should be completed. Start programming the hard parts tasks.
- Lawyer should account for all possible points
- Check or post to forums if there are questions about the rules
- All research complete, beginning work on project, multimedia determined and almost complete

Week 5: First run through (Chief presenter-Master of Ceremonies)

- Run a 2.5 minute round with robot
- Driver and Assistant Driver run through
- Presentation run through
- Be sure all awards covered
- Documentation of teamwork compiled (programmer flowchart, notes on strategy, rules document, sensor managements, project research, project pictures or findings, team list with jobs)

Week 6: Prepare for competition (Awards Chief)

- Run through each award presentation (robot design, programming, rookie award-if applicable, presentation, robot performance)
- Work on consistency
- All robot tasks work consistently, field marked for starting points
- All programs work consistently
- Everyone knows his/her part for presentation
- All documentation for awards collected and packaged nicely
- Rides and maps to tournament prepared
- Scouting teams developed
- Parent volunteers organized
- Each person assigned things to bring (robot charged, computer, field, field parts, permission slips, etc.)
- Hand out team T-Shirts
- Snacks or money for snacks

Tournament!

- Go whether you are ready or not
- Scout out competition look for loopholes in the rules
- Be sure everyone is aware of schedule (generally there is no down time between presentations, 3 performance round, and judging)
- Have a cheer show your teamwork
- Help other teams be the best they can be.

Post Tournament

Rebuild, recreate, reengineer everything ©

Post Season

Celebrate all the hard work you all did!