

Team Ford First



Date: Saturday, November 17, 2007
Location:
Consortium College Prep Academy
1250 Rosa Parks Blvd
Detroit, MI 48216
Time: 9:00 to noon

Please be in the room assigned for your session by 9:00 AM.

Each person is expected to select one of the sessions for the entire workshop. Decide which session is best for each individual based on the synopsis below. Make sure to bring pencils and pens to take notes. Questions are always welcome. There may be handouts for each Session. Presentations will be posted on the Team Ford FIRST website in a few days.

Session 1:

Alvin Carroll and Marv Kraska: Safety and Project Management

Topic 1 (90 min) Alvin Carroll: Safety: with small tools and advice from UL, the sponsors of safety at FIRST competitions.

Topic 2 (90 min) Marv Kraska: Best Practices for a Successful Season - managing project, program, design, competition. many hints, tips, techniques involving project management (!), control program design/modification, debug strategies, sensor conditioning, KISS, operator interface, competition, sensor types, robust SW design techniques, revision control, etc.

Session 2:

Ira Goldberg and Joe Horth: FIRST Boot Camp and Chairman's Award presenters.

Aimed at NEW FIRST team members

Topic 1: FIRST Boot camp: Discussion of the new FIRST principles (gracious professionalism)

Topic 2: Kit of Parts Discussion

Topic 3: Chairman's Award and other FIRST awards. (Good preparation for the Winter Event)

Session 3:

Ronnie Tront: Electrical

Topic 1: Basic FIRST Robotics Electronics: kit parts, wiring diagram, and wiring practices.

Topic 2: The Inputs and Outputs of the Robot Controller and Operator Interface.

Topic 3: Passing the FIRST Robotics Inspection at the FIRST competitions

Session 4:

John Vukovich (and Ken Snodgrass): Robot Construction

Topic 1: Robot construction basics

Topic 2: Motors and drive trains: Fundamental background on selecting gearing and motors

Topic 3: Weight management: Final weight of the robot must be managed

Session 5:

Bob Koehl: C programming of a FIRST robot

Topic 1 (1 hour): Overview of the DEFAULT PROGRAM

Topic 2 and 3 (2 hours): Programming of Multiple Selectable Dead Reckoning Autonomous programs