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Course Email

3 minutes

This question has been coming up a lot...and that's good!
Remember that the course will be based on the Trinity College Fire Fighting Robot competition. I've attached a sample of their course as a PDF.

I will post something more formal but for now:

Colour

The course will be either

A) predominantly white **OR**

B) predominantly black

Dimensions

1) The course will be approximately 244cm x 244cm (96"x96")

2) The course will have four rooms of varying sizes. No room will be smaller than 50cm (20") in any direction

3) The rooms will be connected via hallways with a minimum width of 46cm (18")

4) Doorways will have a minimum width of 46cm (18")

5) Any solid walls will have a minimum height of 30cm (12")

Home Location

- 1) The Home Location (HL) will be a circle approximately 30cm (12") in diameter.
- 2) The HL will be located near an exterior wall in one of the hallways.
- 3) The HL will have a contrasting colour with respect to the course floor
- 4) Robots will begin and end their run in the HL.

Targets

- 1) There may be an incandescent light bulb installed in one of the rooms. Points may be awarded for successfully identifying which room the incandescent bulb is in. Incandescent bulbs generate light...and heat.
- 2) There may be an infrared beacon installed in one of the rooms. The beacon may be transmitting a constant signal, or may be transmitting a data stream. Points may be awarded for being able to detect the signal, or to recover the data. If installed, this beacon will use a 38KHz modulation frequency.
- 3) There may be navigation marks (lines) installed on vertical or horizontal surfaces of the course. These marks will be of a contrasting colour to the course floor and walls (black on white/white on black). There may be points awarded for using the marks to navigate the course, identify rooms, etc.
- 4) There may be blocks or boxes of random sizes installed in one or more rooms. These obstacles will also have navigation marks installed on them. There may be points awarded for

identifying the obstacles and avoiding them, or identifying and recording their location.

5) There may be a stuffed animal blocking access to a hallway or door. This obstacle must be detected and avoided if encountered.

That's what's rumbling around in my head up to now. I hope it gives you more detail on what to expect. Questions are always welcome and I will try to keep things moving along.

Dave