Syllabus – Adventurers FIRST Tech Challenge Robotics 2013

Instructor:   
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Materials Cost: $275 per student. News: $500 grant from FIRST for new teams. We will still plan to seek corporate funding because the total cost of all the parts is substantial, and communicating our project and goals to others will be excellent experience and part of our learning.

Tentative Schedule

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| **Date** | **Plan** |
| September 12 | Professionalism, Priorities – start the process |
| September 19 | Project overview |
| September 26 | Proposals for Sponsorship |
| October 3 | Prepare field, Equipment |
| October 10 | Planning, Designing |
| October 17 | Planning, Designing, Building |
| October 24 | Planning, Designing, Building |
| November 7 | Programming, Building, Testing |
| November 14 | Programming, Building, Testing |
| November 21 | Programming, Building, Testing |
| November 28 | *Thanksgiving* |
| December 5 | Presentation Preparation |
| December 12 | Presentation - Adventurers Fall Showcase |
| December 13 (Friday) evening | Robot inspection for Competition qualifying round |
| December 14 (Saturday)  all day | Competition qualifying round |
| December 20-21 (Friday evening, Saturday) | Michigan Competition – Michigan has very strong robotics competition, so I do not *expect* this to be required, but may be of great interest. |

Subject to change – part of learning is the project planning process.

I am still working to determine dates and requirements for competition.

Brief overview:

Key aspects of the class include:

1. Teamwork – learning to work together graciously and effectively is a valuable skill necessary for our success.
2. The Process – keeping an Engineering Notebook is a part of the FTC requirements; this will help us work together and record our design and development process and efforts.
3. Robot design and construction.
4. Computer Programming.

Before the first class: Read the *FIRST Tech Challenge 2013 – 2014 Game Manual Part1 1*, available at <http://www.usfirst.org/sites/default/files/uploadedFiles/Robotics_Programs/FTC/Game_Info/2013/FTC-2013-2014_Game_Manual_Part_1.pdf>.

Details for this year will be announced on September 7. See [www.usfirst.org/roboticsprograms/ftc/game](http://www.usfirst.org/roboticsprograms/ftc/game)