

FRC Robotics – High School

Mr. Seeger – Room 606

Welcome to robotics!! I am really looking forward to the challenge of this new season! I am both excited and apprehensive at the same time. Please remember, this class is a work in progress; this is the first for the high school program. We will be working together throughout the year to learn what goes into making a driving, functioning robot! Hopefully we will all have a lot of fun in this class, and also learn a lot of new and interesting things along the way!

The good news: There will not be any homework in this class, unless you choose to do some research on your own. Everything will be done at school. There may be some times when it is necessary to stay after school to get some things done before competitions, and there will be some weekend commitments necessary to compete at the competitions. At this point in time, I do not know when or where we will be travelling to compete; I will let you know at a later date when I have more information.

Things you need to know:

1. Not everybody will be able to travel as part of the team to competitions. Per the rules of the FIRST Robotics program, our travelling team can only consist of 15 student members. Because of this, I will be taking several things into account to determine who will be able to travel on the team and who will not: disciplinary issues, attendance, grade in the class, and other middle schools teacher's opinions, along with anything else that could be used to help make this determination. If you are not a member of the travelling team, you are still able, and encouraged, to come along and watch from the stands!
2. You will be working with tools; both power tools and hand tools. I have a background in residential construction, and I know the proper way to use all of the tools that we will be using, as well as what it takes to be safe using them. You will be using a lot of different hand tools: wrenches, sockets, screw drivers etc., as well as a cordless drill, miter saw/chop saw, and a grinder. This program requires a lot of fabrication; we will have a bunch of raw materials that we will have to cut and shape in order to complete the robot.
3. Please be aware of the type of clothing that you are wearing to class. We will be working with power tools, we will be working in a shop environment, and we will be working with metal pieces that have the potential to be sharp at times. I don't want to see anybody get hurt because they were wearing loose fitting clothing that gets caught in a tool, or see any clothes ruined because they get cut up by the sharp metal pieces. You may want to consider wearing something to class every day that is a little thicker, and not so loose fitting.

Grades: Since I already told you that there will be no homework assignments for this class, grades will be based on your daily participation. There will be a possible 10 points each day for participation. If you are using your time wisely, and productively, you will earn the full 10 points for that day. If you don't, you won't. It's that simple. Absences will not count against your grade, but they may be taken into account for deciding who travels on the competition

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team. In order to earn the full 10 points for the day you must be working on something related to the robot, or something academic in nature (AR book or something for another class).

Requirements: You will need a pair of safety glasses. I decided it would be easier for everybody to find something they are comfortable with rather than me purchasing a bunch of generic pair that people don't like, or don't fit etc. I will have a few pair in case you forget yours, but I will probably not have enough for everybody on a daily basis.

Expectations:

- If you are returning to this class, you will be expected to take a bit of a leadership role. I expect that you will be able to teach some of the new comers how things work, and the things that we have tried that worked and didn't work. You should not be telling them not to touch things because they are new and don't know what they are doing; you should be helping them to learn about the different aspects of the robot, and listen to them. They may have some great ideas of their own.
- If you are new to this class, you are expected to jump right in and get to work. You will learn by doing, not sitting back and watching. The "seasoned veterans" of the class are here to help you learn, and work with you, to get things figured out and working. Some day you may be the seasoned veteran teaching a few new comers about the robot!

To everybody: you are expected to come to class every day, ready to **share your ideas** about how to build the robot, and **listen to the ideas of others**. This is a group project, and everybody gets a voice in how things are done!

Format of the class:

The two semesters of the class will be very different. The FRC build season doesn't start until January. We don't even know what the task will be until then, which is why the semesters will be so different!

Semester 1: Research and fundraising. We will spend some time doing some of our own research to see what has gone on in past seasons to try and help us with ideas of our own. We will need to do a little fundraising so that we are sure to have enough money to successfully get through the season!

Semester 2: Build and competition: pretty self-explanatory

If you have any questions, or need to get in contact with me, email is by far the best option for doing so. My school email is kseeger@reese.k12.mi.us. You can also reach me by phone at 868-4191.

I am looking forward to a fun and exciting year in robotics! I think it will be a great year, and I look forward to working with each and every one of you to figure out how to get this robot working properly!