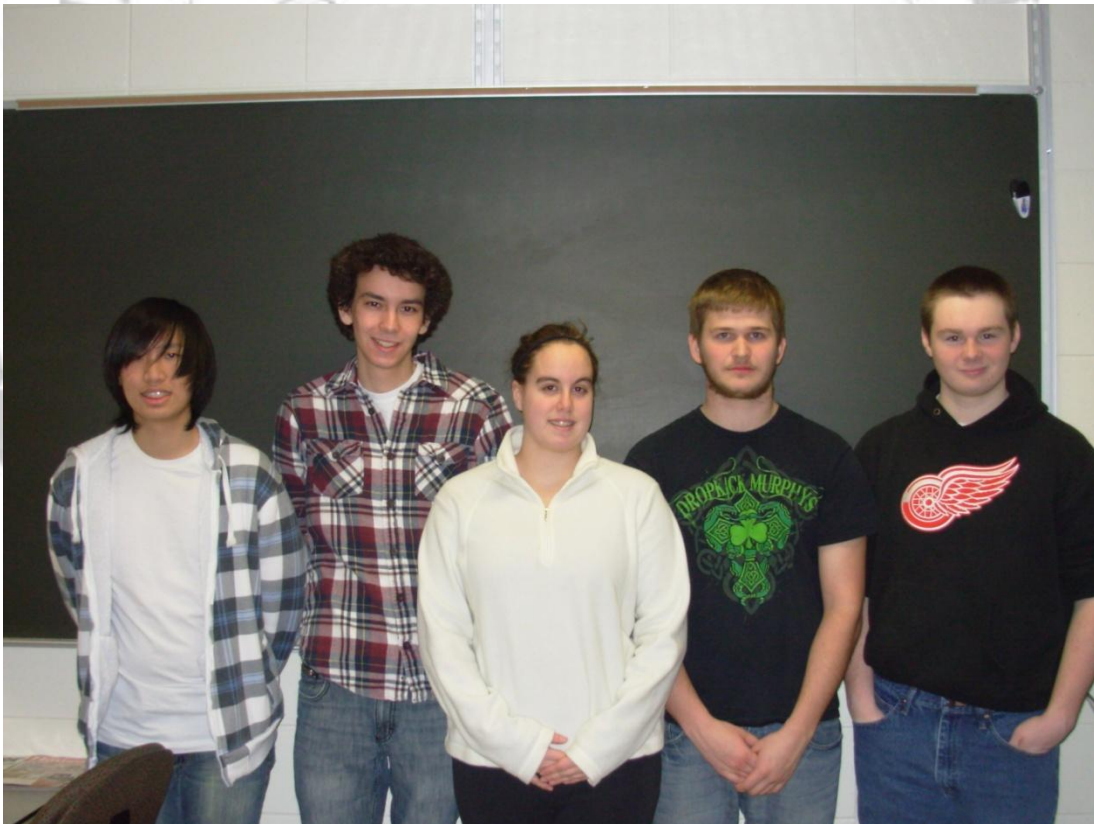




Team Dominion[®]

Semester One Team Update



Pictured from left to right: Hoi-An Thai, Shawn McDowell, Caitlin Goomey,

Alex Allen, and Ben Bouche

About the Team:

- Hoi-An Thai: 2 years CAD experience
- Shawn McDowell: 2 years CAD experience, 1/2 year welding
- Caitlin Goomey: 1/2 year welding experience, 2 years CAD experience
- Alex Allen: 3 years welding experience, 2 years CAD experience, 1 year fabrication experience
- Ben Bouche: 3 years CAD experience

About Formula High School:

FHS is a design and manufacturing competition open to students in High School. The students use a 3D computer model of the formula race car and then manufacture the chassis and the rest of the components. The students then make the drivetrain and control systems, all while following a set of safety rules. After the vehicles have been constructed, the teams take the Formula cars to the track and attempt to get the quickest lap times at Road America, in Elkhart Lake. More importantly, the students learn how to work as a team, under a budget, to a deadline, while properly representing a sponsor. The teams also learn how to apply basic STEM skills (Science, Technology, Engineering and Math) to a fun and exciting design problem. Many FHS students pursue engineering and technical careers at two and four year colleges. Through FHS the students are able to impress their future college or employer with designs of a formula car. When employers ask "Show me what you have done?" the students have an answer!

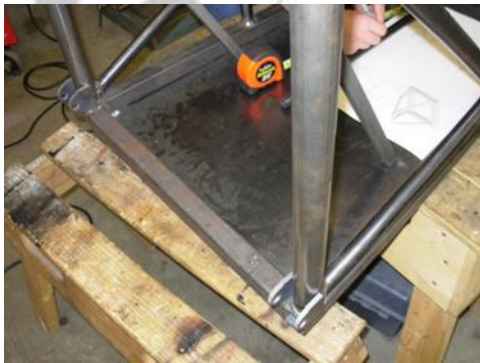
What we've accomplished:

September: The chassis assembly and the front of the chassis (on Inventor) has been designed (by Shawn) and is ready to give to Alex and Taylor for cutting. Round tubing and square tubing have arrived and is ready to be cut. The brochure has been (done by Hoi-An) half-finished still need to include parts list and grand total and information on FHS. The back of the chassis is being designed by Ben.



October: The front part of the chassis has been welded together. The front axle has been cut. Caitlin had worked on the wheel parts. Alex is grinded down the sides of the base frame. The round tubing was cut. Dimensions on the round tubing were being dimensioned at the same time. The floor was tack welded on. Also we were finding where the electric motor was going to be mounted.

November: The halo bar was welded on. We had a few errors; the halo bar was over bent by about 4° on one side, and we eventually fixed the problem. The drive train model had been finished. Alex welded the top two straight bars connecting the halo and the back and we welded the front axle on. The front square of the chassis has been grinded down. Our former sponsor, GT Mobility, has informed us that they cannot sponsor us. We had begun to work on the letter to send to sponsors. The rear assembly was found to be too big. Shawn is redesigning the back to fit the correct measurements. Ben had dimensioned the seat.



December: We have mounted the differential and we attached the rear assembly and chassis together. Alex welded the rear axle plates on the rear assembly. Also we welded the “kill switch” plates on the chassis. We finished the sponsorship letters and sent them out to possible sponsors. Shawn worked on assembling the nose cone. Hoi-An worked on the updates. We spoke with O’Reily’s were able to set up a student discount on parts. Advance Auto Parts has told us the same thing. Autozone still has not replied.

January: Spacers for the rear assembly were cut and placed on. The nose cone was cut and welded on by Shawn, Ben, and Alex. Hoi-An and Alex designed the foot pedals. Hoi-An took pictures of the car for this update. Alex and Ben took care of the sponsorship. Both of the rotors were placed on along with the brake calipers



The brackets for the steering column were completed. Caitlin broke her hand and supervised our team, acting as a reference point.

