

Welcome to PLTW Design and Modeling/Medical Detectives Mr.Doud!

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Course Description:

Design and Modeling

Gateway to Technology (Engineering) - Design and Modeling is a fun, hands-on class designed to let students solve problems through the eyes of an engineer. They are introduced to and use the engineering design process to design, model, and test their ideas. Students use industry standard Computer-Aided Design (CAD) - 3D modeling software, to create a virtual image of their designs and then use tools to help build their ideas from their designs.

Course Objectives:

- Explain the relationship between science, technology, engineering and mathematics (STEM).
- Describe engineering and explain how engineers participate in or contribute to the invention and innovation of products.
- Describe impacts that technology has had on society.
- Use precise measurement and dimensioning on real world problems.
- Build designs with limited resources that meet predetermined criteria.
- Design items that can be 3D printed using Autodesk Inventor.

Medical Detectives:

In the Medical Detectives unit, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, dissect a sheep brain, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

Schedule:

PLTW is a Semester course, and will be split every 9 weeks between the two courses!

Supplies:

Each student is required to have a folder, pencil for sketching, earbuds/headphones, and coloring utensils such as markers or colored pencils.

Homework:

Most work is done in class. The only time a student will be expected to work beyond the allotted class time will be if they fall behind on the assigned project.



Cell Phones:

I DO NOT WANT TO SEE THEM. Our classroom is a time for learning, and we often have different materials, and tools throughout the classroom, and are usually using our Macbooks! I understand that students need to check their phone, please just be respectful, and ask permission if you have a matter to take care of! Inappropriate use of the cell phone during classroom will result in a 3 step process

- 1. Verbal Warning
- 2. Place phone on teachers desk for remainder of class
- 3. Take cell phone to office parents must retrieve cell phone

Fairview Tardy Policy!

- **■** Tardies
 - Tardy to School/per Quarter (if unexcused)
 - o 1st tardy = 1 detention
 - o 2nd tardy = 2 detentions
 - o 3rd tardy = 3 detentions
 - 4th tardy = Referral to principal
 - Tardy to Class/per Quarter
 - o 1st tardy = Verbal warning
 - 2nd tardy = Teacher detention/parent contact
 - o 3rd tardy = Teacher detention/parent contact
 - 4th tardy and above = Office referral

Having a successful year includes knowing our classroom creed:

- I WILL BE POSITIVE (No negative nellies!)
- I WILL BE ENGAGED (I will try my best and actively be involved in every activity)
- I WILL SHOW RESPECT (To my teacher, other classmates, classroom, school)
- I WILL PARTICIPATE (We are a team, everyone must do their part)
- MY ACTIONS, MY CONSEQUENCES (Do what is right and take responsibility)

Above all, I want you to ENJOY your time with me this Semester and maybe even find an interest in Engineering, or any Career you might learn about with me! I am so happy to have you in my class!

Mr. Doud!

Have your Parent/Guardian sign this for 5pts!