Engineering Design And Presentation
Tuloso-Midway High School

General Information

Teacher - Jaime Trevino
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Location - Room 233

Course Description

Engineering Design and Presentation is a broad-based course designed to allow districts and schools considerable flexibility to develop local curriculum to supplement any program of study or coherent sequence. The course has the components of any rigorous scientific or engineering program of study, from problem identification, investigation design, data collection, data analysis, formulation, and presentation of the conclusions. All of these components are integrated with the career and technical education emphasis of helping students gain entry-level employment in high-skill, high-wage jobs and/or continue their education. Students must meet the 50% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for the successful completion of this course. Students may take this course with different course content for a maximum of three credits.

Class Participation & Expectations

1. You are expected to participate in class. You are expected to read all the material provided.
2. You are expected to use the links provided in order to complete items that are assigned.
3. It is essential to recognize that online work is just as important as in-person work.
4. Students are to bring any textbooks home that will be needed to complete their online work as well as their notes and daily work.
5. Students caught plagiarizing online material (copy and paste from another website) will have **earned a zero for the assignment.**
6. **Google Classroom will always be available for assignments and weekly plans.**

Topics

- Students will demonstrate the key components in the design Process in every project
- Students will demonstrate the procedure in storing data through the Engineering Journal or electronic portfolio
- Student will able to outline the responsibilities of the Project Manager
- Student will be able to describe all permits, licensure, certification and degrees required for this project.
- Safety and proper work habits
- Responsibilites of the of each individual team member
- Create 2d and 3d products
- Build a protype
- Independent project using the Design Process

Projects
Projects are worth at least one major grade and can be comprised of multiple minor grades, for example, lab reports, prototype, and models would each be a separate minor grade, and the final project would be a major grade.

Tentative list of projects, based on time and materials:

- Flying Lego Man
- Shoe Design
- Reverse Engineering
- Team Project

Instructional Resources
Along with all assignments, curriculum and instructional materials will be located on Google Classroom. Students will be given a code at the beginning of the year to access the digital classroom or added via PowerSchool.

Grading
- 50% Major Grades (Minimum of 3 major grades will be given each 9 Weeks.)
- 50% Minor Grades (Minimum 12 grades will be given each 9 Weeks)

Course Communication
There are a variety of modes of communication for this course. I encourage students and parents to utilize the resources below to stay informed throughout the year.
- Google Classroom
    - This site will house assignments and resources for our class. Email, Phone, & Zoom Meeting -
    - If there are specific questions, concerns, or information that needs to be shared privately with me, feel free to email or call me at, numbers above. If you would like to set up a conference or meeting, it is best to send me an email.