

Principles of Engineering (POE)

2021 – 2022

Instructor	Mrs. Livia Castro
Room Number	G211
Email	lecastro@fcusd.org
Phone	916.294.2410
Class Time	Period3
Tutoring Hours	FLEX TIME
Course Description & Objectives	<p>POE is a high school-level survey course of engineering. The course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers. POE gives students the opportunity to develop skills through activity-, project-, and problem-based learning. While working in teams, students will continually hone their interpersonal skills, creative abilities, and problem-solving skills based upon engineering concepts.</p>
Course Units	<ul style="list-style-type: none">• Energy and Power<ul style="list-style-type: none">o Mechanismso Energy Sourceso Energy Applications• Materials and Structures<ul style="list-style-type: none">o Staticso Material Propertieso Material Testing• Control Systems<ul style="list-style-type: none">o Machine Controlo Fluid Power• Statistics• Kinematics
Course Requirements	<p>Students will need to bring the following items to class daily:</p> <ul style="list-style-type: none">• Pen or Pencil• Folder• Engineering Notebook• Scientific Calculator

Course Expectations

1. Check PowerSchool, Google Classroom, and school email account daily
2. All assignments must be in on time
 - Student must schedule time for retakes
3. Communicate ideas clearly both orally and in writing
4. Actively participate in classroom activities and team projects
5. Use technology appropriately to solve problems

Grading Policy

The semestral grade will be based upon:

- Homework/Portfolio – 15%
- Projects – 35%
- Quizzes – 35%
- Tests – 15%

Summative assignments are worth 80% of the grade and Formative assignments are worth 20% of the grade.

Grading Scale: A+ (97-100%), A (93-96%), A-(90-92%), B+(87-89%), B (83-86%), B-(80-82%), C+(77-79%), C (73-76%), C-(70-72%), D+(67-69%), D (63-66%), D-(60-62%), F (0-59%).

- There will be one final test given at the end of every unit. End-of-Course (EoC) will be given at the end of the term.

- Students can expect a quiz about every 2 weeks.

- Projects are a VERY important part of the PLTW Curriculum. Most projects will be done in teams of 2 or 3 students. Each student will keep project documentation in their engineering notebook. Project grades are based on team and individual performance.

- Assignments receiving a grade of 80% or below can be redone in order to achieve a grade of 80%.

I conform: _____ (Student's Full Name / Signature / Date)

<https://tinyurl.com/ncfkmks3>

I attest: _____ (Parent's Full Name / Signature / Date)

<https://tinyurl.com/ncfkmks3>