

**Welcome to PLTW Civil Engineering and Architecture
with Mr. Montalvo!**

COURSE INFORMATION AND EXPECTATIONS



Mr. Orlando Montalvo
Room # 405
Office Hours: 5th block (2:30pm-4:00pm)
E-mail: see my webpage
Phone # 956-580-5300 ext. 1435

Tutoring: Tuesdays and Thursdays (4:15pm -5:00pm)

Welcome to CEA! You can take full advantage of what this course has to offer if you come to class with a positive attitude, pay close attention to every lesson in class, keep very good notes, complete your assignments, and study for your exams. Please do not miss class because you could really fall behind. I am available for tutoring after school.

Materials Needed:

1. Engineering Notebook
2. Binder: 1 inch (to keep handouts, homework, reviews, quizzes, etc.)
3. Pencils and Pens (pens are either black or blue)
4. Remind App
5. CamScan App
6. Google Classroom Access

Classroom Expectations:

1. *BE SEATED* and ready to work before the tardy bell rings. The classroom door will close at the bell. You will not be allowed into class without a tardy slip, permission slip, detention slip, teacher pass or administrator pass.
2. *RAISE YOUR HAND* and *WAIT* for me to respond before you speak or move out of your seat.
3. *BE RESPECTFUL* of the people, materials, and equipment of this classroom & work area.
4. *RESTROOM BREAKS* are allowed only when I have finished with the lesson or instructions. You are encouraged to take your restroom break before you come to class or wait until the class block is over.
5. *TURN IN ASSIGNMENTS* on time! If you miss an assignment or test, it is YOUR responsibility to take care of it.
6. Food and drinks are prohibited.
7. All other school and district policies apply.

Safety in the Work Area

PLTW activities can be the most enjoyable part of this course; however, the equipment can be dangerous when students are careless or inattentive. *I reserve the right to deny any student participation if I feel that the student's behavior is inappropriate. The student will receive a zero for any grade recorded for the activity.* The student will be financially responsible for any damage to equipment, except in those cases of normal use.

BYOD (Bring Your Own Device)

- 1. Your device should not be out or in use without permission. I will collect that device if you do not comply.**
2. When we are using devices, you should be using them for the purpose of the lesson.
3. You are responsible for using the district Wi-Fi network when in use for BYOD activities.
4. Devices must stay on or above the desk/counter while in use.

Grade Distribution

1. **Minor Assignments:** The average of these grades will be worth **40%** of the average. Minor Assignments include PLTW Activities, homework assignments, and quizzes.
2. **Major Assignments:** The average of these grades will be worth **60%** of the average. Major assignments include tests, PLTW Project assignments, presentations, and other projects.
3. *At the end of each semester, the average of minor assignments and major assignments will be 80%. The semester exam is worth 20% of the semester average. Your final exam will be comprehensive. Semester and Final Exams are difficult exams. **You must adequately prepare for these comprehensive exams because they are difficult! The final exam is an online End-of-Course PLTW exam.***

Statement for Academic Dishonesty: Academic integrity is fundamental to the activities and principles of our school. *No student shall cheat or copy the work of another. Plagiarism, the use of another person's original ideas or writings as one's own without giving credit to the true author, will be considered cheating, and the student will be subject to academic discipline that may include loss of credit for the work in question.*

I hereby agree that I have read the course information and am aware of the conditions set forth by the Engineering department, Sharyland High School, and Sharyland ISD.

Student Name (print)

Student Signature

Parent Signature

Civil Engineering and Architecture Course Outline

PLTW | Engineering

Unit 1: Overview of Civil Engineering and Architecture

1.1 Lesson 1.1
History of Civil Engineering
and Architecture

1.2 Lesson 1.2
Careers in Civil Engineering
and Architecture

Unit 2: Residential Design

2.1 Lesson 2.1
Building Design and Construction

2.2 Lesson 2.2
Cost and Efficiency Analysis

2.3 Lesson 2.3
Residential Design

Unit 3: Commercial Applications

3.1 Lesson 3.1
Commercial Building Systems

3.2 Lesson 3.2
Structures

3.3 Lesson 3.3
Services and Utilities

3.4 Lesson 3.4
Site Consideration

Unit 4: Commercial Building Systems

4.1 Lesson 4.1
Commercial Building Design Problem

4.2 Lesson 4.2
Commercial Building Design
Presentation