Class Expectations for Digital Electronics
Mrs. Delis
2022-2023

Attendance:
Attendance will be taken at the start of each class. After three unexcused tardies, a detention will be assigned. Please be on time!

Office Hours:
Tuesday: 2:26 pm - 3:20 pm
Wednesday: 2:26 pm - 3:20 pm
If a conflict exists, please see me so that we can schedule a time to meet!

Electronic Devices:
Electronic devices are to be put away during lessons. After three warnings, your phone will need to be placed on my desk for the duration of class. If the problem persists, a detention will be assigned and a phone call home will be made.

Google Classroom:
All slides, assignments and classroom information will be on our Google Classroom page. Check the stream for any announcements!

Grading:
Grades will be based on projects, activities, tests and quizzes, participation, and classroom assignments. Grades are year long and each quarter will be 25% of the final grade.

Advanced Credit Option:
Advanced credit is available to all students taking PLTW Engineering courses. If choosing this option, students will receive weighted grades towards their GPA (4.5 scale). In order to receive advanced credit, the following will need to be completed:
1. Google form filled out stating you would like to be enrolled in Advanced Digital Electronics by Tuesday, August 22.
2. An additional activity or project extension each quarter.
3. An engineering field experience (shadowing, field trip, college visit) must be completed and reflected on by the end of the year (subject to change given the current circumstances).

Late/Missing Assignments:
Late assignments will receive a 10% point deduction for each day late for a maximum 30% point deduction. Assignments will not be accepted after seven school days have passed. If for some reason you will not be able to turn an assignment in on time, please email me.

DE Topics:
The following topics will be covered in this course:
- Lesson 1.1: Introduction to Electronics
- Lesson 1.2: Introduction to Circuit Design
- Lesson 2.1: AOI Combinational Logic Circuit Design
- Lesson 2.2: Universal Gates and K-Mapping
- Lesson 2.3: Specific Combinational Logic Designs
- Lesson 2.4: Introduction to Programmable Logic Devices
- Lesson 3.1: Sequential Logic Circuit Design
- Lesson 3.2: Asynchronous Counters
- Lesson 3.3: Synchronous Counters

- Lesson 4.1: Introduction to State Machines
- Lesson 4.2 Introduction to Microcontrollers

DE Projects:
Random Number Generator: Assemble and test a random number generator that randomly displays a number between one and six.
Pumpkin Circuit Project: Determine the flashing rate of LEDs using a 555 timer. Solder the circuit and use the lights for a pumpkin.
Majority Vote: Use AOI logic to design, simulate, and build a voting machine.
Date of Birth: Design a circuit that will display your birthday on a single, seven-segment display.
Now Serving: Design and build a circuit to be used at a deli counter to keep track of customers in line.
Tollbooth: Using your knowledge of state machines, design a functioning tollbooth.
Buzz Wire Game: Design a game using the Arduino.

End of Course Exam:
PLTWs end of course exam will be given during the month of May. The exam will cover all topics learned throughout the school year.

The WebXam will be given in April. This is a state mandated test for career-technical programs.

I look forward to working with you this year as we explore Engineering! Any other questions or concerns, please feel free to contact me:
E-mail: hdelis@fairview.k12.oh.us

Mrs. Heather Delis
Engineering Teacher
Fairview High School

I have read and understand all the above expectations.

Student Signature:_____ Date: _____

Parent Signature:_____ Date: _____