

Engineering Design & Development (EDD)

Syllabus & Course Expectations

2018-2019

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COURSE DESCRIPTION

Engineering Design and Development (EDD) is the capstone course in the PLTW high school engineering program. It is an engineering research course in which students work in teams to research, design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. At the end of the course, student teams must submit a final written report as well as report and defend their final solution to outside reviewer panel (trade show). In addition, students will complete smaller projects during first semester.

MATERIALS

The following materials must be brought to each class session:

- ☐ Pens and pencils
- ☐ Folder with paper
- ☐ *Instead of an engineering notebook students will create a digital portfolio

***All students are responsible for having all of their own supplies each day.**

All lost or stolen items are the responsibility of the student.

GRADING

Grades will be broken down into four grading categories:

- **45%** Projects
- **25%** Presentations
- **25%** Assignments/Homework (Personal Website and Blog)
- **5%** Teamwork

LAB CODE OF CONDUCT

When participating in a lab students are expected to take care of and properly use all equipment. If you accidentally break an item or are unsure of the proper use of equipment, notify the teacher immediately. Goofing around or failure to follow instructions may result in disciplinary action, and possibly exclusion from lab /activity participation.

- 1) No food, no drinks.
- 2) Do not touch projects that are not yours.
- 3) Do not operate power tools without teacher approval.
- 4) Clear all table tops and floors before you leave.
- 5) Log off your computer before you leave and store into the correct computer slot.

***Always be mindful of your time and begin cleaning up your area at least 5 minutes before class ends.**

ABSENCES & TARDIES

If you are absent, it is your responsibility to get caught up with notes, assignment and/or projects. First check class website, then ask a peer, and if you still have questions come ask me outside of class time. Excessive absences may result in no credit for the course. Students are expected to be in their seat ready to learn when the bell rings.

NOTE: The instructor retains the right to make changes, additions, and deletions to the syllabus during the course of the year.
Check with the class website/Haiku for the most recent copy of the syllabus.

CONCEPT CATEGORIES Students will be assessed for the following EDD Concepts listed below.

SEMESTER 1	SEMESTER 2
<ul style="list-style-type: none"> ☐ Personal Website/Blog ☐ What's the Problem? <ul style="list-style-type: none"> ○ Individual Research and Presentation of an innovative solution. ☐ Group Projects <ul style="list-style-type: none"> ○ Reverse Engineering Challenge ○ JPL Invention Challenge- and Field Trip! ○ Halloween Animatronics Challenge ☐ Capstone Project <ul style="list-style-type: none"> ○ Research a Problem ○ Design a Solution 	<ul style="list-style-type: none"> ☐ Capstone Project <ul style="list-style-type: none"> ○ Create a Prototype & Testing Plan ○ Evaluate & Reflect on the Design Process ○ Present the Design Process ○ Beyond EDD

TECHNOLOGY

Playing non-approved games, downloading files or music, participating in online gaming or social networking, and streaming video are not permitted in class. Use of SMMUSD equipment is a privilege, not a right. Those who choose to violate any District Policy will result in loss of technology privileges and/or disciplinary action.

- Computer – allowed during class hours, at the discretion of Mrs. Snyder
- iPods/Music devices – not allowed during class hours
- Phones – not allowed during class hours

PLAGIARISM & CHEATING

Copying of any work or providing work for another student to copy is not permitted in any circumstances. Any student involved in cheating will receive an automatic 0 for their grade and will be referred for disciplinary action.

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