Sage Creek High School

Course Syllabus

Engineering Design and Development A and B

2025-26

Course Title	*Course Meets A-G Requirement*
PLTW-Engineering Design and Development	"g" College Prep Elective

Purpose of the Course

Welcome to Project Lead the Way and the Engineering Program. Project Lead the Way is a national, not-for-profit educational program that assists high-school students in developing strong backgrounds in science and engineering. The following is the link to Project Lead the Way online:
http://www.pltw.org/our-programs/engineering

The knowledge and skills students acquire throughout PLTW Engineering come together in Engineering Design and Development as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any post-secondary program or career.

EDD is a very collaborative project based course. Students are expected to work collaboratively together in one group for the entire length of the course. The mission of the course is to "Develop an innovative solution to a well defined problem."

Suggested Course Materials

Materials: To be most successful, each student should come to class everyday with the following materials: (Please consult the teacher if there is difficulty acquiring the supplies.)
-Engineering Notebook (Provided to Students)
-Blue or Black Pens
-Scientific or Graphing Calculator

Grading Scale

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

Assignment Values

Trimester A		Trimester B	
EDPPSR	70%	EDPPSR	40%
Team Meetings/Classwork	30%	Team Meetings/Classwork	30%
		Final Presentation	30%

Aeries Expectations

-Every student and parent has their own access to Aeries and Google Classroom to monitor assignments, assessments, grades, and to contact teachers. Grades will be updated at least once a week or as new assignments are graded.
-Students should periodically check grades and contact the teacher if there are any questions or discrepancies.

Student Expectations

Be your BEST
Build
Empower
Show Spirit
Trailblaze

-Students are to conduct themselves in accordance with the Student Code of Conduct as outlined in the Sage Creek High School Student Handbook.
-To receive credit on homework, students must submit it by the beginning of the class period in which it is due There will be no credit for late homework, except for excused absences.
-When a student is absent from class, the student is responsible for finding out missed work assignments from the teacher and their group and submitting them in a timely manner. They will be given an extension equal to the number of days missed due to the absence.
-The student must take detailed progress of the project in their engineering notebook.
-Students are expected to attend all “Team Meetings” with their teacher and mentor, even if those are outside school hours. Please discuss with the teacher ahead of time if there is a conflict.
-Students will be presenting their final project at a determined time. Students will be notified well in advance of the presentation night.
-No electronic devices (Earbuds, Cell Phones, Gaming Devices, etc.), except calculators, will be allowed at any time during the class period. If a student has an electronic device it must be turned off or put completely away, unless pre-approved by the teacher.
-It is mandatory that all students practice safety in the engineering classroom. Failure to do so will result in removal from the class and an alternate assignment will be given.
-Students are not allowed to use tools, 3D Printers, or the Laser Cutter without permission from the teacher.
-Students must ask permission to leave the classroom.
-Students are not permitted in the prep room, in the teacher’s desk, or on the teacher’s computer at any time.

Academic Assistance

Please contact the teacher to make arrangements if further assistance is needed.

Trimester A and B Pacing Guide: Topics & Projects/Activities

The EDD Curriculum is grouped into six components. Five of the six components are aligned to the Engineering Design Process Portfolio Scoring Rubric (EDPPSR). The last component is a presentation of the project to a panel of professionals who will assess the group's progress and success. In addition, student groups will have regular "Team Meetings" with the teacher and mentor to monitor progress and assess completion of the various components and documentation in their engineering notebook.

- Component 0: Project Management
- Component 1: Research
- Component 2: Design
- Component 3: Prototype and Test
- Component 4: Evaluation of Project and Process
- Component 5: Documenting and Presenting the Design Process
- Final Project Presentation and Documentation