

ENGINEERING DESIGN AND DEVELOPMENT SYLLABUS

Teacher: Ms. Squibb
Room Location: CTC 109
Course Length: Full Year

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Fees: \$30 General Fee
\$15 Skills USA Membership

Course Description and Objectives:

The intent of this course is to prepare you for college and beyond by involvement in a real “project development lifecycle” experience. As such, it is my intention to treat all individually as adults and I expect you to behave as such.

Much of the course work must be done outside the classroom.

CTC 109 is available for your work. You will also be using the library and you may seek assistance from other departments in the building.

Safety in the lab is paramount. No student will be allowed to operate any of the tools without proper instruction and safety demonstrations.

Cleanliness is your responsibility. The building custodians are not responsible for anything other than the classroom floor, emptying trash and cleaning the chalkboard.

You are accountable for all tools and materials used.

Course Expectations:

Here it is, in writing, so there is no misunderstanding.

- By the end of the first semester your group will plan, produce, test and document a series of innovative products, which have bona fide utility in the commercial market.
- You will:
- Put in at least 75 minutes of work each school day on something that furthers your group’s project.
- Individually maintain a personal journal, with a technically specific entry for each day you work on the project.
- As a group, maintain a comprehensive schedule of the project and update it as major and minor milestones are met or delayed.
- As a group, maintain an accurate Parts List of literally everything needed to build the prototype.
- As a group, construct a prototype.
- As a group, prepare and execute Test procedures.
- As a group, provide CAD drawings as per ANSI or ISO specs, delineating every detail of “Locally Manufactured” parts. A Locally Manufactured part is one made from scratch or one obtained elsewhere, but modified to suit your needs. Any part you use as obtained,

without modification, does not need a CAD drawing, but does need to be listed in the Parts List and shown on the Assembly Drawing.

- As a group, provide a final assembly drawing; which shows all parts, their location and the methods(s) of attachment.
- As a group, provide a set of Assembly Instructions.
- As a group, provide Operating, Maintenance and Safety Instructions (if applicable).
- As a group, retain copies of all correspondence to outside individuals or organizations.
- As a group, prepare and deliver presentations about your project and prepare a loose-leaf notebook containing all the information for your project.

Materials Needed:

- Loose Leaf Notebook Paper
- Mechanical Pencil
- Graphing Calculator

Classroom Rules:

1. Follow all school rules as posted.

Grading Policy:

1 st Semester:	
Projects/Tests:	65%
Quizzes/Mini Projects:	25%
Community Service	10%
2 nd Semester:	
Senior Project:	65%
Quizzes/Mini Projects:	25%
Community Service:	10%

I _____ have read and agree to abide by the above material.

Student Signature

Parent Signature