Technology, Engineering & Design (6th Grade) Syllabus
Kernodle Middle School Department of CTE/STEM

Course Name: Exploring Technology (6th)
Course Teacher: Mrs. Janet W. Carter (Room 509)
Course Description: Refer to the current Student Registration Book

Objectives
By participating in this course, you will be able to:
- ✓ Examine why technology is developed to help meet our individual needs and wants.
- ✓ Investigate how products can be improved and invented based on the current need to solve problems.
- ✓ Engage in virtual activities & hands-on projects to focus on understanding how criteria, constraints, and processes affect designs.
- ✓ Apply the EDP (Engineering Design Process) in the invention or innovation of a new product, process, or system.
- ✓ Utilize engineering design concepts such as CAD (Computer-Aided Design) & other communication technologies to brainstorm and analyze solutions to technological problems.
- ✓ Develop skills in researching information, communicating design information, and reporting results.

Supplies Needed
The following items are needed for your semester:
- ✓ 3-Prong folder to use as your EDJ (Engineering Design Journal) for drawings, technological terms, research notes, handouts, classwork, etc.
- ✓ Notebook paper for Folder. (Loose leaf paper only - No spiral notebooks)
- ✓ Pencils and/or Pens (**Blue or Black ink ONLY**).
- ✓ Pencils must be used on all engineering drawings – **NO PENS!!!**

Course Assessment
Grading for this course will be based on:
- ✓ Classwork / Activities _____ 40%
- ✓ Participation - Teamwork & Soft Skills _____ 40%
- ✓ Unit Tests / Projects _____ 20%

Course Content: *We will be exploring many areas of technology & engineering.*

STEM101 Topics: Manufacturing a Product, Coding and 2D Design, Lighter Than Air Vehicles, Properties of Flight, Discovering Sketching and Drafting, Discovering Computer Science and Electronics 2.0, Discovering Architecture & Advanced Architecture**.**

TED Topics: Technological systems, Energy & Power, Materials, Manufacturing, Aerospace, Structures, Mechanical systems and much more!

Classroom Policies & Procedures:

- ✓ <u>Be on time</u> - All tardies require a note from a teacher or an administrator. (Excessive unexcused tardies to class will result in lunch detention)
- ✓ <u>Be prepared</u> - Come to class with paper, pencil and a **GOOD ATTITUDE!**
- ✓ <u>Be respectful</u> - Respect the right of others by being a good listener and take care of property within the classroom. (You will be responsible to cover any damages to tools & equipment in the Tech Lab via student fees)
- ✓ <u>No Horse Playing</u> – Accidents & injuries can be avoided by staying on task and working safely.
- ✓ <u>No Food or Drink</u> - Food and drinks can damage the computers and ruin projects. (Water bottles are allowed, but they must have threaded tops)
- ✓ <u>No MP3's/iPods or Cell Phones</u> - These are a distraction to your learning. (Per school policy, if these are out during class time, I will have to take them)
- ✓ <u>Stay on Authorized Websites</u> - You must use teacher instructed/guided websites/software programs only. (You could be banned from using the computers and/or Internet)

Breaking any TED Policies and/or Procedures:

1st Infraction: Warning
2nd Infraction: Lunch Detention
3rd Infraction: Contact Parent/Guardian
4th Infraction: Referral to the appropriate grade-level Administrator

Other Items of Importance:

- ✓ *Assignments* - Name, class & date should be included on all assignments (Assignment points may be lost if your name & class are not included. Late assignments will lose **10pts.** per week)
- ✓ *Make-up Assignments* - All work must be completed, and tests made up in a timely manner (It is **YOUR** responsibility to make up missing assignments - Tutor/Make-up sessions are offered on Wednesday afternoon or mornings)
- ✓ *Bathroom Passes* - You are allowed limited bathroom passes per Quarter. (Only one student is permitted to leave the room at a time)

Feel free to contact me if you have any questions and/or concerns.

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"Change To Empower; Empower to Change"