

Student Name: \_\_\_\_\_ Class Period: \_\_\_\_\_ Computer#: \_\_\_\_\_

**COURSE DESCRIPTION:**

|                     |                                |                |   |
|---------------------|--------------------------------|----------------|---|
| Course Name         | Technological Systems, Grade 8 | Teacher Name   | Mrs. Michelle Cottongim   |
| School Name         | Cartersville Middle School     | Teacher Email  | mcottongim@cartersvilleschools.org  |
| School Phone Number | 770-382-3666                   | School Website | <a href="https://www.cartersvilleschools.org/CMS">https://www.cartersvilleschools.org/CMS</a> |

Technological Systems is designed to introduce students to systems and processes to develop an understanding of the impact of technology on humans, the environment, and the global community. Students will develop an understanding with regards to how technology can impact humans, the environment, and the global community through the development of systems.

A systems model in its simplest form (input, process, output and feedback) and the design process are foundational to understanding technological systems. A system can be as small as two components working together (technical system/device level) or can contain millions of interacting devices (user system/network level). We often break down the macro systems into less complicated microsystems to understand the entire system better. However, technology is becoming more integrated, and systems are becoming ever more dependent upon each other. By investigating systems through their function, design, and development, students will understand what systems are, why they are developed, and how the knowledge of “systems thinking” can be used in the design and production of prototypes. The Technological Systems course reinforces the areas of math, science, social studies, and language arts through practical application and/or hands on activities. Exposure to Engineering and Technology related careers, work ethics and leadership skills will be important components in this course.

**8th Grade Standards - Technological Systems**

<https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Documents/Technological-Systems-Grade-8.pdf>

**Instructional Resources:**

This course utilizes a variety of web-based applications and software. The two primary resources are:

- ITEEA’s Engineering by Design Web based Course: Technological Systems
- Technology: Engineering Our World Eighth Edition ITEEA Textbook

**Class Goal:**

To prepare students to become 21<sup>st</sup> Century learners while enhancing achievements in STEAM subjects (Science, Technology, Engineering, Arts, and Math) through hands on engineering/technology lab experiences.

**Instructional Philosophy:**

The class will be taught in an experiential manner where the students are encouraged to actively participate in class discussions, readings, individual, and group projects. It is important for students to take ownership of their learning and be responsible for all assignments.

**Class Specifics:**

- We will use an online learning environment. Home internet is useful, but not required. Assignments, resources and pertinent information will be posted in the Learning Management System (LMS), Schoology.
- Digital citizenship and appropriate digital use are always expected as most of our work is online.
- Assignments that are not completed in class are due the next day and should be completed for homework.
- Students are required to take and pass a Procedures and Safety test.

**Supplies:**

1 composition notebook graph ruled, 1 2-pocket folder with prongs, Notebook Paper

**Supplies to keep with you in a pencil pouch:** wired ear buds, pens & pencils, highlighters, blunt tip scissors, colored pencils, markers, glue sticks, and scotch tape

**Attendance:**

Attendance is critical to the success of this course. The class attendance policy will follow the same guidelines set forth in the student handbook. Being tardy for the class will result in an infraction.

**Safety:**

Because of the nature of this course, students will work with and learn to use a variety of tools and equipment. Each student will be orientated and assessed on basic workplace safety procedures. While working in the classroom or in the lab, all safety procedures must be followed. If a student does not follow the correct safety procedures, the student will not be permitted to complete the activity. If a student places himself/herself or others in danger, the student will be removed, and the proper disciplinary actions will follow. No food, drink, candy or gum is allowed in the lab except for a water bottle with water only.

**Digital Citizenship:**

As this course is primarily online, it is imperative that appropriate online behavior is maintained to ensure a productive and safe learning environment for all. Students may be provided alternative assignments if unable to abide by proper protocol.

**Grading:**

All assignments are expected on the due date. There will be a 30% penalty for any assignment not turned in on time. Utilize Infinite Campus to view your student's progress. If you need the log-in information, please check with the front office. Grades will be based on a combination of daily work, quizzes, tests, projects, tasks, etc. The grades will be weighted as follows:

- **60%** Summative (Including, but not limited to; tests, projects, Engineering Design Notebooks and exams.)
- **40%** Formative (Including, but not limited to; quizzes, classwork, and Engineering Journal)

**Classroom Expectations:**

1. Be on time and prepared for class every day.
2. Listen carefully to instructions.
3. Turn in work on time.
4. DO NOT tamper with computer settings.
5. Follow all Student Handbook Rules.
6. Clean computer area and log off prior to leaving class.
7. Clean Engineering Workshop as assigned prior to leaving lab.
8. Follow all safety rules in the lab/classroom.
9. Return tools and supplies to proper storage area.
10. Do not eat food in the classroom and or lab area!  
Water bottles must be placed on the floor by chair.

**Actions Taken for Problem Behavior or Failure to Follow Procedures**

· When a student does not follow procedures or demonstrates problem behavior a discipline infraction will be issued. Consequences for infractions will be as follows:

Infraction 1: Parent Contact

Infraction 2: Silent Lunch/Parent Contact

Infraction 3: In-Team Suspension/Parent Contact

Infraction 4: Office Pre-Referral

Infraction 5: Office Referral

· Additional infractions will result in an office referral.

· Severe behavior problems as outlined in the Cartersville Middle School Student Handbook will be referred directly to the office.

PLEASE SIGN BELOW AND RETURN

I have read the syllabus.

Print Student Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Class Period: \_\_\_\_\_

Student Signature \_\_\_\_\_

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_

Additional information to support continued contact:

| Information              | Parent/Guardian |
|--------------------------|-----------------|
| Print Parent Name        |                 |
| Cellular /Home Phone No. |                 |
| Email Address            |                 |

