

# Technological Systems

8<sup>th</sup> Grade

Teacher: Ed Clawson

## COURSE SYLLABUS 2023-2024

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Help Session/Office Hours:

Tuesday Mornings 8:00 -8:45 AM (By appointment)

### SUPPLIES:

Each student will need to bring a pencil, your charged computer, and your agenda to class each day. Mechanical pencils or standard pencils are both acceptable. The school will supply you with a folder for your engineering journal. A box of Kleenex and/or a roll of paper towels for the classroom would be greatly appreciated but are not mandatory. The two most important things to bring to class are a **curious mind** and a **positive attitude!**

### COURSE DESCRIPTION:

The goal of this nine-week course is to introduce students to systems and process to develop an understanding of the impact of technology on human, the environment, and the global community. Technological Systems is designed to reinforce the areas of math, science, social studies, and language arts through practical application and/or hands-on activities. Students will be given exposure to careers related to Engineering & Technology. This course will emphasize the value of good work-place ethics and introduces the concept of leadership skills development.

### COURSE OUTLINE:

Classes will be structured using the *Georgia Performance Standards* which are listed below.

1. Students will demonstrate employability skills required by business and industry.
2. Students will demonstrate proper safety techniques and tool usage in the Engineering and Technology Laboratory.
3. Students will examine the variety of components that make up several examples of a system model.
4. Students will use the Engineering Design Process along with the knowledge of a systems model in the production of a prototype solution to a design problem.
5. Students will develop an understanding of how humans interact with systems.
6. Students will describe how technological systems continuously improve from one iteration to another.
7. Explore how related career and technology student organizations are integral parts of career and technology education courses.

Students will develop leadership, interpersonal, and problem-solving skills through participation in co-curricular activities associated with the Technology Student Association.

### GRADING PROCEDURE:

Grades are reported every 4 1/2 weeks. The category and weights are as follows:

Major Assessments – Major projects or performance tasks that demonstrate mastery of course standards.	50%
Minor Assessments – Daily class assignments, labs, minor projects used to guide instruction.	40%
Practice Assignments - Note taking guides, Engineering notebook entries, homework, ect.	10%

**Late work policy:** If a student is absent, it is his/her responsibility to get the information missed upon return to school and complete the assignments. Students are given one day for each day absent to complete the work. Failure to gather or complete the assignments may result in a zero for missed work. **Late assignments** will be graded according to the AMMS grading policy which states: 10% off per day with a maximum deduction of 25%. Zero points after unit completion. Guidelines listed on page 6 of the AMMS Student Handbook and Agenda.

**Recovery Policy:** Student may use recovery for major assignment that the scored below 75%. The maxim grade for successfully completing a recovery assignment is 75 and must be completed before the next major assignment. Guidelines for recovery are listed on page 6 and 7 in the AMMS Student Handbook and Agenda.

### BASIC CLASSROOM PROCEDURES AND EXPECTATIONS:

\*\*\*SEE AMMS STUDENT HANDBOOK AND AGENDA FOR FUTHER PROCEDURES AND EXPECTATIONS\*\*\*

1. Be on time to class.
2. Bring agendas, pencils, and charged computer to class daily, no phones or book bags unless stipulated by the teacher.
3. Participate in all classroom activities.
4. Maintain an open, positive attitude about all types learning activities.
5. Show respect to your fellow classmates, teacher, and the equipment and materials in the classroom.
6. Be an active participant in group projects.
7. Strict adherence to all rules as they appear in the student handbook.

### CODE OF CONDUCT:

Fulton County Schools highly values good work habits and character development. You will be given a rating in four areas of **non-academic skills**. Those areas are **Self-Direction, Collaboration, Problem Solving, and Work Habits**. This rating will be included in our grade report. In order to maintain a positive environment that is safe and conducive to learning, students are expected to follow the AMMS Code of Conduct guidelines for appropriate student behavior, outlined on page 13 in the AMMS Student Handbook and Agenda with a focus on a Positive Behavior Interventions (PBIS) recognizing and rewarding Respectful and Responsible student behavior.

**Conduct that is considered to be dangerous to yourself or others in the engineering lab will not be tolerated. This type of behavior will result in the strictest enforcement of the discipline code. Any student engaging unsafe behavior may be reassignment to the safe environment of an isolated desk to complete the course requirements from the textbook.**

### GUIDELINES FOR SUCCESS:

**Be Respectful      Be Responsible      Be Employable      Be Safe**

**Please return this by the due date.**

**Student Name** \_\_\_\_\_

**Class Period** \_\_\_\_\_

**Date** \_\_\_\_\_

Dear Parent,

I love teaching engineering and technology to middle school students. I must have said "I have the best job in the world" a thousand times, throughout my nineteen years of teaching. I try to make this very much a "hands on" course. Students will be given opportunities to problem solve, create, design, and build. There is a significant emphasis on the development of problem-solving skills. I very strongly believe that teaching basic engineering concepts in a project-based learning environment will help prepare students for many of the challenges and job opportunities that are ahead of them.

Please feel free to email me with any comments or concerns that might help me to provide your son or daughter with a more positive experience in my classroom.

If you or your spouse have a career as an engineer or work in any technology related field, the students and I would love to invite you to come into the classroom and share your experiences and insight. Hearing a first-hand account of a real-world challenges can have a significant impact. Many students at this age are just beginning to discovery what their true interests are. Perhaps you might be the person that ignites a life-long passion. Please let me know if you would like to contribute a little bit of your time or to further discuss other opportunities for collaboration.

Please check the box if you are interested in exploring the possibility of sharing your experiences in our classroom and I will reach out to you.

Sincerely,

Ed Clawson  
AMMS Engineering Instructor  
Technology Student Association Advisor  
FIRST Robotics Coach  
VEX IQ Robotics Coach  
Drones for Good Coach

**I have read the Technology Systems syllabus and understand the requirements and expectations for success in Mr. Clawson's class.**

Student Name Printed \_\_\_\_\_

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

Parent Name Printed \_\_\_\_\_

Parent Signature \_\_\_\_\_ Date \_\_\_\_\_