



SYLLABUS 2021-2022  
7th Grade Engineering and Design  
Southwest Middle School

**INSTRUCTIONAL GOALS**

*Engineering and Design (Invention and Innovation)* prepares students with opportunities to apply the design process in the invention or innovation of a new product, process, or system, along with helping students learn the fundamental principles and universal laws of technology. Their experience in this course will help them develop skills and insights that will be applicable to lifelong learning. Learning is student centered and directed toward impacting analytical and creative skills. Students will research tasks that are designed to help them achieve technological literacy through authentic real world experiences.

**Assignments:** Students will be expected to turn in assignments when they are due.

**Make-Up Work**

- Upon the student's return to school, arrangements for make-up for excused or unexcused absences shall be made within three (3) school days.
- Due dates for make-up work will be at the discretion of the teacher.

**NEEDS AND RESOURCES**

**Required Background**

To successfully complete this course, you will need to:

- Utilize Engineering Design concepts such as computer aided-design
- Analyze solutions to technological problems
- Understand how technology can impact society

**Required Materials**

Students need earbuds, a hand-held pencil sharpener, 1-subject spiral notebook, and pencils.

**Common Core Curriculum**

We follow the Common Core Curriculum. Please visit the North Carolina Department of Public Instruction for more information. The link is

<http://www.ncpublicschools.org/acre/standards/common-core/>



## CTE Technology Education Curriculum

Instruction will be taught through guided instruction for hands-on projects and Canvas Learning Management System. Students are involved in activities and experiences where they learn about brainstorming, visualizing, modeling, constructing, testing, experimenting, and refining designs. Taking notes in their Engineering Design Journal and Electronic Portfolio is a weekly expectation. Students will have time to work on assignments outside the classroom for practice and independent study for vocabulary, projects, and research.

## POLICIES AND PROCEDURES

### **General Rules:**

#### Student Expectations

- 1) Be respectful.
- 2) Enter quietly and get to work immediately. Exit quietly.
- 3) Sharpen your pencil at the beginning of class. It is highly recommended to have and use a hand-held pencil sharpener.
- 4) Raise your hand and be given permission before speaking or leaving your seat.
- 5) Do your best on all assignments - effort matters.
- 6) Be an active participant by listening and speaking at appropriate times.
- 7) Engineering Design Journal is organized and contains Entry for each class period
- 8) Handle chromebook responsibly (follow GCS Acceptable Use Policy) use for academic purposes only.
- 9) Clear bottled water allowed in the classroom (food not allowed)
- 10) Use the restroom during designated times.
- 11) Cell phones must remain off and put away (Not in use)
- 12) Homework expectations (Once Week) Canvas Journal Entry; Vocabulary

#### Parent Expectations

- 1) ***Please observe and monitor homework.*** Please see that they study and review their vocabulary. Complete research for projects and presentations. Complete their homework, review and study. The success of your child depends on you too!
- 2) Go through their Engineering Design Journal to help maintain organization and neatness.
- 3) Email or call if you have questions. My email address is [Ahsanders@gaston.k12.nc.us](mailto:Ahsanders@gaston.k12.nc.us)
- 4) Access your child's grades online using their lunch number and password.



### Grading Policy

Students are graded using the Gaston County Schools weighted grading scale and will be graded on:

- |    |   |     |
|----|---|-----|
| 1. | Tests, major projects, papers, and performances | 40% |
| 2. | Quizzes, class work, common assessments         | 30% |
| 3. | Guided Work and group activities                | 20% |
| 4. | Homework  | 10% |

Each student will be encouraged to achieve a minimum of 80% on each **test or in-class assignments**.

#### ❖ 10-point Grading Scale

- *A 90-100*
- *B 89-80*
- *C 79-70*
- *D 60-69*
- *F 59-below*

### ADDITIONAL INFORMATION

I look forward to a great year as we incorporate new technology, learning strategies into our classroom.

Please do not hesitate to contact me if you have any questions or concerns. I can be reached:

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### CONTACT INFORMATION

- Mrs. Angela Sanders CTE Technology Education Teacher
- Phone: 704-308-4950 (Planning Time: 1:00-2:00) and By Appointments
- [Ahsanders@gaston.k12.nc.us](mailto:Ahsanders@gaston.k12.nc.us) SWMS Phone: 704-866-6290
- [AngelaSanders.net](http://AngelaSanders.net)

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Grade \_\_\_\_\_

Parent Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Grade \_\_\_\_\_