

SYLLABUS

Exploring Technological Systems

8th Grade Southwest Middle School

INSTRUCTIONAL GOALS

Exploring Technological Systems: This course focuses on 8th grade students' understanding of how technological systems work together to solve problems and foster innovation. As technology becomes more integrated and systems become dependent upon each other, this course gives students a general background on the different types of systems, concentrating on the connections between them. Within this course students are given various hands-on projects consisting of Robotics, 3D Printing, and Python coding. This is a semester course.

Assignments:

Students will be expected to turn in assignments when they are due. Assignments that are late will be deducted 10% for every day they are late. Classes are designed for students to complete all work in class.

NEEDS AND RESOURCES

Required Background

To successfully complete this course, you will need to:

- Develop skills for different types of systems
- Concentrate on how to build, design and connections between different types systems
- Explore Robotics, 3D Printing and Python Coding

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 Interactive Read Aloud. A selected text to the whole class, occasionally and selectively pausing for conversation. Students think about, talk about, and respond to the text as a whole group or in pairs before recording and taking notes in their Engineering Design Journal or Electronic Portfolio. Weekly vocabulary is given and projects assigned. There will be quizzes/tests and journal checks for essential questions. Students will have to take time to work on assignments outside the classroom with more independent study

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) and use for academic purposes only.
- 9) Clear bottled water allowed in the classroom (food not allowed without teacher permission).
- 10) Use the restroom during designated times.
- 11) Cell phones must remain off and put away (Not in use)
- 12) Homework expectations (Once Week) Vocabulary/Research

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

4) Access your child's grades online using their lunch number and password.

Grading Policies:

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**.

I use Gaston County grading scale to determine student grades. The grading scale is as follows:

100-90	A
89-80	B
79-70	C
69-60	D
59- 0	F

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:

CONTACT INFORMATION

- Mrs. Angela Sanders CTE Technology Education Teacher
- 704-308-4950 (Planning Time: 12:30-2:00) and By Appointments
- ~~704-308-4950~~ SWMS Phone: 704-866-6290
- ~~1234567890~~

Student Signature: _____ Date: _____

Parent Signature: _____ Date: _____