# Principles of Technology



Ms. Rutledge
Red Oak High School
2019 – 2020



#### Dear Student and Parents:

Welcome to Principles of Technology! Please take this opportunity to view the Course Information sheet and the Syllabus and discuss them with your child. Principles of Technology is a course in applied science that is designed to prepare students more effectively for the advances in technology. This course is designed as an applied physics course on mechanical, fluid, electrical, and thermal systems -- most of which we come across in everyday life. Details on the concepts and processes studied are listed on the next page. Principles of Technology also counts as a science course and students can also receive a Career and Tech Education credit. We will learn primarily through project-based (inquiry-based) learning. We will also explore the relevance of these science topics to everyday life & emerging applications, how systems and equipment work, social and ethical implications of these technological principles, and investigate great science-related careers.

After viewing the information, please provide me with your contact information and sign below indicating that you and your child understand the requirements for this course. **Your child is required to return this page by August 26, 2019.** Thank you for your time and support. I cannot wait to get started! This year is going to be GREAT! Please do not hesitate to call me or email me anytime if you have any questions. My contact information is provided.

Sincerely,
Susanna Rutledge
Susanna.rutledge@redoakisd.org
972-617-3535

# **PLEASE DO NOT CUT THIS SHEET OFF!!!**

We have read and understand the requirements for this course. We have received an electronic copy of the required Safety Contract and agree to follow all safety rules.

***Should you need to contact me about my child's performance, I can	be reached at:
Parent name (print):	
Student name (print):	
Parent Cell Phone:	
Parent email:	
Parent Signature:	_
Student Signature:	<u> </u>
My child DOES have access My child DOES NOT have ac	

If you feel there is anything specific I need to know about you or your child for everyone to be as successful as possible this year, please take the bottom portion to explain. Thank you!

# Principles of Technology Course Information

## **Expectations:**

Students are expected to come to class with their materials and be prepared to learn. They are to ask questions and become actively involved in their own learning by participating in all class activities and discussions. All homework, projects, labs and assignments are due at the beginning of class on the due date, unless otherwise specified. If a student is absent, he/she is responsible for getting all make up work and returning it within the time allotted according to the student handbook. Missed exams are to be made up before/after school or during Talon Time within the allotted time period. Any form of cheating and plagiarism will not be tolerated.

Through group activities, students will demonstrate interpersonal skills, such as: communication, cooperation, professionalism, efficiency and dependability. This involves a peer review evaluation and reflection upon skills needed for success in the workforce, as well as days where <u>students will need to dress in a professional manner.</u> Special projects may require some student supplied materials. *If this presents a financial burden to your family please let me know and we'll help you procure what is needed.* 

Attendance, listening, teamwork, problem solving, reasoning, good note taking, safely completing hands-on lab experiments and projects, doing homework, and passing exams are essential for success.

# Required supplies:

It is required that each student have a spiral notebook for a journal for keeping notes and a folder/binder for returned papers, handouts, etc. Students are expected to be able to locate and produce a paper if needed. In addition, students will need blue/black pens, pencils, and notebook paper. A donation of a box of Kleenex would be greatly appreciated, and will be encouraged with the reward of a homework pass (one per six week period). These supplies will be required by 2<sup>nd</sup> Monday school begins.

#### **Tentative Course Schedule:**

#### 1st Six Weeks:

Unit 1: What is Science?

Unit 2: Technology Laboratory and Field Investigations

Unit 3: Safety Precautions and Regulations in

Technology

#### 2nd Six Weeks

Unit 4: Scientific Reasoning in Technology

Unit 5: Using the Scientific Process to Investigate

Physical Concepts in Technology

#### **3rd Six Weeks**

Unit 6: Using the Scientific Process to Evaluate and Communicate Physical Concepts in Technology Unit 7: Application of the Laws Governing Motion

#### 4th Six Weeks

Unit 8: Forces in the Physical World

Unit 9: Application of the Laws of Energy Conservation

and Momentum

#### **5th Six Weeks**

Unit 10: The Concept of Thermal Energy

Unit 11: Properties of Wave Motion and Optics

### **6th Six Weeks**

Unit 12: The Concepts of Atomic, Nuclear, and Quantum

Phenomena

Unit 13: Employability Skills

# **Cell Phones/Headphones/Smart Watches**

Cell Phones will be allowed to be out in the classroom for emergency reasons only. I <u>highly encourage</u> students to have phones put away, as these can be a major distraction in their ability to learn and be successful in this course. If phone usage becomes an issue with any student, parents will be contacted and the student will be required to have the phone put away during class times. However, <u>students must have asked permission to use headphones, and I must have given it</u>. If this has not happened, I will take headphones up and return them at the <u>end of the day</u> on the first

offense, after that I will turn it into the office. This is to ensure that all students are able to hear at all times. This is for the safety of each and every student in my classroom.

# Food and/or Drink

There is a very strict **NO FOOD OR DRINK** policy in my classroom. I will allow water bottles ONLY. If a student is eating or drinking something other than water, they will be asked to throw it away or finish it prior to entering the classroom.

# Make-Up Work

It is the student's responsibility to get make-up work from me or another student, whichever they prefer. If they do not get their make-up work done within five (5) days, it will result in a zero in the gradebook. Make up assignments may be different than the original assignment, but the content will be the same. If there is any problem with completing the make-up work, the student will need to see me as soon as possible.

# **Tutoring**

It is HIGHLY ENCOURAGED that any student with a grade of below an 80 come to tutoring. Tutoring hours are 7:50-8:20 am Monday through Thursday, or Monday, Wednesday, or Thursdays after school by appointment only. Students will be asked to sign in/out when they come to tutoring.

#### Homework

Students will be given work to be completed outside of the classroom. It is vital that this work be turned in and completed. Homework passes will occasionally be given out, but must have approval by me before being used.

#### **Late Work**

If a student does not turn in an assignment by the required due date, they will have FIVE (5) school days to get the assignment turned in to the Late Work box, with a penalty of ten points a day taken off.

#### The Honor Code

Students are expected to behave with integrity. Cheating, plagiarizing, stealing, and lying are unacceptable.

For major assignments such as tests, projects or quizzes, the student will receive a zero at that time but will be given the opportunity on a date and time to be determined by the teacher to complete an alternative assignment for a grade no higher than a 70.

For daily work a student will receive a zero with no opportunity to make up the assignment. Cheating and plagiarizing includes both the person doing the cheating or plagiarizing and will also include the person that they copied or plagiarized from if it is determined that this person allowed it to take place.

#### Remind App

IT IS VITAL TO YOUR SUCCESS TO BE PART OF YOUR CLASS PERIOD'S REMIND GROUP. I will send out announcements,

reminders, and any sudden changes that may occur. Parents are also encouraged to join the group as well to stay informed on the class. <i>There is also an app available on the iTunes App Store and Google Play</i> .
Text your Remind code to 81010:
MY REMIND CODE: