

Electricity/Electronics 2nd semester 23/24

INSTRUCTOR

Mr. Wusk

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References:

Electricity and Basic Electronics Goodheart-Willcox

Electricity and Electronics Technology Glencoe MCGraw-Hill

Electricity/Electronics Description

Electricity/Electronics - This class is a semester and is designed to cover the areas of Electricity/Electronics (Careers, Safety, Communication, Energy, Commercial and Residential). Students will learn basic concepts through lectures, notes, videos, field trips, and hands on experience. They will be required to do 2 multimedia's each quarter over electricity. Students will learn the basic of Ohms Law, Series, Parallel, Multimeters, Batteries, Safety, Parts of circuits. Students will use math formulas, and also set up electronic experiments. Also a research presentation on power point over technology in electricity/electronics will also be done.

Expectations

1. Be in your seat on time and materials ready to go
2. Use computer to take notes not for games
3. Bring a calculator, note book, pen or pencil to class
4. Answer daily question and write down objectives
5. Remain in your seat until the bell sounds and the teacher dismisses the class.
6. Be responsible and take care of any equipment used in the lab area.
7. Wear proper eye protection at all times during laboratory activity.
8. Make up all work missed due to an excused absence.
9. Have respect and be polite to others working in the lab.
10. Have self-control when working in the lab.
11. Be reliable in your work, can I count on you to get it done
12. Give the speaker your full attention
13. Pick up after yourself, all trash needs in a trash container
14. Do not throw or drop tools, materials, trash.

15. Use proper language, Put your filter in.
16. Most of all have FUN!

Grading policy:

Summative: 80%
Unit Test x15
Essential words test
Projects
Motor, circuit, elec board,
Final
Final power point over elec technology
Formative :20%
Unit reviews
Worksheets
Multimedia x1
Technical writing- how to steps- 100 steps= 100%

For a student to be granted a retake, teacher approved remediation must have taken place. We may do the remediation during class study time, before school (7:45-8:10), after school (3:35 – 3:45). It is the student's responsibility to make arrangements for the retake.

Classroom rules:

1. Notify teacher immediately in case of an accident, no matter how trivial it may appear.
2. Know the locations of the fire extinguisher and first aid kit.
3. Notify the instructor immediately if a machine is not working properly.
4. Footwear that completely covers the foot is highly recommended.
5. Do not use any equipment if the instructor is out of the room.
6. Use the equipment that the machine was intended to be used for.
7. Use only the equipment that has been covered by the safety rules.
Do not use any machines that have not been covered by safety rules.
8. Always use your head, this is the best way to avoid accidents.
9. Always clean up the lab before you leave.
10. Always follow the safety rules that have been discussed in class.

Objectives

The Learner will

- TLW solve problems effectively as an individual and member of a group.
- TLW employ higher-order thinking skills for solving problems.
- TLW develop and comprehend written and oral directions.
- TLW assist in shop maintenance and clean up.
- TLW demonstrate respect for tools, equipment and other students.
- TLW apply mathematical concepts in the development of projects.
- TLW recognize and correct unsafe work practices.
- TLW assemble electrical components commonly found in residential construction.
- TLW safely operate tools and equipment.
- TLW summarize current information in the areas of electricity/electronics technology.
- TLW identify electrical symbols.
- TLW identify components of an electronic circuit.
- TLW test and measure circuits using a multimeter.
- TLW calculate circuits using Ohms Law.
- TLW identify electricity/electronics careers and trade schools.
- TLW identify parts of an electrical system.
- TLW explain principles of magnetism.
- TLW describe and construct how an electric motor works.
- TLW differentiate between AC and DC circuits.
- TLW examine differences and similarities of various cultures as related to content area.