Syllabus Physical Science 2

RCAS Policies/Procedures

Students will be required to follow all RCAS policies and procedures. To view the RCAS High School Student Handbook, click handbook.

Course Description

Physical Science 2 is an introduction to Physics. This class will study what things make up the universe and how they work. Physical Science 2 will emphasize forces, motion, energy, work, power, electricity and magnetism. The emphasis will be on the close relationship between these areas and how they are important to the individual student and society. The goal is to improve your science literacy skills and your critical thinking skills.

Course Learning Outcomes

Module: Motion
- I can describe motion in terms of distance, displacement, speed, velocity, time, and acceleration.

Module: Forces
- I can describe how forces affect the motion of an object.
- I can mathematically solve for the force on an object, its mass, and its acceleration.
- I can identify action/reaction pairs.
- I can analyze the relationship between mass, weight, and gravitation.

Module: Energy
- I can describe and predict how energy is transformed within a system.

Module: Work, Power, and Machines
- I can describe how work and energy are related.
- I can explain how machines make doing work easier.

Module: Electricity
- I can describe what electricity is.
- I can perform calculations using Ohm's Law.

Module: Magnetism
- I can describe magnetism.
- I can describe how electricity and magnetism are related.

Classroom Expectations
- **Treat each person in the room with respect and dignity.**
- Food and Drink are not allowed when we are doing a lab. If you are eating or drinking in class, please clean up after yourselves.
- Follow all lab safety rules and procedures as they are given.
- You are expected to participate and be attentive during all portions of class. If you are not feeling well, or if a situation arises, please let me know in an appropriate manner so I can be of assistance.
- Assignments are linked on Canvas …. you can access these from anywhere and at any time.
- If you need to use the restroom or get a drink of water, please ask and if the timing is appropriate and you have permission, you may go. Please do not leave the classroom without permission
- Please do not get into cabinets or touch any lab equipment or safety devices unless given permission to do so.

- **<u>Cell phones and electronic devices are to be put away during class per school policy. Earphones should be put away and the phones/devices out of sight. Occasionally you will be given permission to listen to music. You must have permission first, and any issues or disruptions with the device can result in loss of privileges and or office referral.</u>**

Grading

I calculate your grade by weighing tests and daily work equally. Tests will be worth 50 points, Labs will be worth 25 points and assignments will be between 5-25 points depending on the assignment. How this works is I will tally up all the points you earn for test grades, labs and daily work. I will then tally the total score and divide by the number of points possible.
Here is a breakdown of how I assign letter grades as per district policy.

A= 90-100%
B= 80-89%
C= 70-79%
D= 60-69%
F= Below 60%

Textbook

Glencoe Science: Physical Science
Book are available in the classroom. Students will not be given an individual book unless discussed in an IEP or 504. If student want to have a physical book, please discuss with your teacher.

Reading

Any readings will be available on Canvas. If a physical copy is needed, please discuss with your teacher and they will have one available for the student.

Optional Reading

Any Optional readings will be available on Canvas found throughout the modules. Please see your teacher for any questions.

Instructional Resources

Canvas - https://rcas.instructure.com/

Gizmos (Online Labs) - https://gizmos.explorelearning.com/

YouTube (Online Education Videos) – https://www.youtube.com

PhET (Interactive Simulations) - https://phet.colorado.edu/

*Any other Resources will be found on Canvas throughout the modules. The resources above are the main sources.