

## RCHS Physical Science 1 Syllabus 2022-2023

### 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 1 will emphasize matter, energy, and their interactions. Topics will include kinetic theory, heat transfer, waves, conservation laws, atomic structure and theory, the periodic table, chemical bonds, and reaction types. The emphasis will be on the close relationship between these areas and how they are important to the individual student and society. Critical thinking and lab skills will be an additional focus of this class.

### Course Learning Outcomes

- I can identify and use equipment safely with proper techniques.
- I can investigate experimental design, measurement, and matter as they relate to chemistry.
- I can describe and calculate different properties of atoms and their subatomic particles.
- I can use the periodic table to predict properties of elements.
- I can describe and draw metallic, ionic, and covalent compounds.
- I can name and write formulas for simple ionic and covalent compounds.
- I can describe and calculate different properties of electromagnetic radiation.
- I can describe and calculate different properties of thermal energy.

### Classroom Expectations (show how they are connected to schoolwide expectations)

There are three school-wide expectations that work well for a science classroom. In the classroom there is a poster that demonstrates what the expectations below look like.

- Be Present – being here and being aware of yourself and your surroundings, focused on the here and now.
- Be Courageous – taking appropriate risks, persevering, doing what is right, even when it is uncomfortable or unpopular.
- Be Respectful – making safe choices by being kind to self and others, to empower all.

Behavior that is not kind/safe to yourself or others may result in a conference with your teacher, advisor, and/or administrator. Behavior that continues may result in an office referral.

#### Physical Science 1 specific expectations:

- Food and Drink are not allowed when we are doing a lab. If you are eating or drinking in class when approved, please clean up after yourselves.
- Follow all lab safety rules and procedures as they are given.
- Please do not get into cabinets or touch any lab equipment or safety devices unless given permission to do so.
- 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.

- 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, fill out a pass and you may go. Please do not leave the classroom without permission or without a pass.

Cell phones and electronic devices are to be put away during class per school policy. Earphones should be put away and the phones/devices in the classroom cellphone holder. You must have permission for use, and any issues or disruptions with the device may result in loss of privileges and or office referral. It is never okay to video/take pictures/snap of others/your teacher and post to social media. Doing any of these is a violation of federal law (FERPA), which guarantees our rights to privacy. This may also be considered a form of bullying and result in consequences at the school.

### **Grading**

Final grade calculation will be based on points earned for the term. The grading scale will be the district approved grading scale. Assessment retakes will be required of a student until a passing score is obtained (60%). There will be a conference between the student and teacher before a retake. All assignments may be corrected so that students can earn full points on work. Students must successfully complete all modules to successfully complete the course.

Please keep track of assignments using Skyward/Canvas. Please ask for extra help. Students can schedule time for one-on-one help during planning (see posted schedule), before and after school. Please check with your teacher about coming in so you can be assured they will be there.

A note on academic integrity... Copying classmates work may result in all parties receiving partial or no credit for the work and if severe enough may result in disciplinary action. You may work together but you must always hand in your own work.

### **Textbook**

District approved StemScopes website (<https://www.stemscopes.com/>). District Approved Physical Science Text: "Glencoe Physical Science © 2008".

### **Reading**

Physical Science 1 will not have regular required readings. There may be content related articles found and implemented. These will be available for student/parent viewing through Canvas or upon parent/student request for a paper copy.

### **Optional Reading**

See the above statement under "Reading".

### **Instructional Resources**

Select online activities/simulations from the following sites may be used as they relate to content being discovered:

- <https://www.explorellearning.com> (specifically the Gizmos science site)
- <https://phet.colorado.edu/>
- Other sites will be linked in the assignment for student access in Canvas