## Physics with Technology: Mr. Anderson (room 2220) reed.anderson@jordandistrtict.org

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Course Description: In this course, you will learn about the physical world around you in the same way as scientists do. You will be confronted with a series of situations in which you will decide what factors might be related, how you can measure them, and then collect data. You will graphically analyze the data, and learn how to clearly describe the relationships you found, using a variety of representations. You will then go on to explore how these relationships you discovered could be applied to new situations. Successful completion of Elementary Algebra is prerequisite to this course. We will be using Algebra as a tool to help us analyze and understand the world around us.

What You Will Learn: Among concepts to be covered this year are: motion, forces, energy, electricity, and wave phenomena. Students will be taught how to think scientifically as they conduct experiments and analyze data. Students will learn the content of the Utah Core Curriculum for Physics. A copy may be viewed at the following web page:

http://www.usoe.k12.ut.us/curr/science/core/physics/default.htm

<u>How You Will Show What You Learned</u>: Students will demonstrate their understanding of Physics through their lab reports, assignments, projects, quizzes, and unit tests.

What To Do If You're not "getting it": If you begin to feel overwhelmed, or if you think you may need some help, please come visit with me as soon as possible!!! The sooner you come in for help, the better off you will be. Physics can be a lot of fun, but if you start to get behind it is easy to feel lost.

<u>Lab Experiments</u>: Much of what you learn this year is based on the results of your experiments. You will be working in lab teams of 3-4 students. For each experiment you are expected to write a report in a format you will soon receive. Each student will be expected to keep track of all labs in their **lab journals** (**this is a composition notebook**). If I notice that one member of a lab team seems to be doing most of the work, I will lower the report grade for all members. While some elements of the lab report may be the same for all members of a lab team (such as data and graphs), I expect each individual to **write his/her own report**. Receiving three identical copies of a lab report will result in a lower grade for each team member.

**Term Project:** Term projects/labs will be given throughout the year. We will have at least one and may have up to three. These projects/labs may be done on an individually or as a group depending on the project/lab. Specifications for the term project will be given to you with at least three weeks until the due date.

<u>Quizzes</u>: We will often have a quiz right as class begins. Students who are tardy or absent (**for whatever reason**) may not take the quiz. The quiz will usually consist of three to five questions from a previous lesson. There will also be weekly quizzes that will need to be done online. If you do not have internet access at home the school has computers available as well as computers in my classroom that are available before and after school as well as during lunch. I will drop the three lowest quiz scores at the end of each term.

<u>Tests</u>: Test will consist of multiple choice which will be done on a computer and free response. Please bring a pencil on test day for the free response portion. You may use a calculator on tests; please remember to bring your own. I do have calculators that can be checked out for assignments and tests. If you are absent on test day I will need to know about it before hand or you will not be allowed to make up the test. You need to make up the test **within one week**. Tests will be graded and returned within 2 class periods.

<u>Grades</u>: Grades will be based on four categories with different weighted percentages. Homework (25%), Quiz (10%), Lab (25%), and Test (40%). Letter grades will be assigned according to this percentage scale:

93-100%	A	80-82 %	B-	67-69%	D+
90-92%	A-	77-79%	C+	63-66%	D
87-89%	B+	73-76%	C	60-62%	D-
83-86%	В	70-72 %	C-	0-59%	F

**Grading In Class:** From time to time we may grade assignments or quizzes in class. Students may be required to grade or review the work of others, and have their work graded or reviewed by other students. I also use student aides to grade some work

## **FERPA**

"student information, work, and grades will be kept confidential and will not be shared without the necessary authorization as per FERPA Regulations - See JSD Policy."

**Progress Reports:** You may check your grades on the Skyward website (grades will be updated each week). It is your responsibility to notify me of any errors *immediately*.

**Materials:** You will need the following with you *each class period*:

- -3 ring binder of college ruled paper
- -A pen or pencil
- -A good eraser
- -Lab book (composition notebook)
- -Scientific calculator\*

\*A good scientific calculator that does trig functions can be purchased for about \$10. A *graphing* calculator is not *required* in this course, but *may be used* if you have one. I also have calculators that can be checked out during class, however, these calculators cannot be checked out to be taken home.

**<u>Lab Fees:</u>** There is a \$20 lab fee for this course.

<u>Homework Policy</u>: Assignments are due at the start of class. If you are in class when the tardy bell rings, with your assignment completed, or at least attempted with reasonable work shown for *every* problem, your assignment will receive a stamp. As I grade the assignments, a stamped paper is worth 100%, while a paper without a stamp will receive a maximum of 80%.

<u>Late Work Policy</u>: All late work handed in will receive a 20% penalty. Late work turned in after we have taken the unit test will receive NO CREDIT!

<u>Makeup Policy:</u> If you miss class you are allowed to make up the work that you missed. You can know what you missed by checking out the class calendar on the class website. You must be responsible for the work you missed as all assignments will be counted toward your grade whether you were here or not. All work must be turned in 1 week after your return to school unless prior arrangements have been made. Most assignments can be found on the class website.

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For the few assignments that are not on the website, come and talk to me to get the missing work.

<u>Final Exam</u>: We will have a comprehensive final exam during the **last week of school (NO EXCEPTIONS)**. Questions for the final exam may be taken from anything that we covered during the entire year. You must be present and take the final exam.

Attendance Policy: I follow the Copper Hills High School Attendance Policy. If you happen to be tardy I will have already taken roll. As to not interrupt class time I have a tardy sheet located at the front of the room. Sign the tardy sheet so that at the end of the day I can change the absence to a tardy. If you forget to sign the tardy log you will have no proof you were actually here. Sign it.

<u>Cell phones and Electronic devices</u>: The use of cell phones and other electronic devices is prohibited. This is in accordance with school policy. Any electronic devices that are used in class will be confiscated. However, there will be a time when I allow electronic devices to be used to help accommodate class goals, assignments, etc. Only when instructed to will you be allowed to use your electronic devices.

**Cheating:** If a student is caught cheating on a test or assignment they will receive no credit for that assignment and their parents or guardians will notified of the incident.

**<u>Discipline:</u>** Minor problems will be handled between the teacher and the student. If problems persist, parents and administrators will be involved.

## **Class Rules:**

- 1. Read and follow directions
- 2. Be respectful
- 3. Be responsible

4. Follow all school rules (including lab safety rules)

## **Consequences for failing to follow class rules:**

Happy teacher

 $1^{\text{st}}$  infraction: Teacher-student conference

Happy students

 $2^{nd}$  infraction: Phone call to parent

Fun to be had by all

**Consequences for following class rules:** 

 $3^{\rm rd}$  infraction: Referral to Assistant Principal