



Mrs. Raker AACT jraker@washoeschools.net

Physics: The study of energy and matter and how they interact

“Physics is all about knowing – or trying to find out – what makes the universe tick. It started out with some naturally nosy people who wanted to know why the things around them did what they did. Nothing has changed today, but over the past few hundred years, we’ve realized that there are whole worlds both bigger and smaller than our human senses can detect.” (Physics: Why Matter Matters - Basher, 2008)

Here is a tentative outline of topics we will cover:

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| <ol style="list-style-type: none"> 1. Newtonian Mechanics <ol style="list-style-type: none"> a. 1 and 2 Dimensional Kinematics b. Forces c. Equilibrium d. Energy and Power e. Momentum f. SHM | <ol style="list-style-type: none"> 2. Electricity <ol style="list-style-type: none"> a. DC Circuits b. Energy and Power 3. Waves and Optics <ol style="list-style-type: none"> a. Wave dynamics b. Sound c. Harmonics |
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REQUIRED ITEMS – You will be required to bring these items to class everyday!

-Science Notebook (3 ring binder with dividers: Notes, Tests/Quizzes, Completed Work)

-Pencil and Notebook Paper

-Device (phone/laptop/tablet with headphones) that you can use to access TEAMS. There are a few student laptops available to share, but it would be wise to limit contact with shared devices.

-Scientific Calculator...**BRING YOUR CALCULATOR EVERY SINGLE DAY**... If you are looking for a really cheap calculator that is also awesome...Walmart has the **Casio fx-115ES PLUS** right now for 12.97! I will have some loaner calculators as well, but I really recommend that you get one of your own if you can ☺

FLIPPED CLASSROOM – This class will be taught using a flipped classroom model. Students will be required to watch the lecture **and take notes** at home during their digital days so they will be prepared for their in-class lessons. **The notes taken at home will be worth a significant portion of their grade and will also be used to determine attendance.** In-class lessons will focus on trouble-shooting, additional practice, and assessment. It is imperative that every student stay current on the notes for the class. All materials will be available through Microsoft TEAMS.

GRADING - Your grade will be based on points in this class. At the end of the semester your points will be divided by the total possible points and converted to a percentage. You will be given points for activities, labs, tests, quizzes, homework, etc. You will be given a zero for any missing assignment. Tests and quizzes will account for approximately 40% of your total grade and all other work will account for approximately 40% (The final is worth 20%). This is an approximation and it will vary throughout the year depending on the material we are covering at that time. I strongly encourage class participation and effort. This will also be a factor in determining your final grade. The grading scale is as follows:

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

LAB REPORTS Some of the laboratories in this class will require a formal lab report. The format for lab reports will be provided in class, along with an example. While typed reports are preferred, legible, neatly written reports are acceptable. This means that computer/printer problems are NO EXCUSE for late lab reports

HOMEWORK – Homework is either given as an additional assignment to reinforce concepts learned in class, or students may need to take home assignments started in class to be turned in the following day. In either case, you will need to have your homework completed and ready to turn in at the beginning of the period on the day it is due. Your homework may be graded for completeness, correctness, or both. Because of our block scheduling, I strongly recommend beginning your homework the night it is assigned rather than waiting until the night before it is due. This will allow you to come ask for help and still turn in your assignment on time. Finally, please remember that you are responsible for all material from each chapter discussed in class – **there may be material from assigned reading on exams that I have not specifically addressed in class.**

EXTRA CREDIT – Extra credit may be given in some classes and may be awarded if an assignment is completed above and beyond what is required. Extra credit will always be given on a class basis, not individually...SO DON'T ASK!

CELL PHONES –Use common sense and be respectful...

MAKEUP WORK - It is YOUR responsibility to get the makeup work BEFORE or AFTER class from the teacher. You are still responsible for all the material covered in class on the days you missed. Trusted classmates are great resources to help you catch up on what you missed in class and maybe even let you photocopy their notes! Please note that it is to your benefit to complete the assignment(s) as quickly as possible – make-up work piles up fast and only adds to current work.

MAKEUP EXAMS - If you are absent on the day of a test (excused absences only), it is YOUR responsibility to see the teacher about making up the test. The makeup test may be more difficult and a different format from the regular test to encourage you to be here on test days. Make-up tests WILL NOT be given during class time. If you do not make it in to make-up a test, you will receive a zero.

LATE WORK – Life happens, I get it...but please try to get your late work turned in as soon as possible!

CLASS EXPECTATIONS –Students are expected to behave as young adults while in my classroom. We will be working with a variety of expensive and potentially hazardous materials – inappropriate behavior will not be tolerated. Other expectations are simple and include:

- Be respectful – of everyone and everything in the room; leave bad stuff at the door.
- Be appropriate – have a positive attitude, maintain a safe environment, and take responsibility for your actions.
- Be prepared – always bring your planner, textbook, pencil, and notebook to class.

Failure to follow the above expectations will result in a verbal warning, a hall “conference”, a detention “conference”, a phone call home, and an office referral, usually in that order. Serious offenses will result in more serious and immediate consequences.

Safety guidelines are outlined on the student safety contract. Please review the guidelines and associated consequences as they are different and more severe than those listed here.

Finally, please remember that my job is to help you learn. If you don't understand something, please ASK. I don't know unless you tell me. I look forward to a positive and productive year.

REMIND 20-21 PHYSICS- text the message @ecdka8 to the number 81010 to join the class and ensure you are receiving all updates!