PHYSICS

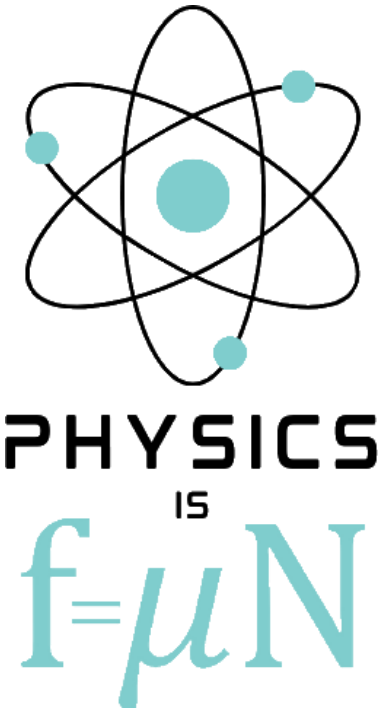
1 Science Credit

Cost: $330

Prerequisites: Algebra I & Algebra II -OR- Geometry

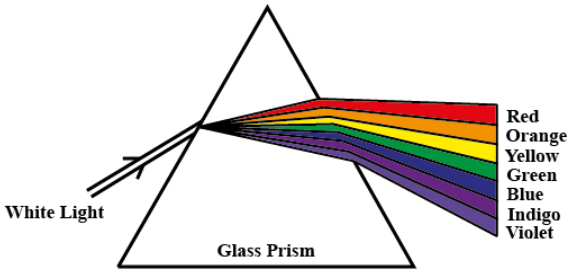
Hi everyone! My name is Hannah Dee (Mrs. Dee) and I will be teaching physics this year. The textbook (**Exploring Creation with Physics by Jay Wile)** for this course is not required, but you are welcome to get it or another algebra-based physics textbook for reference. I would also suggest that you bring a few pencils, a scientific or graphing calculator, a binder, and a notebook or college ruled filler paper.

To begin this class, we will review the math tools you will need to learn physics. Then we will learn about simple motion in multiple dimensions (linear and circular), forces (including gravity), work and energy, momentum, waves, optics, electric fields and electric potential, electric circuits, and magnetism. Most classes will include a Q&A on the previous week's assignments, a lecture on a new topic including example problems, and a laboratory experiment. Each week at home, you will be expected to review your notes, work on problems, and complete the analysis of your laboratory experiment.



Physics is my favorite subject to learn and to teach because **PHYSICS IS FUN**. Have you ever wondered why sand looks darker when it's wet? Or why text appears backward in a mirror? Or why your singing sounds much better in the shower? The answers to all these questions are based in physics! Physics is the study of everything in the world around us, and your knowledge of physics will help you in the study of any other scientific discipline. Plus, you can impress your friends with important and complicated formulas (trust me, it's a great trick at parties)!

I'm looking forward to working with all of you this fall as we explore physics together!



$$v = v_0 + at$$

$$\Delta x = \left(\frac{v + v_0}{2}\right)t$$

$$\Delta x = v_0 t + \frac{1}{2}at^2$$

$$v^2 = v_0^2 + 2a\Delta x$$