

Physics

Mr. Bill Trinklein
2234 Coit Ave. NE
Grand Rapids, MI 49505
(616) 581-5517
william.trinklein@gmail.com

Level: 10th through 12th grade

Prerequisites: Students must have successfully completed one course in Algebra. Students must also know the basic trigonometric functions (sine, cosine, tangent) and how they are defined on a right triangle. They should also be familiar with the inverse of these trig functions (\sin^{-1} , \cos^{-1} , \tan^{-1}).

Text: Exploring Creation with Physics, 2nd Edition, by Dr. Jay L. Wile

Lab Fee: \$25, payable with 1st payment

Copy Fee: \$8, payable to tutor the first day of class

Course Description: Physics will be a really fun two hour class, lasting the full year, and consisting of both lecture and lab. The lecture will chronologically follow the textbook, which is broken up into 16 modules. Approximately 2 weeks will be spent on each module (+/-). Students should plan to devote 45 minutes to an hour of each school day to studying physics. During lab time, students will perform a variety of experiments, relative to each topic covered. Students will be expected to keep a lab notebook for gathering data, making calculations and writing brief reports of what was done and what was learned. An inexpensive spiral-bound notebook will work just fine for this purpose. The class will start out with: a review of the metric system, an overview of the standard scientific methods used to make measurements and report data, and some basic math review. Topics of study will include: laws of motion, vectors, laws of force, work, energy, power, momentum, periodic motion, waves, geometric optics, electric fields, electric potential, electric circuits, magnetism and more. As each topic is studied, we will we take time to learn about men of God who have also been known as men of Science, such as Thomas Aquinas, Michael Faraday, James Maxwell, Galileo Galilei, Sir Isaac Newton, James Prescott Joule, and others who had a Christian world view and who argued for the existence of God.

About Mr. Bill: I am a home school dad, married to my first and only wife, Mary, for 28 years 😊. We have a 23 year old son, Evan, who is a junior at Kendall College of Art and Design, a 19 year old daughter, Emily, who is finishing up her freshman year at Harding University in Searcy, Arkansas, and a 16 year old daughter, Betsy, who will be a home-schooled High School Senior this coming year. Our oldest son, Ross, would have been 26 years old this year. He was killed by a drunk driver when he was 5 ½ years old. I continue to grieve for him, but this situation has only strengthened my relationship with the Lord and has given me spiritual wisdom, patience, and contentment that only God can provide. My academic background includes Electronics Technology (UEI, alias ITT), Engineering Science (Grand Rapids Community College), Electrical Engineering (WMU), and Information Technology (University of Phoenix). My professional certifications are in project management, computer networking, and telecommunications design (although I prefer designing campsites instead). After 31 years of working in a technology based career, I decided to “semi” retire and begin a new business adventure, The 3 Wise Men Handyman Services. I also teach a Handyman Skills class for home schooled teenage boys and girls, during the regular school season.