

Introductory Physics

Course Syllabus

Instructor: Alli Leatherman, alli.leatherman@gmail.com

Required Text: *Introductory Physics, A Mastery-Oriented Curriculum* by John D. Mays (2nd Edition);

Optional: *Student Lab Report Handbook*, by John D. Mays, Solutions manual to accompany text

Prerequisites: Algebra I (or concurrent enrollment)

Course Times: Class will meet Tuesdays and Thursdays from 1:00-2:00. Students should expect to spend 0.75 -1.5 hrs each week day to complete course work.

Course Dates: First class: August 6; Last class: April 30 (Possible make up days May 5 and 7)

Fees: Monthly tuition: \$50/month (or \$200/semester or \$400/year); one-time supply fee: \$40. Fees will be paid directly to the instructor via check or PayPal at the email address above.

Course Description: This algebra-based course introduces students to an overview of physics. Topics covered include scientific inquiry, motion (including Newton's Laws), energy, momentum, atomic structure, heat and temperature, pressure and buoyancy, wave behavior, electricity, DC circuits, magnetism, and optics. Students will use inquiry-based experiments as well as mathematical models to explore concepts. *Note: supplemental, trigonometry-based work can be arranged for students with sufficient math backgrounds. Contact instructor if you are interested.*

Canvas: Much of the communication for class, including weekly assignments and quizzes, will take place using Canvas, an online learning management system. Students should provide the instructor with a personal email address. An invitation will be sent to that email for students to join the course. Parents are welcome to submit an email as well to be added in an observer role. Please note that students will need reliable internet access on a regular basis.

Grading: Students will have a cumulative quiz each week. Students will also turn in formal lab reports for experiments. One semester exam will be given in the fall and spring. Grades will be determined as follows:

Weekly Quizzes-- 50%

Lab Reports-- 30%

Semester Exam-- 10%

Participation in Class/Completing Practice Problems-- 10%

A grade will be given in the fall and spring semester. The fall grade and spring grade will then be averaged to determine a final course grade.

Grading scale:

90-100: A

80-89: B

70-79: C

60-69: D

Below 60: F