Introductory Physics

Course Syllabus

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

Required Text: *Introductory Physics, A Mastery-Oriented Curriculum* by John D. Mays (2nd or 3rd 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 two days a week for an hour. Students should expect to spend 0.75 -1.5 hrs each week day to complete course work.

Fees: Monthly tuition: $50/month (or $200/semester or $400/year); one-time supply fee: $25. 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.

Honors Option: Note: Students who have taken or will be concurrently enrolled in trigonometry are eligible for an honors version of the course. Honors students will be given supplemental, trigonometry-based work outside of the normal coursework to gain the honors distinction. If students are interested, please contact the instructor.

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 cumulative grade will be given in the fall and spring semester.

Late Work: Excused late work due to absence, illness, or extenuating circumstances approved by instructor will be accepted. If a student is absent on the day an assignment is due, they may turn it in at the next class meeting without penalty.

Unexcused late work will be accepted on a limited basis at instructor's discretion. Unexcused late work will be subject to the following policy:

-Work turned in less than one week from original due date: 10% off

-Work turned in between one and two weeks from original due date: 30% off

-Work turned in more than two weeks from the original due date may not be accepted. If it is accepted, it will be subject to 50% off.