

Honors Physics

2026-2027 Semester 1 Syllabus

Welcome Note

Hello Physics students! I am so excited that I get to be your teacher this year and that we get to explore the subject of physics together. This course is typically loved by students due to there being so many different applications to investigate of physics applications in real life. As high schoolers, you will be held to high standards throughout this course. It will be challenging, interesting, and loads of fun. I am looking forward to getting to know each of you throughout the year! Below you will read about the expectations in the course, please take notes on what you believe is important or anything you have questions on.

Contact Information

Email: rhunt@ldisd.net

Phone: 940-497-4031

Conference Period: 7th Period, 1:25pm-2:10pm

Best Way to Reach Me: Email is by far the easiest and quickest way to reach me!

Course Description

The Physics course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in physics will study a variety of topics, including but not limited to including mechanics, thermodynamics, electricity and magnetism, waves, and modern physics. These areas often include foundational concepts like Newton's laws of motion, energy, and the nature of forces.

Class Expectations

1. **Safe** - be safe by following classroom and lab procedures
2. **Ownership** - take ownership of your actions
3. **Attitude** - remain positive by having a good attitude
4. **Responsible** - be responsible for your education and surrounding
5. **Respectful** - be respectful to yourself and others

**Honors Level: Students will have higher expectations in this course in terms of pacing, math complexity, homework problems, challenge problems, and test format. This class is designed to help prepare students for AP Chemistry or AP Physics and to prepare students with skills geared towards college readiness. **

Classroom Supplies

Most of the supplies that you will need for this course will be available in the classroom. **However, you will need to bring a pencil or pen to each class.** A dedicated notebook or binder for chemistry will work best. You will be allowed to store your journal in our classroom if needed.

Calculators: It is recommended to have a scientific calculator for this class and other upper-level science classes. You **DO NOT** have to go purchase one, as we do have calculators in the classroom and an iPad may also perform the required calculations for this course. However, the calculator you purchase now will be an investment for your future math/science college courses.

Grading Policy

In compliance with the updated grading policy for 26-27,

Minor Grades - 60% of grade

Class Notes: 25 points per Lesson

Exit Tickets: 25 points

Problem Sets: 50 points

Worksheets/Paper Assignments: 100 points

In-person or Virtual Labs: 50-100 points

Major Grades - 40% of grade

Exams/Tests: 100 points

Lab Reports: 50 points

Research Projects/Presentations: 100 points

Note: The point breakdowns for all assignment types can be subject to change or vary.

Please refer to the student handbook for information regarding late work, missed work, and retesting policies.

Daily Work & Homework

There will be a daily “Do Now” prompts each day at the beginning of class as well as an exit ticket at the end of each class. Participation is required, as the “Do Now” activities are often graded and all exit tickets are for a grade.

In addition to “Do Now”s, there will be various daily activities entered into skyward as Minor Grades, which account for 60% of your overall grade. This includes class activities, labs, worksheets, quizzes, homework and any other assignments assigned.

Late Work:

Late work is defined as any assignment or project not turned in by the designated due date. Any late work, including missing assignments due to an absence, is a “0” in the gradebook until the work is turned in and graded. Grading late work can be delayed because current work takes

priority over late work. Any assignment submitted after a deadline, has a maximum penalty of ten (10) points per class meeting deducted from the grade with a maximum of 30 points deducted. Student work with no name stays on the “missing work” board for 1 week, then recycled.

Make Up Work for Absences:

For an excused absence, the student is given a reasonable amount of time to make up the work missed; one class day for each day absent. **Work assigned prior to the first day of absence is due the day the student returns to class.** It is the student's responsibility to make up for any work missed.

IMPORTANT: If you happen to turn in late work, you must email me to let me know that you have turned it in. This is how I will grade it in a timely manner. If you do not email me, I will not be notified that you completed it. This is YOUR responsibility.

Exams & Projects

Major grades will be a mixture of exams and projects that will be administered during each unit. Exams will consist of 50% multiple choice questions and 50% free response questions. Exams and projects will account for 40% of your overall grade, as per the LDISD grading policy. Exams are **NOT** open notes. Each 9-weeks will end with a cumulative progress check that will also count for a grade.

Open-note exam corrections will be allowed after each exam but may **ONLY** be completed during my tutorials (NOT during my class period!). Exams will not be returned to you to keep and will only be returned for you to review during my tutorials. Your graded exam and corrections will not leave my classroom, and you will not be permitted to use your phone while working on exam corrections. Exam corrections will earn 50% of the missed points back (so, for example, if you earned a raw score of 60 on the test and submit corrections for missed questions, you may earn an amended exam score of 80). There is no minimum or maximum requirement for exam corrections. If you received a raw 95 and want to amend to 97.5-98, you are free to do so. Exam corrections must be completed within 10 days of when the grade is posted in Skyward.

IMPORTANT: If you miss a scheduled exam, you MUST email me to schedule a time to come in (preferably after school so that you may have your fully allotted 45-minute test time) to make up the exam.

Labs

We are very proud of our school. In an effort to maintain safety, lab quality and classroom decorum I will not tolerate horseplay, vandalism, equipment abuse or tampering with emergency equipment. This also includes any tampering with the school's issued iPad. Science equipment or material use is

purposefully determined by the teacher and is not allowed outside of the classroom. A fee or full replacement of damaged, broken, or missing equipment may result along with an office referral.

Any fighting, purposeful harm to a student or inappropriate behavior that causes a safety concern will result in immediate removal from the lab, which results in a referral and possible loss of participation in upcoming labs.

Academic Dishonesty

Cheating undermines both the cheater and class morale. Avoid doing yourself this disservice: it carries heavy consequences. Please see the Student Handbook to find more information about academic dishonesty.

A.I. Use: AI is a TOOL for learning. Used wisely, it can be a great educational tool to help you learn and understand concepts for everyday life. However, using AI to paste in your assignments or questions and then copying the answers to your work is NOT how to use AI. If you are suspected of using AI on any daily work or major grades, the consequences will be severe and your grade will be a zero for the affected assignment.

Cell Phone, Smart Watches, & Airpods

Per HB1481, use of cell phones and all other personal communication devices are prohibited during the course of the school day. This includes Airpods and other wireless earbuds. The district's and state's policy regarding cell phones, smart watches, and Airpods will be followed in my classroom.

Semester 1 Overview*

*Overview is a course outline and pacing is subject to change during the semester.

1st Nine Weeks	
Chapter 1: Introduction to Physics	TEKS: 1.E, 1.F, 2.B, 2.C, 4.B Topics: Students will be able to define physics as a branch of science that involves the study of the physical world, including energy, matter, and how the two are related. Students learn about SI base units for scientific measurements and how they are combined to form derived units. Students will work with numbers in scientific notation and learn how to construct line graphs and interpret relationships between variables to allow predictions for unmeasured values.

Chapter 2: Representing Motion	TEKS: 5.A, 5.B, 5.C Topics: Students will explore how to describe position and motion using motion diagrams and coordinate systems. Students explore how to use position-time graphs to represent motion for one or more objects. Students will be able to differentiate between average velocity and instantaneous velocity; distance and displacement; and speed and velocity.
Chapter 3: Accelerated Motion	TEKS: 5.A, 5.C Topics: Students will explore motion when velocity is changing and learn how to represent nonuniform motion on motion diagrams. Students will be able to define acceleration, differentiate it with velocity, and give examples of both positive and negative acceleration. Students should be able to interpret x-vs. t, v vs. t, and a vs. t plots for both constant velocity and constant acceleration.
Chapter 4: Forces in One Dimension	TEKS: 5.E, 5.F, 5.G Topics: Students will be able to calculate displacement, velocity, and acceleration using the equations of one-dimensional motion. Students will be able to analyze word problems, choose which equation to use and rearrange the equation when appropriate.
Chapter 5: Forces in Two Dimensions	TEKS: 5.B, 5.E, 5.F Topics: Students will be able to analyze vectors in two dimensions using Pythagorean theorem and trigonometry to add vectors in 2D, apply coordinate systems to problems, and resolve vectors into components. Students will describe both kinetic friction and static friction and know their dependence on the normal force between objects.
2nd Nine Weeks	
Chapter 6: Motion in Two Dimensions	TEKS: 5.C, 5.D, 5.F Topics: Students will be able to describe a projectile as an object upon which the only force acting is gravity. Students will complete a projectile simulation and solve problems that ask for initial velocity and range. Students will work in groups to complete projectile demonstrations and be able to calculate the effects of forces on objects using free body diagrams.
Chapter 7: Gravitation	TEKS: 1.H, 4.B, 5.H Topics: Students will describe the Law of Gravitational Forces and its components and analyze how the mass and distance between two bodies affect the gravitational force between them. Students will calculate the magnitude of gravitational force and describe the inverse square law.
Chapter 8: Rotational Motion	TEKS: 9.A, 9.B, 11.D Topics: While completing a lab investigation students will calculate force, velocity and acceleration of objects in circular motion, distinguish between linear and rotational velocity, differentiate between centripetal and centrifugal forces, as well as determine the direction of force, velocity and acceleration vectors during circular motion.

Chapter 9: Momentum and Its Conservation	TEKS: 7.D, 7.E Topics: Students will learn about linear momentum and how it is calculated, along with impulse and the impulse–momentum theorem. Students explore the law of conservation of momentum and apply it to elastic and inelastic collisions, explosions, and recoil situations, including problems involving two-dimensional momentum.
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PLEASE RETURN THIS SHEET SIGNED, VERIFYING YOU HAVE READ THE SYLLABUS FOR 2025-2026 SCHOOL YEAR .

Name Student (print): _____ **Class Period:** _____

Student Signature: _____ **Date:** _____

Parent/Guardian Signature: _____ **Date:** _____

(This page is worth 50% of your first grade.)