

## AP Physics 2

Welcome to AP Physics 2. Every effort will be made to ensure that you have met and exceeded the TEKS for this course. Consequently, your complete preparation for the Advanced Placement exam on **Thursday May 7, 2026 (8:00 AM)**. The class will be full of discussions, labs, inquiry, and peer collaboration. Take the time to ask questions or make comments every day. Be prepared for class by keeping up with **chapter reading** indicated below and holding yourself accountable for coursework/homework.

Room: **A413**  
Instructor: **Mr. Ryan Drechsel**  
Tutorials: **Most Mornings & Afternoons, Pieper Prep or by appointment**  
Contact: **[ryan.drechsel@comalisd.org](mailto:ryan.drechsel@comalisd.org) (best way to contact me)**  
Materials: **Pencils, eraser, paper, calculator, and Notebook/Binder/Folder:**  
Materials: **Pencils, 1" Binder, Notebook (Note: Notebook not required)**  
Online: **College Board, BFW AP Physics, AP Classroom & Google Classroom**  
Binder : Notes, Ancillary Practice Packets, Labs, FRQ's (**EOY!!!**)  
Labs: Digital (Retain in Binder!) - DOC is best Practice - **[See Lab Expectations](#)**  
Book: ***College Physics for AP 1 & 2 (3rd Edition)* BFW (ONLINE - Classlinks)**

**Class Description:** Physics is a qualitative & quantitative study of Thermodynamics, Electric Force/Fields, Electric Circuits, Magnetism & EM, Geometric Optics, Waves(Sound & Physical Optics) and Modern Physics.

### **Grading Policy:**

Click **[HERE to see District Grading Policy](#)** (p.23-31) - The science department here at Pieper High School has decided to breakdown grading by the following percentages:

- I. Overall Annual Grading Policy(Semester 1 & 2 Averaged):
  - A. 1st 9 Weeks - 45%
  - B. 2nd 9 Weeks - 45%
  - C. Semester Exam - 10%
- II. 9 Weeks Averaging
  - A. Grades are Points-Based ([Points Earned/Points Total] x 100)
  - B. Major Grades - Include Tests and Projects (50%)
  - C. Quizzes - Quizzes and Significant Labs(30%)
  - D. Daily Grades - HW, Warm-Ups, Notebooks, Small Labs (20%)
- III. Opportunity: If you have failed an assignment/assessment, schedule to come by after we review & reflect the Unit. Make sure you have **completed ALL HW assignments & Labs**. Reassessments in my class are based on efforts made to the review and reflection. Reassessments are not guaranteed in AP Physics.

ACCOUNTABILITY IS THE KEY TO SUCCESS THIS YEAR  
**[PERIODICALLY UPDATED AGENDAS - CLICK HERE](#)**

# AP Physics 2

## Classroom Etiquette and Ominous Things:

- I. No Cell Phones or Personal Electronic Devices (Smart Devices) - It's the LAW
- II. Be RESPECTFUL & Take OWNERSHIP
- III. Time Management (Observer - Me). This is not a space time continuum:  
<https://en.wikipedia.org/wiki/Spacetime>
- IV. No lining up at the doors - If you have a 100 in my class, then maybe!?!  
V. Dont write on the desks or lab equipment
- VI. Lab Equipment - The equipment is sensitive and expensive. By reviewing this document along with the [student safety contract](#) you are held accountable for all damage to equipment and subsequently will pay for those damages.
- VII. Vernier/Graphical Analysis Code: **2#ixzCYsn5**

## Topics in AP Physics 1

## Giancoli Chapters

1. Unit 9: Thermodynamics	14,15
2. Unit 10: Electric Force, Field & Potential	16,17
3. Unit 11: Electric Circuits	18
4. Unit 12: Magnetism & EM	19,20
5. Unit 13: Optics - Mechanical Waves & Sound	21
6. Unit 14: EM Waves & Geometric Optics	22,23
7. Unit 15: Modern Physics	24,25,26

## Physics AP 2 - Critical Thinking Skills & Science Practices

### *SYSTEMS, FIELDS, FORCE INTERACTIONS, CHANGE, & CONSERVATION*

- *Create diagrams, tables, charts, or schematics to represent physical situations*
- *Create quantitative graphs with appropriate scales and units, including plotting data*
- *Create qualitative sketches of graphs that represent features of a model or the behavior of a physical system*
- *Derive a symbolic expression from known quantities by selecting and following a logical mathematical pathway*
- *Calculate or estimate an unknown quantity with units from known quantities, by selecting and following a logical computational pathway*
- *Compare physical quantities between two or more scenarios or at different times and locations in a single scenario*
- *Predict new values or factors of change of physical quantities using functional dependence between variables*
- *Create experimental procedures that are appropriate for a given scientific question*
- *Apply an appropriate law, definition, theoretical relationship, or model to make a claim*
- *Justify or support a claim using evidence from experimental data, physical representations, or physical principles or laws*

# AP Physics 2

## Exam Assessment Foundations

- Multiple Choice Questions - 40 Single Response MCQ's/80 Minutes
- Free Response Questions - 4 FRQ's/100 Minutes
  - Mathematical Routines: Derive, Calculate, Predict, Analyze
  - Translation Between Representations: Graph, Representation, Predict
  - Experimental Design/Analysis: Design, Develop, Measure, Draw, Analyze
  - Qualitative/Quantitative Translation: Claim, Justify, Predict, Explain

Physics AP 2 Google Classroom Code: [aqcm4wlf](#)

The following are the appropriate logon codes for the new AP College Board:

3<sup>rd</sup> Period: ZPN77R

6<sup>th</sup> Period: XAPQ2N

VernierGraphical Analysis Code: **2#ixzCYsn5** - Chromebooks

### How to be successful in Physics:

1. Read the textbook and take notes in your OWN words so that you know and you understand the content. **DO NOT GET BEHIND IN YOUR READING!!!**
2. Look up ALL terms that you do not understand...start a vocabulary list of terms in your notebook...even for those terms that are not content based – **ASK QUESTIONS!!! OR Conversation**
3. Find a “study buddy or group” to work with throughout the year to help prepare for formal assessments **OR** make appointments for tutorials with Mr. Drechsel.
4. Complete all homework and in class assignments - **AT LEAST MAKE AN EFFORT!!!**
5. Study for all quizzes and exams. Know the expected **RUBRIC for Math Equations & Labs** (i.e. Standard Problem Point Break Down: 5 PT Total = given, equation, work, answer, units)
6. Go back and review your Notes, Homework, CB MCQ's/FRQ's, and Labs prior to major assessments
7. Do NOT wait until the last minute to approach, attempt and unpack College Board MCQ's and FRQ's. They are only helpful if you can break down, digest and apply the information. These will be saved and shared amongst all students in the classroom.