AP Physics 1

Approved by the Board of Education on August 2, 2022
EUHSD curriculum identifies what students should know and be able to do by grade level in a comprehensive, standards-based course of study. Curriculum may be updated, as needed, based on student academic achievement data, research and best practices, and input from stakeholders. The EUHSD curriculum contains the following information:

- **Course Description** – provides a description of the overarching content and goals of the course and is used in the Course Catalog.
- **Course Information** – provides information specific to length of course, course number, transcript abbreviation, credits earned.
- **Course Requirements** – provides information specific to credits, prerequisites, UC/CSU requirements, and grade level of the course.
- **Course Material(s)** – Instructional materials used in course.
- **Additional Information** – provides links to College Board AP Central for specific Advanced Placement course information.

Mission and Vision

We relentlessly pursue, with optimism, equitable support for all students to navigate a changing world by providing rigorous and relevant learning experiences that strengthen their capacity as:

- Open-minded and invested collaborators;
- Effective and thoughtful communicators;
- Resourceful and creative problem solvers;
- Curious and analytical critical thinkers;
- Informed and compassionate community members.

Escondido Union High School District prohibits discrimination, harassment, intimidation, and bullying based on actual or perceived ancestry, age, color, disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sex, sexual orientation, pregnancy, marital or parental status or association with a person or group with one or more of these actual or perceived characteristics.

Dr. Courtney Goode, Assistant Superintendent of Human Resources, Equity and Title IX Compliance Officer

302 N. Midway Drive, Escondido, CA 92027
Office: (760) 291-3281, Email: cgoode@euhsd.org
## Course Description

*AP Physics 1* is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound.

### Course Information

| Semester A | Course Number: 2857 | Transcript Abbreviation: AP PHYSICS 1 A | Credits: 5 | Weighted: Yes |
| Semester B | Course Number: 2858 | Transcript Abbreviation: AP PHYSICS 1 B | Credits: 5 | Weighted: Yes |

### Course Requirements

| Length of Course: Yearlong | Course Learning Environment: Classroom Based | Type of Grade: Letter grade |
| Grade Level: 10-12 | Course Repeatable: No | Maximum Credits, if Repeatable: N/A |
| Course Type: Advanced Placement | CTE/Designated College Prep: No | CTE Course Level: N/A |

Meets EUHSD Graduation Requirement: Physical Science  
Meets UC/CSU Requirement: D: Laboratory Science  
UC Honors Designation: Yes  
Prerequisite(s): 1 Year of Life Science, 1 Year of Physical Science & Math 1

### Laboratory Requirement:

This course requires that twenty-five percent of instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to demonstrate the foundational physics principles and apply the science practices.

Inquiry-based laboratory experiences support the AP Physics 1 course and AP Course Audit curricular requirements by providing opportunities for students to engage in the seven science practices as they design plans for experiments, make predictions, collect and analyze data, apply mathematical routines, develop explanations, and communicate about their work.

Colleges may require students to present their laboratory materials from AP science courses before granting college credit for laboratory work, so students should be encouraged to retain their laboratory notebooks, reports, and other materials.

### Course Material(s)

- Teachers will utilize a variety of instructional resources designed to assist students in meeting the requirements set forth by the College Board in preparation for the Advanced Placement Exam. In addition, Advanced Placement teachers are required to submit their Course Syllabus in accordance with College Board requirements and receive individual teacher approval to utilize a variety of instructional strategies and course materials in order to meet the requirements set forth in the Advanced Placement Course Guides.

### Additional Information

- For most current course curriculum refer to College Board AP Central for *AP Physics 1 Course and Exam Description*.
- For additional information for Advanced Placement courses go to [https://apcentral.collegeboard.org/](https://apcentral.collegeboard.org/).