

AP Physics 1

Instructor: Cody Wang

Weekly Classes on Wednesdays and Saturdays, 6:00-7:00 PM EST

Course Description

This course is aimed towards middle school and high school students looking to get an introduction into physics. This course should be helpful to those who plan on taking physics in high school as we will cover most of the main topics found in AP Physics 1, thus allowing students to get ahead.

Meeting Agenda

7/19 Meeting 1: Kinematics

- 1D Kinematics
- 2D Kinematics

7/22 Meeting 2: Forces

- Friction
- Contact forces

7/26 Meeting 3: Newton's Laws

- $F=ma$
- Newton's 1st law
- Newton's 3rd law

7/29 Meeting 4: Energy

- Potential Energy
- Kinematic Energy
- Energy Conservation

8/2 Meeting 5: Momentum

- Conservation of momentum
- Impulse-Momentum

8/5 Meeting 6: Rotational Motion

- Angular kinematics
- Torque
- Circular motion

8/9 Meeting 7: Oscillations

- Simple Harmonic Motion
- Springs
- Pendulums

8/12 Meeting 8: Gravitation

- Orbit speed

- Gravitational energy
- Escape velocity

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