



Chandler Unified School District

SCI425A AP Physics 1
SY 2023-24



Course Overview

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.

AP/IB/Dual Enrollment

This is an AP course that may be offered for Dual Credit.

Prerequisite/Fee(s)

Geometry and concurrent enrollment in Algebra 2

Course Materials

- Scientific Calculator – Cell phones are NOT permitted to be used as calculators. A calculator with trig functions (sin, cos, etc.) is required. Please refer to the AP Exams Calculator Policy, and make sure your calculator is approved by the College Board. Labelling or engraving your name on your calculator is highly recommended.
- Notebook – A college ruled graph composite notebook or spiral graph notebook.
- Dry Erase Markers - one pack for white boarding
- Others: Pens, color pens (other than black or blue), pencils, loose leaf paper, etc.

Adopted Resource(s)

Physics, Wilson, Buff and Lou (Savvas).

**An asterisk will indicate a resource containing sexually explicit materials per legislative definitions. CUSD has determined that all resources listed above are of exceptional educational value.*

Site and Faculty Information

School name and address:

Chandler High School, 350 N Arizona Ave, Chandler, AZ 85225

Building principal:

Greg Milbrandt
milbrandt.greg@cusd80.com

Teacher:

Yonglian Wang Ph. D.
wang.yonglian@cusd80.com

Office hours: Tuesday 2:30 - 3:30 PM

Course Access

This course is taught in-person at Chandler High School. Students will have access to the curriculum and instruction in the classroom. Google Classroom is the primary location for students to access material when absent from classes taught in person.

Help

Academic Support

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- Contact the teacher to schedule an appointment during office hours
 - [Ed Tech](#) support for students, parents/guardians, and community link (cusd80.com/Page/45109)

Mental Health Support

- CUSD mental health support cusd80.com/Domain/10528 or 480-573-8808 (talk or text)
- Suicide & Crisis Lifeline: 9-8-8 hotline
- 24-hour Crisis Line Talk: 602-222-9444, Text: 741-741

Student Conduct, Success, and Responsibilities

Student Handbook

Students must follow the policies and procedures established in the Student Handbook. Copies of the handbook can be found at cusd80.com/handbooks. Printed copies will be provided upon request.

Student Responsibilities

General Classroom Rules:

- Students arrive to class on time and be in your seat when the bell rings. If you are late, you will be marked Tardy.
- Cell phones need to be in the cell phone holder before the beginning of the class.
- Bottled water is permitted in class. NO food and drink in the classroom at any time.
- Personal Needs: Students should see to their personal needs between classes (i.e., getting a drink, using the restroom, etc.). Students will be permitted to leave the classroom for emergencies only.
- Nobody leaves the classroom during the first 15 minutes of class.

Pass

- During the class, nobody leaves the classroom without a pass.
- Sign out when you leave the classroom and sign in when you return.
- If you need the bathroom, you need to carry the classroom bath pass with you (1 pass per class). You could not take your cell phone with you when going to the bathroom.
- If you need to go to another room during the advisory period, you need to show the teacher the pass from the other teacher/staff. This pass should be acquired before the 1st hour.

Behavior

Student behavior should be such that it is considerate and does not interfere with my right to teach and other student's right to learn. It is expected that all students will display good citizenship and follow established school policies. The official guideline for student conduct is in the CHS student handbook. However, should you choose to behave inappropriately the consequences in this classroom are as follows:

- First infraction: Verbal warning/student-teacher conference. Severe infractions may result in immediate removal and administrative involvement.
- Second infraction: Parent contact
- Third infraction: Administrative involvement

Late work

Late Work:

Any assignment turned in late will receive only up to 70% credit until the end of the unit. No credit for late work after the unit test. Make a tutoring appointment if you have any questions.

Make-up Work:

The daily agenda is available on Google Classroom. Please check your Google Classroom if you miss the class. Make-up work must be completed within the same number of days as absences from class (e.g., you will have two days to complete make-up work for a two-day absence.) If you are present when an assignment is given, but absent on the day the assignment needs to be turned in, the assignment will be due on the day you return to school.

Assessments and Assignments

Students will complete assessments during each unit of study to assess their understanding. Students will complete the CUSD Common Final at the end of the first and second semesters. The Common Final will count for 20% of the student's final semester grade in grades 9-12 and 10% in grades 7-8 (some

exceptions may apply at the Junior High level). Common finals will be in ELA, Math, Science, Social Science, and World Language.

Final exams will be given during the CUSD Jr High/High School Early Dismissal days in December and May, as identified on the [District Calendar](#).

If students are requested to participate in a survey, the survey questions will be provided to parents/guardians seven days before student contact.

Grading

Grade Percentage

A	B	C	D	F
90% - 100%	80% - 89%	70% - 79%	60% - 69%	<60%

Quarter grades

Grading will be weighted based on categories of work completed in this class as below:

+ Test and Quizzes: 45%

+ Labs: 30%

+ Homework: 15%

+ Participation: 10%

Semester grades

Semester grades are calculated using 40/40/20: Each quarter accounts for 40% of the semester grade and the final exam accounts for the remaining 20%.

Units of study

Units for SCI425A AP Physics 1

Kinematics: Introduction to the study of motion

Dynamics: Exploring forces (the interaction of an object with another object)

Circular Motion and Gravitation: Building the understanding of motion and force

Energy: Learning the definitions of and relationships between energy, work and power

Momentum: Exploring the relationship between force, time, and momentum and learning the law of conservation of momentum to analyze physical situations

SHM: Learning the new type of motion: Simple Harmonic Motion

Torque and Rotational Motion: Exploring the motion of an object rotating around an axis

**An asterisk will indicate a unit of study containing sexually explicit materials per legislative definitions.*



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Teacher: Yonglian Wang, wang.yonglian@cusd80.com

Parent/Guardian

Acknowledgment

Parents/Guardians should indicate if they "Acknowledge" or have a "Potential Conflict" with their student's participation in the following units by checking the appropriate box for each unit of study listed. Students cannot opt out of a standards-based unit. Marking "Potential Conflict" will prompt the teacher to make contact regarding assignment alternatives.

Unit of study	Acknowledge	Potential Conflict
Kinematics: Introduction to the study of motion	<input type="checkbox"/>	<input type="checkbox"/>
Dynamics: Exploring forces (the interaction of an object with another object)	<input type="checkbox"/>	<input type="checkbox"/>
Circular Motion and Gravitation: Building the understanding of motion and force	<input type="checkbox"/>	<input type="checkbox"/>
Energy: Learning the definitions of and relationships between energy, work and power	<input type="checkbox"/>	<input type="checkbox"/>
Momentum: Exploring the relationship between force, time, and momentum and learning the law of conservation of momentum to analyze physical situations	<input type="checkbox"/>	<input type="checkbox"/>
SHM: Learning the new type of motion: Simple Harmonic Motion	<input type="checkbox"/>	<input type="checkbox"/>
Torque and Rotational Motion: Exploring the motion of an object rotating around an axis	<input type="checkbox"/>	<input type="checkbox"/>

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By signing and returning this form, the parent/guardian acknowledges they have reviewed the resources and units of the study included in the syllabus.

- As the parent/guardian, I understand that I may contact the teacher if I have questions about the resources, content, or units of study.
- As the parent/guardian, I understand I can check my student's grades in Infinite Campus anytime during the school year.

Student name (printed)

Student signature

Parent/Guardian name (printed)

Parent Signature

Date

Please return this page to your student's teacher.