

Physics Course Syllabus Chandler High School Fall Semester 2021-2022



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(preferred method of contact) ------

COURSE DESCRIPTION: Physics is the 3rd of the 3 foundational sciences (biology/chemistry/physics) and a foundation without one of its parts is not as strong! At the core, Physics helps us explain things that happen around us everyday. It is the quest for meaningful understanding about how our universe works. This class is a lab-oriented study of various types of motion and matter-energy interactions. Topics include mechanics, electricity, waves and light. Let's have a great year!!

Modeling Instruction: You are going to be a part of an exciting research-based approach to learning called **Modeling Instruction in Physics.** In this approach, tested and shown very effective by physics teachers throughout the nation, you will be confronted with a series of situations in which you will decide what factors might be related, how you can go about measuring them, then collect the data. You will learn how to use a computer to help you graphically analyze the data and you will learn how to clearly describe the relationships you found, using a variety of representations. You will then go on to explore how the relationships you discovered can be applied to a wide variety of new situations. Throughout this process you will create scientific models for understanding phenomena, then determine when these models are useful and when they are insufficient. So, in this approach, you will derive from your experiments most of the equations you will use in physics. Equations are not the means of understanding physics, but the result.

MATERIALS YOU NEED FOR OUR CLASS:

- <u>Scientific Calculator</u> Cell phones are NOT permitted to be used as calculators, you will need a calculator that has trig functions included (sin, cos, tan)
- <u>Composition notebook with grid pages</u> A class notebook is critical due to the on-going lab
 and inquiry-based approach of the course. You will derive your own notes through our
 activities and classroom discussions. The structure of the class notebook will be flexible, but it
 is essential that you keep a notebook that represents all of your learning and understanding
 throughout the year. A notebook can be purchased through the Chandler High Bookstore.
- <u>Dry Erase Markers and Eraser (mismatched socks work great as erasers)</u> We will do a lot of problem solving on whiteboards, and it is helpful for each student to have their own marker.
- Pens, Pencils, loose leaf paper, etc.
- If you have any issues being able to get the materials necessary for your success, please let me know! I can help you figure out something that will work for you!

TUTORING! Need help? You are in luck! Tutoring will be available Tuesdays and Thursdays after school in room 718. If you are unable to meet during a scheduled tutoring session, contact me to set up an alternative time.

GOOGLE CLASSROOM:

We will use google classroom as a supplement to instruction. This platform will be used to house classroom information and resources as well as a location to turn-in practical work.

GAGGLE: Students, please remember that Gaggle is a software used to identify inappropriate words and images in Gmail, Google Drive, Google Docs and more. Trained professionals then apply consistent, school- or district-approved policies for positive intervention, alerting Chandler High School administrators of the issue.

GRADING POLICY:

Assignment Categories % of Qtr Grade

Practical Work 50% Classwork 10% Assessments 40%

Rounding Policy: Semester grade within 1% of the "next level"?

I will round your grade up if you have no zeroes in the gradebook, you have not missed class (all or part) more than twice, I have no reason to question the authenticity of any of your work for the semester, and your average exam score suggests "next level" understanding. There will be no rounding on quarter grades.

ATTENDANCE:

Attendance is the *single most important* characteristic determining success in school.

When a student must be absent, it is the student's responsibility to find out what was missed, complete any make-up work and turn it in.

- Make-up Work: For full credit, make-up work must be completed within the same number of
 days as the absence 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 the day the
 assignment is turned in, the assignment will be due the day you return to school.
- Late work: Late work is accepted up until the end of the unit for 70%. After the unit exam, late work will no longer be accepted.
- *Individual plan of action:* If you find yourself falling behind, asking for help sooner rather than later will ensure you have the best available opportunities to recover. If you need help with an individual plan to get back on track, reach out and I can review your options with you.

TARDY POLICY:

Being tardy to class means that you are not in the classroom ready to learn when the bell rings. This school year tardies will be counted cumulatively. This means that tardies across all class periods will be included when consequences are assigned.

05 total tardies- 3 days lunch detention

10 total tardies - 5 days lunch detention

15 total tardies - 5 days lunch detention, an attendance contract, and a parent meeting.

20 total tardies - 3 days ISS

25 tardies - additional consequences will be given.

BEHAVIOR: Your 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 policy. 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

CLASSROOM ENVIRONMENT: It is my responsibility to ensure that my students are provided a safe and secure environment in which to learn that is free from distraction. Therefore:

- *Cell phones* are to be used *only when directed*.
- **Food and Drink** are not permitted in the science lab at any time.
- **CHS Dress Code** will be strictly enforced.
- **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.

DIVERSITY STATEMENT:

ALL INDIVIDUALS HAVE A RIGHT TO AN EDUCATIONAL ENVIRONMENT FREE FROM BIAS, PREJUDICE AND BIGOTRY. AS MEMBERS OF THE CHANDLER HIGH SCHOOL EDUCATIONAL COMMUNITY, STUDENTS ARE EXPECTED TO REFRAIN FROM PARTICIPATING IN ACTS OF HARASSMENT THAT ARE DESIGNED TO DEMEAN ANOTHER STUDENT'S RACE, GENDER, ETHNICITY, RELIGIOUS PREFERENCE, DISABILITY OR SEXUAL ORIENTATION.

GO WOLVES!!