# Course Syllabus

Physics 10 Winter 2023

**Instructor:** David Newton

**Email:** newtondavid@fhda.edu

**Web Site URL:** http://nebula2.deanza.edu/~newton (Links to an external site.) (in addition to Canvas)

**Office:** S12 or S13, not sure yet.

**Office hours:** Tuesday and Thursday 11:30 am-12:20 pm,

**Final Exam:** Wednesday, March 29th, 11:30 am – 1:30pm. Finals will not be given earlier or later.

**Text:** Conceptual Physics by Hewitt. 11th (or 12th) edition or whatever you can find that costs less (or don't even get a text).

Masks are recommended, but not required. We will meet in class, face-to-face four days a week (Monday through Thursday) and online with Zoom through Canvas on Fridays. That means face-to-face lectures will not be recorded. And I don't intend on recording the Friday lectures.

Your grade will be based on a simple calculation. Most of your grading will be based on multiple choice questions. I figure over the course of the quarter, you should have at least 150 of these types of questions. They will be given out a little bit at a time, maybe three days a week. They will be taken at the end of the period with enough time left in the period, by my judgement, for you to finish by 1:20 when the class is over. Other quizzes will be typically of a one sentence answer as I will explain in class. These types of questions may be worth more than one point a piece. You will be informed how much it is worth before you take it. The simple grade calculation is that I just add up all the points at the end and have a percentage of the total, and your grade will be based on that percentage.

.

- This course will explore the structure of physics from a purely conceptual standpoint. Few mathematical techniques will be used to express the rationale of our universe, instead, verbal logic will be employed. Few numerical calculations will be performed. Although it may sound easier to study physics without mathematics, this is a challenging goal and requires a skillful and precise use of language. We will start with mechanics and study motion, Newton's laws, energy, and momentum. Then on to the structure of the atom and the nature of matter. Electricity is next maybe including simple circuits. And oscillations, wave motion, and sound are last. Special topics (light, relativity, quantum mechanics, etc..) will briefly be treated after that as time allows.

- **Attendance is required! If you miss more than five lectures, you may find yourself dropped from the class (or after the withdraw date, receiving a grade of F).** A missed quiz is considered equivalent to a missed lecture.

**A: 90-100%;**
**B: 80-89%;**
**C: 60-79%;**
**D: 50-60%;**

**F: not given unless an exam is missed, or attendance is unacceptable.**
**Overall class scores may be curved to fit this pattern.**

**Student Learning Outcome(s):**

*Critically examine  new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of physics in general.

**Office Hours:**

| | | | | |
|---|---|---|---|---|
| T,TH | 11:30 AM | 12:20 PM | In-Person | S12 |