# Course Syllabus

Physics 10 Winter 2022

Student online presence, daily attendance (five days a week) is required. Student video camera strongly recommended. (I need to visually see you or special arrangements need to be made)

**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 hours:** Twice a week. Tuesday and Thursday 11:30 am-12:20 pm,

**Final Exam:** Wednesday, March 23rd, 11:30 am – 1:30pm. Finals will not be given earlier or later.

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

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 maybe 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.

I will be recording all the lectures, but they will only be available to view for about two or three days after they are given. You will have time to take notes for the lectures while they are available to view. After that, I will delete them. I will not be saving any of my lectures for future viewings.

- 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, actually 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 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.