

Conceptual Physics

Instructor: Mr. Young

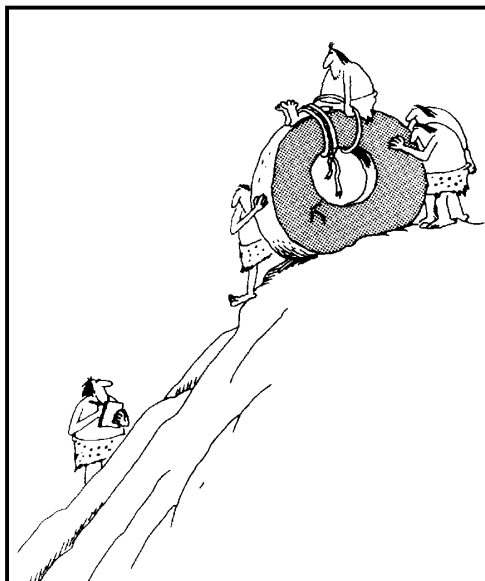
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Course Description:

Physics studies questions related to matter and energy, and utilizes mathematics to predict the behavior of matter and energy. Both qualitative and quantitative laboratory experiences are provided in order that students can manipulate apparatus, make observations, gather data, process data, and interpret this data to form conclusions.

Students will be expected to describe and explain physics principles conceptually through tests, "hands-on" activities, formal laboratory reports, and semester projects. There will be significantly less math computation and theoretical aspects than in AP Physics.



Early experiments in transportation

The style of teaching that I utilize in this class includes asking lots of questions to aid the student in their understanding, as well as help me to determine where students may be struggling. I use socratic questioning as an approach to difficult concepts by outlining them and pursuing misconceptions. All questions are meant to aid learning.

Prerequisites: Algebra I, Chemistry

Text: Conceptual Physics. Hewitt, Third Edition, 1999

Supplies: binder, notebook/paper, calculator (provided for tests), writing tool, charged iPad

Classroom Rules (all handbook rules apply):

1. Follow directions the first time that they are given.
2. Come to class prepared: writing utensil, homework/notes, paper, calculator, iPad, & book
3. Maintain a productive learning environment, including using the iPads appropriately
4. Respect yourself and others, including not talking while others are speaking.
5. Be in your seat before the bell rings.

Homework:

Homework is given as a means of practice and may not always be collected for a grade. It is your responsibility to complete all of the homework on time.

- For a computational problem, you must show ALL work and include UNITS to earn credit.

- Due at the beginning of the hour unless otherwise noted.
- All assignments must include your name and the date at the top of the page.
- All late work is accepted for 80% credit.

The purpose of homework is to reinforce what was taught in class and to check your understanding of the material. Completing your own homework is vital to your comprehension. If an assignment is difficult, ask me for help. Some homework may introduce new material. Reading the book will be important in the next class discussion and your understanding of the new material.

Missing a Class

You are responsible for handing in any work that was due during the missed class. You are also responsible for checking with the teacher (emailing works well), accessing Schoology, and asking a classmate about missed assignments. You can get handouts from a peer or the teacher. Your make-up days for assignments are described in the handbook.

Labs:

Missing a Lab: Most labs cannot always be made up if missed. A handout will be distributed that outlines what students must do to receive a grade for the missed lab.

Reports: Lab reports will usually be due two days following the labs. We will discuss formal lab reports later. Late labs will not be accepted.

Grading

Conceptual Physics will be graded on total points. I expect that you will do your homework for your own benefit and that quizzes will help better prepare you for tests. You will have labs that require both your participation and a formal write-up in this class.

Cheating, copying, or “sharing” will NOT be tolerated. Any behavior of this type may result in a grade reduction or zero for all persons involved.

The Road to Success

The best way to succeed in physics is to ask questions, participate fully, take notes, attend class, and complete assignments. I also additionally feel that reading assigned text is vital to your success. Extra credit opportunities will occasionally be available. ***If you need help, please ask. I am available before and after school and during my prep periods.***