

Syllabus: Conceptual Physics

Mr. Wilson

Course Description: Conceptual Physics is an introductory course for the college-bound student who wishes to undertake a challenging science course. Conceptual physics focuses more on the ideas and concepts of physics and utilizes basic algebra to help explain these concepts. Demonstrations, computer simulations, and laboratory work will combine to help develop the student's understanding of physics and its role in the Universe.

Teaching Methods: This class will be taught using a variety of teaching methods including lectures, discussions, labs, hands-on activities, computer simulations, demonstrations, and homework. If you have missed class, you can access and download worksheets, notes, labs, and view PowerPoint lectures online by visiting my website at: <http://sctritonscience.com/Wilson/home/>

Textbook: **CONCEPTUAL PHYSICS by Paul Hewitt (Prentice Hall)** Keep this at home. I do have a classroom set as well.

Grading: (These are *weighted* categories) Access at <http://www.sctritons.com>

50% Tests and Quizzes
20% Final Exam

15% Lab Write-ups/Class Projects
15% Homework

COURSE OUTLINE:

First Semester

Unit 1: Linear Motion
Unit 2: Projectile Motion
Unit 3: Forces and Motion

Second Semester

Unit 4: Energy
Unit 5: Waves
Unit 6: Electricity and Magnetism

Quizzes & Tests: These will be given in the form of smaller quizzes and larger tests for chapter and unit exams. We may move through some chapters in a few days and others in a few weeks. **YOU ARE EXPECTED TO BE READY TO TAKE THE TEST THE NEXT DAY YOU RETURN FROM AN ABSENCE.** It is your responsibility to schedule and take your make-ups. (Utilize tutorial time)

Labs: Labs are essential in understanding physics concepts. Labs will include many hands-on activities as well as a variety of simulations accessed with Chromebooks and classroom computers. If you miss a web-based lab you will be able to complete it on your own, however if it is a large lab requiring a complicated set-up, you will be given an alternative assignment to make it up.

Homework: Homework will be assigned regularly. Points are received upon completion of homework on time. Students are responsible for completing and correcting all work as assigned. Failure to turn in homework will receive a zero. It is your responsibility to make up any homework during an absence from class.

Participation: Every grading period you will be receiving participation grade. If you come to class on time and work productively in class you will receive **50 points**. Every class tardy you will lose 3 points from this grade. If you are seen improperly working in class such as: sending or receiving cell phone calls or text messages, playing games, searching the Internet for things unrelated to physics, you will lose points.

MOVIES: Throughout the course of the year, one or more of the following movies may be shown to the class. All are rated PG-13: "Avatar", "The Day After Tomorrow", "Gravity", "The Martian".

Extra Credit: There are no extra credit assignments in this class. This is a college prep class that expects you to achieve and perform at a high level. Take all assignments seriously. Extra credit can be earned at various times throughout the year by participating in periodic extracurricular projects and activities. These include, but are not limited to, the following activities: Pumpkin drop and Float a Boat.

General Rules: Treat the classroom, your fellow students and the teacher with **respect**. Come to class on time and prepared to learn. Observe all school rules listed in your school handbook. The tardy policy stated in the school wide discipline plan will be enforced.

***It is recommended that you should bring the following with you every day:**

1. ***Notebook:** A 3 ring binder notebook is suggested for this class. This notebook should have 3 dividers (with plastic tabs). The dividers should be labeled and in the order as follows:
 - Lecture Notes
 - Homework
 - Labs
2. *** Calculator:** All you need is a very simple calculator capable of addition/subtraction, multiplication/division, and square roots. (If you do not have one, let me know and I will help you get a calculator)
3. *** Pen/pencil:** Either or both is fine.
4. *** Ruler, paper, graph paper:** Keep these in your notebook.

Class Rules: (sorry to be negative, but every classroom has to have these)

- BE RESPECTFUL AT ALL TIMES (the remaining rules fall under this one)
 - **Be respectful at all times** – To fellow students, the teacher, and your classroom
 - **Be prepared for class** - paper, pens, notebook, and **homework completed**.
 - **Do not leave your seat** without permission.
 - **No food, gum, or drinks allowed in class** (bottled water is the exception)
 - **Copying homework is unacceptable.**
 - **No Cell Phones** will be in use during class without permission.
 - **Follow safety procedures** at all times. No screwing around!
 - **Do not mess with classroom computers or Chromebooks.**

Contact Mr. Wilson:

Email: dbwilson@capousd.org

Website: <http://sctritonscience.com/Wilson/home/>

Phone: (949) 492-4165

Student Name (**PRINT**)

Student Signature

Date

Parent/guardian Signature

Date

** Please note that the Constitution of the State of California requires that we provide a public education to you free of charge. Your right to a free education is for all school/educational activities, whether curricular or extracurricular, and whether you get a grade for the activity or class. Subject to certain exceptions, your right to a free public education means that we cannot require you or your family to purchase materials, supplies, equipment or uniforms for any school activity, nor can we require you or your family to pay security deposits for access, participation, materials, or equipment.*