

## AP Physics C Course Information

The course is geared towards the two Advanced Placement Physics C Exams given by the College Board in May. The subject matter of the two exams, Mechanics and Electricity & Magnetism, will be discussed further during the final preparation. The first semester of this course covers Mechanics, and the second covers E & M, and includes an overall review in preparation for the exam. This course must be taken for a letter grade, and students must take the AP exams to receive credit.

Grades in the course will be determined on the basis of periodic chapter tests or quizzes, packet checks, lab reports and possibly other assignments. Tests and quizzes vary in frequency and amount of subject matter covered. Packets will contain completed class work and are checked during the test-taking period. Tests will generally be reviewed the next class day, after which they are collected. Students may review past tests at any time in conference.

At the end of the first semester there will be a semester exam on Mechanics which counts as 20% of the semester grade. The second semester grade will be based only on the two quarter grades (50% each); there will be no final exam. The review exams given in the second quarter of the second semester cover material from the whole course, but count only for that quarter's grade.

Letter grades for quarters, the semester exam and semesters will be based the breakdown to the right. Grades are not rounded, for example: an 84.9% is a B+ and would not round up to an A-. The first semester grade is an average of the percentages from the quarters for 80% of the grade and the semester exam counts for 20%.

It is the student's responsibility to arrange for a makeup test for excused absences. Students are encouraged to make up work beforehand if they know they will be absent in advance, they are encouraged to take tests or hand in work the day they get back if possible. Makeup tests may or may not be the same as those given to other students; students who have taken a particular test may not discuss it with students who have not. An unexcused absence from a test or any assignment results in a grade of zero for that assignment.

There will be a due date established for lab reports at the time the lab is done (generally about one cycle afterwards). If a student is absent on the day the lab is done, it is their responsibility to schedule a time to make up the lab. A due date will be established then, usually 1 cycle after the lab is completed or by the end of the unit, whichever comes first. If a student is absent the day a lab report is due, it must be handed in as soon as they return to school. No one may use data they did not collect if they are absent for a lab, that is considered cheating. Students receive 3 late lab days each semester that they can use for any reason. Once you have used all your late lab days, no excuses are accepted for late work.

Two unexcused absences (cuts) in a given quarter will result in failure for the quarter. The third and all subsequent unexcused tardies in a given quarter will affect your quarter grade by a partial drop: for example a B+ would become a B.

A	100%
A	90%
A-	85%
B+	80%
B	75%
B-	70%
C+	65%
C	60%
C-	55%
D+	50%
D	45%
D-	40%
F	0%

### Academy Competencies

AP Physics C focuses on a variety of academy competencies, primarily in the areas of Collaborate, Create, Communicate, Think Critically and Embrace Challenge.

- Collaborate: A) Students can contribute meaningfully to the group processes of idea generation and task completion to achieve a common goal.
- Create: B) Students can commit to the iterative process of developing an idea to its fullest potential.  
C) Students can direct their own learning to stay motivated and engaged in their work.
- Communicate: G) Students can develop and hone speaking, listening, and interpreting skills in order to use communication to accomplish goals.
- Think Critically: C) Students can synthesize their learning in order to achieve higher levels of analysis and interaction with the crucial concepts of a discipline.  
E) Students can identify and explain relationships and patterns and use them to understand phenomena and make predictions.

F) Students can utilize a systematic approach to solving problems using experimentation, observation, questioning, deep thinking, and multiple perspectives.

- Embrace Challenge: A) Students can use strategies to overcome obstacles.
- B) Students can utilize a growth mindset to reframe challenges and accomplish goals.
- C) Students can deepen their learning or enhance their performance through consistent, meaningful practice to improve their repertoire of skills.
- D) Students can safely and effectively take risks and step outside their comfort zones in order to experience growth.
- E) Students can take the responsibility to seek elegant solutions to complex problems.

### **Laboratory Procedures**

All laboratory work involves a certain amount of risk of bodily injury because of the materials and equipment needed for meaningful scientific studies. With proper procedures, the risks are minimal. They can, however, become serious if a student (either carelessly or willfully) departs from instructions given. Therefore, all instructions must be followed carefully at all times. Any misuse of laboratory materials is strictly prohibited.

No materials, tools, apparatus, chemicals, or other supplies may be taken from the laboratory without specific permission from the instructor.

Failure to abide by these procedures is cause for disciplinary action, which may include dismissal from the course.

### **Plagiarism and Cheating: Definitions and Consequences**

Plagiarism is the act of taking words or ideas that are the work of someone else and, by failing to cite your source, suggesting or claiming that they are your own. If you plagiarize, with or without intention, you are guilty of theft. If you allow your work to be plagiarized, you also are guilty because you become a party to dishonesty. You should expect to be treated as severely as the plagiarist.

#### **Here are some examples of plagiarism:**

1. Turning in as your own work the work of another student or a past student.
2. Taking ideas or words from a published source without making it clear that they have been borrowed by providing proper citations.
3. Taking ideas or words from the Internet without making it clear that they have been borrowed by providing proper citations.
4. Taking bits and pieces of the work of others, including scientific publications, without indicating that they are not your own. (Changing the words in a passage does not make it your own.)
5. Proper paraphrasing of ideas or concepts that you read means that you summarize and synthesize the work in your own words. If you only change a few words or copy from a source without putting what you copied in quotation marks (and provide the proper citation) you have plagiarized someone else's work.

Cheating is as serious an offense as plagiarism. If you help another person cheat, you also are guilty because you become a party to dishonesty. You should expect to be treated as severely as the cheater.

#### **Here are some examples of cheating:**

1. Obtaining help from or giving help to another student without authorization during a quiz, test, exam, or extra credit assignment.
2. Using data you did not collect to do analysis and come to conclusions on a lab report.
3. Submitting the same written or oral material in more than one course without obtaining authorization from the instructors involved.
4. Using books, notes, or any unauthorized sources of information during a quiz, test, or exam. Specifically, this includes storing physics equations in a programmable calculator for use during a test.
5. Obtaining, without authorization, part or all of a quiz, test, or exam, before taking the quiz, test, or exam. Specifically, this includes discussions between a student who has taken a quiz, test, or exam in an earlier period and one who will take it at a later time.

Teachers in the Science Department will report all instances of plagiarism and cheating (which includes helping someone else plagiarize or cheat) to the deans. If you plagiarize or cheat, once in a course, you will fail the assignment with a grade of zero. If you plagiarize or cheat twice in a course, you will fail the course for the semester. The deans will also impose consequences **in addition** to those imposed by the Science Department, which may include a notation in your file, demerits, conferences with your parents, suspension and/or expulsion from school.

Phones will generally not be used in class and must be silenced and put out of sight in student's book bag or backpack. Students going to the restroom will be asked to leave their phone in the classroom.

This information and other class information such as the cycle sheet, links to content, etc. are available on the class website:

<http://iws.punahou.edu/department/acad/physics/apc/>