

Physics 10 (Spring 2012)

General Information

Welcome to Physics 10. This course will introduce you to a wide spectrum of physics concepts, including motion, energy, matter, sound, electricity, magnetism, light, space and time. Physics 10 is a nonmathematical course. Equations will be avoided except for the use of simple formulas to guide our thinking (without solving the actual equations). The emphasis will be on developing a conceptual understanding of nature's amazing behavior. *You will learn to see, hear, and experience more in your world!*

Instructor Information:

Instructor: Joe McCullough, Ph.D.
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Office Hours: Mon. 9:30 – 10:30
Tues. 12:45 – 1:30
Wed. 10:00 – 10:45
Thur. 12:45 – 1:45
Also by appointment.

PLC Hours: Tues. 1:30 – 3:00
(room 835) Wed. 12:45 – 2:45

Course Information:

Class Meetings: Lecture (room 825) T, Th 9:30 – 10:50

Textbook: *Conceptual Physics* (11th Edition), Paul Hewitt

Class Website: <http://www.cabrillo.edu/~jmccullough/physics10>

Student Learning Outcomes:

- 1) Correctly analyze natural phenomena using the concepts of physics.
- 2) Clearly communicate conceptual analyses using the language of physics.

Grading Policy:

Course work will be weighted as follows:

Class Participation	10%
Homework	20%
Quizzes	20%
Exams (total of two)	30%
Final Exam	<u>20%</u>
	100%

Grade cutoff levels:	A	90%
	B	80%
	C	70%
	D	60%

These cutoff levels may drop but they **will not** rise. I do not grade on a curve so you are competing only with yourself. I encourage you to work in small groups with other students as much as possible.

Class Participation: Your attendance and eager participation in the class will help you learn so I believe it should also help your grade. In “lecture”, we will be using a remote controlled student response system that will record your responses to various multiple-choice questions that I will ask during class. Your class participation grade will be based on the percentage of these questions that you have answered (*regardless of whether or not your answers were correct*).

Note: *You will automatically be dropped from this course if you miss six classes.*

Homework: Questions from the text will be assigned and collected approximately once a week. The answers to the homework questions will be discussed during class. Your success in the course will depend largely on the effort that you invest in these.

Quizzes: A 15-minute quiz will be given at the beginning of class the day that homework is collected. Each quiz will test you on the concepts covered in class and in the homework. You should do well on the quizzes as long as you attend every class and keep up with the homework and reading.

Exams: There will be two major exams and a comprehensive final exam. The exams will cover all course material including textbook readings, lectures and homework assignments. A written excuse (medical, legal, etc.) **must** be provided if an exam is missed – preferably prior to the exam.

Expected time commitment: You should expect to spend about 10 hours per week (inside and outside of class) studying Physics 10. Spending less time than this will decrease your chances of doing well in this course.

In class: Lectures (3 hours)

Outside of class: Reading textbook (~ 3 hours)
Homework (~ 2 hours)
Studying (~ 2 hours)

Miscellaneous:

Students with Special Circumstances:

If you have a medical condition or learning impairment that requires some special classroom accommodations, please meet with me during my office hours to discuss your needs **as soon as possible**. Prior to meeting with me, you should meet with a Disabled Student Services counselor or a Learning Disabilities Specialist to officially verify your disability and to obtain an Accommodations Request Form.

Policy and Attendance:

Quizzes and exams are based on information presented in lecture so attendance is critical to your success. ***You will automatically be dropped from this course if you miss 6 classes.***

It is also imperative that you arrive exactly on time. It is rude to your fellow students and to me when you are late. Repeated tardiness, according to the Cabrillo College guidelines, may be defined as disruption, and disruptive students may be dropped at the instructor's discretion. Students tardy a total of six times may be dropped from the course.

Policy on Academic Dishonesty:

I assume that the student is familiar with Cabrillo College's policy on academic dishonesty, which states that cheating or plagiarism is "prohibited conduct." In my class, cheating is considered to be copying any other source but your own, including looking at someone else's paper during an exam (including quizzes).

Although I highly encourage students to work together in small groups on homework assignments, the solutions to each problem **must be** written up individually.

Copying someone else's work will result in a zero on the assignment or exam for the first offense and an F in the course for the second offense.