

PHYSICS 122.4 -General Physics II - Spring 2015

An algebra-based physics course about electricity, magnetism, optics, quantum, and the uses of physics for students in life sciences, pre-health professions, and liberal arts.

You must also separately register for the Physics Lab, Physics 122.1, which is treated as a separate class.

This is a challenging course. It will require you to do considerable reading, attend lectures, and further develop your problem-solving skills. As you have probably learned by now, there is no royal road to success in physics - for most of us, it requires a lot of hard work. But the benefits of deepening your understanding of the physical world, the relationships among physics and the other natural sciences, the implications for the modern world and its own beauty and poetry make the effort well worthwhile.

Lecture/Recitation: Tuesday & Thursday, 2:15–4:05 PM in Science Building Room C201

Dr. Larry Liebovitch: <http://people.qc.cuny.edu/Faculty/Larry.Liebovitch/>

Office Hours: Tuesdays/Thursdays 4:05-5:05 PM in SB B322

Textbook: Hugh D. Young. College Physics: Sears & Zemansky's, Ninth Edition, Addison-Wesley. 2012.

Available in Print or E-Book (from <http://www.coursesmart.com>)

Attendance in Lecture and Recitation is required and attendance will be taken

Grading Policy:

Homework: 20%

Each week on Mastering Physics: <http://www.masteringphysics.com> Course ID: MPLIEBOVITCH78114

Must be submitted on time, no credit for late homework

Exams: 60%

each 15%: 3 in-class, 1 final exam

Student video: 10%

Solutions to 2 homework problems

Personal journal: 10%

Responses to questions given each week in lecture

Week	Tuesday	Topic	Chapter	Thursday	Topic	
1				1/29/15	INTRODUCTION How to do problems	
2	2/3/15	Electrical Charges	17	2/5/15	Recitation/Problems	
3	2/10/15	Electric Potential	18	2/12/15	x	Lincoln's Birthday
4	2/17/15	Circuits	19	2/19/15	Recitation/Problems	
5	2/24/15	Magnets	20	2/26/15	Exam #1	
6	3/3/15	E and M	21	3/5/15	Recitation/Problems	
7	3/10/15	E-M Waves	23	3/12/15	Recitation/Problems	
8	3/17/15	Optics	24	3/19/15	Recitation/Problems	
9	3/24/15	Interference	26	3/26/15	Exam #2	
10	3/31/15	Special Relativity	27	4/2/15	Recitation/Problems	
11	4/7/15	x	Spring Recess	4/9/15	x	Spring Recess
12	4/14/15	Quantum Mechanics	28	4/16/15	Recitation/Problems	
13	4/21/15	Atoms	29	4/23/15	Recitation/Problems	
14	4/28/15	Nuclei	30	4/30/15	Exam #3	
15	5/5/15	Applications		5/7/15	Recitation/Problems	
16	5/12/15	Review		5/14/15	Review	
	FINAL EXAMS May 17-22, 2015					