

PHYSICS 9C-A (WINTER, 2010)

Instructor:	Xiangdong Zhu, 237 Physics Building, 752-4689 xdzhu@physics.ucdavis.edu ; www.physics.ucdavis.edu/xdzhu	
Office Hour:	<i>Drop-in or by appointment</i> (set up through e-mail)	
Lecture Time/Place:	12:10 PM - 1:30 PM, Tu-Th, 66 Roessler Hall	
Textbook:	<i>University Physics</i> , Young and Freedman, 12 th edition	
Lecture Notes:	Available on www.physics.ucdavis.edu/xdzhu/course2010_Winter.html	
Lab manual:	http://www.physics.ucdavis.edu/Classes/Physics9Lab/Phy9CLab/	
Discussion TA:	Kevin Cleary , cleary@student.physics.ucdavis.edu	
Lecture TA:	Chris Miller , miller@student.physics.ucdavis.edu	
TA Office Hour:	<i>Drop-in or by appointment</i> (set up in advance through e-mail)	
Course outline:	Electric force and field (Ch. 21 - 24)	4 weeks
	Current and circuits (Ch. 25, 26)	2 week
	Magnetic force and field (Ch. 27, 28)	2 weeks
	Electromagnetic induction (Ch. 29, 30)	1 week
	Electromagnetic waves (Ch. 32)	1 week
Course grading:	Midterms (2):	200 points (100 points each)
	Final (1):	200 points
	Assignments (9):	130 points
	Discussions (7):	70 points

Exams: During major exams you can have two 8-1/2" × 11" sheets of notes and equations and a calculator. *You need to bring your own large-size blue-book.* Integrals and constants will be provided, although no physics formulae will be given. The final will be given on the day as scheduled. ONLY IN EXTREME EMERGENCIES (personal health-related or family-related) WILL YOU BE ALLOWED TO TAKE THE FINAL ON AN EARLIER DATE. In these cases, you need to submit a written note from the Health SERVICE or an appropriate authority to the instructor prior to the scheduled exam.

Homework: Weekly homework will be posted on Tuesdays after the lectures on www.physics.ucdavis.edu/xdzhu/course2010_Winter.html. The assignments are due on the following Tuesdays (see **IMPORTANT DUE DATES**). The solutions to the assignments will be posted at www.physics.ucdavis.edu/xdzhu/course2010_Winter.html right after the due dates. You will receive full credits for problems that you have seriously attempted to solve as shown by the work. No points will be given to those problems that you have not shown work that leads to the answers.

Re-grading Midterm Exams: If you believe that mistakes occur in the evaluation of your solutions, you may request for re-grading the problem(s) in question. You need to write a short comment on the inside of the front page of the blue-book to indicate where the evaluation errors might have occurred and RETURN THE EXAM TO THE INSTRUCTOR. The instructor handles re-grading directly. You have ONE WEEK to submit the request from the time the exam is returned to you. MAKE NO OTHER

CHANGES ON THE EXAM! Any alteration of the exam may be considered cheating and the matter will be submitted to Student Judicial Affairs.

Laboratory: You need to enroll *simultaneously* in a laboratory section. If you have not yet enrolled, you need to do so IN PERSON at the next meeting of a lab section that has positions available. Failure to take and pass the lab part of the course *automatically* results in "F" for the ENTIRE course. Exceptions (e.g., use of a prior lab grade) require the approval of Physics Department before the end of the first week of the class. The laboratory part of the grade will be included by either raising the course Letter-grade by one step (e.g., from "C" to "C+") for a HIGH-PASS except for "A" or lowering it by one step for a LOW-PASS except for "D-". A LOW-PASS will not necessarily drop someone from "D-" to "F", nor will a HIGH-PASS automatically take someone from "A" to "A+".

Tips: Get help early. Read one section of the textbook ahead of the lecture. Study with partner(s). Engage in discussion and exchange of ideas with your study partners. Come to office hours.

IMPORTANT DUE DATES:

Jan. 12	HW#1 <u>Reading:</u> Ch. 21, Ch. 22 (Electric force, electric field, Gauss' law)
Jan. 19	HW#2 <u>Reading:</u> Ch. 23 (Electric potential)
Jan. 26	HW#3 <u>Reading:</u> Ch. 24 (Capacitors and dielectrics)
Jan. 28	MT#1: Ch. 21, 22, 23, and 24
Feb. 2	HW#4 <u>Reading:</u> Ch. 25 (Electric current, Ohm's law, electromotive force)
Feb. 9	HW#5 <u>Reading:</u> Ch. 26 (Direct-current circuits)
Feb. 16	HW#6 <u>Reading:</u> Ch. 28-1, 28-2, Ch. 27 (Magnetic force and magnetic field)
Feb. 18	MT#2 Ch. 25, 26, 27, and 28
Feb. 23	HW#7 <u>Reading:</u> Ch. 28 (More on sources of magnetic field)
Mar. 2	HW#8 <u>Reading:</u> Ch. 29 (Magnetic induction and electromagnetic induction)
Mar. 9	HW#9 <u>Reading:</u> Ch. 30, Ch. 32 (Inductance and Maxwell's Equations)
Mar. 17	FINAL 8:00 AM – 10:00 AM, Wednesday (Ch. 21 – 30)