PHYSICS 9C-A (WINTER, 2016)

Instructor:	Xiangdong Zhu, 237 Physics Building, (530) 752-4689 xdzhu@physics.ucdavis.edu
Lecture:	12:10 PM - 1:30 PM, Tues-Thurs, 66 Roessler Hall
Office Hour:	**3:00 PM - 4:00 PM, Mon-Wed-Fri**, **Rm 237** Physics Building
Textbook:	***University Physics***, Volume 2, Young and Freedman, 13th edition ISBN-13: 978-256-29240-1 (UCD Physics version)
Lecture Notes:	www.physics.ucdavis.edu/xdzhu/course2016_Winter.html
Lab manual:	http://www.physics.ucdavis.edu/Classes/Physics9Lab/Phy9CLab/
Discussion TA:	Gabriel Herczeg, **Office Hours: Rm 440, Mon 11 – 12, Th 10:30 - 11:30** herczeg@ms.physics.ucdavis.edu
Lecture TA:	John Chae, **Office hours: Rm 80, Fri 3 - 4 PM**, yjchae@ucdavis.edu Yasen Hou, yshou@ucdavis.edu
Lab TA:	Wubin Bai, **Office hours: Rm 393, Fri. 11 – 12**, wbbai@ucdavis.edu

Course outline:		
	Electric force and field (Ch. 21 - 24)	4 weeks
	Current and circuits (Ch. 25, 26)	2 weeks
	Magnetic force and field (Ch. 27, 28)	2 weeks
	Electromagnetic induction (Ch. 29, 30)	1 week

Course grading:		
	Midterms (2)	**200 points**
	Final (1)	**200 points**
	Assignments (9)	**130 points**
	Discussions (7)	**70 points**

Exams: The exams will be given on the days as scheduled. ONLY IN EXTREME EMERGENCIES (personal health-related or family-related) WILL YOU BE ALLOWED TO TAKE THE EXAMS ON DIFFERENT DATES. In these cases, you must submit a written note from the Health SERVICE or an appropriate authority to the instructor prior to the originally scheduled exams. ***You need to bring your own large-size blue-book*** and a calculator. You may bring up to four sheets of notes and equations to an exam. Integrals and constants will be provided as needed, although no formulae will be given.

Homework: Weekly homework assignments will be posted on Tuesdays after the lecture on www.physics.ucdavis.edu/xdzhu/course2016_Winter.html. The assignments are due on the following Tuesday except the last one (see **IMPORTANT DUE DATES**). The solutions to the assignments will be posted at www.physics.ucdavis.edu/xdzhu/course2016_Winter.html after the due dates. You will receive ONE POINT for each assigned problem that you have shown detailed work on its solution. No points will be given to the problems that you have not worked on in details.

Re-grading Midterms: If errors occur in grading your Midterm solutions, you may request for re-grading by writing a note on the inside of the front page of the exam book to indicate where the errors might have occurred and RETURN THE EXAM BOOK TO THE INSTRUCTOR within one week after the exam is returned. MAKE NO OTHER CHANGES ON THE EXAM!

Laboratory: You need to enroll *simultaneously* in a lab section in order to pass the course. 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 lab starts meeting the first week of the quarter.** If you have not yet enrolled, you need to enroll IN PERSON at the next meeting of a lab section that has positions available. The laboratory part of the grade will be included in the course Letter Grade. It can raise the 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 "D-" to "F", nor will a HIGH-PASS automatically take "A" to "A+".

Tips: (1) Read the book; (2) Read one chapter of the book and 6 pages of notes ahead; (3) Study with partner(s); (4) Engage in discussion with study partners; (5) Get help early; (6) Come to office hours.

IMPORTANT DUE DATES:

Jan. 12	HW#1	
	Reading:	Ch. 21 (Electric force and Electric field)
Jan. 19	HW#2	
	Reading:	Ch. 22 (Gauss law)
Jan. 26	HW#3	
	Reading:	Ch. 23 (Electric potential)
Jan. 28	**MT#1**	**Ch. 21, Ch. 22, Ch. 23,**
Feb. 2	HW#4	
	Reading:	Ch. 24 (Capacitors)
Feb. 9	HW#5	
	Reading:	Ch. 25 (Electric current, Ohm's law, Electromotive force)
Feb. 16	HW#6	
	Reading:	Ch 26 (Directed-Current circuits)
Feb. 23	**MT#2**	**Ch. 24, Ch. 25, and Ch. 26**
Feb. 23	HW#7	
	Reading:	Ch. 27 (Magnetic force and Magnetic field)
Mar. 1	HW#8	
	Reading:	Ch. 28 (Magnetic induction and Electromagnetic induction)
Mar. 10	HW#9	
	Reading:	Ch. 29 and Ch. 30 (Inductance and Maxwell's Equations)
Mar. 19	**FINAL**	**1:00 – 3:00 PM, Saturday (Ch. 21 – Ch. 30)**