PHYSICS 9C-C (WINTER, 2021)

Instructor:	Xiangdong Zhu 237 Physics Building xdzhu@physics.ucdavis.edu www.physics.ucdavis.edu/xdzhu/
Lecture:	12:10 PM - 1:30 PM, Tu/Th, Online via Zoom
Office Hours:	3:00 PM - 4:00 PM, M/F, Online via Zoom. Examples of problem-solving: on two problems in each assignment.
Textbooks:	***University Physics***, Volume 2, Young and Freedman, 12th and 13th Edition, ISBN-13: 978-256-29240-1 (UCD Physics version) Physics_9C_Electricity_and_Magnetism, Thomas Weideman (available at www.physics.ucdavis.edu/xdzhu/course2021_Winter.html)
Lecture Notes:	www.physics.ucdavis.edu/xdzhu/course2021_Winter.html
Lab Manual:	http://www.physics.ucdavis.edu/Classes/Physics9Lab/Phy9CLab/

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)	**220 points**
	Final (×1)	**200 points**
	Assignments (×9)	**110 points**
	Discussions (×7)	**70 points**

Lecture TA:	Sunny Rhoades, smrhoades@ucdavis.edu Komal Sah, ksah@ucdavis.edu Zijan Song, zjsong@ucdavis.edu
Discussion TA:	Siddharth Vadnerkar, svadnerkar@ucdavis.edu

Exams: Exams will be given via Zoom on the days as scheduled. You will have 30 minutes to submit your solutions in electronic form, - scanned or photographed, to Gradescope on Canvas. ONLY IN EXTREME EMERGENCIES (personal health-related or family-related) MAY 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.

Homework: Weekly homework assignments will be posted every Wednesday following a Tuesday lecture at www.physics.ucdavis.edu/xdzhu/course2021_Winter.html. Your solutions are due the following Tuesday for submission to Gradescope on Canvas (see **IMPORTANT DUE DATES**). The solutions to assignments are posted at www.physics.ucdavis.edu/xdzhu/course2021_Winter.html at the start of the Quarter. You receive ONE POINT for each problem on which you show detailed work. No

points will be given otherwise. Though solutions are available, do your work without them as much as possible so that you will learn more.

Midterm regrade: If errors occur in grading your Midterm, you may request for regrade by writing a note to me to indicate where errors might have occurred within one week after your exam is graded.

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.** 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+".

IMPORTANT DUE DATES:

Jan. 12	HW#1	
	Reading:	Chapter 21 (***Electric force and Electric field***)
Jan. 19	HW#2	
	Reading:	Chapter 22 (***Gauss law***)
Jan. 26	HW#3	
	Reading:	Chapter 23 (***Electric potential***)
Feb. 2	**MT#1**	**Ch. 21, Ch. 22, Ch. 23,**
Feb. 2	HW#4	
	Reading:	Chapter 24 (***Capacitors***)
Feb. 9	HW#5	
	Reading:	Chapter 25 (***Electric current, Ohm's law, Electromotive force***)
Feb. 16	HW#6	
	Reading:	Chapter 26 (***Directed-Current circuits***)
Feb. 23	**MT#2**	**Ch. 24, Ch. 25, and Ch. 26**
Feb. 23	HW#7	
	Reading:	Chapter 27 (***Magnetic force and Magnetic field***)
Mar. 2	HW#8	
	Reading:	Chapter 28 (***Magnetic induction and Electromagnetic induction***)
Mar. 9	HW#9	
	Reading:	Chapters 29 and 30 (***Inductance and Maxwell's Equations***)
Mar. 18	**FINAL**	**Zoom, 10:30 – 12:30 PM, Thursday (Ch. 21 – Ch. 30)**