Physics 1B: Spring 2019

Lecture: MTWF 1:00 - 1:50 PM

Instructor: Hector Garcia Vasquez (hectorgarcia@physics.ucla.edu)

Office: Knudsen 2-125

Office Hours: Tuesdays 4:00 pm - 6:00 pm, PAB 3735

Teaching Assistants: Pauline Arriaga (parriaga@astro.ucla.edu)

Chandler Schlupf (crs10@ucla.edu)

Text: We will use the Kudu online textbook and homework. https://www.kudu.com/

Exams:

Exam Schedule:

Tuesday,	23 April 2019	1:00 pm - 2:00 pm	**Midterm I**
Tuesday,	21 May 2019	1:00 pm - 2:00 pm	**Midterm II**
Tuesday,	06 June 2019	11:30 pm - 2:30 pm	**FINAL EXAM**

All exams must be taken as scheduled. **There will be *no* makeup exams**.

Exams will cover all material in the homework assignments and lectures. There will be no surprises.

Exam Rules:

- Students are allowed ONE 3"x 5" index card per exam. I will provide mathematical formulas (trig identities, calculus, etc.). However, physics formulas covered in this course and 1A will not be provided.
- One scientific and/or one graphing calculator is allowed. Any device with a browser or internet capability is not allowed. All other items must be put away.

- Breaks: if you must leave in the middle of an exam, raise your hand for a proctor to excuse you. Cellphones must be left on the table with the exam for the proctor to see when you are excused, and then put away when you return.
- A UCLA photo ID card will be required at all exams. During the exam, please leave your ID on the table for the proctors to check.
- Pen or pencil is allowed. Please note: every graded page will be scanned.
- Partial credit: TAs will be instructed to give partial credit wherever possible, and/or where they see it is appropriate.
    - Useful tip: try to leave your answer in variables for as long as possible, providing numerical answers at the end of a question (again, if possible).
- Regrades:
    - For grading consistency, regrades will go through the TA that graded the problem in question.
    - To be eligible for a regrade: the exam work must be clear, and a grading error must be apparent. If a reader must jump within or between pages to find the work, a regrade will not be given.

Homework:

Graded: Graded Kudu homework assignments. Homework for material covered in the week will be due the *following* Sunday at midnight. This gives students 2+ full weeks to do the assigned problems. The lowest homework score is automatically dropped.

Ungraded:

- Ungraded Kudu problems. I will make all problems visible, graded and ungraded.
- Ungraded problems from other sources. I highly recommend going through these problems. They will be at the level of understanding I expect on exams.

Pre-Lecture Questions:

Will be assigned through Kudu 1+ weeks in advance and due on Mondays at noon. The questions will be simple calculation and conceptual problems that cover the material to be seen in lecture on that week. The lowest pre-lecture score is automatically dropped.

In-Class Questions:

Will be done through the Kudu website. Each student must bring a laptop, smartphone or other browser device to class. Score will be based on participation, not correct answers. This is to encourage students to work together on the problems without the pressure to secure the points. Two no-shows are allowed.

Grade Composition:

Homework:	10%
Pre-Lecture Questions:	5%
In-Class Questions:	5%
Midterm I:	20%
Midterm II:	20%
Final Exam:	40%

The final grade will be based on the weighted average with a "safety net." This way, a student can never get a lower grade than that given by a "curve," but it is possible to get a higher grade based on absolute performance. *Each* student grade will be assigned by the scheme in the column that gives the higher grade:

A+	> 98 % of the total score	or	top 2% of class
A	94-98% of total score	or	3-10% of class
A-	90-93% of total score	or	11-30% of class
B+	86-89% of total score	or	31-40% of class
B	83-85% of total score	or	41-50% of class
B-	80-82% of total score	or	51-60% of class
C+	76-79% of total score	or	61-70% of class
C	70-75% of total score	or	71-80% of class
C-	66-69% of total score	or	81-90% of class
D+	60-65% of total score	or	91-93% of class
D	56-59% of total score	or	93-95% of class
D-	50-55% of total score	or	95-98% of class
F	otherwise		

Tentative Course Schedule:

	MONDAY	TUESDAY	WEDNESDAY	FRIDAY
WEEK 1	4/1 Oscillations	4/2 Oscillations	4/3 Oscillations	4/5 Oscillations
WEEK 2	4/8 Waves	4/9 Waves	4/10 Waves	4/12 Sound & Music
WEEK 3	4/15 Sound & Music	4/16 Sound & Music	4/17 Sound & Music	4/19 Electric Charges
WEEK 4	4/22 Electric Fields	4/23 **Midterm I** 1pm - 2pm	4/24 Electric Fields	4/25 Electric Fields
WEEK 5	4/29 Electric Fields	4/30 Gauss's Law	5/1 Gauss's Law	5/3 Gauss's Law
WEEK 6	5/6 Gauss's Law	5/7 Electric Potential	5/8 Electric Potential	5/10 Electric Potential
WEEK 7	5/13 Electric Potential	5/14 Capacitance	5/15 Capacitance	5/16 Capacitance
WEEK 8	5/20 I, R, and EMF	5/21 **Midterm II** 1pm - 2pm	5/22 I, R, and EMF	5/24 I, R, and EMF
WEEK 9	5/27 **Memorial Day**	5/28 DC Circuits	5/29 DC Circuits	5/31 DC Circuits
WEEK 10	6/3 DC Circuits	6/4 Magnetic Forces and Fields	6/5 Magnetic Forces and Fields	6/7 Magnetic Forces and Fields
WEEK 11	6/10	6/11 **Final Exam** 11:30am - 2:30pm		