

Physics 7A,  
Lecture 001: LEE  
Fall 2015

## Course Information

**Instructor:** Professor Adrian T. Lee

- Email: [Adrian.Lee@berkeley.edu](mailto:Adrian.Lee@berkeley.edu)
- Office Hours: Tuesday 3:30-4:30 and Thursday 1:30-2:30, room 105 LeConte and by appointment

**Head GSI:** Zachary Stone

- Email: [stone@berkeley.edu](mailto:stone@berkeley.edu)
- Office Hours: by appointment.
- All administrative issues may be addressed directly to the head GSI

**Course Webpage:** [bcourses.berkeley.edu](http://bcourses.berkeley.edu)

**Enrollment:**

- Early Drop Deadline: Friday 9/4 at midnight.
- All enrollment is through TeleBEARS
- You must attend ALL discussion/laboratory (DL) sections in the first two weeks to remain enrolled in the class. You must attend the DL sections for which you are registered.

**Prerequisites:**

- Math 1A (Calculus) is a prerequisite
- Math 1B may be taken concurrently

**Lecture:**

- Time/Location: MWF 8:10AM-9:00AM, 1 LeConte Hall
- Reading: Lectures will be a compliment to the assigned reading, not simply repeat what is covered in the book.
- Clickers: We will use clickers in lecture to facilitate interaction. Clickers are required and you will receive credit for participation only, not for correctness. (see details on grading below)

**Discussion/Lab Sections:**

- DL sections meet twice a week for two hours EVERY week, even when there is no lab scheduled.
- Quizzes will be given in section on weeks when there is no lab.
- In your DL sections you will practice problems and discuss concepts in small groups, with the guidance of a GSI, as well as perform labs and take quizzes.
- You must bring your workbook to your DL section.

### Homework:

- There will be weekly homework due Fridays at 5pm.
- Homework will be a combination of computer-based homework on the Mastering Physics website and traditional turned in homework. The written homework will be turned in electronically by scanning or photographing your assignment. For Mastering Physics, you must purchase a registration card either along with your textbook, or on the Mastering Physics website ([www.masteringphysics.com](http://www.masteringphysics.com)) directly.
- You will need to sign up for Mastering Physics with your Cal SID# and use the Course ID: **MPLEE20151**. If your Cal SID # is incorrect you will not receive homework credit.
- No late homework will be accepted. We will drop your lowest two homework scores.
- We encourage you to work with and help other students, however the homework you submit must ultimately be your own work. This means that while other students may teach you how to do a problem, you must eventually be able to solve the problem on your own and submit your own solution, not one copied from another student.

### Labs:

- There will be 7 labs throughout the semester (see the syllabus) performed in your DL section. While you perform the labs you will complete the lab worksheet found in the workbook. You will turn in the lab worksheet at the end of your lab section.
- If you miss a lab for a valid reason (e.g. illness) you must email your GSI to let them know the reason for your absence. To make up a missed lab, you should attend another DL section during that same week, also emailing that GSI ahead of time to let them know you will be attending their section. If you are not able to make up a lab in the week that it runs, one lab setup will also be available in each lab room the following week for makeups. You may only make up a lab in the following week once per semester. After that following week, you will not be able to make up the lab at all.
- You are required to complete ALL labs: any uncompleted labs will result in a reduction of your grade by 1/3 of a letter grade for each lab missed.

### Quizzes:

- Quizzes will be given in DL section on weeks that there is no lab scheduled.
- Each quiz will be a single problem that is very closely related to a HW problem that you have already turned in.
- Your quizzes will be primarily graded on your solutions, not your answers. Your solutions must clearly demonstrate your reasoning with words and equations. The quizzes are intended to give you practice working out exam-style solutions.
- The quizzes are closed book, but you will be allowed to bring one handwritten 3"x5" card (both sides) of notes to the quizzes.
- We will drop your lowest quiz grade. There will be NO makeup quizzes.

### Exams:

There will be two evening midterms

ReviewMT1\_1: Saturday 9/26/15, 12-2pm, 1 Pimentel

ReviewMT1\_2: Sunday 9/27/15, 12-2pm, 1 Pimentel

Midterm#1: Monday, September 28, 2015 07:00 pm-09:00 pm, 1 Pimentel

ReviewMT2\_1: Saturday, 10/31/15, 12-2pm, 1 Pimentel

ReviewMT2\_1: Saturday, 11/1/15, 12-2pm, 1 Pimentel

Midterm#2: Monday, November 02, 2015 07:00 pm-09:00 pm, 1 Pimentel

- The final exam place is TBD, but this class is in exam group 4. Monday, December 14, 2015, 7-10pm
- You MUST be available to take all exams. Unresolvable conflicts with the exam dates must be discussed with the head GSI immediately.
- All exams are closed book—you will be allowed one 3"x5" card (both sides) handwritten (or size 14 font or larger computer) notes for each MT and three for the final.
- Exams will include both conceptual questions similar to the clicker and workbook questions, as well as quantitative problems similar to homework problems and quizzes.
- Exam problems will be graded based on your solutions, not your answers. No credit will be given for correct answers without a clear reasoning and showing your work.

#### **Clickers:**

- Clickers are required for lecture. You will receive credit for participation only, not for correctness. You can use iclicker hardware or use a device such as your phone. There is a charge for using your device but it is less than for new hardware.
- Clicker participation is extra credit: your clicker percentage will replace 2 percentage points of your total exam weighting only if your clicker percentage is higher than your exam percentage. We will start using clickers on the second week of lecture, but we will start counting the extra credit in the third week of class.
- It is your responsibility to bring a functioning (with working batteries), properly registered iClicker (iclicker.com) to lecture every day.
- There are NO makeups for clicker questions. We will drop the lowest three days of clicker scores.
- You must register your clicker with your name and student ID through the iClicker website ([www.iclicker.com/support/registeryourclicker/](http://www.iclicker.com/support/registeryourclicker/)) to receive credit. If your iclicker is incorrectly registered you will not receive clicker credit.

#### **Course Center:** 105 Le Conte

- All GSI office hours are held in the course center.
- The course center is designed to facilitate group work. It will be open during business hours whether or not there are office hours being held, so feel free to come to work individually or in groups any time.

#### **Required Course Materials:**

- Textbook: Giancoli, *Physics for Scientists & Engineers*, Volume 1 (Custom Edition for UC Berkeley)
- workbook/lab manual: Birkett & Elby, *7A Workbook*
- online homework: Mastering Physics subscription
- clicker: iClicker Classroom Response System

**Grading:**

- The grade breakdown is the following:

Midterm 1	20%
Midterm 2	20%
Final Exam	40%
Homework	10%
Labs & Quizzes	10%

- Clicker participation will act as extra credit: if you're clicker percentage is higher than your total exam percentage, your clicker participation will count for 2% of your grade and your exams will count for 78% of your grade.
- We will drop your lowest homework score, lowest quiz score, and 3 lowest clicker scores.
- Your homework grade will be split 50/50 between mastering physics and written homework. One of the written HW problems will be picked randomly and graded each week.
- We will follow the department guidelines for grade distribution: roughly 25% A's, 40% B's and 35% C's. D's and F's will be given on a case-by-case basis to students displaying especially poor performance.
- A grade of "Incomplete" is only given to students who have completed work that is at least "C" quality and are unable to complete the course due to circumstances beyond their control.

**Accommodations:**

- Students who require special accommodations for the class (e.g. for exams, lecture, labs) must contact the instructor at the beginning of the semester.