University of California, Berkeley, Department of Physics

Physics 7A Lecture 3 Course Information Sheet, Fall 2017
MWF 1pm-2pm, 1 LeConte

Instructor:	Head GSI:	Undergraduate Advisers
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Prerequisites: MATH 1A is a prerequisite. MATH 1B should be taken concurrently

Texts:

- **Required texts** include a textbook, workbook, and online homework access, which are packaged together at the student bookstore. The textbook is D. C. Giancoli, *Physics for Scientists and Engineers*, Volume 1 (custom edition for the University of California, Berkeley), 4th edition. The workbook is by Birkett and Elby. The online homework access is called Mastering Physics, and you will need the Course ID: **MPDEWEESE94463**.
- **i>clicker** will also be required for use in lecture. You may purchase one of the following models: The original i>clicker, i>clicker + or i>clicker 2. The mobile application, REEF Polling by i>clicker will not be allowed.
- **Suggested texts** include Elby, Portable TA: Problem Solving Guide, Volume 1.
- See the "Advice Sheet" on the course website for more information (and, naturally, advice).

Course website:

- https://bcourses.berkeley.edu/courses/1464920 is the main course website for announcements and resources. Please stay up to date on everything through this site!

Course center and GSI office hours: 105 LeConte is reserved for 7A, and is available for students to use to study together. GSI office hours will also be held here, beginning the second week of class. (A schedule will be posted to the course website and on the door. You may attend any GSI's office hour.)

IMPORTANT INFORMATION
First two weeks of class: You must attend ALL of your discussion and laboratory (DL) sections during the first two weeks of class or you may be dropped from the course. See the "Advice Sheet" on the course website for suggestions on what to do if you cannot get into a section that works with your schedule.) Register your i<clicker at bcourses by September 1 (more info below).
Drop deadline: This is an Early Drop Deadline course: the deadline to drop is **Friday, September 1**, at midnight. DO NOT assume that we will automatically drop you from the course if you do not attend sections; it is your responsibility to drop the course before the deadline. There are many people trying to enroll, so if you plan to drop the course please do so as soon as possible.
Course policies: It is your responsibility to read, understand, and abide by all course policies listed in this document AND on the course website, and to keep up with all announcements. Contact the Head GSI at the above email address with any administrative issues or questions, and include your name and section number in the email. (Messages without this information will be ignored!) Please read this entire document and consult the course webpages before emailing with questions.

Lectures: Physics 7A will cover Newtonian Mechanics, including topics such as Kinematics, Dynamics, Rotations, Gravitation, Fluids, and Waves. We have 16 chapters to cover in about 14 weeks (including holidays). This is a lot of material and we have to move fast. Please try to keep up with the material and let us know if we move too fast! We will cover first chapters quickly and slow down to the usual pace of the course in Newtonian Mechanics. Students, who did not take Physics before, may find it difficult to catch up with the pace of the course. I strongly recommend these students to spend extra time on problem solving and GSI office hours. Students with prior physics knowledge from AP or honors classes are warned to not underestimate the effort required to be successful – Although you may find the course to cover familiar material in the beginning, it will pick up steam rapidly.

Semester grades will be determined by the following weighting:

Midterm 1	Midterm 2	Final Exam	MP Homework	Section (Labs + written quizzes)	Clicker
20%	20%	35%	15%	10%	7% (extra credit)

University guidelines specify that in lower division courses, the total percentage of students getting an A should be roughly 25%, the percentage of students getting a B should be roughly 40%, and the percentage of students getting a C should be roughly 35%. We will be following these approximate guidelines. The grade of D or F will also be given to a small percentage of students displaying especially poor performance. In accordance with UCB policy, a grade of "Incomplete" will only be given under dire circumstances beyond a student's control, and only when work already completed is of at least C quality.

Exams: There will be two midterm examinations and a final exam. Dates and times are listed below. Exams cannot be rescheduled and must be taken at the scheduled time. Anyone with an unresolvable conflict with exam dates (like another pre-scheduled exam in a different class) must contact the Head GSI immediately. Exams will include conceptual questions and workbook questions, as well as quantitative problems similar to homework problems. The level of exam questions is higher than practice problems at the beginning of the chapters in Giancoli. They are at the level of end of chapter problems with (*) or the ones in "General Problems". Further details about the exam (location, what to bring, extra review sessions, etc) will be announced via the course website.

Midterm 1	Midterm 2	Final Exam
Monday, 9/25, 7-9pm	Monday, 10/30, 7-9pm	Tuesday, 12/12, 8-11am
1 Pimentel	105, 155 Dwinelle	TBA

Homework: Homework will be computer-based through the Mastering Physics (MP) website. The MP homework will be submitted electronically on the corresponding website **MPDEWEESE94463**, is **due at 11:59pm each Friday** and will make up 15% of the final course grad. **Late homework will not be accepted**. We will drop your lowest homework score, but no other excuses or extensions will be allowed. (See the "Advice Sheet" on the course website for detailed instructions for logging in to Mastering Physics and important advice for getting the most out of the online homework.)

Discussion/Lab (DL) Section: DL sections meet twice a week for two hours EVERY week, even when there is no lab scheduled. 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.
We do expect students to attend and participate in discussions. Learning physics means *doing* physics, and discussion sections are a chance for you to *do* physics – to practice solving problems, talk about concepts, and grapple with the course material in as many ways as possible. (See the "Advice Sheet" on the course website for more advice on getting the most out of your discussion sections.)

Labs: Lab sections are **required**, in addition to being worth 5% of your semester grade. If you miss a lab session, you must make it up within a week. E.g., if you miss your lab on Wednesday, you must make it up before your class the following Wednesday. Do the lab (unobtrusively!) during some other section, and turn it in to your GSI at the next meeting. There will be no make-ups at the end of the semester. Missed labs will have a bad effect on your grade. You must complete at least 6 of the 7 labs to pass the course, and missing one lab will affect your grade. See the "Advice Sheet" on the course website for a guide on rescheduling or making up labs.

Your lab handouts (in your 7A Workbook, which you should bring with you) must be completed and turned in before you leave the lab, and will be graded according to a rubric that will be announced in the lab sections. **Written quizzes** will occur in lab section on weeks when no lab is scheduled, and will be graded according to the same rubric. These are designed to prepare you for exams, and will be included in the 10% of your semester grade for labs, but will not be subject to the 1/3 letter grade penalty (or automatic failing grade) discussed above.

Clicker: We will use clickers in lecture to facilitate interaction.

- Clicker participation is *extra* credit: After you take the final exam, your clicker score for the whole course will be compared with your final exam score. If your clicker score is lower, then your final exam score will be 35 % of your overall course grade as stated above and your clicker score will not affect your course grade. If your clicker score is higher, then your final exam score will be 28 % of your overall course grade and your clicker score will be 7% of your course grade.
- We will start using clickers on the first day of lecture, but we will start counting the extra credit in the third week of class.
- For each clicker question, you will get one point if you participated and another point if you provided the correct answer.
- It is your responsibility to bring a functioning (check batteries!), properly registered iClicker to lecture every day.
- To receive credit for the responses you submit with i>clicker, you must register your clicker on bCourses (https://www.ets.berkeley.edu/discover-services/clickers/students-getting-started) by the drop/add deadline, (**Friday, September 1**). Students who register after this time will not receive credit.

Accommodations: The Disabled Students' Program (DSP) is committed to ensuring that all students with disabilities have equal access to educational opportunities at UC Berkeley. If you need individualized services or accommodations for exams or other aspects of this course; if you have emergency medical information you wish to share with the instructor; or if you need special arrangements in case the building must be evacuated, please inform the professor or the head GSI immediately. You may reach us by email to arrange a meeting, or you may speak to one of us in person after class or during office hours. We may need several weeks before the scheduled exams to make appropriate arrangements, so please contact us as soon as possible.

Intellectual honesty: The student body of UC Berkeley has adopted the following honor code. "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." The hope and expectation is that you will adhere to this code.

Collaboration and Independence: Reviewing lecture and reading materials, working practice problems, and studying for exams can be enjoyable and enriching things to do with fellow students. This is recommended. However, when you submit an answer to MasteringPhysics or a hard-copy assignment to your GSI, you are stating that the answer/solution is your own work and not copied from a book, website, friend, or other animate or inanimate source.

Cheating: A good lifetime strategy is always to act in such a way that no one would ever imagine that you would even consider cheating. Anyone caught cheating on an exam in this course will receive a failing grade on the relevant exam problem(s) and will also be reported to the University Center for Student Conduct. In order to guarantee that you are not suspected of cheating, please keep your eyes on your own materials and do not converse with others during the exams. If you must look in a direction other than your exam paper, we recommend looking up at the ceiling.

Plagiarism: To copy text or ideas from another source without appropriate reference is plagiarism and will result in a failing grade for your assignment and usually further disciplinary action. This includes copying homework solutions from printed or online, published or unpublished sources.

Academic Integrity and Ethics: Cheating on exams and plagiarism are two common examples of dishonest, unethical behavior. Honesty and integrity are of great importance in all facets of life. They help to build a sense of self- confidence, and are key to building trust within relationships, whether personal or professional. There is no tolerance for dishonesty in the academic world, for it undermines what we are dedicated to doing – furthering knowledge for the benefit of humanity.

Your experience as a student at UC Berkeley is hopefully fueled by passion for learning and replete with fulfilling activities. And we also appreciate that being a student may be stressful. There may be times when there is temptation to engage in some kind of cheating in order to improve a grade or otherwise advance your career. This could be as blatant

as having someone else sit for you in an exam, or submitting a written assignment that has been copied from another source. And it could be as subtle as glancing at a fellow student's exam when you are unsure of an answer to a question and are looking for some confirmation. One might do any of these things and potentially not get caught. However, if you cheat, no matter how much you may have learned in this class, you have failed to learn perhaps the most important lesson of all.

FINAL NOTE: If you are in trouble (behind in homework, doing worse in the course than you would like, etc.) for whatever reason, please let us know. We'll try to help! Additional help is available through the Student Learning Center (Golden Bear Center), the Honors Society, the Society of Physics Students, and the Physics Scholars Program. Inquire in the Physics Department Undergraduate Student Services Office (368 LeConte Hall) for further information. **There is quite a lot of material in this course, and not a lot of time to learn it. There are many resources available to help you. We strongly encourage you to take advantage of them.**

All above provisions listed in the course info sheet are subject to change at the instructor's discretion. Changes may happen to address problems and to improve the smooth running of the class and/or discussion sections.