Lecturer: Tom Zajdel  
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Lecture Hours: From 10:15 to 11:45 am in 227 Bechtel  
Discussion Hours: From 4:15 to 5:15 pm in 227 Bechtel  
Study Hall Hours: From 7:45 to 10:00 pm in Unit 1 Freeborn Lounge

Course Information: Welcome to UC Berkeley! This intensive summer course is meant to give you a taste for college-level physics, as well as help you develop your personal studying strategies and philosophy of learning. Along the way, we’ll introduce the first quarter of Physics 7A: Mechanics.

Learning Goals: By the end of this course, you should be able to...

- Explain the physical intuition behind forces in a variety of contexts
- Understand the resources available to you and how you best learn complex material

You will likely forget all the formulae and problems by the time you enroll in Physics 7A. Therefore, it’s most important that we use this time to help you adjust to rigorous engineering coursework. We will practice a variety of different learning strategies, so by the end you should be well-equipped for your first year of studies with a strategy for learning and understanding new technical concepts.

Topic Schedule: Each day of lecture will focus on one core idea in mechanics:

- 1D Kinematics .........................................................Lecture 1
- Vectors and 2D Kinematics .....................................Lecture 2
- Newton’s Laws .......................................................Lecture 3
- Circular Motion .....................................................Lecture 4
- Work and Energy ..................................................Lecture 5
- Gravitation ..........................................................Lecture 6

Homework: Practice problems will be assigned after every lecture and will cover the day’s topic. There will be five graded assignments and one optional assignment. Homework is due at the beginning of the following day’s discussion section. Late work will not be accepted for credit. Collaboration on homework is encouraged, but all work turned in must reflect your personal understanding of the material.

Final Exam: There will be a one-hour comprehensive final exam on August 17, 2016 in 227 Bechtel at 4:15 pm. A one-page front-and-back formula sheet is the only resource you may use.

Grading: Assignments and examinations will be weighted as follows:

- 10% Readings (5)
- 20% Homeworks (5)
- 70% Final exam

Even though this course is not worth credit, a letter grade will be assigned.

Academic Honesty: The UC Berkeley Student Honor Code consists of one sentence: “As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others.” You are expected to abide by this policy. You can find more information at http://www.asuc.org/honorcode/index.php.

Diversity Policy: Throughout this course, we will work together to create an inclusive learning environment in which all individuals are included, valued, and respected. The teaching staff and student population come from a variety of educational and cultural backgrounds and hold diverse beliefs. We will encourage the exploration of and engagement in both divergent scientific approaches and diverse learning methods throughout the course. Diversity is an essential component of the engineering profession, because breakthroughs occur when diverse viewpoints work together to address massive challenges that our society faces.