

## Waves, Kinetic Theory, and Relativity

College of Creative Studies  
University of California, Santa Barbara

This is the third of 6 courses in the CCS Physics sequence and is required for all CCS Physics majors. Topics to be covered include:

- Sound waves
- Fluid dynamics
- Kinetic theory of matter
- The Maxwell-Boltzmann distribution
- Specific heat
- The special theory of relativity

Prerequisites: PHYS CS 32 or consent of instructor

### Lecture:

**Time:** Tues/Thurs 3:30 - 4:50 p.m.

**Place:** PHELPS 1440

**Instructor:** Dr. Ilan Ben-Yaacov, ESB Room 2213, ext 5295, [ilan@engineering.ucsb.edu](mailto:ilan@engineering.ucsb.edu)

**Office Hours:** Wednesday 10:00am-12:00pm in ESB 2213

### Problem Sessions:

**Time / Place:** Wed 1:00 - 2:50 p.m., BLDG 387 room 103

Wed 3:00 - 4:50 p.m., BLDG 387 room 103

**Instructor:** Matthew Neeley, [maffoo@physics.ucsb.edu](mailto:maffoo@physics.ucsb.edu)

**Office Hours:** Tues 1:15-3:15pm in BROIDA Room 4217

**Teaching Assistant:** Daniel Balick, [dbalick@physics.ucsb.edu](mailto:dbalick@physics.ucsb.edu)

**TA office hours:** Mon 5:00-7:00pm in CCS Room 145 (or 148 if room 145 is full)

**Grader:** Ryan Hazelton, [rhazelton@umail.ucsb.edu](mailto:rhazelton@umail.ucsb.edu)

**Grader office hours:** Tues 7:00-9:00pm in CCS room 148 (or 145 if room 148 is full)

**Required Texts:** *Physics*, 5<sup>th</sup> edition, by Resnick, Halliday, and Krane, 2002, ISBN 0-471-32057-9  
*An Introduction to Mechanics*, by Kleppner and Kolenkow, 1973, ISBN 0-07-035048-5

Class Web Page: [http://my.ece.ucsb.edu/PHYSCS33\\_S2007](http://my.ece.ucsb.edu/PHYSCS33_S2007)