Physics 140A, Condensed Matter Physics
Winter 2009

Instructor: Rena Zieve
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Office hours: 11:00-12:00 Monday, 12:00-1:00 Tuesday, 2:30-3:30 Wednesday
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I will be in my office or lab during my scheduled office hours each week. You are welcome to find me for brief questions at other times. E-mail is by far the best way to get in touch with me.

Reader Jim Ma
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Office hour 1:00-3:00 Monday
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Text: H.P. Myers, Introductory Solid State Physics. I plan to cover chapters 1-3 and 5-7 in 140A. Other possibly useful books:
Charles Kittel, Introduction to Solid State Physics—another classic, currently in its 8th edition. Often annoyingly glib; older editions are better about this.

Prerequisites: Some general familiarity with quantum mechanics is necessary. Physics 9D is adequate, although Physics 115A is preferable. Helpful topics include Fourier analysis, the simple harmonic oscillator, and the quantum particle-in-a-box solution. I will also assume some knowledge of statistical mechanics.

Grading
Homework 20%
Problem sets are due in class. I will usually pass out answer sets one lecture after the problem set is due, and up to this time you may turn in your work late for half credit. The exception is that just before the midterm I may hand out an answer set on the day the problem set is due; if so I will not accept late homework for that problem set. (I will warn you in advance if I am going to do this.) The lowest problem set score will be dropped.
Midterm 30%
There will be one midterm, tentatively on February 12, 2009.
Final Exam 50%
The final will be on Thursday, March 19, 2009 at 8 AM.