PHYSICS 203B (2010) Course Description

Instructor

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Assistant:

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<u>Lectures</u>

Tu, Th 9:30—10:50 Mayer Hall Addition 2623

Homework

Will be assigned during lecture, and solutions will be posted on the web at http://physics.ucsd.edu/students/courses/spring2010/physics203b/

Close cousins to the homework problems will appear on the mid-terms and final.

Grade

Mid-Term	Mid-Term	Final
25%	25%	50%

Lecture notes will be posted on web at http://physics.ucsd.edu/students/courses/spring2010/physics203b/

Texts

- 1. Classical Theory of Fluids by Landau and Lifshitz
- 2. Classical Electrodynamics by Jackson

Outline

- 1. Boundary value problems in electrostatics and magnetostatics
- 2. Electromagnetic waves and geometrical optics
- 3. Drude model for $\varepsilon(\omega)$
- 4. Magnetic diffusion and skin depth
- 5. Wave guides
- 6. Radiation