

**DEPARTMENT OF PHYSICS**  
**PHYSICS 4C. Physics for Physics Majors - Electricity and Magnetism. Fall 2009.**

**INSTRUCTOR:** Prof. Alex Groisman, 7254 Urey Hall, Ext. 21838, e-mail: [agroisman@ucsd.edu](mailto:agroisman@ucsd.edu). Office hour: Mondays Urey Hall 7230, time to be announced.

**Grader:** Yuliya Kuznetsova. E-mail: [kuznetso@physics.ucsd.edu](mailto:kuznetso@physics.ucsd.edu)

Web page: <http://physics.ucsd.edu/students/courses/fall2009/managed/physics4c/>  
Please check the web page often for announcements.

**TEXTBOOK:** Ginacoli, Physics for Scientists and Engineers, Volume 2.

**COURSE COORDINATOR:** Patti Hey, 118 Urey Hall Addition, Ext. 21468.

**COURSE FORMAT:**

This is the third course in the Physics for Physics Majors sequence.

**Lectures** will take place at 2:00 - 2:50 PM, on **M, W, and F** in **York 4080A**

**Quizzes:** Tuesdays at 5:00 – 5:50 pm in **Sequoyah Hall 147**. Attendance to quizzes is **mandatory**.

**HOMEWORK ASSIGNMENTS:**

Problems from the book will be assigned for each text chapter, solutions will be posted on the web page. To fully understand the material, you should work most of the problems **on your own** without help of the solution key. **Homeworks will not be graded.**

**QUIZZES:**

1. Closed-book quizzes will be given **on six Tuesdays** in accordance with the schedule provided in the attached Tentative Course Schedule. All students are required to purchase bluebooks for taking the quizzes. Your assigned code number and course number should be written on the cover of the bluebook; do not write your name on the bluebook. At the first quiz you will be assigned a 3-digit number. This number will become your code number for the quarter and will be used on each quiz thereafter, in place of your name. You must memorize this number. Please write quiz answers in ink. You will be able to collect your quizzes in Physics Department Student Affairs Office window (116 Urey Hall Addition) after they are graded. Hours the office will be available for quiz pick-up are 8 a.m.-12 p.m. and 1 p.m.-4:30 p.m. Monday-Friday. Solutions and grades by the code numbers will be posted on the web. Please, check your posted grades promptly to make sure your grade has been recorded correctly.
2. Appeals to the grading of quizzes should be made in writing, within one week from the day when the graded quizzes are made available for pick-up. **Do not** write directly on the bluebook. Instead, attach a sheet of paper with an explanation for why you are appealing the grade (be specific) and give it to the Grader. Other than for incorrect addition of points, grade changes will only be considered for quizzes written in ink (not pencil). Contact the instructor if the problem is not resolved after a discussion with the Grader.

3. 5 out of 6 quiz grades will count towards your final grade, so you can drop or miss (the latter is not recommended!) one quiz without penalty.
4. **There will be no make-up quizzes.**

**FINAL EXAM:** The final exam will be given on December 9<sup>th</sup> at 3:00 – 6:00 PM (location to be announced) and will cover the entire material of the course. Student I.D. is **required** for the final.

**COURSE GRADE:** Quizzes - 60%, with each of the 5 quizzes that count towards the final contributing 12%. **Final - 40%.**

**ACADEMIC DISHONESTY:**

Please read "UCSD Policy on Integrity of Scholarship" in the 2008-2009 UCSD General Catalog. These rules will be rigorously enforced.

**WHOM TO SEE:**

Sharmila Poddar or Richard Hsu, 115 Urey Hall Addition, Physics Dept. Student Affairs Office, if you have any trouble using WebReg to add/change/drop, drop from waitlists. The Grader if you have questions relating to grades received. The Instructor, if you have basic questions about the subject matter, or if you have administrative problems.

***COURSE SCHEDULE (TENTATIVE)***

| <b>Week</b>            | <b>Topics/Chapters from Giancoli</b>     | <b>Quiz on Tuesday</b> |
|------------------------|--|------------------------|
| <b>0:</b> September 25 | introduction                             |                        |
| <b>1:</b> September 28 | electric charge, field/21                |                        |
| <b>2:</b> October 5    | Gauss's law/22                           | Quiz 1                 |
| <b>3:</b> October 12   | potential, capacitance/23, 24            | Quiz 2                 |
| <b>4:</b> October 19   | currents, resistance, DC circuits/25, 26 |                        |
| <b>5:</b> October 26   | circuits, magnetism/26, 27               | Quiz 3                 |
| <b>6:</b> November 2   | sources of magnetic field/27, 28         | Quiz 4                 |
| <b>7:</b> November 9   | Faraday's law/29                         |                        |
| <b>8:</b> November 16  | inductance, EM oscillations/30           | Quiz 5                 |
| <b>9:</b> November 23  | AC circuits/31                           |                        |
| <b>10:</b> November 30 | Maxwell's equations/32                   | Quiz 6                 |