INSTRUCTOR: C. M. Surko; csurko@ucsd.edu
       Office: 4302 Mayer Hall; 534 6880
       Office Hour: W 2 - 3 pm, after class, or email/call to arrange.

TEACHING ASSISTANT: Matthew Sudano; msudano@physics.ucsd.edu
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       Office Hour: e-mail or call to arrange

COURSE SCHEDULE:

Lectures:	MWF	10:00 am – 10:50 am	Center 212
Discussion/problem session:	W	5:00 – 5:50 pm	WLH 2113
Midterms Nov. 5 & Nov. 26	M	10:00 am – 10:50 am	Center 212
Final Exam Dec. 14,	F	8:00 am – 11:00 am (location TBA)	

COURSE WEB PAGE: See the course web page for changes and updates:
       http://physics.ucsd.edu/students/courses/fall2006/physics100a/

GRADING: Homework 20%; two midterms, 20% each; final 40%.

COURSE TEXT: *Introduction to Electrodynamics*, 3rd Edition, by David J. Griffiths. (You'll also need access to a table of integrals.) If you'd like to read other treatments of the subject or for integrals, the following will be on reserve in the Science and Engineering Library.
       Griffiths, *Introduction to Electrodynamics*. Informal, intuitive style but careful.
       Reitz, Milford and Christy, *Foundation of Electromagnetic Theory*. Terse
       Pollack and Stump, *Electromagnetism*. Comparable in level to Griffiths
       Jackson, *Classical Electrodynamics*. Standard graduate text.
       Schaum's Outlines, *Mathematical Handbook of Formulas and Tables*

HOMEWORK: Homework will be assigned most weeks and graded. It is due at the START of lecture on the dates indicated (Mondays except where noted). You can turn it in at the start of the next lecture, but will then receive only a small amount of credit for it. Problems marked with a * are recommended but need not be turned in. You may discuss problems with your peers but the solutions you turn in must be your own work and written up separately.

HOMEWORK, MIDTERM AND FINAL DETAILS:

1. Exams are closed book. Bring a blue book. Formulae will be provided as necessary. You will be assigned a 3-digit code number. Please enter your code number on the exam blue books in the upper right-hand corner.
2. Only in very exceptional cases will there be accommodation for a missed midterm. In such cases, arrangements <u>must</u> be made in advance.
3. The solutions to the exams and recorded grades will be posted on the course web page.

ACADEMIC DISHONESTY: Please read "UCSD Policy on Integrity of Scholarship" in the General Catalog. The rules on academic dishonesty will be strictly enforced.

Revised Course Outline and Schedule

Week	Chapter[1]	Homework Assignments[1] Due date
0 Sept. 28	1 Vector calculus review	
1 Oct. 1	1 Vector calculus, cont'd	1.7, 1.12, 1.25, 1.33, 1.42*, 1.44*, 1.47*, 1.49, 1.62* Due Monday, Oct. 8
2 Oct. 8	2 Coulomb's law electric fields, Gauss' law	2.3*, 2.6, 2.7*, 2.8, 2.9, 2.14, 2.16. Due Monday, Oct. 15
3 Oct. 15	2 Properties of E scalar potential	2.20, 2.21, 2.24, 2.25 [only for the disk (c)] 2.26, 2.27* *Due Friday, Oct. 19.*
4 Oct. 22	*No classes due to San Diego fire emergency.*	
5 Oct. 29	2 Work and energy	2.31 − 2.34, inclusive *Due Wednesday Nov. 7*
6 Nov. 5	2 Conductors and forces *[Midterm Mon. Nov. 5]*	2.35 − 2.40, inclusive *Due Wednesday, Nov. 14*
7 Nov. 12 (Hol. Nov. 12)	3 Laplace's eqtn., images	3.6, 3.8, 3.9, 3.10 *Due Wednesday, Nov. 21*
8 Nov. 19 (Hol. Nov. 22-23)	3 Separation of variables	3.12, 3.15, 3.18, 3.20, 3.22 *Due Wednesday, Nov. 28*
9 Nov. 26	3 Spherical probs. & multipoles *[Midterm Monday, Nov. 26]*	3.27, 3.28, 3.31, 3.40 *Due Monday, Dec.. 3*
10 Dec. 3	4 Electric fields in matter, D	4.10, 4.15, 4.18 *Due Friday, Dec. 7*

1. *Introduction to Electrodynamics*, 3rd Edition, by David J. Griffiths.

* You are encouraged to do these (*) problems and check your answers with the posted solutions, but they will not be graded.