Electromagnetism

College of Creative Studies University of California, Santa Barbara

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

- Coulomb's Law, Gauss' Law, Electric Fields
- Electric Potential, Electric Field Energy
- Conductors and Dielectrics
- Capacitors, Resistors, and Diodes
- Electric currents and resistance
- DC circuit analysis, RC circuits
- Magnetic fields
- Ampere's Law, Biot-Savart Law

Prerequisites: PHYS CS 33 or consent of instructor

Lecture:

Time:	Tues/Thurs 12:30 - 1:50 p.m.
Place:	BLDG 387, Room 101
Instructor:	Dr. Ilan Ben-Yaacov, ESB Room 3221D, ext 5295, ilan@engineering.ucsb.edu
Office Hours:	Wednesday 11:00am-1:00pm in ESB 3221D

Problem Sessions:

Time / Place:	Thurs 10:00 - 11:50 a.m., BLDG 387, Room 103
	Thurs 2:00 - 3:50 p.m., OLD LITTLE THEATER, Room 164B
Instructor:	Doug Folsom, doug.folsom@gmail.com
Office Hours:	Tues 1:00-3:00pm in CCS Faculty Office (behind CCS building)

Teaching Assistant:James Garrison, garrison@physics.ucsb.eduTA office hours:Tuesday 6:00-8:00pm in CCS Room 145

Grader:Alex Toesch, <u>atroesch@umail.ucsb.edu</u>Grader office hours:Wednesday 6:00-8:00pm in CCS Room 145

Required Texts: *Physics*, 5th edition, vol 2, by Halliday, Resnick, Krane, 2002, ISBN 0-471-40194-3 *Electricity and Magnetism*, 2nd edition, by Purcell, 1985, ISBN 0-07-004908-4

Class Web Page: http://my.ece.ucsb.edu/PHYSCS34