Physics 100C SYLLABUS

Spring 2010

PROFESSOR: Oleg Shpyrko, oleg@physics.ucsd.edu

Office: Mayer Hall 3210, ext. 4-3066

Office Hour: DI and afterwards, Fri 3:00-4:30PM or email to arrange.

GRADER: Yuliya Kuznetsova, kuznetso@physics.ucsd.edu

COURSE SCHEDULE:

Lectures: Mon, Wed, Fri 10:00AM – 10:50AM, WLH 2206 Discussion Session: Fridays 3:00PM-3:50PM, WLH 2115

Midterm: Fri, May 7th 10:00AM – 10:50AM, WLH 2206 (in class)

Final Exam: June 7th 8:00AM – 11:0AM, Location TBA

COURSE WEB PAGE: x-ray.ucsd.edu/PHYS_100C (RSS/Atom feeds available)

GRADING: Homework=20%, Midterm =30%, Final=50%

COURSE TEXT: Introduction to Electrodynamics, 3rd Edition, by David J. Griffiths.

HOMEWORK: Homework is due at the START of Monday lecture, unless otherwise indicated.

You can turn it in at the start of the next lecture on Wednesday, but with 20% penalty.

ACADEMIC DISHONESTY: Please read the section entitled "UCSD Policy on Integrity of

Scholarship" located in the 2009-2010 General Catalog, www.ucsd.edu/catalog

The rules on academic dishonesty will be strictly enforced.

MIDTERM AND FINAL:

Open book midterm and final exams. Bring your textbook only, and a bluebook. Formulae and integral tables will be provided if needed. The solutions to the midterm and final exams, as well as recorded grades will be posted on the course web page.

DETAILED/WEEKLY SCHEDULE:

Week #	Topic (Chapter.Section), Approximate	Homework Assignment
1	Wave Equations, Electromagnetic Waves in Vacuum (9.1-9.2)	None
2	Electromagnetic Waves in Matter, Reflection and Transmission. Adsorption and Dispersion (9.3-9.4)	TBA
3	Waveguides and Antenna (9.5)	TBA
4	Potential formulation of Maxwell's equations and retarded potentials (10.1-10.2)	TBA
5	Lienard-Wiechert potentials and fields of a moving point charge (10.3)	TBA
6, 7	Radiation (11)	TBA
8,9	The special theory of relativity (12.1-12.2)	TBA
10	Relativistic Electrodynamics (12.2-12.3)	TBA