Physics 321 **Electromagnetism I** **Autumn 2017**

Instructor:	Subhadeep Gupta (deepg@uw.edu)
Lectures:	Tuesdays and Thursdays 9:00-10:20 am, Rm A118 Phys/Astr Building (A-wing)
Office:	B428 Phys/Astr Building (616-9649)
Office Hour:	Wednesday 2-3 pm in B428 (or by appointment, please email)
Tutorial Website:	https://sharepoint.washington.edu/phys/ugrad/tutorials/321/Pages/default.aspx
TA's:	Bert Xue (Tutorial Head TA, bertx@uw.edu),
Textbook:	David Griffiths, *Introduction to Electrodynamics*, fourth edition
Homework:	HW problems will be assigned each week, to be worked out completely and handed in during class on (typically) Thursday of the following week. You may also turn in your HW 15 minutes before class to the instructor's mailbox in the Physics main office. A portion of each week's HW assignment will be graded. Late HWs will be given a score of zero. There will be no HW assigned during exam weeks (see schedule).
Exams:	There will be two midterm exams and a two-hour final exam (see course schedule). Each of these three exams will be in A118 and will be closed book. You will be be provided an equation-sheet containing all relevant formulae. There will be no make-up exams. You may return an exam for regrading within one week after it was distributed, but you must attach a brief statement explaining the possible error in the original grading.
Course grade:	20% of your grade is assigned to each of Homework, Exam 1, Exam 2, Final, and Tutorial ("Quiz Section").
Course Website:	http://faculty.washington.edu/deepg/phys321/ Homework solutions will be made available the day after the due-date.

If you would like to request academic accommodations due to a disability, please contact Disability Resources for Students, 011 Mary Gates, 543-8924, uwdrs@uw.edu, and inform me (the instructor) so we can discuss the accommodations you might need for class.

Physics 321 **Course Schedule** **Autumn 2017**

Week	Date	Topic	Text
1	Sep 28	Introduction, Miscellaneous Math	Ch. 1
2	Oct 3	Electric Field, Coulomb's Law	2.1
	Oct 5	Gauss's Law	2.2
3	Oct 10	Electrostatic Potential	2.3
	Oct 12	Static Work, Conductors	2.4, 2.5
4	Oct 17	Laplace's Equation	3.1
	Oct 19	Review	
5	Oct 24	**First Exam**	
	Oct 26	Method of images	3.2
6	Oct 31	Separation of Variables I	3.3
	Nov 2	Separation of Variables II	3.3
7	Nov 7	Multipole expansion I	3.4
	Nov 9	Multipole expansion I	3.4
8	Nov 14	Review	
	Nov 16	**Second Exam**	
9	Nov 21	Polarization	4.1
	Nov 23	Holiday	
10	Nov 28	Fields of a Polarized Object	4.2
	Nov 30	Electric "Displacement" Vector	4.3
11	Dec 5	Linear Dielectrics	4.4
	Dec 7	Review	
12	Dec 13	**Final Exam**	