

## PHY 712 Electrodynamics 9-9:50 AM MWF Olin 105

### Plan for Lecture 5:

**Reading: Chapter 1 & 2 in JDJ**

**Introduction to numerical methods**

- 1. Finite difference methods with 2-dimensional example (Section 1.13 of your textbook)**
- 2. Finite element methods with 2-dimensional example (Section 2.12 of your textbook)**

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### Course schedule for Spring 2019

(Preliminary schedule -- subject to frequent adjustment.)

	Lecture date	JDJ Reading	Topic	HW	Due date
1	Mon: 01/14/2019	Chap. 1 & Appen.	Introduction, units and Poisson equation	#1	01/23/2019
2	Wed: 01/16/2019	Chap. 1	Electrostatic energy calculations	#2	01/23/2019
3	Fri: 01/18/2019	Chap. 1	Electrostatic potentials and fields	#3	01/23/2019
	Mon: 01/21/2019	No class	Martin Luther King Holiday		
4	Wed: 01/23/2019	Chap. 1 - 3	Poisson's equation in 2 and 3 dimensions		
5	Fri: 01/25/2019	Chap. 1 - 3	Brief introduction to numerical methods	#4	01/28/2019
6	Mon: 01/28/2019				
7	Wed: 01/30/2019				
8	Fri: 02/01/2019				
9	Mon: 02/04/2019				
10	Wed: 02/06/2019				
11	Fri: 02/08/2019				
12	Mon: 02/11/2019				

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