Fall 2017 – PHYSICS 333 – R.Sonnenfeld

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SCHEDULE – (Rev. E– 9/28/2017)

Wk	Date	Class Topic	Reading Asst.	HW Asst.
1	8/21/17	NO CLASS	Ch 1.1–1.2	
	8/23	[1]Course Overview	Ch. 1.3–1.4	
	8/25	[2]Divergence and Stokes Thm	Ch. 1.5	
2	8/28/17	[3]Delta Function	Ch. 2.1	
	8/30	[4]Clickers, line and surf. integrals	Ch. 2.2	
	9/1	[5]Fancy integrals for Coulomb/Gauss Law	Ch. 2.3	HW01 due
3	9/04	NO CLASS	2.4	
	9/6	[6]Potential of a Disk	2.5	
	9/8	[7]Gauss / Questions		HW02 due
4	9/11	[8]Conductors/Field lines	3.1	
	9/13	[9]Capacitors	3.2	
	9/15	[10]Uniqueness		HW03 due
5	9/18	[11]Method of Images	3.3	
	9/20	[12]Separation of Vars (x,y,z)	3.3.1	HW04 due
	9/22	Test 1 (Ch. 1–3)		
6	9/25	[13]Separation of Vars (R,θ)		
	9/27	[14]Separation of Vars	3.3.2	
	9/29	[15]Multipole Expansion		HW05 due
7	10/2	[16]Dipoles	3.4	
	10/4	NO CLASS	4.1	
	10/06	[17]Polarization	4.2	HW06 due
8	10/9	[18]$\vec{D}$	4.3	
	10/11	[19]Linear dielectrics	4.4	
	10/13	[20]Linear dielectrics	5.1	HW07 due
9	10/16	[21]Magnetic Field	5.2	
	10/18	[22]Biot-Savart Law	5.3	
	10/20	NO CLASS		
10	10/23	Test 2 (Ch. 3-4)		
	10/25	[23]Ampere's Law	5.4	
	10/27	[24]Vector Potential	6.1	HW08 due

Wk	Date	Class Topic	Reading Asst.	HW Asst.
11	10/30	[25] Magnetization	6.2	
	11/1	[26] Bound Currents	6.3	
	11/3	[27] $\vec{H}$	6.4	HW09 due
12	11/06	[28] Mag. Susceptability	Ch. 7.1	
	11/08	[29] Ferromagnetism		
	11/10	[30] Drude Model	Ch. 7.2	HW10 due
13	11/13	[31] Motional EMF		
	11/15	[32] Faraday's Law		
	11/17	[33] Induction	Ch. 7.3	HW11 due
14	11/20	Test 3 (Ch. 5-6)		
	11/22	[34] Induction		
	11/24	THANKSGIVING		
15	11/27	[35] Inductance		
	11/29	[36] Maxwell's Equations		
	12/1	[37] Maxwell's Equations		HW12 due
16	12/4	[38] Waves		
	12/6	[39] Waves		
	12/8	SLACK		
17	12/10	FINAL EXAM (1–7)		