

Physics 102 Lecture Schedule Fall 2009 (Term 091)

Week	Date	Topics	Chapter	Sections	Omitted Sections
1	03 Oct 09 05 07	Waves and Particles, Types of Waves . (Demo # 1)	16	1-4	8,11
		Speed of Traveling Waves, Power.	16	5-7	
		Superposition of Waves , Interference . (Demo # 2)	16	9,10	
2	10 Oct 12 14	Standing Waves , Resonance . (Demo # 3)	16	12,13	8
		Sound Waves, Interference. (Demo # 4)	17	1-5	
		Intensity and Resonance.	17	6,7	
Wednesday – 14 Oct 2009- Last day for dropping courses without permanent record					
3	17 Oct 19 21	Doppler Effect (Demo # 5).	17	9,10	4(reading)
		Zeroth Law, Thermal Expansion.	18	1-6	
		Temperature and Heat.	18	7,8	
4	24 Oct 26 28	First Law of Thermodynamics.	18	9,10	6,7,10
		Applications of the First Law, Heat Conduction.	18	11,12	
		Ideal Gases.	19	1-3	
5	31 Oct 02 Nov 04	RMS Speed, Translational Kinetic Energy.	19	4,5	8
		Specific Heats of an Ideal Gas, Adiabatic Expansion.	19	8,9,11	
		Entropy and the Second Law of Thermodynamics.	20	1-4	
6	07 Nov 09 11	Heat Engines and Refrigerators.	20	5-7	7
		Electric Charge, Coulomb's Law.	21	1-6	
		Electric Fields. (Demo # 6)	22	1-6	
Sunday – 15 Nov. 2009 – First Major Exam (Chapters 16 – 20) 6:00 – 8:00 PM					
7	14 Nov 16 18	Review			
		Point Charges in Electric Fields.	22	8,9	
		Electric Flux, Gauss' Law.	23	1-5	
8	05 Dec 07 09	Charged Isolated Conductor, Cylindrical Symmetry.	23	6,7	9
		Planar and Spherical Symmetry.	23	8,9	
		Electric Potential and Potential Energy. (Demo # 7)	24	1-4	
9	12 Dec 14 16	Potential Due to a Point Charge.	24	5-8	7
		Electric Potential Energy of a System.	24	10-12	
		Capacitance. (DEMO #8)	25	1-3	
10	19 Dec 21 23ec.	Capacitors in Parallel and Series.	25	4	
		Energy Stored in a Capacitor, Dielectrics.	25	5,6,8	
		Review			
11	26 Dec 28 30	Current and Current Density.	26	1-3	6,8,9
		Resistance, Ohm's Law, Electric Energy and Power.	26	4,5,7	
		EMF, Resistors in Series and Parallel, Single Loop.	27	1-5	
Saturday – 2 Jan. 2010 – Second Major Exam (Chapters 21 – 26) 6:00 – 8:00 PM					
12	02 Jan 04 06	Review			
		Multiple Loop. (Demo # 9)	27	6,7	
		RC Circuits.	27	9	
13	09 Jan 11 13	Magnetic Field and Force. (Demos # 10 & 11)	28	1-4	5, 7(reading)
		Charged Particle in a Magnetic Field.	28	6, 8	
		Torque on a Current Loop.	28	9, 10	
14	16 Jan 18 20	Biot-Savart Law.	29	1-3	
		Ampere's Law.	29	4,5	
		Solenoid.	29	6	
15	23 Jan 25 27	Faraday's Law, Lenz's Law (Demos # 12 & 13)	30	1-4	6-12
		Induction and Energy Transfers.	30	5	
		Review			
?? – ?? Jan. 2010 – Final Exam (Chapters 16– 30)					