

**Physics 102 Lecture Schedule (Principles of Physics, Halliday, Resnick, & Walker, 10th Ed)
Spring Semester 2016-2017 (Term 162)**

Week	Week	Date	Topics	Chapter	Sections	Omitted Sections
1	Sun	05 Feb 2017	Transverse waves	16	1	4, 6
	Tue	07	Wave speed on a string, Energy and power	16	2,3	
	Thu	09	Interference of waves	16	5	
2	Sun	12	Standing waves and resonance	16	7	6, 8
	Tue	14	Traveling sound waves, Interference	17	1-3	
	Thu	16	Intensity and Sound Level, Sources of musical sound	17	4,5	
Thursday 16 February 2017 – Last day for dropping courses without permanent record						
3	Sun	19 Feb	Doppler effect	17	7	
	Tue	21	Temperature, Celsius & Fahrenheit scales, Thermal expansion	18	1-3	
	Thu	23	Absorption of heat	18	4	
4	Sun	26	First Law of Thermodynamics	18	5	
	Tue	28	Heat Transfer Mechanism	18	6	
	Thu	02 Mar	Avogadro's number, Ideal gasses;	19	1,2	
5	Sun	05	RMS speed, Translational kinetic energy	19	3,4	5, 6, 8
	Tue	07	Molar specific heat of an ideal gas, Adiabatic expansion	19	7,9	
	Thu	09	Entropy	20	1	
6	Sun	12	Second law of thermodynamics	20	2	4
	Tue	14	Entropy in real world: Heat engines & Refrigerators	20	3	
	Thu	16	<i>Review</i>	---	---	
Sunday 19 March 2017 (7:00 pm- 9:00 pm) – First Major Exam (Chapters 16 – 20)						
Thursday 16 March 2017: Last day for dropping a course with grade of "W" thru Internet						
7	Sun	19	Coulomb's law, Charge quantization and conservation	21	1,2	4, 5
	Tue	21	Electric fields due to charged particles and electric dipoles	22	1-3	
	Thu	23	Point charge and electric dipole in an Electric Fields	22	6,7	
8	Sun	26	Electric flux, Gauss' law	23	1,2	
	Tue	28	Charged isolated conductor, Cylindrical symmetry	23	3,4	
	Thu	30	Planar symmetry, Spherical symmetry	23	5,6	
Mid-term Break: 02-06 April 2017						
9	Sun	09 April	Electric potential, Equipotential surfaces, Potential energy	24	1,2	5
	Tue	11	Potential due to charged particles; Calculating E from V	24	3,4,6	
	Thu	13	Potential energy of a system, Isolated conductors	24	7,8	
10	Sun	16	Capacitance, Calculating the capacitance	25	1,2	6
	Tue	18	Capacitors in parallel and series	25	3	
	Thu	20	Energy stored in an electric field, Capacitors with dielectrics	25	4,5	
11	Sun	23	Electric current, current density	26	1,2	
	Tue	25	Resistance and resistivity, Ohm's law, Power in electric circuits	26	3-5	
	Thu	27	<i>Review</i>	---	---	
Monday 01 May 2017 (7:00 pm – 9:00 pm) – Second Major Exam (Chapters 21 – 26)						
12	Sun	30	Single loop circuits,	27	1	3
	Tue	02 May	Multi loop circuits	27	2	
	Thu	04	RC circuits	27	4	
13	Sun	07	Magnetic field, Cross fields	28	1,2	3, 5
	Tue	09	Circulating charged particle, Magnetic force on a current wire	28	4,6	
	Thu	11	Torque on a current loop, Magnetic dipole moment	28	7,8	
14	Sun	14	Magnetic field due to a current	29	1	
	Tue	16	Forces between two parallel currents, Ampere's Law	29	2,3	
	Thu	18	Solenoids and toroids, A Current-carrying coil as a magnetic dipole	29	4,5	
15	Sun	21	Faraday's law and Lenz's law	30	1	3-9
	Tue	23	Induction and energy transfers	30	2	
	Thu	25	<i>Review</i>			
----- June 2017 – Final Exam (Chapter 16–30)						

Wish you a successful semester.

Dr. Saleem Rao; Physics 102-Lecture Coordinator