Tentative Syllabus and Calendar

Phys 116, Autumn, 2015

L1	Thu	10/2	Periodic motion and oscillations	13.1
L2	Fri	10/3	Simple harmonic motion and circular motion	13.2-5
L3	Mon	10/5	Mass-spring system, energy conservation	13.5-6
L4	Tue	10/6	The pendulum, damped and driven oscillations	13.7-8
L5	Thu	10/8	Types of waves, waves on a string	14.1-3
L6	Fri	10/9	Sound	14.4-5
L7	Mon	10/12	Doppler shift, interference	14.6
L8	Tue	10/13	Superposition	14.7
L9	Thu	10/15	Standing waves and beats	14.8-9
R1	Fri	10/16	Review	
E1	**Mon**	**10/19**	**Exam 1 – Covers chapters 13-14**	
L10	Tue	10/20	Electromagnetic waves	25.1-2
L11	Thu	10/22	Energy and speed of electromagnetic waves	25.3-4
L12	Fri	10/23	Polarization	25.5
L13	Mon	10/26	Reflection, mirrors, and ray tracing	26.1-2
L14	Tue	10/27	Spherical mirrors, mirror equation	26.3-4
L15	Thu	10/29	Refraction and total internal reflection	26.5-6
L16	Fri	10/30	Thin lens equations	26.7
L17	Mon	11/2	Rainbows and vision	26.8, 27.1-2
L18	Tue	11/3	Optical instruments	27.3-6
L19	Thu	11/5	Interference and Young experiment	28.1-2
R2	Fri	11/6	Review	
E2	**Mon**	**11/9**	**Exam 2 – Covers chapters 25-27**	
L20	Tue	11/10	Thin films	28.3
L21	Thu	11/12	Diffraction and resolution limit	28.4-6
L22	Fri	11/13	Special relativity	29.1-4

L23	Mon	11/16	Momentum and energy; general relativity	29.5-8
L24	Tue	11/17	Early quantum theory	30.1-4
L25	Thu	11/19	de Broglie and Heisenberg	30.5-7
L26	Fri	11/20	Early atomic models	31.1-2
L27	Mon	11/23	Development of quantum mechanics	31.3-5
L28	Tue	11/24	Atomic structure and chemistry; lasers	31.6-7
	Thu	11/26	Holiday	
	Fri	11/27	Holiday	
R3	Mon	11/30	Review	
E3	**Tue**	**12/1**	**Exam 3 – Covers chapters 28-31**	
L29	Thu	12/3	Constituents of matter; particles within particles	32.1
L30	Fri	12/4	Nuclear structure and radioactivity	32.2-3
L31	Mon	12/7	Nuclear energy, radioactivity	32.4-9
L32	Tue	12/8	Cosmology, unified theory	
FR	Thu	12/10	Review	
FR	Fri	12/11	Review	
	Mon	**12/14**	**Final exam, 2:30-4:20 pm, room A118**	