

## Tentative Syllabus and Calendar

### Phys 116, Autumn, 2016

L1	Wed	9/28	Periodic motion and oscillations	13.1
L2	Fri	9/30	Simple harmonic and circular motion	13.2-5
L3	Mon	10/3	Mass-spring system, energy conservation	13.5-6
L4	Tue	10/4	The pendulum, damped and driven oscillations	13.7-8
L5	Wed	10/5	Types of waves, waves on a string	14.1-3
L6	Fri	10/7	Sound	14.4-5
L7	Mon	10/10	Doppler shift, interference	14.6
L8	Tue	10/11	Superposition	14.7
L9	Wed	10/12	Standing waves and beats	14.8-9
R1	Fri	10/14	Review	
<b>E1</b>	<b>Mon</b>	<b>10/17</b>	<b>Exam 1 - Covers chapters 13-14</b>	
L10	Tue	10/18	Electromagnetic waves	25.1-2
L11	Wed	10/19	Energy and speed of electromagnetic waves	25.3-4
L12	Fri	10/21	Polarization	25.5
L13	Mon	10/24	Reflection, mirrors, and ray tracing	26.1-2
L14	Tue	10/25	Spherical mirrors, mirror equation	26.3-4
L15	Wed	10/26	Refraction and total internal reflection	26.5-6
L16	Fri	10/28	Thin lens equations	26.7
L17	Mon	10/31	Rainbows and vision	26.8, 27.1-2
L18	Tue	11/1	Optical instruments	27.3-6
L19	Wed	11/2	Interference and Young experiment	28.1-2
R2	Fri	11/4	Review	
<b>E2</b>	<b>Mon</b>	<b>11/7</b>	<b>Exam 2 - Covers chapters 25-27</b>	
L20	Tue	11/8	Thin films	28.3
L21	Wed	11/9	Diffraction and resolution limit	28.4-6
	Fri	11/11	Veterans day	
L22	Mon	11/14	Special relativity	29.1-4
L23	Tue	11/15	Momentum and energy; general relativity	29.5-8
L24	Wed	11/16	Early quantum theory	30.1-4
L25	Fri	11/18	de Broglie and Heisenberg	30.5-7

L26	Mon	11/21	Early atomic models	31.1-2
L27	Tue	11/22	Development of quantum mechanics	31.3-7
Q3	We	11/23	Quizzes, Review	
	Fri	11/24	Thanksgiving	
R3	Mon	11/28	Review	
L29	Tue		Constituents of matter; particles within particles	32.1
<b>E3</b>	<b>Wed</b>	<b>11/30</b>	<b>Exam 3 - Covers chapters 28-31</b>	
L30	Fri	12/2	Nuclear structure and radioactivity	32.2-3
L31	Mon	12/5	Nuclear energy, radioactivity	
L32	Tue	12/6	Cosmology, unified theory;	32.4-9
QF	Wed	12/7	Quizzes, Review	
FR	Fri	12/9	Final Review	
<b>FE</b>	<b>Mon</b>	<b>12/12</b>	<b>Final exam, 2:30-4:20 pm, room A118</b>	<b>Comprehensive</b>