

Week	Class	Date	Topic/Lab	Book Sections	Assigned Reading Pages	Assignment	Laboratory
1	0	Mon 22-Jan	Introduction & Laser Safety				
1		Wed 24-Jan	MatLAB and LaTeX		OS. 7-33		
2		Fri 26-Jan	Description of Light	1.1-1.3	K: 0-8		Lab 1: Speed of Light
2	3	Mon 29-Jan	Light and wave description	1.4 - 1.5	9-18	H0 (OS: p. 46: 27, 36)	
4		Wed 31-Jan		1.6 - 1.10	18-28		
5		Fri 2-Feb	Ray Optics	2.1	31-37	H1 (Kenyon 1.5)	Lab 2: Cell Phone Optics I
3	6	Mon 5-Feb		2.2-2.4	37-45	H2 (1.8)	
7		Wed 7-Feb	Mirrors and Lenses	3.1-3.4	47-57	H3 (2.2)	
8		Fri 9-Feb	Lens Activity				Lab 3: Optical Coatings
4	9	Mon 12-Feb	MatLAB Project 1 - Lens equation			H4 (2.4)	
10		Wed 14-Feb	Lens Matrix	3.5-3.6	57-70		
11		Fri 16-Feb	Optical Systems	4.1-4.4	75-85	H5 (3.10)	Lab 4: Cell Phone Lens and Micros
5	12	Mon 19-Feb		4.6-4.8	93-94		
13		Wed 21-Feb	Wave Optics	5.1-5.3	97-105	H6 (4.1)	
14		Fri 23-Feb	Midterm 1				Lab 5: Holographic Diffraction
6	15	Mon 26-Feb	Interferometers	5.4, 5.6-5.7.2;	105-107; 115-118		
16		Wed 28-Feb		5.8-5.9	120-128	H7 (5.4)	
17		Fri 2-Mar	Diffraction - single; multi slit	6.1-6.7	133-143	H8 (5.9)	Lab 6: Interferometers
7	18	Mon 5-Mar	MatLAB Project 2 - Diffraction graphs				
19		Wed 7-Mar	Presentation 1: Optics Catalog item				
20		Fri 9-Mar	Diffraction grating and spectrometers	6.8-6.9	143-150	H9 (6.5)	Lab 7: Single Slit Diffraction
8	21	Mon 12-Mar	Fresnel and Fraunhofer Diffraction	6.10 - 6.14	150-160		
22		Wed 14-Mar	Fourier Optics, linewidth and bandwidth	7.1-7.2	169-173	H10 (6.9)	
23		Fri 16-Mar		7.3 - 7.3.3	177-189		Lab 8: Multiple Slit Diffraction
9	24	Mon 19-Mar	Spatial Transforms and Holography	7.4-7.8	189-203	H11 (7.1)	
25		Wed 21-Mar	Reflection and Refraction	9.1, 9.5	239-240; 251-255	H12 (7.6)	
26		Fri 23-Mar	Midterm 2				Open lab
Spring Break							
10	27	Mon 2-Apr	Fresnel's equations	9.6-9.7	255-266		
28		Wed 4-Apr	Waveguides	9.8-9.9	267-274		
29		Fri 6-Apr	Polarization	10.1-10.4; 10.5	277-283; 288-289; H13 (9.9)		Lab 9: Cell Phone Spectroscopy
11	30	Mon 9-Apr	LCD and optical activity	10.5.2-10.8	290-307	H14 (10.5)	
31		Wed 11-Apr	Presentation 2: Optics research paper				
32		Fri 13-Apr	Presentations continued.				Lab 10: Polarization of Cell Phone Display
12	33	Mon 16-Apr	Scattering, Absorption and dispersion	11.1-11.5	309-321	H15 (10.8)	
34		Wed 18-Apr	Group Velocity	11.6-11.6.2	321-331	H16 (11.5)	
35		Fri 20-Apr	MatLAB Project 3 - dispersion, group velocity				Lab Assessment
13	36	Mon 23-Apr	Quantum Review	13.7-13.13	378-394	H17 (11.7)	
37		Wed 25-Apr	Lasers	14.1-14.4	397-412	H18 (13.6)	
38		Fri 27-Apr		14.7-14.8.1	423-434		Lab 11: Projects
14	39	Mon 30-Apr	Detectors	15.1-15.4	457-466	H19 (14.6); H20 (14.14)	
40		Wed 2-May		15.4.1-15.7	467-479	H21 (15.1)	
41		Fri 4-May	Fiber Optics	16.1-16.3	493-500	H22 (15.5)	Lab 11: Projects
15	42	Mon 7-May		16.4-16.5	500-504	H23 (16.2)	
43		Wed 9-May	TBA			H24 (16.10, 16.6)	
44		Fri 11-May	Last day of class / Review				Lab Project Presentations
		Wed 16-May	Final 10:00 am - 12 Noon				