

Week	Class	Day	Date	Topic/Lab	Book Sections	Assigned Reading Pages	Assignment (Due)	
1	1	Tue	18-Jan	Introduction, MatLAB and LaTeX and Laser Safety				
	2	Thu	20-Jan	Description of Light	1.4 - 1.5	Kenyon 9-18	H0 Laser Safety Quiz	
	L1	Fri	21-Jan	<b>Lab 0: Lab Introduction and LabArchives</b>				
2	3	Tue	25-Jan	Light Waves	1.6 - 1.10	18-28	H1 MATLAB Printout of Kenyon 1.1 calculation.	
	4	Thu	27-Jan	Ray Optics	2.1 - 2.4	31-45	H2 (1.5, 1.8)	
	L2	Fri	28-Jan	<b>Lab 1: Speed of Light</b>				
3	5	Tue	1-Feb	Mirrors and Lenses	3.1-3.4	47-57	H3 (2.2)	
	6	Thu	3-Feb	Work on MatLAB project 1: Lens equation and ray diagrams				
	L3	Fri	4-Feb	<b>Lab 2: Cell Phone Optics I</b>				
4	7	Tue	8-Feb	Lens Matrix	3.5-3.6	57-70	H4 (2.4), MATLAB P1	
	8	Thu	10-Feb	Optical Systems	4.1-4.4; 4.6-4.8	75-85; 93-94	H5 (3.10, 4.1)	
	L4	Fri	11-Feb	<b>Lab 3: Optical Coatings</b>				
5	9	Tue	15-Feb	Midterm 1 (CH 1-4)				
	10	Thu	17-Feb	Wave Optics	5.1-5.3	97-105		
	L5	Fri	18-Feb	<b>Lab 4: Cell Phone Lens and Microscopes</b>				
6	11	Tue	22-Feb	Interferometers	5.4, 5.6-5.7.2;	105-107; 115-118	H6 (5.1)	
	12	Thu	24-Feb	Interferometers cont.	5.8-5.9	120-128	H7 (5.4)	
	L6	Fri	25-Feb	<b>Lab 5: Holographic Diffraction</b>				
7	13	Tue	1-Mar	Diffraction - single; multi slit	6.1-6.7	133-143	H8 (5.9) $\Delta\Omega=2013 \text{ Mm}^2 \cdot \text{str}$	
	14	Thu	3-Mar	Diffraction grating, spectrometer	6.8-6.9	143-150		
	L7	Fri	4-Mar	<b>Lab 6: Interferometers</b>				
8	15	Tue	8-Mar	Fresnel and Fraunhofer Diffraction	6.10 - 6.14	150-160	H9 (6.2) $\phi = 15^\circ$	
	16	Thu	10-Mar	Work on MatLAB project 2: Diffraction graphs	6.10 - 6.14	150-160	H10 (6.5)	
	L8	Fri	11-Mar	<b>Lab 7: Single and Multiple Slit Diffraction</b>				
9	17	Tue	15-Mar	Fourier Optics, linewidth and bandwidth	7.1-7.2, 7.3 -7.3.3	169-173, 177-189	H11 (6.9), MATLAB P2	
	18	Thu	17-Mar	Spatial Transforms and Holography	7.4-7.8	189-203	H12 (7.1)	
	L9	Fri	18-Mar	<b>Lab 8: Multiple Slit Diffraction Analysis</b>				
10				Spring Break				
11	19	Tue	29-Mar	Reflection and Refraction, Fresnel's equations	9.1-9.5; 9.6-9.7	239-240; 251-255; 255-266	H13 (7.6)	
	20	Thu	31-Mar	Midterm 2 (CH 5-7)				
	L10	Fri	1-Apr	<b>Lab 9: Cell Phone Spectroscopy</b>				
12	21	Tue	5-Apr	Waveguides	9.8-9.9	267-274	H14 (9.3)	
	22	Thu	7-Apr	Polarization, LCD and optical activity	10.1-10.4; 10.5; 10.5.2-277-283; 288-10.8	289; 290-307	H15 (9.9)	
	L10	Fri	8-Apr	<b>Lab 10: Polarization of Cell Phone Display</b>				
13	23	Tue	12-Apr	Work on MatLAB project 3 - Graphing Polarization, Malus' Law				
	24	Thu	14-Apr	Scattering, Absorption and dispersion, Group Velocity	11.1-11.5; 11.6-11.6.2	309-331	H16 (10.5, 10.8)	
	LA	Fri	15-Apr	<b>Lab Assessment Day</b>				
14	25	Tue	19-Apr	Work on MatLAB project 4 - dispersion, group velocity				
	26	Thu	21-Apr	Lasers	14.1-14.4	397-412	H17 (11.5, 11.7), MATLAB P3	
	L11	Fri	22-Apr	<b>Lab 11: WI System Symposium Field Trip</b>				
15	27	Tue	26-Apr	Lasers (cont.)	14.7-14.8.1	423-434	H18 (14.6), MATLAB P4	
	28	Thu	28-Apr	Detectors	15.1-15.7	457-479	H19 (14.14)	
	L11	Fri	29-Apr	<b>Lab 11: Digital Holography</b>				
16	29	Tue	3-May	Fiber Optics	16.1-16.2; 16.4-16.5	493-506	H20 (15.1, 15.5)	
	30	Thu	5-May	Course Review			H21 (16.2, 16.10)	
	31	Fri	6-May	<b>Presentation: Optics Project Report</b>				
17		Tue	10-May	Final 12:15 pm - 2:15 pm (CH 1-7, 9-11, 14-16)				