Schedule of Experiments:

Week	Date	Lab number	Lecture topics	Reading (Pedrotti)	HW due	Labs due
1	Aug 31– Sept 3	Lab 0	Error analysis, Waves	(Ch 1, 4-1:4-5)		
2	Sept. 8 – 10	Lab 1a: Reflection and Refraction	Fermat's principle, Snell's Law, total internal reflection	2-0:2-5 and 3-3	HW 1	Lab 0
3	Sept. 14 - 17	Lab 1b: Reflection and Refraction	Imaging, spherical surfaces	2-6:2-8	HW 2	
4	Sept 21 – 24	Lab 2a: Geometric Optics	Thin lenses, optical instruments, the eye	2-9:2-10, 3-5:3-7, 19-3:19-5		Lab 1
5	Sept 28– Oct 1	Lab 2b: Geometric Optics	Waves in three dimensions, Polarized light, Malus' Law	4-8:4-9, 15-1	HW 3	
6	Oct. 5 – 8	Lab 3a: Polarization of Light	Brewster's angle, Fresnel equations	15-2:15-3, 23-1		Lab 2
7	Oct. 12 - 15	Lab 3b: Polarization of Light	Two-beam interference, Young's double slit exp,	7-0:7-2	HW 4	
8	Oct. 19 - 22	Lab 4a: Michelson Interferometer	Michelson interferometer, Coherence	8-1:8-2		Lab 3
9	Oct. 26 - 29	Lab 4b: Michelson Interferometer	Fraunhofer Diffraction	11-0:11-3	HW 5	
10	Nov. 2 - 5	Lab 5a: Diffraction of Light	Double slit diffraction, Babinet's principle	11-4:11-5		Lab 4
11	Nov. 9 - 12	Lab 5b: Diffraction of Light	N-slit diffraction, diffraction gratings	11-6, 12-0:12-4	HW 6	
12	Nov. 16 - 19	Lab 6a : Atomic Spectra	Light quanta, Einstein coefficients	6-5:6-7		Lab 5
13	Nov. 23 - 25	Catch-up (if necessary)	**Thanksgiving**			
14	Nov 30- Dec. 3	Lab 6b: Atomic Spectra	Population inversion, Lasers		HW 7	
15	Dec. 7-10 3 – 5:45 PM	**Final exam – (in class, written)**				Lab 6