

CLASS SCHEDULE

Mon	Tues	Wed	Thur	Fri
Jan 5 Wave motion 2.all		E&M waves 3.1-2, 3.4.1-3	H1 due	Photons, radiation 3.3, 3.4.4
Jan 12 3.5 Matter and index	H2 due	4.1-3, 4.11.2 Scattering and propagation	H3 due	4.4-5 Refraction, Fermat
Jan 19 <i>Holiday</i>	H4 due	4.6 Fresnel coefficients	Exam 1 Ch 2-4.5 Thur-Sat	4.7-8 Internal reflection, metals
Jan 26 5.1-2 Lenses	H5 due	5. 3-5.4 Stops, mirrors	H6due	5.5-6 Prisms, fiber optics
Feb 2 5.7.1-5 Eyes - microscopes	H7 due	5.7.7-5.8.1 Telescopes, adaptive	Exam 2 Ch 4.6-5.6 Thur-Sat	Peatross 9.4-6 (see web) ABCD matrices, imaging
Feb 9 Peatross 9.7-8 (see web) Optical systems. 6.4 GRIN rods	H8 due	7.1-2 Superposition of waves	H9 due	Colors
Feb 16 <i>Holiday</i>	Monday Instruction- No class Plan your labs	8.1-2, 8.3.1, 8.4, 8.13.2 Polarization and Jones vectors Birefringence	Exam 3 [Ch 5.7- 7.2,Colors, ABCD] Thur-Sat	8.5-8.8 Polarization by scattering; reflection, retarders
Feb 23 8.11,12, 8.13.3 Modulators, LCD Jones vectors (ignore Mueller method)	H10 due	9.1-3 Interference Personal Lab 1 due	H11 due	9.4-5 Interference amplitude splitting
Mar 2 9.6.0, 9.7 Multiple beams, coatings	H12 due	9.8 Applications interference	Exam 4 Thur-Sat	10.1 10.3.1-4 Diffraction intro, Fresnel diffraction
Mar 9 10.3.5 Zone plates 10.3.11 Babinet	H13 due	7.3,4 Fourier Analysis 11.1-11.2.1 Plan PLab 2 due	H14 due	11.2.2-2.3 Fourier optics 11.3.1 FT in imaging
Mar 16 11.3.2 Convolution theorem	H15 due	10.2.4, 11.3.3 Fraunhofer as FT	H16 due	10.2.3-4,8 Multiple slits, gratings Personal Lab 2 due
Mar 23 10.2.5-6 Fraunhofer circular apertures	H17 due	12.1-3 Coherence	H18 due	12.4 Stellar interferometry
Mar 30 13.1.0, 13.1.2-3 Lasers (stop before "Gaussian Laser beams")	H19 due	13.1.3 (Gaussian to end) - 13.1.4 (through speckle effect) Plan PLab 3 due	Exam 5 Thur-Sat	13.2.3 Spatial filtering
Apr 6 13.3 Holography	H20 due	13.4 Nonlinear optics	H21 due	Quantum optics... Personal Lab 3 due
Apr 13 To be announced	H22 due	Exam Prep day		Final Noon Fri, April 17 11:00 a.m. to 2:00 p.m.