## Ch. 23-24 Notes

## John Yang

## February 13, 2021

23	Geometric Optics	23.12	9 1	
23.1	The Domains of Optics	•	Surface	
23.2	The Inverse Square Law for Light	23.13	Thin Lenses	
23.3	The Law of Reflection	23.14	Ray Diagrams for Thin Lenses	
23.4	The law of refraction	23.15	Optical Instruments	
23.5	Total Internal Reflection	24	Physical Optics	
23.6	Dispersion	<b>24.1</b> •	Existence of Light Waves	
23.7	Rainbows	24.2	Interference	
23.8	Optics and Images	24.3	Young's Double Slit Experiment	
23.9	The Cartesian Sign Convention	24.4	Single Slit Diffraction	
23.10	Imagine Formations by Spherical and Plane Mirrors	24.5	Diffraction by a Circular Aperture	
• 23.11	Ray Diagrams for Mirrors	24.6	Resolution	

24.7	The Double Slit Revisited
•	
24.8	Multiple Slits: The Diffraction Grating
•	
24.9	Resolution and Angular Dispersion of a Diffraction Grating
•	
24.10	The Index of Refraction and the Speed of Light
•	
24.11	Thin-Film Interference
•	
<b>24.12</b> •	Polarized Light
24.13	Polarization by Absorption
24.14	Malus's Law
24.15	Polarization by Reflection: Brewster's Law
•	
24.16	Polarization by Double Refraction
•	

24.17 Polarization by Scattering