

Optics 513L - Optical Testing Lab

OPTI 513L. Optical Testing Laboratory (1). Measurement of paraxial properties of optical components, refractive index, surface figure, and surface finish.

TA: Anoop George

Course Outline (3-hour laboratory experiments)

9/1-9/12

- 1) Orientation Lab
- 2) Measurement of Paraxial Parameters

9/15-9/26

- 3) Refractive Index Measurement
- 4) Fizeau Interferometer and Spherometer

9/29-10/10

- 5) Twyman-Green Interferometer
- 6) Interference Microscopes

10/13-10/17 and 10/27-10/31

- 7) Foucault, Wire, Ronchi, and Star Tests
- 8) Shack-Hartmann Test and Smartt Point-Diffraction Interferometer

11/3-11/14

- 9) Scatterplate Interferometry
- 10) Lateral Shearing Interferometry

11/17-11/21 and 12/1-12/5

- 11) Laser Based Fizeau Interferometer
- 12) Moiré Interferometry

12/9

Lab Report due

Grades:

- 30% Lab report
- 70% Lab book