- 1. What is science? (chapter 1)
 - a. Basic of natural science: Hypothesis v.s. theory
 - b. Scientific approach: observation hypothesis testing theory retesting
- 2. Basic of light (part of chapter 3 and 12)
 - a. What is light? (Different approaches: ray, photon, waves.)
 - i. Propagation: ray
 - ii. What are rays, how do rays correspondent to the brightness, location, orientation of objects?
 - b. Light sources: point source and extended source
 - c. Propagation of rays
 - i. Reflection: mirror, speculate,
 - ii. Refraction: changing direction at an interface.
 - iii. Image formation: for mirrors (plane and curved) for lenses (convex)