Introduction to ASTR 110L Telescopes

Read:
• Ridpath, pp. 385–392
• Telescope-related sections of your ASTR 110 textbook

1. Be able to identify the **following parts** of our lab telescopes and their functions:

Base

Tube

Primary mirror

Secondary mirror

"Spider" (secondary mirror support)

Eyepiece

Focuser (knob)

Finder scope

Filters: Moon, Nebula, Red, Blue

2. Know the following terms and their meanings:

Reflector vs. Refractor telescope

Altazimuthal (Alt-Az) mount vs. Equatorial mount

resolution

seeing

aperture

limiting magnitude

averted vision

3. What distinguishes a "**Dobsonian**" design from other telescope designs? Do Dobs have alt-az or equatorial mounts? Are our Dobs Newtonian reflectors?

4. On our "8-inch Dobsonian" telescopes, **which part** measures 8 inches? What advantages does an **8-inch** telescope have over, say, a **4-inch** telescope?

5. What does the **number of millimeters** printed on the side of our different **eyepieces** refer to? How is the **view** through a long-focal-length eyepiece (installed on the telescope) different from that through a short-focal-length eyepiece? (This is why we have an assortment of different focal lengths.)