Night Labs

Spring 2007 | Astronomy 212 | SJU Observatory

Lab Instructor:

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Labs:

Three night labs at the St. John's Observatory are required for astronomy students. Generally each lab begins at 8:15 or 9:30 on a Monday or Wednesday evening. However because of increasing daylight, the third lab will be one hour later (i.e., start at 9:15 or 10:30). The night labs meet as scheduled regardless of weather conditions. If the sky is clear we will be outside for an hour in the cold: *dress accordingly*! There are no bathrooms or water at the observatory: *plan accordingly*! Note also that food and liquids are not allowed in the observatory.

The observatory is about 0.2 miles south of Emmaus Hall: just south of the St. John's Cemetery on the west side of CR 159. A sign on 159 warns "no shoulder" just at the entrance to the observatory's dirt parking lot. The observatory is a small flat-topped building behind the pine trees. No obvious sign announces its location: it is very easy to miss. A map on the class web site displays its location. I strongly suggest you find it in daylight well before your lab period, as missed labs generally cannot be made up.

Bring your textbook and handouts (Star Finder, SC001, etc.) to lab. Also bring a *pencil* to lab to record your lab work. (Pens should not be used in lab.)

1. **Backyard Astronomy with the Unaided Eye**

   Learn the bright star names. Learn constellation patterns and names. Use the Star Finder to find stars, constellations, and naked eye planets. The constellation-hop technique. The star brightness system. Measure the separation of stars in the sky.

2. **Star Atlas & Binoculars**

   Learn about deep-sky objects such as clusters, nebulae, and galaxies. Use binoculars together with Sky Atlas 2000.0 by Wil Trion to find objects invisible to the unaided eye. The star-hop technique.

3. **Observe Deep-Sky Objects** or **Retrograde Motion**

   Observe deep-sky objects with binoculars and telescope. Why do planets for a brief period of time appear to move "backward" in their motion through the constellations?

Lab Sign-up:

During the next class period you must sign up for a specific lab group. Compare your schedule with the lab times listed below. Mark those which do not conflict with your other activities. Mark on this sheet the lab you select and then retain this sheet as a reminder. If a schedule conflict arises later, you may arrange a lab exchange with another student. Be sure to *report the switch to me.* Otherwise missed labs cannot be made up. If labs are a problem, contact me *before* the next class.

Group 1	Wed	8:15–9:15 P.M.	Feb 7, Mar 7, Apr 11[†]
Group 2	Wed	9:30–10:30 P.M.	Feb 7, Mar 7, Apr 11[†]
Group 3	Mon	8:15–9:15 P.M.	Feb 12, Mar 12, Apr 16[†]

[†] Recall third labs start one hour later (i.e., 9:15 or 10:30)!