ASTR 1010 Lab Friday 11am

Semester Projects – Both due <u>APRIL 24 at 1pm</u>

THESE LABS ARE REQUIRED AND CANNOT BE DROPPED.

Lab 24 – Phases of the Moon (20 points)

- Take a picture of 7 phases of the moon (not including new moon). Pictures do not have to be taken in order, since it will be cloudy some nights.
- Don't wait too long to start this, or you'll miss some of the phases!
- Please use a good camera. Digital camera and smart phone cameras are fine, just **make sure you can see the phase in the picture**. (Don't go out and buy a camera just for this project.)
- Write down the time, date, weather conditions, etc, for each phase in Lab 24.
- Measure the angle of the Moon above the horizon with your quadrant.
- Don't forget to answer the questions at the end of the lab!
- What you have to hand in completed Lab 24 worksheets and 7 pictures.
- Extra Credit:
 - 2 pts Build your quadrant and bring it in to show me by Feb. 13
 - 1 pt Take your first moon picture and show it to me by Feb. 20

Lab 28 – Visiting an Observatory (10 points)

- Each student must visit an open house and complete Lab 28 worksheet.
 - Open houses Hard Labor Creek Obs., GA Tech, Fernbank Science Center, on campus
 - Transportation is not provided.
- On campus observing:
 - Dates TBD. I will announce it in class.
 - You must sign up ASAP with me to get on the list, since space in limited.
- Write in complete sentences. Be as descriptive as possible! More description = more points.
- Bring your lab book to the open house to **have a staff member sign or stamp the bottom** of the page, to prove you were there.
- What you have to hand in completed Lab 28 worksheet (with signature/stamp)
- Extra credit:
 - $\circ~4~pts$ Going to HLCO for this lab.
 - 3 pts Going to a second open house at a different observatory, and completing the Bonus Lab 28 worksheet.

There are 10 total extra credit points available - enough extra to make up one entire lab assignment!

Feel free to ask me any questions you may have.