

# Syllabus for Astronomy 101 Labs

**Instructor:** David Stark

**Office:** Phillips 116 (desk at far corner from door)

**Office Hours:** Monday (12:30-2:30)

**Email:** [dstark@physics.unc.edu](mailto:dstark@physics.unc.edu)

**Class Website:** [www.physics.unc.edu/~dstark/ASTR101L.html](http://www.physics.unc.edu/~dstark/ASTR101L.html)

**Required Text:** Investigations in Observational Astronomy by Wayne A. Christiansen, Ronald H. Kaitchuck, and Michelle D. Kaitchuck.

This lab manual is old and for telescopes that we do not use anymore. Therefore, I have to constantly make corrections and changes to the lab procedures. Make sure you note these changes when I tell you about them. I am not likely to have mercy when grading your lab reports if you did the lab wrong.

**Lab Times:** Half the labs take place in the **Morehead Planetarium**. DO NOT BE LATE! The Planetarium doors lock five minutes after class begins, and after that point you cannot get in. More information about night labs is linked on the class website, or you can go to Brian Pohl's webpage ([www.physics.unc.edu/~bpohl](http://www.physics.unc.edu/~bpohl)).

For night labs, we will meet in **Chapman Hall, Room 235** at 8:00 PM. Night labs will NOT be canceled due to cloudy skies or other inclement weather; backup labs have been prepared if such an occurrence happens. Attendance is required. There will be one makeup planetarium lab at the end of the semester, but you should only miss a lab under extreme circumstances.

The planetarium and night labs alternate by week. A schedule of lab dates is on the website. Since the labs depend on the weather (and in some cases, the positions of celestial bodies), the schedule is tentative, and could change at any time.

**What to bring:** You should always bring your lab manual, writing utensils, a calculator, a flashlight, and spare paper if necessary. For most of the night labs, we will be using the telescopes on the top of Chapman Hall. Therefore, dress appropriately, as it is likely to get colder as the semester progresses. Your primary tools for these labs will be your eyes, so make sure to wear glasses or contacts if you need them.

**Observation Deck Rules:** There are some basic rules we have to follow on the observation deck. No food is allowed. Drinks are allowed, but must be in a closed container. Do not place anything on the railing (drinks, books, bags, etc.) due to the risk of it falling and hitting someone. Handle the telescopes carefully (they aren't cheap), and be sure not to touch any of the mirrors or lenses with your hands. Finally, the janitors don't come to the observation deck, so make sure to clean up any trash.

**Lab Reports:** For each lab, all students must submit a full lab report. These are due in my drop box (by the front entrance to Phillips Hall) by 5:00 on the day one week after the lab is conducted. Each lab report is graded out of 100 points. Late reports will be accepted, but at a penalty of one letter grade (10%) per day late. **IMPORTANT!!! STUDENTS MUST ATTACH THEIR LAB WORKSHEET (FROM THE LAB MANUAL) WITH MY INITIALS IN ORDER TO RECEIVE CREDIT FOR A LAB. THIS PROVES TO ME THAT YOU ACTUALLY ATTENDED CLASS. DO NOT LEAVE LAB BEFORE I INITIAL YOUR LAB WORKSHEET!**

**Final Grades:** The final lab grades are determined on a relative scale. The final grade scale is based both on the average of the final grades and their spread, or standard deviation. These are calculated by the professor, Dan Reichart. This means I cannot tell you the cutoffs for A, B, C, D, and F, at least not yet. To help you see how you are doing in the class, I will post grade distributions for each lab.

**Honor Code:** Students will be working together in small groups (~4 people per group) during class. Data taking may be done together as a group, but should not be shared between groups. The reports themselves are to be done independently. Copying and/or letting someone copy even a small portion of your lab report is considered a violation of the Honor Code.

**A few other things:** There is math in the class, but it's nothing you shouldn't already know from high school (algebra and geometry). Still, I realize not everyone feels comfortable with math, so feel free to ask me for help at any time if you are struggling, not just with math, but any aspect of the class. It's my job to help you, so take advantage of it.

I highly suggest you don't miss any labs. You can estimate that one missed lab means your final class score drops one letter grade, which can hurt you quite a bit. Nobody that completed the full ten labs last semester failed (at least in my sections). Don't necessarily count on a curve to help you pass either. Last semester, there was hardly any curve at all.

