**ASTR 105G Lab: Introduction to Astronomy**

**TA:** David DeColibus

**Office:** Astronomy Bldg., 121

**Office Hours:** Wednesday 2:00-4:00pm

**Email:** decolib@nmsu.edu

**Location:** Walden Hall, Rm. 232

**Lab Manual:** <http://astronomy.nmsu.edu/astro/Ast105labmanual_spring2020.pdf>

**What You Need:** Pen/pencil, calculator (graphing would be great, scientific would be nice, the Wolfram Alpha app would be acceptable), printed copy of lab (link above).

**Lab Work:**

There will be a total of 10 labs over the course of the semester. Each lab will be worth 65 points, and the 10 labs will be worth 25% of your final grade. Each lab will consist of two parts: an in-class group work portion for 65% of the lab grade, and a take-home summary for 35% of the lab grade, to be completed **individually**. You are required to show all of your work. You will not receive credit for answers lacking a clear explanation. **You are expected to print out and read the lab for the week prior to arriving in class.**

**Group Work (65 pts.):** Each group will turn in a single copy of the group work section at the end of lab time. Everyone is expected, however, to bring their own copy of the lab, and actively participate in discussion. All group members will receive the same grade on this portion of the lab, provided all group members are actively participating in discussion. **Failure to participate in the group work will result in a reduced grade**. Your lab TA will assign groups consisting of three to five participants. To ensure full participation of the group, your TA will choose one student at random from your lab group, and collect their lab as the group’s contribution. As such, every group member must bring a copy of the lab, and be following along. *If the chosen group member has neglected to print the lab prior to class time, or has not been following along, the full group will receive no credit for the in-class lab portion.*

**Lab Homework (35 pts.):** Lab homework is to be completed outside of lab time, individually. It will be due at the next lab section after it is assigned, generally one week after. You will receive an individual grade on this portion. Lab homework will be in the form of answering the prompt below- if you forget it, it is on the Canvas page. Please use complete sentences, proper grammar, and correct spelling on your responses. Include citations when using an outside source or the lab handbook. Plagiarized summaries are subject to the university policy on academic misconduct. These must be **handwritten** and submitted on paper.

*In your own words, please do the following:*

* *Summarize the three main points of this Lab. There should be at least one complete sentence per topic. Please take care not to copy your answers from any resource, including the Lab Manual.*
* *Describe one concept or technique that you found particularly challenging about this lab. If it was not challenging for you, describe how we could make it more challenging.*

**Lab Policies:**

1. **Attendance is Mandatory.** Arrive on time, and plan to use the full two hour period to complete the lab. Assignments late or incomplete due to a missed lab session will be counted as a zero. **If you know in advance that you will be unable to make lab**, notify your TA as soon as possible. You will be temporarily placed in an alternate section for that week’s lab. If you fail to attend any lab section within a given week, you will not be able to receive credit for the in-class lab portion of that week’s lab.
2. **Plagiarism is not acceptable.** Do not use ideas from the lab manual, Wikipedia, etc., without citation. Do not copy your classmates, full stop. Plagiarism will result in an immediate report of academic misconduct to the university. The full academic misconduct policy can be found at studenthandbook.nmsu.edu. Be aware of the Student Code of Conduct.
3. **Late Work:** Lab homework is due one week from when it is assigned. If you attend an alternate lab section the previous week, your summary is still due in your normal lab session. **I will not accept late work.** In general, missing one, or even two lab homework assignments will not *significantly* impact your grade, however, repeated failure to complete homework will likely cause you to fail the lab section of the course (see below).
4. **Participation:** Active participation from each group member is *expected and mandatory*. Every student is expected to have read and printed the lab prior to class time. Every student is expected to be contributing to the discussion, and answering the questions in their copy of the lab. To enforce this, one student from each group will be chosen at random to hand in the group portion of each lab. If that student does not have a copy of the lab, or has not been following the discussion, the entire group will receive no credit for the lab. You are expected to hold your fellow group members accountable.

**Other Information:**

1. If you are confused **ask me for help.** I promise I don’t bite, and I’m really not that scary. I am here to help you, and I want to help you, but I don’t always know that you need it until you ask for it.
2. Partial credit is great, and I’m pretty lenient with it, but I have to have something to work with. So, answer every question, and show all of your work. Units are a big part of this.
3. GO TO OFFICE HOURS. Seriously. There’s a reason we have them, and there’s a reason that, whenever you look at advice to new undergrads, this is always on the list. IF YOU CANNOT MAKE MY OFFICE HOURS, let me know! I am more than willing to set up an alternate time/place. There should be no reason you cannot meet with me. I am available to assist you not only with lab, but with the wider course as a whole. Feel free as well to contact me via email/canvas message for remote help, general questions, life advice, unrelated astronomy questions, etc., at any time, and I will endeavour to respond as quickly as possible.
4. **Calculators:** It is *vitally* important that you have a decent calculator available to you. You are likely aware that your phone has a calculator app that came pre-installed. Invariably, it is not nearly powerful enough to be your sole calculator for this course. I generally suggest the WolframAlpha app ($2.99, but it will also do calculus for you!), but I’ve also heard great things about Desmos (free, available on iPhone and Android), Wabbitemu (free, Android), Graphing Calculator by Mathlab (free/$6.99, Android), and MyScript Calculator (free I think? iPhone & Android).