Astronomy 105 Lab Syllabus – Spring 2016
Walden Hall 232

Lab session: M06, Thursdays 1:30 – 3:30 PM
Lab website: http://astronomy.nmsu.edu/dahlek/astro105.html
Lab TA: Emma Dahl
Email: dahlek@nmsu.edu
Office hours: Tuesday 1:00 – 2:00 PM, or by appointment (shoot me an email)
Office location: Astronomy Building #108

Lab Overview
There will be 13 labs over the course of the semester. I'll be taking attendance at the beginning of each class.

There will be **pre-lab quizzes** at the beginning of each lab session that will assess whether you read the lab beforehand or not. These will eventually add up to one whole lab grade; be sure to get to class on time and be prepared to do well!

There are two parts of each lab: the group lab and the take-home section.
→ In-lab section (65%) will be done during lab, with your lab group. Turn in one complete, well-written copy each lab. If you're turning in your copy, try to write down answers on a spate sheet of paper in case you need the information to answer the take-home section.
→ Take-home section (35%) will be due at the beginning of the following lab.

Attendance is mandatory.
The only way to pass Astro 105 is to pass the lab, and the only way to pass the lab is to show up and participate. If you absolutely can't come to lab, you must let me know as far ahead of time as possible and we'll schedule a make-up lab during a different lab session that same week (since our lab sessions are at the end of the week, the earlier you let me know the more likely you'll be able to make up the lab you missed). If you don't go to a make-up lab that week, it becomes very difficult to do it later, and most likely won't happen at all.
Be on time to lab. I start each lab session with a quiz and a brief overview of the material and the process of the lab. Missing the beginning of class means missing points and a better understanding of what's going on, so don't do it!

On lab work:
Please please please be sure to do the following when you fill out lab packets in order to get full credit:

- Show your work if you do any math (so I can give you partial credit in case your final answer is wrong). You can just do it on a separate piece of paper and attach it to your lab when you turn it in.
- Label any numbers you use with the correct units (i.e. 3 ft, 5 m/s)
- Use complete sentences!!!! If I can't understand what you're trying to tell me, I can't know for sure if you understand the material, so I'll probably just deduce points.

- Make sure you answer all the parts of every question (they're often very long, with multiple parts). Don't just state a fact, tell me why it's true; make sure you have a "because" statement somewhere in your answer.
- If you can type something up, please do. This makes my life much easier.
- **INSANITY POINTS**: Always check to make sure your answers make sense!!! For example, if you tell me the Sun's core is -10 ˚C, I'm going to take off points, because that's insane.

On plagiarism:
Please understand that plagiarism is **UNACCEPTABLE**. Using information from an outside source (Wikipedia, another student, etc.), not citing it, and passing it off as your own work is plagiarism and is a serious offense. **I will notice** if you copy information from an outside source or another student. Any instances of plagiarism will be reported to Dr. Murphy, and will likely result in a 0 for the assignment. Repeated offenses will result in a letter to the Dean. Remember, plagiarism is illegal and an expellable offense. I take this issue seriously and so should you.
Cite information like: "Blah blah blah" –Author, website/article/book title, website URL. If in doubt about whether your work is acceptable on this front, don't hesitate to contact me and ask.

Late work policy:
Technically, I have a 0-tolerance late work policy. However, I understand that sometimes life gets in the way (sick kids, work, broken down cars, etc.) so I will tentatively accept late work if you have a good reason for not being able to turn it in on time. But know that by not turning your work in on time with everyone else, you run the risk of me not having time to grade it. Remember, I'm a student with a busy schedule too! If an issue pops up, email me ASAP so we can resolve it. If it becomes clear that you're taking advantage of my policy, I will be less forgiving.
I won't accept any work the week after the original due date.

Lab Manual
You can purchase the lab manual at the Fedex Kinkos at University Ave. and Espina St., or you can print the labs yourself from Canvas or the PDF on my website. It might be cheaper to print out the individual labs, since we won't be doing every lab in the manual. **Bring your own copy to each lab session**!!! I will try to print out extras but I can't guarantee that I'll have enough for everyone.

Come to class prepared and ready to learn!
Print out and read over a copy of the lab before you come to class and be prepared to ask questions if you'd like. Bring your copy of the lab, a pencil with a functional eraser (no pens please), and a calculator (or download an app on your phone – I like "Free GraCalc") that can do trigonometric functions and square roots to lab sessions.

Stop, collaborate and listen:
It's important to have everyone in your lab group participate and learn from the lab. Listen to other people's ideas, share your own, be an active participant and encourage others to do so. I notice when you don't participate! I'm not going to babysit every lab group, so please take it upon yourselves to be an active participant and to help others learn. Don't leave anyone out, and don't be left behind.

Please feel free to send me an email or come visit my office hours if you have any questions about lab, the material, or astronomy in general. Remember, I'm here to help you learn!

Schedule

Jan. 21	NO LAB
Jan. 28	Lab #1 – Tools for Success
Feb. 4	Lab #7 – Density
Feb. 11	Lab #6 – Scale Model of the Solar System
Feb. 18	Lab #3 – Phases of the Moon
Feb. 25	Lab #2 – Origin of the Seasons
March 3	Lab #11 – Surface of the Moon
March 10	Lab #8 – Earth's Density
March 17	SPRING BREAK
March 24	NO LAB
March 31	Lab #14 – History of Water on Mars
April 7	Lab #9 – Reflectance Spectroscopy
April 14	Lab #17 – Exoplanets
April 21	Lab #16 – Building a Comet
April 28	Lab #18 – The Sun
May 5	Review