

Astr 1115L – Spring 2022 – Syllabus

Coordinator: Prof. Jessica Dowell (jldowell@unm.edu),
Pre-/co-requisites: ASTR 1115

TAs: Stephanie Hansen (sthansen@unm.edu), Amilcar Jeronimo Perez (ajeronimo75@unm.edu),
Andrew Gentry (agentry2@unm.edu)

Textbook: No textbook is required, however, if you have a text for ASTR 1115, it may be useful. Another useful resource might be the free online introductory astronomy text available at <https://openstax.org/details/astronomy>

Office hours: by email appointment (Dowell: Regener Hall 113)

Lab homepage: <http://physics.unm.edu/Courses/Rand/index.php>

Goals of the lab:

The main goal of this lab is for students to discover how astronomers use physics and observations with telescopes to gain an understanding of how the universe works. To that end, you will learn many physics concepts as applied to astronomy, and follow the process of doing astronomical observations and measurements. These observations include ones that you will make, both with the naked eye and with a telescope. It is not the goal to provide a complete survey of all areas of astronomy – this is what the ASTR 1115 lecture class is for. As such, the lab will not follow the lecture material exactly. The labs are generally computer-based and you will be working with a lab partner. There is a small amount of homework (see below).

Attendance:

Attendance in lab is mandatory. Each student is required to complete every lab assignment, and the labs may only be completed in class, except for the Observing Projects (see below). If you are working with a partner in class, only one of you will enter answers for the quizzes, but make sure that your partner is identified in the last quiz question.

If for any reason you cannot attend a lab, you may attend another lab section, as long as they are doing the lab you missed. To attend another lab section, email the TA of the section you want to attend (and cc your own TA) at least 24 hours in advance to ask permission. The TA needs to know which section you are in. Check the schedule and list of TAs on the course webpage (location of homepage shown above). The only other opportunity to make up labs is during designated make-up days the week before Spring Break. See below for credit for make-ups. Please contact your TA well in advance to schedule a time to make up a lab or labs during those days. Do not allow yourself to have uncompleted labs at the end of the semester. As the end of the semester nears, there are too many other things to worry about. Please keep on track.

Requirements:

Please note that Astronomy 1115L *is* a math-based course. **It is much more math-intensive than the lecture, and you will be doing many calculations.** You will be expected to know algebra and some geometry, and you will be making use of it in nearly every class. If you cannot solve the equation below for x , you will have a great deal of difficulty passing this class:

$$5x - 3 = 7$$

You will also be making many measurements of physical quantities. It is important to understand the units of each measurement, and to be able to convert between different units.

You will also be using math equations in physical contexts. For instance, you should know how to answer the following problems. If a car goes 5 miles in 10 minutes, what is its average speed in miles per hour? If a car travels at 10 miles per hour for 6 minutes, how many miles does it go?

Grades:

Grading is on the following scale:

97.0-100%	= A+
93.0-97%	= A
90.0-93%	= A-
87.0-90%	= B+
83.0-87%	= B
80.0-83%	= B-
77.0-80%	= C+
70.0-77%	= C
60.0-70%	= D
Less than 60%	= F

There are fifteen labs in total. Lab 0 is the Observing Project and requires some explanation. You have three observing projects to do for this lab: Observing Projects 1, 2 and 3, with deadlines spread over the semester. There are also a few questions to answer for Lab 0 in class. Each lab carries 100 points, except Lab 0, which has 100 points for the in-class questions as well as 100 points each for each of the three actual projects. There is also one homework assignment associated with the Foundations lab that is worth 50 points. Thus there are **1850** points available. **There is no extra credit.** It will be a great challenge to pass this class without completing and turning in the observing projects, some of which require visiting the Campus Observatory. Please note that there may be nights when the Campus Observatory will not be open due to bad weather.

All work will be done in person during class time, with the exception of the observing projects and the Foundations lab homework. Attempts to complete in-class lab work outside of class will receive a zero and you will be asked to make-up the work according to the standard make-up policy.

Missing a lab or consistent lack of effort or consistent poor performance will also result in a half-grade deduction (e.g., A to A-). If at any point in the semester you have a question about a lab grade, your lab instructor will be happy to go over it with you. You may contact me if you still have questions after that.

It is up to you to understand what your grade is at any point in the class. If you are unsure, ask your TA.

Homepage: The URL at the top of this syllabus is for a class homepage that you can access from anywhere. This is in case you need information about the class or the Observing Projects when you are not in your lab.

Due Dates:

All in-class lab assignments are due at the end of class each day. If for whatever reason you are unable to complete the assignment during the lab time, you may ask your TA for an extension (to be given at their discretion) of up to 24 hours. **Check the schedule for the due dates of the Observing Projects.** If you are unable to upload your Observing Project, you can turn it in to the lab office in Regener Hall 113 during regular business hours. Since Observing Projects 2 and 3 both typically require a visit to the Campus Observatory on a Friday night, **you are strongly encouraged to get the information you need for both projects by the deadline for Observing Project 2.** This will save you a second visit to the Observatory, which may not even be possible if the weather is cloudy.

Grading Disputes:

You must bring any questions about grading of a lab to your TA's attention within 10 days of receiving the grade. If you do not receive a grade for work that you did, you must inform your TA within 20 days of the date you submitted the work.

Make-ups and late policy:

If you miss a lab, **you can make it up by going to another section before your next lab** (i.e. within a week, see above). **Both your TA and the TA who runs the section you plan to attend need to be informed via email.** The only other time to do make-ups is the make-up slots during the week before Spring Break (see schedule). Labs made up within a week get 50% credit, unless you present a valid excuse. All make-up week labs get 50% credit. For the Observing Projects, you can also upload them or turn them in up to one week late for 50% credit. If you want to attend a make-up session email the TA at least 24 hours in advance to make the appointment.

UNM Academic Dishonesty Policy:

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet the standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Conduct:

UNM has strict guidelines for both student and TA conduct, which are outlined in the University catalogue. Both the students and the instructor are expected to adhere to these policies. In particular:

- **Please do not answer cell phones, texts, or tweets in the lab room!! If urgent,** Calls may be taken in the hallway so long as classes are not disturbed.
- **Drinks must be in a container with twist cap or other sealed top and kept on the floor or at the front of the room.** Food in the lab is not allowed without special permission from the instructor.

UNM Administrative Mandate on Required Vaccinations

UNM requires COVID-19 vaccination and a booster for all students, faculty, and staff, or an approved exemption (see: UNM Administrative Mandate on Required Vaccinations). Proof of vaccination and booster, or a medical, religious, or online remote exemption, must be uploaded to the UNM vaccination verification site. Failure to provide this proof may result in a registration hold and/or disenrollment for students and disciplinary action for UNM employees.

Booster Requirement: Individuals who received their second dose of a Pfizer or Moderna vaccine on or before June 15, 2021, or their single dose of a Johnson & Johnson vaccine on or before October 15, 2021, must provide documentation of receipt of a booster dose no later than January 17, 2022.

Individuals who received their second dose of a Pfizer or Moderna vaccine after June 15, 2021 or who received their single dose of Johnson & Johnson after November 15, 2021 must provide documentation of receipt of a booster within four weeks of eligibility, according to the criteria provided by the FDA (5 months after completing the Pfizer or Moderna sequence, and 2 months after receiving a one-dose Johnson and Johnson vaccine).

International students: Consult with the Global Education Office.

Exemptions: Individuals who cannot yet obtain a booster due to illness should request a medical, religious, or online remote exemption (which may have an end date) and upload this to the vaccination verification site.

Medical and religious exemptions validated in Fall 2021 (see your email confirmation) are also valid for Spring 2022 unless an end date was specified in the granting of a limited medical exemption. Students must apply for a remote online exemption every semester.

UNM Requirement on Masking in Indoor Spaces

All students, staff, and instructors are required to wear face masks in indoor classes, labs, studios and meetings on UNM campuses, see the masking requirement. Students who do not wear a mask indoors on UNM campuses can expect to be asked to leave the classroom and to be dropped from a class if failure to wear a mask occurs more than once in that class. Students and employees who do not wear a mask in classrooms and other indoor public spaces on UNM campuses are subject to disciplinary actions. Medical/health grade masks are the best protection against the omicron variant and these masks should be used, rather than cloth.

COVID-19 Symptoms and Positive Test results

Please do not come to a UNM campus if you are experiencing symptoms of illness, or have received a positive COVID-19 test (even if you have no symptoms). Contact your instructors and let them know that you should not come to class due to symptoms or diagnosis. Students who need support addressing a health or personal event or crisis can find it at the Lobo Respect Advocacy Center.

Communication on change in modality

The President and Provost of UNM may direct that classes move to remote delivery at any time to preserve the health and safety of the students, instructor and community. Please check your email regularly for updates about our class and please check <https://bringbackthepack.unm.edu> regularly for general UNM updates about COVID-19 and the health of our community.

Accomodations

In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as I am not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact Accessibility Resource Center at 277-3506 or arcsrvs@unm.edu for additional information.

UNM is committed to providing courses that are inclusive and accessible for all participants. As your instructor, it is my objective to facilitate an accessible classroom setting, in which students have full access and opportunity. If you are experiencing physical or academic barriers, or concerns related to mental health, physical health and/or COVID-19, please consult with me after class, via email/phone or during office hours. You are also encouraged to contact Accessibility Resource Center at arcsrvs@unm.edu or by phone 277-3506.

If you feel that there are questions that your lab instructor has not answered adequately or you have concerns that have been not addressed, please feel free to contact the Lab supervisor: Jessica Dowell (jldowell@unm.edu).

Title IX

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg 15 - <http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf>). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). If you want to retain anonymity, instead report the incident to other units on campus, namely Student Health and Counseling (SHAC), Counseling and Resource Center (CARS), a licensed medical practitioner on campus, or off campus to the Rape Crisis Center of Central New Mexico, or a sexual assault nurse examiner. If you report the incident to the LoboRESPECT advocacy center, Women's Resource Center, or the LGBTQ Resource Center, you retain anonymity but an anonymous record is made for statistical purposes. See more information at https://policy.unm.edu/university-policies/2000/2740.html#_Toc414642678.