The Solar System Laboratory

Spring 2026 Lab Syllabus Physics 1062 Section 501 and 502

Meet the Team

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(she/her), Lab Content Creator

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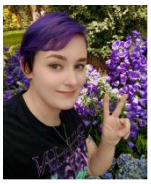
My research background is in Physics Education Research, where I focus on developing and implementing teaching strategies to enhance student learning in Physics and Astronomy courses. I am deeply passionate about making astronomy an exciting and accessible subject for everyone. I look forward to working with you and supporting your learning journey this semester!



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Key Information

Classroom:

Labs meet in ENV 150 or ENV 290.

Lab Meeting Times:

Labs are self-scheduled *by students* using Canvas Calendar.

Course Website:

PHYS 1062 Section 501/502 Canvas Page.

Frequently Asked Questions:

1. How do I access the lab content?

All content for your labs is on Canvas under "PHYS 1062 Lab Sections 501, 502..." Please note **this is a separate Canvas "course" than your lecture material**.

2. What labs can I attend?

There are three different types of labs you can attend. You can attend planetarium labs, observatory labs, or an experimental lab. We offer two planetarium labs, two observatory labs, and one experimental lab.

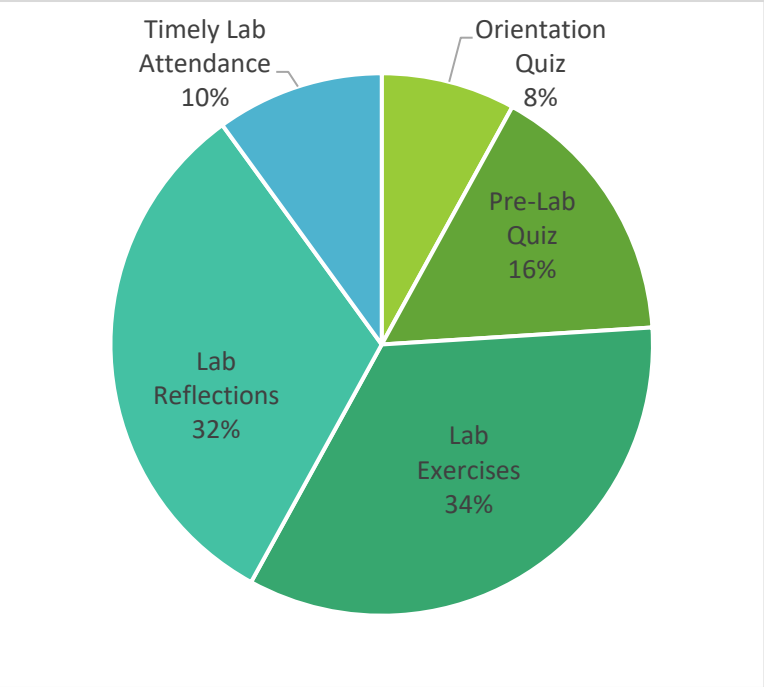
Lab Type	*Lab Name*	*Lab Location*
Planetarium labs	Celestial Sphere	ENV 150
	Perspectives of the Universe	ENV 150
	Stellar Lifecycles	ENV 150
Observatory Labs	Stars and Telescopes	ENV 290
	Deep Sky Objects	ENV 290
Experimental Lab	Stellar CSI	ENV 290

3. How many times do I have to attend each lab?

There are a total of 6 labs to attend. You only have to attend each lab one time. Labs are offered multiple times per semester, so that students can find a time that best works with their schedule. If a student repeats a lab multiple times (for example they attend the Celestial Sphere lab twice), the student will only receive credit for the first time they attend the lab.

4. How will I be graded?

Assessing your Work



The lab **Orientation Quiz** is designed to make sure you are familiar with all the Lab policies so you can complete your labs successfully. It is worth 8% of your Lab Grade. You get 3 attempts, and the highest grade will be kept. The Orientation Quiz is due on January 23rd.

Each lab has a lab write up and a **pre-lab quiz** that students need to complete prior to attending lab. These are designed to get you familiar with the lab material ahead of time. There are a total of 5 pre-lab quizzes and students are given 3 attempts on each pre-lab quiz. Your first Pre-Lab quiz attempt is due when you check-in to lab. Students risk not being admitted to lab if the pre-lab quiz is incomplete. Any additional Pre-Lab attempts are due on the last the lab is offered. Pre-lab quizzes are worth 16% of your lab grade.

The **lab exercises** are completed during the labs and due at the end of the lab a student attends. Passwords to complete them are given out during your scheduled lab. Sharing passwords and completing these assignments outside of lab is a violation of the student code of conduct. Lab exercises are worth 34% of your lab grade.

The **lab reflections** are completed during the labs and are due at the end of the lab a student attends. You will be given 20 minutes to write your lab reflection. Using AI to write your lab reflections is a violation of the student code of conduct for this course. Lab reflections are worth 32% of your lab grade.

To motivate timely lab sign-ups, a schedule is provided for completing labs to earn full credit. **Timely lab attendance** is worth 10% of your lab grade (20 points for timely lab attendance). Failure to complete the labs in a timely manner will result in a deduction of 2% of the student's lab grade (or 4 points from the 20 Timely Lab Attendance points).

5. When do I have to attend lab?

To encourage students to sign up for labs early in the semester, there is a schedule by when students should complete the labs in order to earn full credit for the labs.

- **Due February 21st:** Students must attend at least one of the labs
- **Due March 7th:** Students must attend at least two of the labs
- **Due April 4th:** Students must attend at least three of the labs
- **Due April 18th:** Students must attend at least 4 of the labs
- **Due April 30th:** Students must attend at least 5 of the labs

Failure to complete the labs in a timely manner will result in a deduction of 2% of the student's lab grade (or 4 points from the 20 Timely Lab Attendance points).

6. How are lab scheduled?

Labs are scheduled by students using the PHYS 1062 Section 501, 502 Canvas course Calendar. Each laboratory topic is presented only during the days listed in the Lab Calendar. Reservations for a lab are on a first-come, first-served basis.

Steps to Sign up for Labs:

1. Login to Canvas and select "PHYS 1062 Lab Sections 501, 502..." from the Canvas Dashboard **icon** on the far left of your screen.

2. Click on the Calendar **icon** located below the Dashboard **icon**.

3. Click the 'Find Appointment' button to the far top right of your screen.

4. In the drop-down menu, select the calendar for "PHYS 1062 Lab Sections 501, 502..." and press 'Submit'.

5. Scroll through the entire semester's calendar carefully to see the available dates and times for each lab. Some labs are only offered for a week, while others are offered at different times throughout the semester. **Be sure to check ALL months of the semester.**

6. When you have decided on a date and time for the lab you want to attend, **be certain that it doesn't conflict with any of your other classes or labs**. Then click on that calendar appointment.

7. A box with the event details will appear. Click 'Reserve' in the bottom left-hand corner. (Remember, plan to arrive early for check-in as the labs will start on time).

8. Make sure to schedule one visit for each lab listed in the table under "Course Organization and Content" in the previous section.

Additionally, **there is a short YouTube video under the Canvas Module "Scheduling Labs"** that gives detailed steps how to schedule your labs.

A document of the full semester's Lab Calendar is also provided in the "Scheduling Labs" module in Canvas.

7. Where are the labs located?

Each lab will meet in one of two locations:

ENV 150 or ENV 290

You can check Canvas Calendar reservation for the meeting location. Additionally, a map with the lab locations can be found on Canvas under the Orientation Module.

Please arrive for your lab at least 10-15 minutes before the lab begins so that students can get checked in.

Lab Type	*Lab Name*	*Lab Location*
Planetarium labs	Celestial Sphere	ENV 150
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The **Observatory labs are held outside** at the Rafes Urban Astronomy Center. Please come prepared in proper attire with regards to weather conditions, as the observatory labs take place outdoors. Additionally, **Students are NOT permitted to drive to the Observatory (Rafes Urban Astronomy Center)**. Transportation is provided after instruction in ENV 290 to our Observatory if weather conditions are favorable. If you have any physical access needs, please email the lab instructor (astrolab@unt.edu) 3 weeks prior to attending an observatory lab so that we can provide accessible transportation from campus to the observatory.

8. How long do lab session last?

Students should arrive for Lab Check-in 15 minutes before their scheduled lab time in front of that lab's location. (ENV 150 for the Sky Theater Planetarium and ENV 290 for the Observatory and Experimental Labs) Check into lab with required materials before the lab's start time or your seat can be forfeited to a student who is present on "Standby".

Students must arrive on time for all lab sessions. **Labs begin promptly at the scheduled start time, and late entry is not permitted.** If you arrive after the doors have been locked, you will need to reschedule for another session or count this as your dropped lab. Timely starts are essential because the planetarium and other lab facilities are often reserved for public programs immediately after class, and the space must be vacated on schedule. Additionally, planetarium labs include a show that requires complete darkness for proper viewing; once the doors are closed, they cannot be reopened, similar to how a movie theater works.

Each lab lasts about two hours, but this does not include transportation time for the two observatory labs. Plan on those taking about two and a half hours. Transportation is provided after instruction in ENV 290 to our Observatory if weather conditions are favorable. Otherwise, cloudy night labs are completed in ENV 290.

9. What if the weather is cloudy/rainy. Will I still have lab?

Observatory labs will still occur even if the sky is overcast or rainy. We have alternate arrangements if the weather is cloudy.

Labs are cancelled only if the University officially closes; please check the University website at www.unt.edu or with the campus operator at (940) 565-2000 for closing information. In the event of such a cancellation we will post an announcement about the measures that will be taken regarding the cancelled labs.

10. What do I need to buy?

Required Materials

None! For the labs, you will not need to purchase any additional materials for lab. All materials will be either online (on the lab Canvas course) or provided for you.

11. What do I need to bring to lab?

When you arrive for your lab, you will need to bring 3 items:

1. A photo ID
2. Your ***completed*** Pre-Lab quiz
3. A Wi-Fi compatible device with access to Canvas.

Students risk not being admitted to lab if the pre-lab quiz is incomplete before attending lab. Please arrive for your lab at least 10-15 minutes before the lab begins so that students can get checked in. **Labs begin promptly at the scheduled start time, and late entry is not permitted.** If you arrive after the doors have been locked, you will need to reschedule for another session or count this as your dropped lab.

12. Will you drop any assignments or accept late work?

Hey, we get it. We know that unforeseen events can sometimes disrupt life. Maybe you can't get to lab one day or maybe you miss an assignment. We have built some flexibility into the grading scheme to make sure your grade won't unnecessarily suffer for issues and events that are out of your control. At the end of the semester, we will automatically drop the following:

- Your lowest pre-lab score
- Your lowest lab exercise
- Your lowest lab reflection

Pre-lab must be completed before a lab. If a student does not have a pre-lab completed by the time they attend, the student risks not being able to attend the lab and might need to re-schedule their lab.

Lab Reflections cannot be submitted late. Why not? We will be giving you about 20 minutes in class to work on the lab reflections, so you should leave lab with your *Lab Reflection* already done. In principle you should be able to submit your *Lab Reflection* that same day.

13. Once I have scheduled a lab, can I reschedule it?

There are many valid reasons why someone might have to reschedule a lab or miss lab, including (but not limited to) interviewing for a job, presenting at a conference, observing a religious commitment, participating on a sports team or performance group, attending a funeral, or recovering from an illness.

If you have scheduled a lab that you can no longer attend, you can reschedule your lab by following the instructions below:

1. **Cancel your current lab appointment in the Canvas calendar** to sign up for a new lab time. (Note: The Canvas calendar allows only students to sign up for each lab once, so your previous reservation needs to be cancelled in order to re-schedule.)
    a. Click on the calendar appointment. A box with event details will appear.
    b. Click the 'Un-Reserve' button in the bottom left-hand corner.
2. Now, you can re-schedule your labs as normal.

We advise you to **re-schedule another lab right away** because labs can fill up quickly, especially as the semester comes to an ends.

14. The only labs that I see on the Canvas calendar are ones that I have already attended. Can I repeat a lab and still earn credit?

Each lab can only be taken once. If a student repeats a lab multiple times (for example they attend the Celestial Sphere lab twice), the student will only receive credit for the first time they attend the lab. To earn full credit in the lab, a student needs to attend at least 5 different labs regardless of which labs are left in the semester.

15. What if I cannot find any more labs listed on the Canvas calendar?

If you don’t see any available spots for labs being offered in the next few weeks, it is likely that all the spots are filled up for the labs for the upcoming weeks. Unfortunately, we do not have any additional offerings other than what is posted because we do not have the staff to run additional labs.

If there are no more available spots for the lab you are wanting to take, you can attend any remaining labs on a **'Standby Status.'** This means you will show up to this lab time early and if there are any available spots after those signed up have entered the lab, you can fill in an empty spot. To do this, arrive early to any additional lab sessions. The complete astronomy lab session schedule is available in the document labeled 'PHYS 1062 Lab Schedule' in the Scheduling Labs Module on Canvas. Use this to find additional lab sessions. Standby attendance is on a first-come, first-served basis and does not guarantee a seat.

Once all sessions of a particular lab topic have been completed, that lab cannot be made up.

16. The lab times offered don't fit with my schedule. What do I do?

If you notice that you cannot any of the 5 labs, immediately send an email to the dedicated listserv for the labs: astrolab@unt.edu . The lab instructor with work with you to determine the best option moving forward. Please note: makeup labs can only be arranged in cases of a documented course conflict. We are unable to adjust lab schedules for work or personal commitments.

If you need a letter verifying your lab participation for employment purposes, please contact your lab instructor. We are happy to provide documentation upon request.

17. I have a question that is not listed on here. Who do I contact?

We have a dedicated email list serv for astronomy labs. Please make sure to communicate all your questions about labs to this email to ensure the quickest responses. To email this listserv directly, use email: astrolab@unt.edu. In your emails, please include: your name, course, and section number (EX: PHYS 1062.501). If you have a question about a specific lab, make sure to include the lab's name, date, and meeting time. We will return emails during normal business hours.

Policies

1. Accommodations

If you have any physical access needs, please email the lab instructor (astrolab@unt.edu**) 3 weeks prior to attending an observatory lab so that we can provide accessible transportation from campus to the observatory.** If a student with physical access needs shows up to an observatory lab without emailing the lab instructor 3 weeks prior to attending an observatory lab, the student risks having to reschedule their observatory lab so that appropriate transportation can be provided to the student.

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website (https://studentaffairs.unt.edu/office-disability-access). You may also contact ODA by phone at (940) 565-4323.

2. Supporting Your Success and Creating an Inclusive Learning Environment

I value the many perspectives students bring to our campus. Please work with me to create a classroom culture of open communication, mutual respect, and belonging. All discussions should be respectful and civil. Although disagreements and debates are encouraged, personal attacks are unacceptable. Together, we can ensure a safe and welcoming classroom for all. If you ever feel like this is not the case, please stop by my office and let me know. We are all learning together.

3. Technical Support

The UIT Helpdesk will provide support with any issues you might have with Canvas and they may be able to help you troubleshoot other computer issues. 940-565-2324 or helpdesk@unt.edu. Canvas does not work well with some browsers. Chrome browser does support Canvas.

4. Generative AI guidelines in this course

Students in my physics and astronomy courses have shared that they like to use GenAI as a partner in learning. Students shared that they have conversations by asking questions (“Was there ever water on the surface of Mars?”) or get help with math by giving it a specific question (“How do you find the acceleration of an object with a mass of 2 kg that experiences a net force of 10 Newtons?”). While I am mostly confident that GenAI will give you correct answers to these questions, I have seen examples where it gives super wrong answers. So, while I encourage you to use this tool to help you study, maintain a critical eye, ask it to give you sources, and reach out if the information you get seems to contradict something we learned in class or does not make sense.

You may not use Generative AI in this course to help you complete Pre-Lab Quizzes, Lab Reflections, or any Lab work that you submit to Canvas. You may use a tool to check your original written work for grammar/clarity. It is my expectation that the content you submit in this course is your original work.

I will always disclose how I use GenAI, and I expect the same from you. In accordance with the UNT Honor Code, unauthorized use of GenAI tools is prohibited. Using GenAI content without proper credit or substituting your own work with GenAI undermines the learning process and violates academic integrity. All ideas that are not originally your own have a source and that source must be attributed. Please be aware that generative AI tends to invent sources. You have a two-fold obligation with respect to attribution:

- ***If a source is identified***, find and attribute the original source of the idea, identify the location of the text within the source, and provide a working link to the location (if the source is available online). If you are not able to locate the source, delete that content.
- ***Document the process by explaining how you used generative AI*** in a work statement that will accompany your submission of major projects in the class. As you submit an assignment, develop, and include an appropriate version of the below statements:
  - "I attest that this assignment did not use AI at any stage in its development or in the creation of any of its components."
  - "I attest that this project made use of AI in the following ways:" (please specify).

If you're unsure whether something is allowed, please seek clarification.

Please refer to the Academic Integrity Policy (PDF) (https://policy.unt.edu/policy/06-049).