

PHYSICS 1062 – STARS AND THE UNIVERSE LABORATORY

Summer II 2017

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ASTRONOMY LAB SYLLABUS

The PHYS 1062 Laboratory syllabus is designed to help you learn everything you need to know about astronomy labs. Read the entire syllabus and refer to it throughout the semester.

ACCESSING LAB CONTENT

All content for your labs is located in either *Blackboard*, or your *Astronomy 1062 Lab Manual eBook*. The Lab Manual eBook is accessible through a link in *Blackboard* under 'Course Content'. Content is divided as listed in the table below.

| Blackboard | Astronomy Lab Manual eBook |
|------------------------------------|---|
| Syllabus | Lab Write-Ups, Pre-Lab Quizzes, Lab Exercises, Post-Lab Quizzes |
| Link to Astronomy Lab Manual eBook | Grades |
| Lab Calendar, Lab Scheduler | Lab Video Content |
| Announcements, FAQ's, Tutoring | Printable Lab Worksheets |

- The web address for *Blackboard*: <https://learn.unt.edu>
- Step-by-Step Instructions for setting up access to the *Astronomy 1062 Lab Manual eBook*:

<http://physics1062.courses.haydenmcneil.com>

IMPORTANT: You will need to add your EUID to your profile page, instruction in link above
If Blackboard or the Lab Manual eBook is offline, you are still responsible for lab attendance.

COURSE COMMUNICATION

Communicate questions about the lab course via **e-mail ONLY** to astrolab@unt.edu. Please include your name, EUID, and, if you have a question about a specific lab, the lab's name, date, and meeting time. An email response will be sent during normal business hours. Also, sign into *Blackboard* often for announcements.

COURSE ORGANIZATION AND CONTENT

PHYS 1062 labs are collectively designed as an algebra based physics component of the PHYS 1062 course. The overall point total you receive for lab coursework will count as a part of your final course grade, as determined by your professor.

PHYS 1062 includes both lectures and labs; however, **you must schedule your labs through *Blackboard***, via the "PHYS 1062 Laboratory" class link. Astronomy labs cover 8 topics as listed below. Remember, if *Blackboard* is offline, you are still responsible for lab attendance.

(Please note, labs are not presented in the order in which they are listed below)

| Lab Name | Lab Location |
|-----------------------------------|------------------------------|
| Celestial Sphere | Sky Theater - ENV 150 |
| Stars and Telescopes | Rafes Urban Astronomy Center |
| Radio Astronomy: A New Way to See | Demonstration Lab - ENV 363 |
| Stellar CSI | Computer Lab - ENV 290 |
| Stellar Lifecycles | Sky Theater - ENV 150 |
| Deep Sky Observations | Rafes Urban Astronomy Center |
| Perspectives on the Universe | Sky Theater – ENV 150 |
| Universe of Galaxies | Sky Theater - ENV 150 |

SCHEDULING LABS

Labs are scheduled through *Blackboard*, via the "PHYS 1062 Laboratory" class link, under the "Lab Scheduler" icon. Each laboratory topic is presented only during the days listed on this calendar. Sign up for all labs **early** as places are reserved on a first-come, first-served basis. Write down your schedule in the space provided below!

1. Log in to *Blackboard* at <https://learn.unt.edu>
2. Enter your UNT Enterprise User ID (EUID) and password (my.UNT.edu password)
Note: If you cannot remember your EUID or password, visit ams.unt.edu for help
3. Select "Physics 1062 Laboratory"
4. Choose the "Lab Scheduler" link.
5. For each of the 8 labs, sign-up for ONE session (day/time) to attend.

Note: Once you have signed-up for a specific lab session, your selection CANNOT be changed.

| Lab Name | Lab Location | Lab Date and Time |
|----------|--------------|-------------------|
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Fill in your lab schedule in the table above.

MISSED LABS and "Standby Status"

If you miss one of your scheduled lab sessions, you may try to attend the lab on "Standby Status" by showing up early to any additional sessions of the lab. The complete astronomy lab session schedule is listed in the *Blackboard* "Course Calendar". **Standby attendance is on a first-come, first-served basis, and does not guarantee a seat will be available.** Show up early, and do not wait until the last session for the lab. Once all sessions of a particular lab topic have been presented, the lab cannot be made up and your points are forfeited.

REQUIRED TEXT AND MATERIALS

You will not be able to earn full credit for a lab unless you have ALL materials.

- Astronomy 1062 Lab Manual eBook
 - Purchase from the campus bookstore ISBN: 978-0-7380-9017-7
- Student/Picture ID – *Only students with picture IDs are admitted to lab.*
- "Smart Device" – fully-charged, wi-fi compatible (must connect to Eaglenet with your EUID)
- Flashlight with extra batteries
- Scientific calculator (not solar powered)
- Worksheet for the Deep Sky Observations Lab must be printed from the Lab Manual eBook and brought to Check-In for that lab

LAB WRITE-UPS AND PRE-LABS

You must read each lab write-up and complete the online pre-lab quiz questions prior to attending lab.

It is your responsibility to consult the online Lab Manual eBook and for both the write-ups and pre-lab quizzes. You are given 3 attempts on the each pre-lab quiz.

LAB DURATION

Each lab lasts 2 hours. Please note that for observatory labs, transportation time is in addition to the duration of the lab. It takes approximately 15-20 minutes to get from campus to the observatory and vice versa.

LAB CHECK-IN

Labs begin precisely at the times listed. Check into lab with required materials and a picture ID at least **5 minutes before** the designated lab's designated start time or your seat can be forfeited to a student who is present on "standby".

No one will be admitted to a lab session without a picture ID and WiFi capable device
No one will be admitted late to lab sessions.

OBSERVATORY LAB MEETING LOCATION

Transportation is ONLY provided for observatory labs and leaves from the pickup location precisely at the designated lab start time. **The pickup location for the observatory labs is at the west entry of the Environmental Science Bldg. (Lot 11).** You can park in Lot 7 across the street with any valid UNT permit after 5:30pm.

If you do not have a permit, you will need to purchase one from the UNT Transportation website at transportation.unt.edu. You do not have to purchase an annual permit; UNT Transportation has temporary permits available to students on its website. Student vehicles are not permitted at the observatory and there is no nearby parking.

You must ride in the UNT buses to be admitted to Observatory labs!

BAD WEATHER CANCELLATIONS

You are required to attend the observatory labs even if the sky is overcast or rainy. Labs are canceled 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. Only students who have signed-up for sessions prior to the University closing will receive credit. No credit will be given to potential standby students for cancelled lab sessions.

GRADES

Each of the labs is worth up to 10 points, except for *Celestial Sphere* and *Stars and Telescopes* (each worth up to 20 points). Points are assigned for a completed pre-lab, lab exercise, and quiz. The overall point total will be the **sum of the scores** for each lab, 100 being the maximum possible number of points you can earn.

Both your cumulative and individual lab scores can be reviewed in the gradebook of the *Astronomy 1062 Lab Manual eBook*. Your Cumulative Lab Point Total will also be placed in the Blackboard gradebook.

At the end of the semester your Cumulative Lab Point total will be issued to your professor, who will then factor this number into your course grade.

| Lab Name | Max. Score | Your Score |
|-----------------------------------|------------|------------|
| Celestial Sphere | 20 | |
| Stars and Telescopes | 20 | |
| Radio Astronomy: A New Way to See | 10 | |
| Stellar CSI | 10 | |
| Stellar Lifecycles | 10 | |
| Deep Sky Observations | 10 | |
| Perspectives on the Universe | 10 | |
| Universe of Galaxies | 10 | |
| Cumulative Lab Point Total | 100 | |

Individual lab scores are posted on the *Astronomy Lab Manual eBook* within 3 business days after your lab. If you cannot locate your lab score, please contact astrolab@unt.edu (**include your name, EUID, class section, time, and instructor's name**)

During the semester, please double-check the *Astronomy Lab Manual eBook* gradebook and notify the lab coordinator as soon as possible if you have not received credit for a lab. You will be required to show your signed sticker for this lab (see last page).

Grade disputes must be reported no later than **one business day** after the grade posts to the *Astronomy Lab Manual eBook*. After this time, the grade will stand.

ADDITIONAL GRADE INFORMATION

1. NO MAKEUP LABS are offered! Once all sessions of a particular lab have been conducted, that lab topic will no longer be available. Each lab can only be taken once.
2. There are NO EXTRA-CREDIT assignments.
3. NO WORK is accepted late or outside of laboratory sessions.

ACADEMIC DISHONESTY AND MISCONDUCT

Academic dishonesty may result in a grade of zero for the lab in question, expulsion for that lab, and a report to the dean of students.

It is unlawful for any person to interfere with classes or other university activities by any form of disruption, including excessive noise. Texting during lab is prohibited. Violators may be asked to leave and a grade of zero may be assigned for the lab.



HEALTH AND SAFETY WARNING:

MOSQUITO PROTECTION

Protect yourself from mosquito-borne illness by applying mosquito repellent before you attend the Rafe Urban Astronomy Center. The buses will have spray repellent for your use if you do not have any.

The University of North Texas Department of Physics will make reasonable adjustments to ensure equal opportunity for qualified persons with disabilities to participate in all physics programs and activities. Please e-mail the astronomy office at astrolab@unt.edu for accommodations.

STICKERS

At the conclusion of each lab you will receive a sticker, which is proof of attendance just in case there are any errors with uploading your grade to the *Astronomy Lab Manual eBook*. It is your responsibility to make sure you pick up your sticker before you exit the lab and make sure it has been initialed by the TA. This sticker should be placed below.

| Celestial Sphere | Perspectives of the Universe |
|------------------------------|-------------------------------------|
| | |
| Stellar Lifecycles | Universe of Galaxies |
| | |
| Deep Sky Observations | Stars and Telescopes |
| | |
| Radio Astronomy | Stellar CSI |
| | |