



Please read this syllabus carefully as it contains important information.

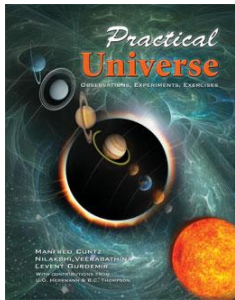
Astronomy Labs will begin on **August 31, 2009**

Lab website: [www.uta.edu/physics/astrolab/](http://www.uta.edu/physics/astrolab/)

I. Fill out this information:

Name \_\_\_\_\_ Id \_\_\_\_\_  
Due Date \_\_\_\_\_ Lab Instructor \_\_\_\_\_ Course Instructor \_\_\_\_\_ Section \_\_\_\_\_

II. Required Materials



1. LAB MANUAL

You must have the lab manual with you during each lab. You can obtain a copy at UTA Bookstore. **Never buy used Lab Manuals! If you do not have your lab manual, you will not be able to complete the lab and will have to make up the lab during the Make-Up Lab week, Nov 9 – 13<sup>th</sup>.**

2. CALCULATOR

Bring a scientific calculator to your lab.

3. UTA ID CARD



You must have your UTA ID Card with you when you attend labs, as we use ESTS (Electronic Student Tracking System). ESTS units are installed at lab room doors. You will “swipe” your student ID card to be “present” in the lab.

- After swiping your card, make sure you see “ACCESS” on the screen
- If you get “DENIED”, talk to the lab instructor immediately
- If you forget your UTA ID Card, lab instructor can still put you in. You may be asked to show another form of ID for verification.

III. Recommended Material

- Red Flashlight

You will need a flashlight as some labs will be meeting in dark areas such as the planetarium, night labs, etc. In dark, regular flashlights will affect the lab as they may be too

bright. During lab sessions, only usage of red LED or red lens flashlights will be allowed. You can find red flashlights in most stores including the UT Arlington Planetarium gift shop.

#### IV. Location of Labs

You are assigned to attend lab at either SH122 or SH127 (SH : Science Hall). However, labs will not be meeting in these rooms every time. **Check the lab schedule for lab location each week.**

#### V. Planetarium



We have 2 Planetarium facilities on campus. All Astronomy Labs will be meeting in the Round House Planetarium during planetarium weeks. The Round House Planetarium is located in Preston Hall

Check the map on the Astronomy Board located besides the room 128, in the north wing of the Science Hall.



- The Planetarium door locks when lab begins. When the door is locked, it can be opened only from inside. Please show up at least 5 minutes before lab time to avoid being locked out of lab.



- Planetarium sessions are dark. You will need to use your Red LED flash light to take notes.



- The Planetarium temperature is set to 65 degrees. You should bring a jacket or sweater, if this temperature is uncomfortable for you.

- No food or drink is allowed in the planetarium. You are also responsible to pick up your trash at the end of labs. This includes any kind of paper as well.

#### VI. Night Labs

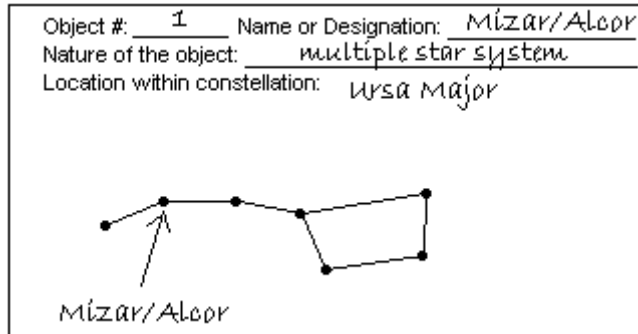
Night Labs are the telescopic observation aspect of Astronomy labs. You have to attend Night Labs only once within the time period that is mentioned in the schedule. It is not guaranteed that night labs will meet every scheduled night as weather may not permit observations. You can check the status through the lab web page.

**Night Lab locations are TBA.**

You must have UTA ID Card and Lab Manual with you in order to attend Night Labs as well as during regular daytime labs. A Red LED flash light will help you to work on your worksheet as the area will be dark. Bring a calculator.

**Directions for the Night Lab:**

- a. Use page 107 for Astronomy 1446.
- b. Read the Unit 4.4 in the lab manual, Double Stars, Open and Globular Clusters, Nebulae, and Galaxies.
- c. Find the list of “Night Lab Objects” which you will be observing during your Night Lab below.
- d. Trace constellations on the left side of the page 107. Label the main star(s). Locate the Night Lab Object within Constellation and label.
- e. **An example** is given below for URSA MAJOR



You must have this work completed before you show up for the night lab. No students will be admitted for observation without this completed this part.

To find shapes of constellations, you can use Stellarium, StarryNight or Supplemental Materials in the back of the lab manual for Star Maps (page 373-379).

**Night Lab Objects:**

Object #	Name or Designation	Nature of the object	Location within constellation
1	Jupiter	?	?
2	M15	?	?
3	M27	?	?

**VII. Astronomy Clinic**

Astronomy clinic is available for those of you that need help to complete a lab task. Lab Assistants will be on duty during the hours posted on the web page and Astronomy Board.

**VIII. Make-up Lab Policy**

- a. Students will be given an opportunity to make up **ONE** lab. Students cannot make up a Quiz, Point Out, or Night Lab.
- b. Make-up lab is worth 10% of lab credit.
- c. No exceptions allowed in the make-up lab policy.

## IX. Contact us

In case of a missed class, notify your lab instructor immediately. Your lab instructor may send you another lab if you give advance notice as any arrangement has to be approved by the lab supervisor. For this reason, it is very important to have your lab instructor's official contact information. **FILL THIS SECTION OUT.**

My Lab Instructor is : \_\_\_\_\_  
Office Phone Number : 817-272-5700  
Office Location : Science Hall Room 133  
Office Hours : \_\_\_\_\_  
Email Address : \_\_\_\_\_

## X. Grading Policy

Graded lab work will not exceed 100 points in each lab. Being present in "Star and Constellation point-out" units will be an automatic 100 as there will be no lab work. Sum of each lab grade that multiplied by the lab weight (see "% of grade" in the schedule) will be the lab average (min 0 – max 100).

**ESTS allows you to check your lab grades by using your UTA ID card.**  
**Grade teller machine is located in the Physics Office, Science Hall 108.**  
**Physics office is open during regular business hours.**

Your lab average will be reported to your course instructor at the end of the semester. Pass-Fail policy and effect of lab average on the overall course grade is up to the course instructor

## XI. Lab Schedule

<b>Dates</b>	<b>Lab Topic</b>	<b>Location</b>	<b>% of grade</b>
Week 1 Aug 24 – 28	No labs—first week of classes.		
Week 2 Aug 31 – Sep 4	Star and Constellation Point Out	Round House Planetarium	2.5
<b>Monday Sept 7</b>	Holiday—No labs on <b>MONDAY</b> .		
Week 3 <b>Sept 8 – 11</b>	Unit 3.2 – Spectral Analysis	Science Hall 127	10
Week 4 Sept 14 – 18	Unit 7.2 – The H-R Diagram	Science Hall 127	10
Week 5 Sept 21 – 25	Star and Constellation Point Out	Round House Planetarium	2.5
Week 6 Sept 28 – Oct 2	Unit 7.1 – Parallax	Science Hall 127	10
Week 7 Oct 5 – 9	Unit 8.3 – The Doppler Effect	Science Hall 127	10
Week 8 Oct 12 – 16	Unit 7.4 – The Hierarchy of Distance Measurements	Science Hall 127	10
	Unit 4.4 – Night Time Observations	Night Lab Area TBA	12.5
Week 9 Oct 19 – 23	Unit 8.4 – Black Holes	Science Hall 127	10
	Unit 4.4 – Night Time Observations	Night Lab Area TBA	12.5
Week 10 Oct 26 – 30	Star and Constellation Quiz Review	Round House Planetarium	2.5
Week 11 Nov 2 – 6	Quiz	Round House Planetarium	20
Week 12 Nov 9 – 13	Make-Up Lab	Science Hall 127	10
Week 13 Nov 16 – Nov 20	<b>BAD WEATHER WEEK</b>	Round House Planetarium	-
Nov 23rd	Make up lab for Week 3 students only. Unit 3.2 – Spectral Analysis	Science Hall 127	10
As the grades are submitted they will become available on the grade computer located in room 108 Science Hall, your UTA ID card is required to access the grades.			