AST 103L

Observational Astronomy

Fall 2015

Unique Number: 46695

Classroom: RLM 13.132

Class Time: 7PM - 9PM Tueseday

Instructor: Alan Sluder

Office: RLM 16.327 471-6858

Office Hours: 1-2PM Tueseday

Email: alsluder@astro.as.utexas.edu

## Purpose

The point of this course is to understand the observations that astronomers make and how they are explained by theory.

# Prerequisites

You should understand some basic astronomy and mathematics (algebra and how to use a scientific calculator).

## Materials

You need a scientific calculator, or something that functions as one.

# Grading

There will be one assignment for each week (14 assignments total) and 100% of your grade is from these. All assignments are worth 100 points, and your final grade will be your total number of points divided by 1300 times 100 (equivalent to dropping the lowest grade). The assignments will be done in class. The grade scale is:

Grading Scale	
Grade	Final Score
А	85-100%
В	70-84%
С	55-69%
D	40-54%
F	0-40%

## **Course Website**

We will use Canvas as the course website. The syllabus and all worksheets will be posted there.

## Academic Honesty

You are expected to fill out your worksheet yourself.

## Attendance

Please notify me in advance if you are going to miss a lab.

## Students with Disabilities

If you need academic accomodations, please contact 471-6259 (voice) or 232-2937 (video) as soon as possible. I will need an official letter outlining authorized accomodations.

# Schedule

Here is a list of the topics covered for each class date:

September 1 - Mathematics

September 8 - Parallax

September 15 - Velocity of a Comet

September 22 - Light

September 29 - Spectroscopy

- October 6 Age of the Universe
- October 13 The Magnitude System
- October 20 Special Relativity
- October 27 General Relativity
- November 3 Orbital Dynamics of Extrasolar Planets
- November 10 Detecting Extrasolar Planets
- November 17 Weather and Climate of Extrasolar Planets
- November 24 The Milankovitch Cycles
- December 1 Why do stars shine?