

Astronomy 103 Spring 2010 Instructor: Dr. Don Summers 915-7032
 Lewis 101 TTh 1:00-1:50 Office Hours: Lewis 221 TThF 4-5
 Text: Cosmic Perspective, Bennett et al., 5th Edition
 Lab Section: 1,2 Wed 7-8:50, 9-10:50 Lewis Hall David Sedorook
 Lab Section: 3,4 Thu 7-8:50, 9-10:50 Kennon Obs Viktor Klymko
<http://www.phy.olemiss.edu/~kakukk/Astro/Lab/Lab.html>

Date	Subjects	Chapter Reading (before class)
21 Jan	Introduction, Cosmic address, light year	1
26 Jan	Stars, Constellations, Long/Lat., Seasons, Precession	2
28 Jan	Lunar phases, eclipses, retrograde motion, parallax	2
2 Feb	Earth Size, Kepler's Laws, Venus' Phases, Jupiter's Moons	3
4 Feb	Time, Calendar, RA, Dec., Star Tracks, Long., Lat.	S1
9 Feb	Energy, Temperature, Matter Phases, atoms, energy levels	4
11 Feb	Motion, orbits, Newton's & Kepler's Laws	4
16 Feb	Gravity, Escape Velocity, Weight and Mass, Tides	4
18 Feb	FIRST HOUR EXAM	
23 Feb	Light waves, spectra, thermal radiation, doppler shift	5
25 Feb	Telescopes: Optical, Radio, and X Ray; Diffraction Limit	6
2 Mar	Solar System Tour and Formation, Radioactive Dating	7,8
4 Mar	Terrestrial Planets, tectonics, volcanoes, magnetism	9
9 Mar	Planet Earth: S-waves, P-waves, Continental Drift	9
11 Mar	Terrestrial Atmospheres, O ₂ , CO ₂ , Ozone	10
23 Mar	Greenhouse effect, Ozone, Escape Velocity	10
25 Mar	SECOND HOUR EXAM	
30 Mar	Solar System Epic Adventure, Voyager Spaceflight	11
1 Apr	Interiors/Atmospheres: Jupiter, Saturn	11
6 Apr	Interiors/Atmospheres: Uranus, Neptune	11
8 Apr	Rings & Moons: Jupiter, Saturn, Uranus, Neptune	11
13 Apr	Rock and Ice: Asteroids and Comets	12
15 Apr	Pluto and Charon, Kuiper Belt, Meteors, Meteor Showers	12
20 Apr	Planets around stars beyond the sun	13
22 Apr	THIRD HOUR EXAM	
27 Apr	Sunspots, Solar Magnetism, Flares, Energy Transport	14
29 Apr	Why does the sun shine? Nuclear fusion, neutrinos	14
4 May	COMPREHENSIVE FINAL EXAM 4:00 pm Tuesday (not earlier)	1-14

Grading Scheme	Lab	25%	You must do at least 75% of the labs to pass.
	Pop Quizzes	15%	It helps to read the chapter before class.
	1st Exam	12%	You will need a scientific pocket calculator.
	2nd Exam	12%	The Texas Instruments TI-30Xa is a good choice.
	3rd Exam	12%	Bring a picture ID to tests.
	FINAL EXAM	24%	Plan on the final exam on 4 May, not earlier.

The 1st lab will be on Wednesday night, 27 January
 Come on the night and time that you have signed up for.
 Labs are a required part of the course.
 Reasonable accommodations to students with disabilities will be provided.
 Bring a scientific calculator lab.
 Adding exponents (11+11=22).

$$10^{11} \times 10^{11} = 10^{22}$$

stars/galaxy x galaxies = stars in the universe

Learning Objectives: To learn how planets, the sun, and other wonders of the solar system work and to find out how astronomers made these discoveries and to do some of the actual experiments.