Astronomy 103 Spring 2011 Instructor: Dr. Don Summers 915-7032
Lewis 101 TTh 1:00-1:50 Office Hours: Lewis 221 WThF 4-5
Text: Cosmic Perspective, Bennett et al., 6th Edition Lab Instructor
Lab Section: 1,2 Wed 7-8:50, 9-10:50 Kennon Obs Preet Sharma
Lab Section: 3,4 Thu 7-8:50, 9-10:50 Kennon Obs Preet Sharma
http://www.phy.olemiss.edu/~kakukk/Astro/Lab/Lab.html

Date	Subjects	Chapter Reading (before class)
25 Jan	Introduction, Cosmic address, light year	1
27 Jan	Stars, Constellations, Long/Lat., Seasons, Precession	2
1 Feb	Lunar phases, eclipses, retrograde motion, parallax	2
3 Feb	Earth Size, Kepler's Laws, Venus' Phases, Jupiter's Moons	3
8 Feb	Time, Calendar, RA, Dec., Star Tracks, Long., Lat.	S1
10 Feb	Energy, Temperature, Matter Phases, atoms, energy levels	4
15 Feb	Motion, orbits, Newton's & Kepler's Laws	4
17 Feb	Gravity, Escape Velocity, Weight and Mass, Tides	4
22 Feb	FIRST HOUR EXAM	
24 Feb	Light waves, spectra, thermal radiation, doppler shift	5
1 Mar	Telescopes: Optical, Radio, and X Ray; Diffraction Limit	6
3 Mar	200 inch telescope at Mount Palomar	6
8 Mar	Solar System Tour and Formation, Radioactive Dating	7,8
10 Mar	Terrestrial Planets, tectonics, volcanoes, magnetism	9
22 Mar	Planet Earth: S-waves, P-waves, Continental Drift	9
24 Mar	Terrestrial Atmospheres, O2, CO2, Ozone	10
29 Mar	Greenhouse effect, Ozone, Escape Velocity	10
31 Mar	SECOND HOUR EXAM	
5 Apr	Solar System Epic Adventure, Voyager Spaceflight	11
7 Apr	Interiors/Atmospheres: Jupiter, Saturn	11
12 Apr	Interiors/Atmospheres: Uranus, Neptune	11
14 Apr	Rings & Moons: Jupiter, Saturn, Uranus, Neptune	11
19 Apr	Rock and Ice: Asteroids and Comets	12
21 Apr	Pluto and Charon, Kuiper Belt, Meteors, Meteor Showers	12
26 Apr	Planets around stars beyond the sun	13
28 Apr	THIRD HOUR EXAM	
3 May	Sunspots, Solar Magnetism, Flares, Energy Transport	14
5 May	Why does the sun shine? Nuclear fusion, neutrinos	14
12 May	COMPREHENSIVE FINAL EXAM 12:00 noon Thursday	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 12 May, not earlier.

The 1st lab is Wednesday night, 2 February. Bring a jacket if it is cold.
Come on the night and time that you have signed up for.
Labs are a required part of the course.
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

Reasonable accommadations for absences and for students with disabilities will be provided.

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.