

Astronomy 103	Fall 2005	Instructor: Dr. Don Summers	915-7032
Lewis Hall 101	TTh 1:00-1:50	Text: The Cosmic Perspective, Bennett.. 3rd Ed	
Office: Lewis Hall Research 221		Lab: Julio Tafoya, Instructor	
Office Hours: TTh 2-3		1,2 Monday 7-9, 9-11	Kennon
		3,4 Tuesday 7-9, 9-11	Observatory

Date	Subjects	Reading (before class)
23 Aug	Introduction, Cosmic address, light year	Chapter 1
25 Aug	Stars, Constellations, Long/Lat., Seasons, Precession	Chapter 2
30 Aug	Lunar phases, eclipses, retrograde motion, parallax	Chapter 2
1 Sep	Earth Size, Kepler's Laws, Venus' Phases, Jupiter's Moons	Chapter 3
6 Sep	Time, Calendar, RA, Dec., Star Tracks, Long., Lat.	Chapter S1
8 Sep	Energy, Temperature, Matter Phases, atoms, energy levels	Chapter 4
13 Sep	Motion, orbits, Newton's & Kepler's Laws	Chapter 5
15 Sep	Gravity, Escape Velocity, Weight and Mass, Tides	Chapter 5
20 Sep	FIRST HOUR EXAM	
22 Sep	Light waves, spectra, thermal radiation, doppler shift	Chapter 6
27 Sep	Telescopes: Optical, Radio, and X Ray; Diffraction Limit	Chapter 7
29 Sep	200 inch Telescope at Mount Palomar	Chapter 7
4 Oct	Solar System Tour and Formation, Radioactive Dating	Chapter 8,9
6 Oct	Terrestrial Planets, tectonics, volcanos, magnetism	Chapter 10
11 Oct	Terrestrial Atmospheres	Chapter 11
13 Oct	Greenhouse effect, Ozone, Escape Velocity	Chapter 11
18 Oct	SECOND HOUR EXAM	
20 Oct	The Voyager Space Flight	Chapter 12
25 Oct	Interiors/Atmospheres: Jupiter, Saturn, Uranus, Neptune	Chapter 12
27 Oct	Rings & Moons: Jupiter, Saturn, Uranus, Neptune	Chapter 12
1 Nov	Rock and Ice: Asteroids and Comets	Chapter 13
3 Nov	Pluto and Charon, Meteors, Meteor Showers	Chapter 13
8 Nov	Planet Earth: S-waves, P-waves, Continental Drift	Chapter 14
10 Nov	Planet Earth: Atmosphere. O <sub>2</sub> , CO <sub>2</sub> , Ozone	Chapter 14
15 Nov	Planet Earth: Conditions for Life	Chapter 14
17 Nov	THIRD HOUR EXAM	
29 Nov	Sunspots, Solar Magnetism, Flares, Energy Transport	Chapter 15
1 Dec	Why does the sun shine? Nuclear fusion, neutrinos	Chapter 15
8 Dec	COMPREHENSIVE FINAL EXAM 12noon Thursay (not earlier)	

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%	
	FINAL EXAM	24%	Plan on the final exam on 8 Dec. not earlier.

The 1st lab will be on Monday night, 29 August  
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.

$$\begin{array}{rcccl} & 10 & 10 & 20 & \\ & 10 & \times 10 & = & 10 \end{array}$$