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Astronomy 103
                Fall 2006
                                 Instructor: Dr. Don Summers
915-7032
Lewis Hall 101 TTh 1:00-1:50
                                 Text: Cosmic Perspective, Bennett.. 4th Ed
Office: Lewis Hall 221
                                 Lab:
Office Hours: TTh 2-3
                                      1,2 Monday 7-9, 9-11
                                      3,4 Tuesday 7-9, 9-11
                                                                  Chapter
Date
        Subjects
                                                                  Reading
                                                                 (before class)
22 Aug Introduction, Cosmic address, light year
                                                                  1
        Stars, Constellations, Long/Lat., Seasons, Precession
                                                                  2
24 Aug
        Lunar phases, eclipses, retrograde motion, parallax
                                                                  2
29 Aug
        Earth Size, Kepler's Laws, Venus' Phases, Jupiter's Moons 3
31 Aug
 5 Sep Time, Calendar, RA, Dec., Star Tracks, Long., Lat.
                                                                  S1
 7 Sep FIRST HOUR EXAM
12 Sep Energy, Temperature, Matter Phases, atoms, energy levels
14 Sep
       Motion, orbits, Newton's & Kepler's Laws
                                                                  4
19 Sep Gravity, Escape Velocity, Weight and Mass, Tides
                                                                  4
21 Sep Light waves, spectra, thermal radiation, doppler shift
                                                                  5
26 Sep Telescopes: Optical, Radio, and X Ray; Diffraction Limit
                                                                 6
                                                                  7,8
28 Sep Solar System Tour and Formation, Radioactive Dating
 3 Oct Terrestrial Planets, tectonics, volcanoes, magnetism
                                                                  9
 5 Oct Planet Earth: S-waves, P-waves, Continental Drift
                                                                  9
10 Oct SECOND HOUR EXAM
12 Oct 200 inch Telescope at Mount Palomar
                                                                  6
17 Oct Terrestrial Atmospheres
                                                                  10
19 Oct Greenhouse effect, Ozone, Escape Velocity
                                                                  10
24 Oct Planet Earth: Atmosphere. 02, CO2, Ozone
                                                                  10
26 Oct The Voyager Space Flight
                                                                  11
31 Oct Interiors/Atmospheres: Jupiter, Saturn, Uranus, Neptune
                                                                  11
 2 Nov Rings & Moons: Jupiter, Saturn, Uranus, Neptune
                                                                  11
 7 Nov Planets around stars beyond the sun
                                                                  13
 9 Nov THIRD HOUR EXAM
14 Nov Rock and Ice: Asteroids and Comets
                                                                  12
16 Nov Pluto and Charon, Kuiper Belt, Meteors, Meteor Showers
                                                                  12
                                                                  14
28 Nov Sunspots, Solar Magnetism, Flares, Energy Transport
30 Nov Why does the sun shine? Nuclear fusion, neutrinos
                                                                  14
 5 Dec COMPREHENSIVE FINAL EXAM 4:00 pm Tuesday (not earlier)
                                                                  1-14
Gradina
           Lab
                        25% You must do at least 75% of the labs to pass.
           Pop Quizzes
Scheme
                       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 5 Dec, not earlier.
The 1st lab will be on Monday night, 28 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.
                                        11
                                                          22
Adding exponents (11+11=22).
                                      10
                                          Х
                                                 10
                             stars/galaxy x galaxies = stars in the universe
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