

82-114 Schedule - All Dates and Activities Subject to Change

	Date	Chapter	Reading	Lecture Topics	Activities
Week 1	29-Jan	Intro		Discussions	Survey (home), Nature of Science (class)
	31-Jan	Intro	Prolog, pp. 1-13	Slide Show, Metric System, Sci. Notation	
	2-Feb	Ch2: Orbits/Gravity	Ch 2, pp. 39-47	Kepler/Orbits, Begin Newton	Kepler's Law (class), Mass of Moon (home)
Week 2	5-Feb	Ch2: Orbits/Gravity		Newton, Angular Momentum	
	7-Feb	Ch 4: Radiation/Spectra	Ch 4, pp. 81-101	Nature of Light, EM Spectrum	Spectroscopic Activity (home)
	9-Feb	Ch 4: Radiation/Spectra		Radiation Laws, Brightness, Types of Spectra	
Week 3	12-Feb	Ch 4: Radiation/Spectra		Structure of Atom, Spectral Lines, Doppler Shift	Photoelectric Effect (computer)
	14-Feb	Ch 5: Instruments	Ch 5, pp. 105-125	Optical Telescopes, Detectors	
	16-Feb	Ch 5: Instruments		Radio, High Energy, Space Based	
Week 4	19-Feb	Test #1, Ch 2, 4, 5			
	21-Feb	Ch 6: The Sun as a Star	Ch 6, pp. 130-146	The Solar Atmosphere, Solar Activity	Solar Rotation Activity (class)
	23-Feb	Ch 6: The Sun as a Star		The Sunspot Cycle, Solar Activity	The Rotation of the Sun (computer)
Week 5	26-Feb	Ch 7: The Sun - Interior	Ch 7, pp. 152-166	Possible Energy Sources, Atomic Structure	
	28-Feb	Ch 7: The Sun - Interior		The Proton-Proton Chain, Interior Theory	Creating a dichotomous chart (home)
	2-Mar	Ch 7: The Sun - Interior		Tests of Interior Theory	Relative Brightness and Judging Distance (home)
Week 6	5-Mar	Ch 8: Starlight	Ch 8, pp. 171-182	Brightness, Color, Spectral Classification	Spectral Classification (class)
	7-Mar	Ch 8: Starlight		Spectral Classification, Other Properties	Spectral Classification (computer)
	9-Mar	Test #2, Ch 6, 7, 8			
Week 7	12-Mar	Ch 9: The Stars	Ch 9, pp. 187-204	Nearby/Distant Stars, Masses	
	14-Mar	Ch 9: The Stars		The Mass-Lumin. Relation, Diameters	
	16-Mar	Ch 9: The Stars		The HR Diagram	Color-Magnitude Plot (class/home)
	19-Mar	Spring Break			
	21-Mar	Spring Break			
	23-Mar	Spring Break			
Week 8	26-Mar	Ch 10: Distances	Ch 10, pp. 209-222	Parallax, Variable stars	Parallax (class)
	28-Mar	Ch 10: Distances		Standard Bulbs, Spectroscopic Parallax	Color-Magnitude Plot of the Pleiades (computer)
	30-Mar	Ch 11: ISM	Ch 11, pp. 227-242	Observations, General Properties	
Week 9	2-Apr	Ch 12: Star Form	Ch 12, pp. 247-265	ISM/Young Star Relation, Orion, Birth	
	4-Apr	Test #3, Ch 9, 10, 11, 12			
	6-Apr	Ch 13: Evolution 1	Ch 13, pp. 270-286	Main Seq. To Red Giant, Star Clusters	
Week 10	9-Apr	Ch 13: Evolution 1		Cluster CMDs, Further Low Mass Evol.	Cluster CMD Lab (class/home)
	11-Apr	Ch 13: Evolution 1		High Mass Evol.	
	13-Apr	Ch 14: Deaths of Stars	Ch 14, pp. 281-308	White Dwarfs, Massive Star Deaths	SN1987A (computer)
Week 11	16-Apr	Ch 14: Deaths of Stars		Supernovae, Pulsars	
	18-Apr	Ch 15: Black Holes	Ch 15, pp. 313-328	General Relativity	
	20-Apr	Ch 15: Black Holes		Black Holes, Evidence of Black Holes	
Week 12	23-Apr	Test #4, Ch 13, 14, 15			
	25-Apr	Ch 16: The Milky Way	Ch 16, pp. 341-358	Shape of MW, Overview, Spiral Arms	
	27-Apr	Ch 16: The Milky Way		Stellar Populations, Mass, Nucleus, Formation	
Week 13	30-Apr	Ch 17: Galaxies	Ch 17, pp. 363-403	Distances, Types	Galaxy Classification (class)
	2-May	Ch 17: Galaxies		Properties, the Distance Scale	Galaxy Classification (computer)
	4-May	Ch 17: Galaxies	Ch 19, 406-412	Hubble's Law, Large Scale Structure	Hubble's Law
Week 14	7-May	Ch 20: The Big Bang	Ch 20, pp. 431-449	Age of Universe, Models	
	9-May	Ch 20: The Big Bang		The Beginning, Inflation	
	11-May	Test #5, Ch 16, 17, 20			