

ASTRONOMY 2 – FALL 2009
GENERAL SCHEDULE OF ACTIVITIES

WEEK #	WEEK BEGINNING	LECTURE TOPICS AND ACTIVITIES	TEXTBOOK READING*	HOMEWORK**	3RD HR EXERCISE	CPS QUIZ
1	8/31	Enrollment Check, Introduction and Objectives Overview of Astronomy and the Universe Distance and Time Scales, Our Place in the Cosmos	Chapter 1	Assignment 0 No Due Date	PT	—
2	9/7 Monday Holiday	Planetarium Sky Demonstrations – Terminology and Motions Seasons, Precession, Moon Phases, Eclipses Ancient Mysteries – Retrograde Motion and Stellar Parallax	Chapter 2	Assignment 1 Due 09/11	A***	—
3	9/14	Early History and the Geocentric Models, Ptolemy Origins of Modern Astronomy – Copernicus, Brahe, and Kepler Galileo – Nature of Science, Observations, and Inertia and Motion	Chapter 3	Assignment 2 Due 09/18	B	AA
4	9/21	Newton’s Three Laws of Motion, Force and Acceleration Conservation Laws, Momentum and Energy Law of Universal Gravitation, Orbits and Tides	Chapter 4	Assignment 3 Due 09/25	C	BB
5	9/28	Properties of Light, Waves & Photons, Electromagnetic Spectrum Properties of Matter, Atomic Structure, Phase Changes Atoms and Spectra, The Stefan-Boltzmann and Wien Laws Doppler Shift, Radial Velocity and Rotation	Chapter 5	Assignment 4 Due 10/2	D	CC
6	10/5	Telescopes – Refractors & Reflectors, Interferometers Light Gathering, Angular Resolution, Magnification Observations at Nonvisible Wavelengths, Instrumentation Atmospheric Effects – Light Pollution, Twinkling, Windows	Chapter 6	Assignment 5 Due 10/9	E	DD
7	10/12	Comparative Planetology, Spacecraft Investigations Structure and Dynamics of the Solar System Clues to the Formation of the Solar System	Chapter 7	Assignment 6 Due 10/16	F	EE
8	10/19	Physical Processes and the Creation of the Solar System Formation of the Planets and the Aftermath The Age of the Solar System Planetary Geology, Connecting Interiors and Surfaces Take-Home Midterm Available (Part 1)	Chapter 8 Chapter 9	Assignment 7 Due 10/23	G	FF

- * Supplementary Chapter S1, although not required reading, may be helpful in understanding Week 2 lectures and third-hour activities.
- ** Assignments are found on the “Mastering Astronomy” web site for “The Cosmic Perspective: The Solar System”.
- *** Since Monday is a holiday this week, Monday Third-Hour students need to attend a Third-Hour class at a later time during the week.

ASTRONOMY 2 - FALL 2009
GENERAL SCHEDULE OF ACTIVITIES
 (continued)

WEEK #	WEEK BEGINNING	LECTURE TOPICS AND ACTIVITIES	TEXTBOOK READING[†]	HOMEWORK^{††}	3RD HR EXERCISE	CPS QUIZ
9	10/26	The Geologies of the Moon and Mercury, The Geology of Mars and the Geology of Venus The Unique Geology of Earth In-Class Midterm (Part 2) in Third Hour (Bring Scantron 882) Extra Credit (first 10 pts) – Due 10/30 by 12:00 Noon	Chapter 9	Take-Home Midterm (Part 1-50 pts) Due 10/30	In-Class Midterm (Part 2 – 50 pts)	GG
10	11/2	Atmospheric Basics, Weather and Climate The Atmospheres of the Moon and Mercury Atmospheric Histories of Mars & Venus, The Earth's Atmosphere	Chapter 10	Assignment 8 Due 11/6	H	HH
11	11/9 Friday Holiday	Overview of the Outer Planets – Jupiter, Saturn, Uranus, Neptune Jovian Weather and Magnetospheres The Jovian Moons and Ring Systems	Chapter 11	Assignment 9 Due 11/13	I	II
12	11/16	Solar System Debris – Asteroids, Meteoroids, Comets Pluto, Dwarf Planets, and the Kuiper Belt Cosmic Collisions and Consequences	Chapter 12	Assignment 10 Due 11/20	J	JJ
13	11/23 Thursday, Friday Holiday	Other Planetary Systems – Detection and Nature Formation of Other Solar Systems Searching for Earth-Like Planets	Chapter 13	Assignment 11 Due 11/27	K ^{†††}	KK
14	11/30	Physical Characteristics and Processes of the Sun Sunspots, Solar Activity Cycle, and the Sun-Earth Connection	Chapter 14	Assignment 12 Due 12/4	L	LL
15	12/7	Life on Earth, Life in the Solar System, Life Around Other Stars The Search for Extraterrestrial Intelligence Interstellar Travel and The Implications for Civilization	Chapter 24	Assignment 13 Due 12/11	M	MM
16	12/14	Final Exam (110 pts, 3 parts – see <i>Final Exam Outline</i>) and Skyl Quiz (30 pts) Balance of Extra Credit Due 12/18 by 12:00 Noon	—	—	Final	—

[†] Supplementary Chapter S1, although not required reading, may be helpful in understanding activities in Third-Hour.

^{††} Assignments are found on the “Mastering Astronomy” web site for “The Cosmic Perspective: The Solar System”

^{†††} Since Thursday classes are cancelled this week, the instructor will explain how to complete Third-Hour K.