

Revised 8/27/13		The Cosmic Perspective: Solar System	Astronomy 1122 TTh PM schedule - Fall 2013				Mastering Astronomy website course ID: CODI122STOUGHTONFALL2013TTR
Date	Time	Lecture Topics	Text (7/e)	Homework	Due date	Lab activity	Content
8/27	1:00 - 2:15	Welcome & Introduction					Syllabus, schedule, succeeding; MA website
8/27	2:30 - 3:45	Lec 1 - Our Place in Universe/ Intro to SS	1.1-1.4	MA assign 1	9/2	Math review	Scale of cosmos, Solar system overview
8/29	1:00 - 2:15	Lec 2 - Observing the Sky	2.1, 2.2; S1.2	MA assign 2	9/2		Constellations, seasons, celestial sphere
8/29	2:30 - 3:45	Lab 1 - Stellarium & Star Chart				Earth, Moon, Sun	
9/3	1:00 - 2:15	Lec 3 - Cycles of Moon & Planets	2.3-2.4; S1.1	MA assign 3	9/9		Rotation, revolution, lunar phases, eclipses
9/3	2:30 - 3:45	Lab 2 - Stellarium: Coordinates & Diurnal				Earth, Moon, Sun	
9/5	1:00 - 2:15	Lec 4 - The Science of Astronomy	3.1, 3.2, 3.4	MA assign 4	9/9		Greek astronomy
9/5	2:30 - 3:45	Lab 3 - Stellarium: Season & Moon Phases				Evening Sky	
9/10	1:00 - 2:15	Lec 5 - The Copernican Revolution	3.3	MA assign 5	9/16		Copernicus, Brahe, Kepler, Galileo
9/10	2:30 - 3:45	Lab 4 - Stellarium: Planets & Venus Phases				Solar system	
9/12	1:00 - 2:15	Lec 6 - Motion	4.1-4.2	MA assign 6	9/16		Fundamental concepts of motion
9/12	2:30 - 3:45	Lab 5 - Motion (MA)				Motion	
9/17	1:00 - 2:15	Lec 7 - Energy and Gravity	4.3-4.5	MA assign 7	9/23		Concepts of energy, gravity
9/17	2:30 - 3:45	Lab 6 - Energy (MA)				Gravity	
9/19	1:00 - 2:15	(Review for exam)					
9/19	2:30 - 3:45	Exam 1: Observing & History					
9/24	1:00 - 2:15	Lec 8 - Our Planetary System	7.1-7.3	MA assign 8	9/30		Solar system overview
9/24	2:30 - 3:45	Lab 7 - LSW 2				Scale of Solar System	
9/26	1:00 - 2:15	Lec 9 - Formation of SS	8.1-8.5	MA assign 9	9/30		Nebular hypothesis
9/26	2:30 - 3:45	Lab 8 - Mastering Astronomy				Formation of SS	
10/1	1:00 - 2:15	Lec 10 - Planetary Interiors & Surfaces	9.1-9.2	MA assign 10	10/7		Cratering, volcanism, erosion, tectonics
10/1	2:30 - 3:45	Lab 9 - Mastering Astronomy				Planetary Surfaces	
10/3	1:00 - 2:15	Lec 11 - Planetary Geology - M, M, V, M	9.3-9.5	MA assign 11	10/7		Geology, history of M, M, V, M
10/3	2:30 - 3:45	Lab 10 - video				"Roving Mars"	
10/8	1:00 - 2:15	Lec 12 - Atmospheres I	10.1-10.2	MA assign 12	10/14		Terrestrial planet atmospheres
10/8	2:30 - 3:45	Lab 11 - Mastering Astronomy				Temperature of Planets	
10/10	1:00 - 2:15	Lec 13 - Atmospheres II	10.3-10.5	MA assign 13	10/14		Atmospheres of M, M, V, M
10/10	2:30 - 3:45	Lab 12				IAE6 - Temp of Earth	
10/12	<i>8:00 - 10:00 PM Observing night</i>						
10/15	1:00 - 2:15	Lec 14,15 - Earth geology & atmosphere	9.6, 10.6	MA assign 14 & 15	10/21		CO2 cycle, greenhouse effect
10/15	2:30 - 3:45	Lab 13				Plate tectonics	
10/17	1:00 - 2:15	(Review for exam)					
10/17	2:30 - 3:45	Exam 2 - Inner Solar System					
10/22	<i>1:00 - 3:45 No Class</i>						
10/24	1:00 - 2:15	Lec 16 - Jovian I	11.1	MA assign 16	11/4		Jovian interiors, weather
10/24	2:30 - 3:45	Lab 14 - LSW 19				Jovian planets	
10/29	1:00 - 2:15	Lec 17 - Jovian II	11.3	MA assign 16	11/4		Jovian ring systems
10/29	2:30 - 3:45	Lab 15 - worksheet				Rotation of Saturn's Rings	
10/31	1:00 - 2:15	Lec 18 - Moons I	11.2	MA assign 17	11/11		Moons of Jupiter
10/31	2:30 - 3:45	Lab 16 - Project CLEA				Mass of Jupiter	
11/5	1:00 - 2:15	Lec 19 - Moons II	11.2	MA assign 17	11/11		Moons of Saturn, Uranus, Neptune
11/5	2:30 - 3:45	Lab 17 - video				Cassini to Saturn	
11/7	1:00 - 2:15	Lec 20 - Asteroids	12.1	MA assign 18	11/11		Asteroid types
11/7	2:30 - 3:45	Lab 18 - LSW 3				Asteroids	
11/12	1:00 - 2:15	Lec 21 - Comets	12.2	MA assign 19	11/18		Comets
11/12	2:30 - 3:45	Lab 19 - LSW 4				Comets	
11/14	1:00 - 2:15	Lec 22 - Pluto & KBOs	12.3, 12.4	MA assign 20	11/18		Characteristics of Pluto and Kuiper Belt
11/14	2:30 - 3:45	Lab 20 - essay				Pluto & Kuiper Belt	
11/16	<i>6:00 - 8:00 PM Planetarium visit</i>						
11/19	1:00 - 2:15	(Review for exam)					
11/19	2:30 - 3:45	Exam 3 - Outer Solar System					
11/21	1:00 - 2:15	Lec 23 - Light I	5.1-5.3	MA assign 21	12/2		Properties of light
11/21	2:30 - 3:45	Lab 21 - LSW 22				Light	
11/26	1:00 - 2:15	Lec 24 - Light II	5.4-5.5	MA assign 21	12/2		Spectra
11/26	2:30 - 3:45	Lab 22 - LSW 24				Spectra	
11/28	<i>1:00 - 3:45 No class - Thanksgiving break</i>						
12/3	1:00 - 2:15	Lec 25 - Telescopes	6.1-6.4	MA assign 22	12/9		Telescope types & uses
12/3	2:30 - 3:45	Lab 23 - LSW 8				Telescopes	
12/5	1:00 - 2:15	Lec 26 - Sun	14.1-14.3	MA assign 23	12/9		Solar energy and phenomena
12/5	2:30 - 3:45	Lab 24 - LSW 26				The Sun	
12/10	1:00 - 2:15	Lec 27 - Extrasolar Planets	13.1-13.2	MA assign 24	12/16		ESP detection, characterization
12/10	2:30 - 3:45	Lab 25 - Extrasolar planets				Extrasolar planets	
12/12	1:00 - 2:15	Lec 28 - Life	24.2, 24.3	MA assign 25	12/16		Conditions for life
12/12	2:30 - 3:45	(Review for exam)				(no lab)	
12/17	1:00 - 3:45	No class - Final exam week					
12/19	1:00 - 2:45	Exam 4 - Light, Sun, ESP					