

Course Schedule

Note: The lecture material may vary, but the assignment dates are fixed. Check back to this page for updates on the topics and readings.

All assignments (homework and reports) are due at the *beginning of class* on **Friday**.

Date	Topic	Reading	Assignment Due
Mon Aug 26	Introduction		
Wed Aug 28	Cosmic ingredients: basic physics		
Fri Aug 30	Cosmic ingredients: stellar structure and evolution	SG 1.1	
Mon Sept 2	<i>No Lecture: Labor Day</i>		
Wed Sept 4	Cosmic ingredients: stellar structure and evolution	SG 1.1	
Fri Sept 6	Milky Way Galaxy: Overview and History	SG 1.2, 2.1	PS 1
Mon Sep 9	Gravitation	SG 3.1	
Wed Sep 11	Milky Way mapping: gas	SG 1.2, 2.2	
Fri Sep 13	Milky Way mapping: stars	SG 2.2	PS 2
Mon Sep 16	Milky Way: rotation	SG 2.3	
Wed Sep 18	Gravitational lensing	SG 2.3.4	
Fri Sep 20	Microlensing, dark matter, and galactic structure	SG 2.3.4	PS 3
Mon Sep 23	A theory of spiral structure	SG 3.3, 5.4-5.4.2	
Wed Sep 25	The Galactic nucleus	SG 2.3.3	
Fri Sep 27	The black hole at the center of the Galaxy	SG 2.3.3	PS 4
Mon Sep 30	Globular Clusters	SG 2.2.3, 3.2.3	
Wed Oct 2	Galaxies: Introduction	SG 1.3	
Fri Oct 4	Galaxies: dynamics and dark matter	SG 5.1.2, 5.3	PS 5
Mon Oct 7	Galaxy photometry	SG 1.3.1	
Wed Oct 9	Elliptical galaxies	SG 6.1, 6.4	

Fri Oct 11	Interacting galaxies	SG 7.1, 5.6.2	PS 6
Mon Oct 14	The Local Group	SG 4.1, 4.2, 4.4, 4.5	
Wed Oct 16	Clusters and superclusters	SG 6.5, 1.4	
Fri Oct 18	Hour Exam		
Mon Oct 21	<i>No Lecture</i>		
Wed Oct 23	Introduction to Cosmology	SG 1.4, 7.1, 7.2	
Thurs Oct 24	Planetarium Show		
Fri Oct 25	Cosmodynamics		PS 7
Mon Oct 28	The Friedmann equations		
Wed Oct 30	Friedmann solutions		
Fri Nov 1	Density and Destiny		PS 8
Mon Nov 4	Dark energy: evidence and implications		
Wed Nov 6	The Early Universe		
Fri Nov 8	Cosmic microwave background: theory		PS 9
Mon Nov 11	Cosmic microwave background: observations		
Wed Nov 13	Big bang nucleosynthesis		
Fri Nov 15	Particle physics and the early universe		PS 10
Mon Nov 18	Big bang nucleosynthesis: theory		
Wed Nov 20	Where is the antimatter?		
Fri Nov 22	Big bang nucleosynthesis: observations		PS 11
Nov 25--29	<i>No Lecture: Thanksgiving</i>		
Mon Dec 2	Big bang nucleosynthesis and the early universe		
Wed Dec 4	Dark matter and particle cosmology		
Fri Dec 6	Inflation		PS 12
Mon Dec 9	Cosmic structure formation		
Wed Dec 11	Cosmic structure formation		
Fri Dec 20	Final Exam 8:00-11:00 am		

[Brian D. Fields](#)

Last modified: Tue Oct 22 18:03:45 CDT 2013