AST 235. Astronomy: Stars, Galaxies, and Cosmology – Spring 2019

Tentative Lecture Schedule, week by week. Tuesdays shaded in gray. Homework is assigned (available on MasteringAstronomy at 11:59am) on the last day a chapter/topic is covered in lecture. Homework/labs are due at 11:59pm the day specified above, generally 1 week after assigned. No homework will be due on days of midterms, but check the lecture schedule: doing homework early may be good exam preparation! Average completion times for last semester's students in parentheses after the assignment.

Date	Chapter	Topic	Homework	
			Assigned	Due
Jan 15		Introduction to the Course	Tutorial (23mins)	
Jan 17	1.1-1.4	Lec. 1. Modern View of the Universe	Ch 1 (46mins)	
Jan 22	2.1-2.4	Lec. 2. What We See in the Sky; math review		Tutorial
Jan 24	2.1-2.4	Lec. 3. Half class in the UNCG Planetarium: Earth's Orbit and its Effects	Ch 2 (50mins) Lab 1 (28mins)	Ch 1
Jan 29	3.1-3.3	Lec. 4. History of Astronomy, The Scientific Method		
Jan 31	3.4, Appendix D	Lec. 5. The Scientific Method	Ch 3 (22min)	Lab 1 Ch 2
Feb 5	4.1-4.2	Lec. 5. Basic Laws of Physics, I.	Ch 4 (52mins)	
Feb 7	4.3-4.4	Lec. 6. Basic Laws of Physics, II.		Ch 3
Feb 12	5.1-5.2	Lec. 7. What is light?	Lab 2 (14mins) Ch 5 (35mins)	Ch 4
Feb 14	5.3-5.4	Lec. 8. What's the matter? Real talk about atoms	Ch 6 (31mins)	
Feb 19	6.1-6.3	Lec. 9. Astronomical telescopes and types of observation	Lab 3 (14mins)	Lab 2 Ch 5
Feb 21	**1-6**	**Mid-Term Exam 1**		
Feb 26	14.1-14.2	Lec. 10. The Sun		Ch 6

				Lab 3
Feb 28	14.3, 15.1-15.2	Lec. 11. Properties of stars	Ch 14 (14mins)	
Mar 5, 7	*Spring Break*			
Mar 12	15.1-15.2	Lec. 12. Properties of Stars	Lab 4 (10mins)	
Mar 14	15.3, 16.1	Lec. 13. Star formation/birth of stars	Ch 15 (33min)	Ch 14
Mar 19	16	Lec. 14. Stellar Life Cycles: low mass stars	Ch 16 (12mins)	Lab 4
Mar 21	17.1-17.2	Lec. 15. Stellar Life Cycles: high mass stars		Ch 15
Mar 26	17.2-17.3	Lec. 16. Stellar evolution after the main sequence	Ch 17 (20mins)	Ch 16
Mar 28	18	Review for midterm 2: 14-18	Ch 18 (21mins)	
Apr 2	14-18	Mid-Term Exam 2		
Apr 4	19	Lec. 17. The Milky Way Galaxy	Ch 19 (23mins) Lab 5 (11mins)	Ch 17 Ch 18
Apr 9	20	Lec. 18. The Variety of Galaxies and Hubble's law	Ch 20 (16mins)	
Apr 11	21	Lec. 19. Galaxy evolution	Lab 6 (8mins)	Ch 19 Lab 5
Apr 16	22	Lec. 20. The Birth of the Universe	Ch 22-23 (27mins)	Ch 20
Apr 18	23	Lec. 21. Dark Matter and Dark Energy		Lab 6
Apr 23	24	Lec. 22. Life in the Universe		Ch 22-23
Apr 25	13 *(in e-textbook)*	Lec. 23. Exoplanets	Ch 13 (19mins)	
Apr 30	1-6, 13-24	Review for final exam: mostly covering Ch. 13, 19-24; some 1-6 content will appear		Ch 13
May 9	1-6, 13-24	Final Exam (12:00 - 3:00 p.m.)		