

## Schedule – Astronomy 2020: Stars, Galaxies and the Universe

Prof. Tom Megeath		MH 2002	Spring Semester 2009
Date	Chapter	Topic (schedule approximate; subject to change)	
13 Jan	1	Intro to the class, The size of the Universe	
15 Jan	1	The history of the universe	
20 Jan	2	Constellations and the distances to the stars HW #1 given	
22 Jan	4	Gravity and the Laws of Motion	
27 Jan	5	Light, Spectra and Blackbody HW #2 given, HW #1 back	
29 Jan	6	Observing the Universe: Telescopes	
03 Feb	14	The Sun and the Stars HW #3 given, HW #2 back	
05 Feb	15	The HR diagram and stellar clusters	
10 Feb	16	Stellar Evolution HW #3 back	
12 Feb		Review of homework solutions and review for test.	
17 Feb		<b>MIDTERM EXAM #1</b>	
19 Feb	17	Star Formation	
24 Feb	18	White Dwarfs and Neutron Stars	
26 Feb	18, 19	Our Galaxy and Black Holes	
03 Mar		Planetarium show – meet at Ritter Planetarium	
05 Mar	17,19	The interstellar medium and cosmic recycling HW#4 given	
10 Mar		Spring Break	
12 Mar		Spring Break	
17 Mar	19	Other Galaxies and the expansion of galaxies	
19 Mar	20	Galaxy evolution HW #4 back, HW #5 out	
24 Mar	21	The Origin of Structure in the Universe planetarium report back	
26 Mar		Review of homework solutions and review for test HW #5 back	
31 Mar		<b>MIDTERM EXAM #2</b>	
02 Apr	S2	Special Relativity	
07 Apr	S3	General Relativity HW #6 given	
09 Apr	22	Dark Energy and Cosmology	
14 Apr	S4	Quantum mechanics and fundamental particles HW #6 back, HW #7 given	
16 Apr	23	The Beginning of the Universe	
21 Apr	12/17/22	The future of the Earth, Sun and the Universe HW #8 given, HW #7 back	
23 Apr	13/24	Other Planets and Interstellar Travel	
28 Apr	24	Origin of Life and The Search for Extraterrestrial Life HW#8 back	
30 Apr		Review of homework and review for test	
<b>07 May</b>	<b>All</b>	<b>FINAL EXAM 10:15-12:15</b>	

Instructor: Tom Megeath 204 Ritter Observatory 419-530-7812

Webpage: <http://astro1.physics.utoledo.edu/~megeath/A2020/A2020.html>

[megeath@physics.utoledo.edu](mailto:megeath@physics.utoledo.edu) (please put A2020 in subject)

**Office hours:**

Monday 10:30-1, Wednesday 1-3, Friday 10:30-1 (subject to change - check my web page)

**Grading:**

There will be two midterms, eight homework sets and a final exam. In addition, attending the planetarium show and writing a one page report on the show will count as two grades total. The final grade breakdown is 30% final, 40% midterm, and 30% homework.

**Lectures:**

PDF files of the lecture slides will be available on the class website. I will try to get the slides on the site within one day after the lecture, but it may occasionally take as long as one week.

**Questions:**

Please ask questions! If you do not feel comfortable asking a question in class, please send me an email.

**Math:**

This course does involve some basic mathematics. You will be expected to know high school level algebra and geometry, scientific notation, and the metric system.

**Academic Dishonesty:**

The university of Toledo has a policy towards academic dishonesty on their website. Every student has a responsibility to know this policy. This policy will be strictly enforced in this class.

[http://www.dl.utoledo.edu/current\\_students/academic\\_dishonesty.htm](http://www.dl.utoledo.edu/current_students/academic_dishonesty.htm)

**Classroom Distractions:**

Please be courteous to your fellow students and try to minimize distractions. Disable all cell phone ringers, beepers, alarms, etc before the lecture. I will ask anyone to leave for the remainder of a lecture if they take a call in class.