

Syllabus - PHYS6820/7820
Version 2/21/2011: Subject to change

Prof. Tom Megeath

MH 4012

Spring 2010

Date	Chapter	Topic (schedule approximate; subject to change)
11 Jan 2011	Hartmann 1	1. Class syllabus, introduction to star formation
13 Jan 2011	Hartmann 2	2. Molecular Clouds: Galactic Context and Observational Methods
18 Jan 2011	Hartmann 2	3. Molecular Clouds: Properties and Evolution, HW 1 released
20 Jan 2011	Hartmann 2, 3	4. Molecular Clouds: Turbulence and Magnetic Fields
25 Jan 2011	Hartmann 3	5. Molecular Cores: Observations
27 Jan 2011	Hartmann 3	6. Molecular Cores: Bonnor-Ebert spheres, HW 1 due, HW 2 released
01 Feb 2011	Hartmann 4	7. Protostars: Collapse of Cores and Finals
03 Feb 2011	Hartmann 4	8. Protostars: Collapse of Rotating Cores
10 Feb 2011	Hartmann 5	9. SEDs: Protostars and Disks, HW 2 due
15 Feb 2011	Hartmann 7,8	10. SEDs: Disks
17 Feb 2011	Hartmann 8,12	11. Disk Evolution
22 Feb 2011	Hartmann 6,11	10. Pre-main sequence tracks and the IMF CHW 3 released
23 Feb 2011	Hartmann 6	11. Clusters and Associations
24 Feb 2011	Hartmann 7	12. Accretion Disks
01 Mar 2011	Hartmann 10	13. Magnetospheric Accretion: HW 3 due, Midterm handed out
03 Mar 2011	Hartmann 10	14. Outflows
08 Mar 2011		Spring Break
10 Mar 2011		Spring Break
15 Mar 2011	Hartmann 11, 4	15. Stellar Birthline & Massive Star Formation: Midterm Due, HW 5 released
17 Mar 2011	Hartmann 4	16. Massive star formation
22 Mar 2011		17. Overview of post-main sequence evolution
24 Mar 2011		18. Low mass star evolution: HW 5 due, HW 6 released
29 Mar 2011		19. Low star evolution
31 Mar 2011		20. Low star evolution
05 Apr 2011		21. Massive star evolution: HW 6 due, HW 7 released
07 Apr 2011		22. Massive star evolution
12 Apr 2011		23. Massive star evolution:
14 Apr 2011		24. Nucleosynthesis: HW 7 due, HW 8 released
19 Apr 2011		25. Nucleosynthesis
21 Apr 2011		26. White dwarfs
26 Apr 2011		27. White dwarf supernovae: HW 8 due
28 Apr 2011		28. Neutron stars
5 May 2011	All	FINAL EXAM due: TAC Meeting

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Books:

The main books are:

Accretion Processes in Star Formation 2nd edition by Hartmann
Stellar Interiors by Hansen & Kawaler (& Trimble)

Other books that could be useful (but not necessary):

Clayton: Principles of Stellar Evolution and Nucleosynthesis

Lectures:

PDF files of the lecture slides will be available on the class website:
<http://astro1.physics.utoledo.edu/~megeath/ph6820/ph6820.html>

These will become available after class.

Office hours:

Please set up an appointment. I will try to be in at
Monday 12:30-2 PM, Wednesday 12:30-2 PM

These times may have to be revised.

Grading:

60% 8 homeworks

30% 2 exams

10% Observing Proposal and TAC participation