

Course Schedule/Syllabus

Astronomy 205a: Introduction to Astrophysics I
Haverford College - Astronomy Department

Fall 2003
F. Crawford

Lecture	Day	Date	Lecture Topics	Kutner Reading
1	Tue	Sep 2	Introduction; Telescopes and Detectors	4.1 - 4.9
2	Thu	Sep 4	Stellar Magnitudes; Blackbody Radiation	2.1 - 2.7
3	Tue	Sep 9	Bohr Atom; Spectral Lines	3.1 - 3.5
4	Thu	Sep 11	Spectral Classification of Stars; HR Diagram	3.1 - 3.5
5	Tue	Sep 16	Kepler's Laws; Binary Systems	5.1 - 5.6
6	Thu	Sep 18	Binary Systems	5.1 - 5.6
7	Tue	Sep 23	Properties of the Sun; Radiative Transport	6.1 - 6.6
8	Thu	Sep 25	Limb Darkening; Regions of the Sun	6.1 - 6.6
9	Tue	Sep 30	Starbirth; Protostars; Jeans Mass and Length	13.3, 15.1 - 15.7
10	Thu	Oct 2	Virial Theorem; Evolution of Protostars	13.3, 15.1 - 15.7
11	Tue	Oct 7	Stellar Structure; Hydrostatic Equilibrium	9.1 - 9.6
12	Thu	Oct 9	Stellar Energy Generation; Stellar Lifetimes	9.1 - 9.6
—	Tue	Oct 14	<i>Fall Break - no class</i>	<i>none</i>
—	Thu	Oct 16	<i>Fall Break - no class</i>	<i>none</i>
13	Tue	Oct 21	Stellar Stability; Eddington Luminosity	9.1 - 9.6
14	Thu	Oct 23	Evolution of Sunlike Stars	10.1 - 10.3
15	Tue	Oct 28	Evolution of Massive Stars	10.1 - 10.3
E	Thu	Oct 30	Midterm Exam - in class	<i>none</i>
16	Tue	Nov 4	Supernovae; Stellar Death	10.3, 11.1
17	Thu	Nov 6	White Dwarfs; Degenerate Matter	10.4, 11.2
18	Tue	Nov 11	Neutron Stars; Black Holes	8.1 - 8.4, 11.5
19	Thu	Nov 13	Pulsars and Supernova Remnants	11.1, 11.3, 11.4
20	Tue	Nov 18	Structure of the Galaxy and ISM	14.1 - 14.3
21	Thu	Nov 20	Dust and Reddening/Extinction; HII Regions	14.1 - 14.3, 15.6
22	Tue	Nov 25	21-cm Hydrogen Line	14.4
—	Thu	Nov 27	<i>Thanksgiving - no class</i>	<i>none</i>
23	Tue	Dec 2	Interstellar Molecules and Masers	14.5, 15.6
24	Thu	Dec 4	Milky Way Dynamics	16.1 - 16.6
25	Tue	Dec 9	Galactic Rotation; Oort Constants	16.1 - 16.6
26	Thu	Dec 11	Spiral Arms; Review	16.1 - 16.6

All course work is due on Fri Dec 12.

The **Final Exam** is a self-scheduled exam to be taken during final exam week (see the Registrar's policy for allowed dates and times).