

AST 4002 Syllabus

Astrophysics II, Galactic and Extragalactic Astronomy, Spring 2008

Professor: Liliya L.R. Williams (Physics 353, 624-1084, llrw@astro.umn.edu)

Class Times: M W Th (and occasional T) 1:25-2:15pm, Physics 157

Class Web-page: http://www.astro.umn.edu/~llrw/a4002_s08.html

Books

“Galaxies in the Universe”, Linda Sparke & John Gallagher (the text)

“The Structure and Evolution of Galaxies”, Steven Phillipps

“Galactic Astronomy”, Dimitri Mihalas & James Binney

“Galactic Dynamics”, James Binney & Scott Tremaine

“Galaxy Formation”, Malcolm Longair

“Introduction to Cosmology”, Barbara Ryden

Grading

Class participation, including summary of reading assignment (done in groups)	35%
Home-work: (done individually)	25%
Individual presentations: April 30, May 1,5,6,7,8 (20 mins each)	20%
Individual papers (same topic as presentations): due Friday, May 9th, by 5pm presentations/papers: topics due Mar 13; paper drafts due Apr 17	20%

Topics - Book Chapters

1. Introduction (01.22-01.25)
2. Mapping our Milky Way (01.28-02.04)
3. The orbits of stars (02.06-02.14)
4. Our backyard: the Local Group (02.18-02.25)
5. Spiral and S0 galaxies (02.27-03.03)
6. Elliptical galaxies (03.05-03.27)
7. Galaxy groups and clusters (03.31-04.07)
8. The large-scale distribution of galaxies (04.09-04.17)
9. Active galactic nuclei and the early history of galaxies (04.21-04.30)

Note:

LLRW will do Chapter 1;

Chapters 2-9 have a total of 36 subsections

Mon, Jan 28 – Thu, Apr 24 = 12 weeks = 36 class days

Our average “speed” should be 1 subsection/day.

For example, Mon Jan 28 - §2.1 - Group #1

Wed Jan 30 - §2.2 - Group #2, etc.