

## Syllabus for Astro 620

- We will cover sections of MBW chapters
  - 1-2 Introduction and Observational facts
  - 8 Formation and Evolution of Gaseous Halos (only a small part)
  - 9 Star Formation in Galaxies
  - 10 Stellar Populations and Chemical Evolution
  - 11 Disk Galaxies
  - 13 Elliptical Galaxies
  - 14 Active Galaxies
  - 15 Statistical Properties of the Galaxy Population

## Lectures for the Semester

- Lecture 1 Introduction: Some Galaxy Properties
- Lecture 2 Introduction (continued): Some Galaxy Properties
- Lecture 3 Introduction (continued): Some Galaxy Properties
- Lecture 4 Basic Galaxy Properties
- Lecture 5 Properties of Stars I
- Lecture 6 Properties of Stars II
- Lecture 7 Gas in Galaxies Lec I
- Lecture 8 Gas in Galaxies Lec II
- Lecture 9 Dust in Galaxies
- Lecture 10-11 Milky Way Lec
- Lecture 12 Galactic Rotation
- Lecture 13 Dynamics I
- Lecture 14 Dynamics II
- Lecture 15 Dynamics III
- Lectures 16,17 Local group
- Lecture 18 Chemical Evolution
- Lecture 19 Star Formation
- Lecture 20-21-22 Spiral Galaxies
- Lecture 23-24-25 Elliptical galaxies
- Lecture 26 AGN I
- Lecture 27-28 AGN II-III

Required text: Galaxy Formation & Evolution by H. Mo, F. van den Bosch & S. White

Authors' web page:

<http://www.physics.utah.edu/~vdbosch/astro5580.html>

- the first two chapters of MBW are on-line at

<http://www.astro.umass.edu/~hjmo/astro330/htmldir/reading.pdf>

secondary books

- Galaxies in the Universe: An Introduction (2nd Edition) by L. Sparke & J. Gallagher

<http://www.astro.wisc.edu/~sparke/book/galaxybook.html>

- Galactic Dynamics (2nd Edition) by J. Binney & S. Tremaine
- Course web page:

<http://www.astro.umd.edu/~richard/teaching/ASTR620.html>

- Information, syllabus, lecture schedule

- Assignments
  - Past lectures
- Lectures will be posted on the web page *after* they are given

Homework assigned approx. once every two weeks

HW is collected *at the start of class* on the due date (~a week later)

- **Please hand in on time**, or document the valid reason why it is late.
- No credit after the day on which it is due, unless there is a justifiable reason.
- Assignments:
  - Homework: 30%- including research reports
  - Midterm : 20%
  - Final : 30%
  - Project/term paper 20%
  - TOTAL : 100%
  - Class participation is strongly encouraged*
  - Mid-term date Oct 13*