

Astro 421 Syllabus

Prof. Richard Mushotzky

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Office hours: 10:00-11:00am Tues/Thurs- TBD by appointment

75 min class

web pages see /quasar/richard/public_html/ASTRO421/index_fall_2018.html

Mid-term Oct 11

Term paper Dec 4

Final exam Dec 17

Topics Covered

Broad description of galaxies

Stellar populations/star formation

Gas and Dust in galaxies

Milky Way as a detailed example of a galaxy

Galactic dynamics/need for dark matter

Spiral galaxies

Elliptical galaxies

Galactic evolution/formation and cosmological implications

Active Galactic nuclei -galactic centers

This is an enormous range of material; the level of detail will vary greatly from section to section

Lecture #	TOPIC	Text (S&G) Chapter
Lec 1	INTRODUCTION	
Lec 2	Continuation of introduction	Ch 1
Lec 3	Basic Galaxy Properties	Ch 1
Lec 4,5	Relevant Properties of stars	
Lecs 6,7,8	Properties of Gas and Dust	
Lecture 9, 10	Milky Way	Ch 2
Lecture 11	Galactic Rotation	
Lecture 12---15	Dynamics I---III	Chap 3
Lectures 16,17	Local group	Ch 4
Lecture 18	Chemical Evolution	
Lecture 19	Star Formation	
Lecture 20---22	Spiral Galaxies	Ch 5
Lecture 23---25	Elliptical galaxies	Ch 6
Lecture 26---28	AGN I---III	Ch9
Lec 29	Summary	