

Physics 308: Astrophysics

Professor: Lyle Hoffman

Spring 2018

Month	Week of	Topic	Reading	Work Due
Jan.	22-26	Observed Stellar Parameters	Chs. 7-8	Prob. Set 1
	29-2	Stellar Atmospheres	Ch. 9	Prob. Set 2
Feb.	5-9	Stellar Interiors	Ch. 10	Prob. Set 3
	12-16	Star Formation	Ch. 12	Prob. Set 4
	19-23	Stellar Evolution	Chs. 13-14	Prob. Set 5
	26-2	Degenerate Remnants	Chs. 15-16	Prob. Set 6
Mar.	5-9	General Relativity & Black Holes	Ch. 17	Prob. Set 7
	12-16	<i>Spring Break</i>		
	19-23	The Milky Way	Ch. 24	Prob. Set 8
	26-30	Galaxy Morphology	Ch. 25	Prob. Set 9
Apr.	2-6	Galaxy Evolution	Ch. 26	Prob. Set 10
	9-13	Large-scale Structure	Ch. 27	Prob. Set 11
	16-20	AGN and Quasars	Ch. 28	Prob. Set 12
	23-27	Cosmology	Ch. 29	Prob. Set 13
	30-4	Early Universe	Ch. 30	Prob. Set 14

In the event of inclement weather or other crises:

- Call professor's voice mail: 610-330-5211

Texts:

- Carroll & Ostlie, *An Introduction to Modern Astrophysics*, 2nd Ed., Pearson/Addison-Wesley 2007, ISBN 0-8053-0402-9

Requirements:

- Weekly problem sets.
- Weekly tutorials with the instructor.
- Attendance at Phys 108 lectures.
- You may sit for the Phys 108 exams if you think they will help your final grade.

Learning goals: Upon completion of this course, each student should:

- Understand the nature and evolution of stars;
- Understand the nature and evolution of galaxies;
- Understand the nature and evolution of the universe as a whole;
- Have gained skill in problem-solving;
- Have gained an appreciation for the applicability of physics to scales of space and time far vaster than those encompassed by an individual human being.

Registrar's Mandatory Privacy Statement:

- Moodle contains student information that is protected by the Family Educational Right to Privacy Act (FERPA). Disclosure to unauthorized parties violates federal privacy laws. Courses using Moodle will make student information visible to other students in this class. Please remember that this information is protected by these federal privacy laws and must not be shared with anyone outside the class. Questions can be referred to the Registrar's Office.

Federal Credit Hour Compliance Statement:

- The student work in this course is in full compliance with the federal definition of a four credit hour course.

Your grade will be based primarily on your scores on the weekly problem sets, but attendance and performance on the Phys 108 exams (if applicable) will be

taken into consideration as warranted.

This page is maintained by [Lyle Hoffman](#)