

Astronomy S-110 Planets & Stars
2:00-3:45 MTWTh

Instructor: Robert Zinn
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Textbook: Universe: Stars and Galaxies 5th E. **OR** Universe 10th Edition
Roger A. Freedman Roger A. Freedman
Robert Geller Robert M. Geller
William J. Kaufmann III William J. Kaufmann III
Publisher: W. H. Freeman Publisher: W. H. Freeman

Week 1: The motions of the planets
Kepler's Laws, Newton's laws and theory of gravitation
The Nature of Light and Matter
Optics & Telescopes

Reading: Chapters 1, 4, 5, & 6

Week 2: Comparative Planetology & Exoplanets

Reading: Chapters 7 & 8

Week 3: More on Exoplanets & Our Star, the Sun
Mid-term Exam: Thursday, July 19

Reading: Handouts + Chapter 16

Week 4: The Nature of Stars
The Birth of Stars
Stellar Evolution
The Death of Stars

Reading: Chapters 17, 18, 19, 20

Week 5: The Death of Stars, Neutron Stars, and Black Holes
Final Exam: Thursday, August 2. **Every student** is expected to take the Exam on this date.

Reading: Chapters 20 & 21

Grading: 33% Mid-term
 33% Final
 34% Homework

There will be approximately 8 homework assignments.

Homework Policy

1. To receive any credit for a homework problem, you must show how you arrived at your answer (the answers to some problems are given at the back of the textbook).
2. You may ask other students for help with the homework, but the work you hand in must be your own. (NO copying).
3. Late homework will be marked down 10 points for each class period that it is late. Homework later than two class periods will not be graded, and a zero will be recorded.
4. Homework will not be marked down if you are ill or have an emergency. Please notify me as soon as possible.