PRINCETON UNIVERSITY
Department of Astrophysical Sciences
Topics in Modern Astronomy (AST 204) — Spring 2018

Overview

In this introductory astronomy class, we will study the solar system, exoplanets, stars, white dwarfs, neutron stars, black holes, the interstellar medium, the Milky Way and other galaxies, active galaxies, and the Big Bang. Our goals are to teach you the quantitative foundations of astronomy, prepare you for more advanced work in this field, and enhance your problem-solving skills in the physical sciences.

Prerequisites

Classical mechanics (PHY 103 or 105) and calculus (MAT 103 or 104). No prior knowledge of astronomy is necessary.

People

Lecturer	Prof. Joshua Winn	Peyton 125, `jnwinn@princeton.edu`
Graduate Teaching Assistant	Mr. Lev Arzamasskiy	Peyton 010, `leva@princeton.edu`

Schedule

- Class meetings: Mondays and Wednesdays from 3-4:30 pm in the Peyton Hall auditorium.
- Office hours: Prof. Winn, after class from 4:30-5:30 pm or by appointment; Mr. Arzamasskiy on Tuesdays from 3:30-4:30 in the Peyton Hall "dome room", and Tuesdays from 7:30-8:30 pm in Peyton 033.
- Weekly reading assignments and problem sets.
- Midterm exam: Monday, March 12, in class.
- Comprehensive final exam: Sunday, May 20, Lewis Library 120.

Required textbook

Foundations of Astrophysics by B. Ryden and B. M. Peterson, Addison-Wesley (2010).

Grades

Grades will be based on attendance and class participation (5%), problem sets (35%), midterm exam (20%), and final exam (40%).

Other Policies

- Attendance is mandatory. Please arrive on time. Bring paper, a pencil, and a calculator. Ask lots of questions.
- Reading assignments, problem sets and solutions, and other materials will be distributed using Blackboard.
- We encourage you to work together on problem sets. Please wrestle with a problem on your own, then discuss it with friends, and finally write the solution by yourself. You may *not* consult solution sets from previous years.
- Late problem sets will not be accepted.