Overview

Welcome to 8.282! 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 (8.01 or equivalent). No prior knowledge of astronomy is necessary. Not usable as a restricted elective by physics majors.

People

Lecturer  Prof. Joshua Winn  37-664b, jwinn@mit.edu
Graduate Teaching Assistant  Mr. Alex Ji  alexji@mit.edu
Course Manager  Ms. Nancy Boyce  4-315, nboyce@mit.edu

Schedule

• Class meetings: Tuesdays and Thursdays from 1-2:30 in 26-328. These will be a mixture of lecture, recitation, and group problem-solving.

• Office hours: Prof. Winn on Wednesdays from 3:30-5 or by appointment in 37-664b; Alex Ji on Mondays from 2-4 in the “Solarium”, 37-626d.

• Weekly reading assignments and problem sets.

• Midterm exam: Thursday, March 17, in class.

• Comprehensive final exam: to be scheduled during finals week.

Required textbook

Grades

Grades will be based on problem sets (40%), midterm exam (25%), and final exam (35%). Small adjustments will be made to reward attendance and class participation.

Other Policies

• Attendance is mandatory. Please arrive on time. Bring paper, a pencil, and a calculator.

• Reading assignments, problem sets and solutions, and other materials will also be distributed using the web site:


• Please read the assigned material before each class meeting or shortly afterward.

• We encourage you to work together on problem sets. It is best to wrestle with a problem yourself, 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.