

COLLEGE OF CHEMISTRY COURSE GUIDE (../INDEX.HTML)

MAJORS (../MAJOR.HTML) LIST OF COURSES (COURSES.HTML)

RESOURCES (../RESOURCES/RESOURCE.HTML)

STUDENT LIFE (../STUDENTLIFE/ORGS.HTML)

ASTRO 7A - INTRODUCTION TO ASTROPHYSICS (4 UNITS)

(Taken from the UC Berkeley Course Guide (<http://guide.berkeley.edu>))

COURSE OVERVIEW

SUMMARY

This is the first part of an overview of astrophysics, with an emphasis on the way in which physics is applied to astronomy. This course deals with the solar system and stars, while 7B covers galaxies and cosmology. Solar system topics include orbital mechanics, geology of terrestrial planets, planetary atmospheres, and the formation of the solar system. The study of stars will treat determination of observations, properties and stellar structure, and evolution. The physics in this course includes mechanics and gravitation; kinetic theory of gases; properties of radiation and radiative energy transport; quantum mechanics of photons, atoms, and electrons; and magnetic fields.

PREREQUISITES

MATH 1A ([math1a.html](#)), MATH 1B ([math1b.html](#)). PHYS 5A ([phys5a.html](#)), PHYS 5B ([phys5b.html](#))/5BL ([phys5bl.html](#)), PHYS 7C ([phys5c.html](#))/7CL ([phys5cl.html](#)), or PHYS 7A ([phys7a.html](#))/PHYS 7B ([phys7b.html](#))

Students will receive 2 units of credit for ASTRO 7A after taking ASTRO C10 ([astroc10.html](#)); 6 units of credit for both ASTRO 7A-7B ([astro7b.html](#)) after taking ASTRO C10 ([astroc10.html](#)).

