Astronomy 4
Solar System Astronomy
Section 01Z, CRN 207

Fall Quarter 2022
T,Th 1:30-2:20 PM
Class Location: Online only

Instructor: Rachel Mastrapa, PhD
Email: mastraparachel@fhda.edu

Textbook:
>   *Astronomy*, Fraknoi, Morrison, and Wolff Openstax (Free)

Office hours: Friday, 2 PM, or by appointment. Use Zoom in Canvas.

Course Description: In this class, students will analyze the physical principles, logic, and development of solar system astronomy from ancient times through the present. This class includes multimedia planetarium demonstrations. Class content is designed for non-science majors. Credit for the 5 quarter units of Astronomy 4 is fully transferable to both the University of California and California State University systems.

Drop without W by October 9
Drop with W by November 18

Grade Breakdown

Discussions	15%
Homework	40%
Exams	30%
Final Exam	15%
Total	**100%**

Course Grade Ranges

A	90–100%
B	80–89%
C	70–79%
D	60–69%
F	<60%

Exam Schedule

Exam 1 Due October 14
Exam 2 Due November 18

Final Exam Due Tuesday, December 13

I will inform you of any changes to the policies or procedures listed below.

Behavior
All students and instructors are expected to treat each other with respect. Everyone will be held to the expectations listed in the Student Code of Conduct and the Academic Integrity Policy.

Class Format
This class is divided into 21 modules in Canvas. Each module contains reading assignments, videos, and homework. All homework assignments are due at 1:30 on the date of the module, while the discussion is due at 3pm. You are responsible for completing all of your assignments on time. Late assignments will lose 2% of their grade per day late. Exams and the Final are separate work and discussed below. You will need to use Canvas and Zoom to complete the class. Please visit the remote learning page for any technical support or advice.

Discussions: 15% of grade
Zoom Tuesday, Thursday 1:30-2:20 pm
The discussions are **required** live meetings through Zoom. I will give a short lecture and lead a discussion related to the reading and videos. There will be a discussion assignment in Canvas that we will complete together for a grade. This is also a time when students can ask questions about the class.

Please be prepared to access Zoom discussions through Canvas, ideally using a computer. If you do not have a computer, please consult the online resource page for options. If you need to access the discussion in another way, please contact me for the session ID and password **before** the discussion. I will not answer messages during the discussion time. All students will be muted for Zoom sessions. You will not be required to share video, but I will take attendance and respond to questions through text.

Homework: 40% of grade
All homework assignments are in the format of Canvas multiple choice quizzes. Although they are called quizzes, they are open notes/textbook and you have 2 chances to complete them, retaining your highest score. There is at least one quiz on the reading assignment and one quiz for each video lecture. All homework assignments are due at 1:30 **before** the discussion.

Exams: 30% of grade
There will be two open notes exams due at 5 pm on **October 14 and November 18**. The exam in October will cover all material covered before that date. The exam in November will focus on material covered since the previous exam. Exams will consist of multiple-choice questions in Canvas. You will have only **ONE** attempt to take the exam. Late exams will have a deduction of 10% per day. The exam will close 5 days after the due date and answers will be posted. **There are no make-ups or extensions for any reason.**

Final Exam: 15% of grade

The final will be due on Tuesday, **December 13** at 5pm. The final will include all material covered over the entire course. The format is the same as the exams. Late finals will be deducted 20% per day. The final will close on , December 10 at 5pm. **There are no make-ups or extensions of the final for any reason.**

Attendance
Attendance will be taken through Zoom during discussions. Be sure that your full name is clear or you may be marked as absent. If you are absent at all during the first two weeks of class, you will be dropped.

Objectives

- To provide the student with as comprehensive an account of the modern field of planetary astronomy as possible.
- To create an increased sense of place and scale in the universe and a sense of how our species reached its current understanding of our world's place in the larger scheme of things.
- To acquaint the student with the appearances and other physical characteristics of the major planets, especially as they have been revealed by space probes over the last generation.
- To generate a familiarity with the various modes of research, which astronomers use to investigate other planets, including (but not limited to) various types of automated spacecraft.

Tutoring

Need help with this course? Want to more personal connections this quarter? Student Success Center tutors and workshops are ready for you! Watch the SSC Welcome Videoto learn more.

Tutoring: Go to http://deanza.edu/studentsuccess and click to join a Zoom tutoring room during open hours.

Workshops: Attend a Skills Workshop, a content-specific math/science workshop, an Accounting chapter review workshop, or a Listening and Speaking workshop.

Resources: Join the SSC Resources Canvas site to see content and learning skills links.

After-hours or weekend tutoring: See the Online Tutoring page for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).

Student Learning Outcome(s):

*Appraise the benefits to society of planetary research and exploration.
*Compare and contrast the development of planetary systems and of the major panet types, including those factors that have led to Earth's unique characteristics.
*Evaluate astronomical news items or theories concerning solar system astronomy based upon the scientific method.

Office Hours:

Zoom	F	2:00 PM	3:00 PM