

ASTR 255 - Introduction to Planetary Science

Spring 2025 - Syllabus

Class times: Tues-Fri 14:30-16:00 at CLE A216 (*Clearihue Building*)

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Office hours: Mon 10:30am-11:30am or upon request.

Description

The scientific study of planets, moons, and planetary systems, both solar and extra-solar, and the processes that form them. In this case, we will introduce:

- Dynamics
- Solar Heating and Energy Transport
- Planetary Atmospheres
- Surfaces and Interiors
- Sun, Solar Wind and Magnetic Fields
- Giant Planets
- Terrestrial Planets and the Moon
- Planetary Satellites
- Meteorites
- Minor Planets and Comets
- Planetary Rings
- Exoplanets

Textbook

Fundamental Planetary Science: Physics, Chemistry and Habitability by J.J. Lissauer & I. de Pater (2013) – free ebook and PDF can be found on the UVic library website. Reading the text is not necessary for completing the assignments and exams but may aid in comprehension of concepts.

Evaluation

Homework assignments	45%	• 4 homework assignments, roughly one every other week. These will be problem sets that you will submit for grading.
Assignment Discussion	5%	• MidTerm and Final exams are required
Midterm Exam	20%	components of the course, and will be in person and
Final Exam	30%	on paper.

- MidTerm and Final exams will be based on homework assignments and lectures

Note on Plagiarism: Unacceptable. Never copy work from each other, nor cite work from others without proper acknowledgment. Collaboration and discussion are fine, but the work you submit must be your own.

Lecture Schedule (tentative)

	Week	Lecture Date
	1	Jan 7
		Jan 10
	2	Jan 14
		Jan 17
A1 due	3	Tues Jan 21
A1 discussion		Jan 24
	4	Jan 28
		Jan 31
A2 due	5	Tues Feb 4
		Feb 7
A2 discussion	6	Feb 11
Midterm		Fri Feb 14
Reading Week	7	Feb 18
Reading Week		Feb 21
	8	Feb 25
Last Drop Day		Feb 28
A3 due	9	Tues Mar 4
A3 discussion		Mar 7
	10	Mar 11
		Mar 14
	11	Mar 18
A4 due		Fri Mar 21
A4 discussion	12	Mar 25
		Mar 28
	13	Apr 1
		Apr 4
Final		TBD