

GEL 36: The Solar System
Spring 2017 Syllabus, updated 4/3/2017

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<http://sarahtstewart.net>

Office: 2127 Earth & Physical Sciences Building

Office hour: Fridays 2:10-3 pm

Lectures: MWF 1:10-2:00 pm in Wellman Room 226

Midterm Exam: Wednesday May 3 in class

Final Exam: Wednesday June 14 at 8:00-10:00 AM

Sections and Teaching Assistants:

Mon 11:00 AM (A05)	EPHSCI 1317	Tyler Schlieder	tdschlied@ucdavis.edu
Mon 12:10 PM (A02)	EPHSCI 1316	Tyler Schlieder	tdschlied@ucdavis.edu
Tue 11:00 AM (A03)	EPHSCI 1317	Gigja Hollyday	gohollyday@ucdavis.edu
Tue 2:10 PM (A01)	EPHSCI 1309	Gigja Hollyday	gohollyday@ucdavis.edu
Wed 12:10 PM (A04)	EPHSCI 1316	Dylan Vasey	davasey@ucdavis.edu

Catalog description: Nature of the sun, moon, and planets as determined by recent manned and unmanned exploration of the solar system. Comparison of terrestrial, lunar, and planetary geological processes. Search for life on other planets. Origin and evolution of the solar system.

GE credit: SciEng, Wrt I SE, VL, WE.

Goal of the course: To help you to comprehend nature at the astronomical scale and to gain a deeper appreciation of the uniqueness of Planet Earth. An overriding theme of the course will be the possibility of life elsewhere in the universe. You will learn about the scientific method and how data and physical models are used to build scientific hypotheses and what criteria are applied to have a concept rise to the category of a scientific theory.

Textbook: Foundations of Astronomy (13e) by Michael Seeds & Dana Backman.

We will be using the online version of the book, The Solar System, which is linked from Canvas under **Modules**. For this course, there will be weekly assigned readings and quizzes from planetary science sections of this book, but you have access to the entire Foundations of Astronomy text if you want to read more. The ebook environment is called MindTap.

The content of this class will follow this text relatively closely. Lectures will include material from several other sources to illuminate and clarify topics, especially for current exploration of the Solar System. Read the textbook sections as indicated in the weekly instructions on MindTap. The textbook is well written and is very useful for the figures that it contains. **You will find it a very important supplement to the lecture material in the class by studying the textbook. Exam materials will be drawn directly from the textbook and lectures.**

Class Structure: Come to class. You will spend much less time attending the class and listening to the lecture, asking questions, seeing the images and listening to explanations, than you will trying to teach the material to yourself from notes and the book. Skipping class because you can always 'get the notes' is a recipe for disaster. Ask questions in class.

Course content: The emphasis is on principles and concepts, not trivia. Isolated facts have no real meaning without a conceptual context. The purpose of the course is to impart knowledge and understanding rather than mere information.

Discussion: Discussion sections begin on April 3.

Discussion section materials and homework are posted in Canvas. Each Geology 36 discussion section meets once a week to discuss a topic in planetary science. The TAs will go over discussion topics & assignments with you in section each week.

Please go to the section that you signed up for. Do not go to a different section and expect credit from your assigned section/TA. Teaching assistants will not do extra work to help a student catch up who has intentionally skipped discussion sections. Obviously they will do what they can for legitimate absences.

The discussion sections are intended to be straightforward and relevant. The discussion section activities (homework and term paper) is worth 45% of the overall class grade, so it is important to attend and accumulate the points. One of the main objectives is to write a proposal to NASA supporting a space mission of your choosing. The sections will walk you through this process. **Section attendance is part of your grade!**

Note that the timing of a particular discussion topic does not always overlap with lecture topics. Try not to worry about this. In the long run of the course they compliment each other and will be integrated by the end of the quarter.

Grading:

- **Term Paper** = 25%
- **Final** = 25%
- **Midterm** = 20%
- **Discussion** (section participation and exercises) = 20%
- **EBook reading and quizzes** (online questions in MindTap) = 10%

NO EARLY EXAMS OR MAKEUP EXAMS.

Late section work will be docked 25% per day. Exceptional circumstances for late course work must be arranged in advance with the professor.

Collaboration policy:

Activities in discussion sections are meant to be group-oriented and participatory. Homework assignments from sections should be completed on your own. **Homeworks that appear to be copied will be sent to Student Judicial Affairs.**

Plagiarism:

This course includes a term paper that satisfies the Gen Ed writing requirement. The paper must be original work with no collaboration. Explanations of proper citation style and plagiarism are included in the term paper assignment. Refer to UC Davis [Academic Integrity Project](#).