

## ERTH 466 Planetary Geology Syllabus

Year Course Offered: **Spring 2024**

Number of Credits: **3**

Instructors: **Shuai Li** ([shuaili@hawaii.edu](mailto:shuaili@hawaii.edu)), **Sarah Fagents** ([fagents@hawaii.edu](mailto:fagents@hawaii.edu))

Class Hours: **Tu&Th: 1:30 – 2:45**

Class Room: **POST 601**

Office Hours: **Tu&Th: 3:00-4:00, or by appointment**

### **Course Description:**

Comparative geology of the terrestrial planets (moon, Mars, Mercury, Venus, and Earth); impact cratering, volcanism, tectonism, geomorphology, weathering; manned and unmanned space exploration. Pre: any 100-level EARTH course.

### **Learning Objectives**

This course aims to provide senior undergraduate students and junior graduate students general background about the geology of the terrestrial planets (moon, Mars, Mercury, Venus, and Earth).

### **Selected Topics to be Covered:**

- Geologic processes (e.g., volcanism, tectonics) on planetary bodies' surfaces.
- Space weathering processes (e.g., impacting, radiation) on planetary bodies' surfaces.
- Water related processes (e.g., liquid water and glaciers) on planetary bodies' surfaces.
- Introductions to geologic and weathering processes on Mercury, Venus, the Moon, Mars, Europa, and Titan, etc.

### **Prerequisites:**

ERTH 101 and comparable courses.

### **Required Texts and Readings:**

- Planetary Surface Processes (H.J. Melosh).
- Planetary Crusts (S.R. Taylor and S.M. McLennan).

### **Major Assignments/Exams:**

- A midterm exam.

- A final class project report.
- A class presentation of the final project.

### **Grading:**

%	Grade	%	Grade
100	A+	73 – 76	C
93 – 99	A	70 – 72	C-
90 – 92	A-	67 – 69	D+
87 – 89	B+	63 – 66	D
83 – 86	B	60 – 62	D-
80 – 82	B-	<59	F
77 - 79	C+		

### **Statement about using AI in the classroom and homework**

In this course, students must be the primary and majority authors of text, code, analysis, images, graphics, and all course work products and assignments. Students are permitted to use AI to polish text they have drafted, or perform tasks that are not essential to completing the learning outcomes of the course. The application of this principle will vary by assignment. For example, students will be graded on the design and layout of a PowerPoint slide deck, in which case they would not be permitted to use AI to generate the slides. Students are encouraged to keep drafts of assignments and logs of interactions with AI applications to demonstrate their contribution and original authorship, and to check what is permissible for each assignment.

### **Course Information, Policies and Resources**

**Attendance policy:** Students who are enrolled in this course, but never attend will be flagged by the course instructor for non-participation before the last day to add/drop (for 100% tuition refund) deadline. Flagged students will be administratively dropped by the Office of the Registrar. Any changes to a student’s enrollment status may affect financial aid eligibility and can result in the return of some of all of federal student financial aid.

**Statement on Disability: KOKUA Program** If you have a disability and related access needs, please contact the KOKUA Program (Office for Students with Disabilities) at 956-7511, KOKUA@hawaii.edu, or go to Room 013 in the Queen Lili‘uokalani Center for Student Services. Please know that I will work with you and KOKUA to meet your access needs based on disability documentation. Kokua’s services are confidential and offered free of charge.

**Academic Integrity and Ethical Behavior: Office of Student Conduct:** Cheating, plagiarism, or other forms of academic dishonesty are not permitted within this course

and are prohibited within the System-wide Student Conduct Code (EP 7.208). Examples include: fabrication, facilitation, cheating, plagiarism, and use of improper materials. Any incident of suspected academic dishonesty will be reported to the Office of Student Conduct for review and possible adjudication. Additionally, the instructor may take action in regards to the grade for the deliverable or course as they see fit.

**Office of Title IX:** (808) 956-2299 /t9uhm@hawaii.edu/<https://manoa.hawaii.edu/titleix/>

**Department of Public Safety:** (808)956-6911 (Emergency) / (808)956-8211 (non-Emergency) <http://manoa.hawaii.edu/dps/>

**UH System Basic Needs:** include food and housing, childcare, mental health, financial resources and transportation, among others. Student basic needs security is critical for ensuring strong academic performance, persistence and graduation and overall student well being. If you or someone you know are experiencing basic needs insecurity, please see the following resources: [UH System Basic Needs](#)