This introductory course will offer an illustrated voyage through the Solar System based on recent scientific results. In this course, we will focus on the origin, evolution, and current knowledge of the eight planets, their moons, asteroids, comets, and the Sun. Course topics will emphasize applicable geology, tectonic activity, material properties, and atmospheric conditions of the planets and how these properties compare to planet Earth. Recent findings from current planetary missions, as well as knowledge gained from past missions, will be incorporated into lecture discussions whenever possible and relevant.

**Required Text**

Authors: Eric Chaisson and Steve McMillian
Publisher: Addison Wesley, 2013

**Grading (see below for more information on grading policy, etc):**

- Problem Sets (homework) 25%
- iClicker Participation 15%
- Question of the Day (iClicker) 10%
- Mid-Term Exam 1 15%
- Mid-Term Exam 2 15%
- Final Exam 20%

**Course Policies**

- Homework assignments will be assigned semi-regularly and will be posted on the class website.
- Each assignment will have a specified “due date”, which will typically be one week after the assignment is given.
- NO LATE HOMEWORK WILL BE ACCEPTED.
- No homework may be submitted through email unless prior arrangements have been made (with an excused absence).
- Your lowest graded homework will not be counted in the final tally. This means that you have **one no-questions-asked excused homework** (use it wisely!)
- Working Together on Homework: Studies have shown that students learn best when they work together. You are encouraged to work with each other on assigned homework. However, each student must turn in his or her own assignment, written using his or her own words. Any student who fails to follow this rule will receive zero credit for the question, and if the offense is severe, for the assignment.
iClickers
I will ask questions in class that will require your participation using the iClicker Reef Polling technology system (https://www1.iclicker.com). I will ask a few questions during each class that will require you to "buzz in" your answer through your individual handheld iclicker remote, smartphone, tablet, or laptop. You will receive the same credit for responding to the answers regardless of whether or not your response is correct. These questions will count a total of 25% toward your grade. Note: your body must be physically in the classroom during each class to receive credit for the iClicker questions. One person, one device at all times. Violating these rules will result in the loss iClicker credit for the remainder of the quarter.

- **iClicker Participation.** I will ask multiple choice/true false questions designed to help both me and you assess learning. You will get the same credit for responding to the answers whether or not your response is correct. These questions will count a total of 15% toward your grade.
- **Question-of-the-Day.** In some classes (chosen randomly), there will be a Question of the Day. These questions will also be multiple choice and you will receive 1 point for a correct answer and 0 points otherwise. These questions will usually be based on material covered in the previous class and will be straightforward in nature, testing learning rather than memorization. These questions will count a total of 10% toward your grade and up to 3 points can be used for extra credit.

Note that for the first TWO weeks of class, we will only practice using the iClicker system. During these two weeks, your answers will not count toward your grade. This practice time should give everyone enough time to settle in with the technology. However, beginning Week 3, I will begin to collect your electronic responses and at this time your answers (and participation) will count toward your grade.

Further information (in class) will be provided to prepare you and your smart devices for the iClicker system.

Exams
There will be two midterm exams and a final exam; the final exam will be cumulative. You will be allowed to bring a single 8.5" by 11" sheet of paper to the exams with notes on it. It must be handwritten on one-side only and must be turned in with your exams.

- **Make-Up Exams/Early Exams.** Make-up exams will not be given except when a student misses the exam for a legitimate reason such as illness or family emergency (a doctor's note or other documentation is required). Please get in touch with me as soon as possible if such a situation arises. Anyone with sporting event conflicts must provide at least 2 weeks notice with appropriate signed paperwork.
- **Note that make-up and/or early exams will be essay format and will be substantially more difficult than the standard multiple-choice exam given to the rest of the class.**

Course Grades
Course grades will be based on homework (25%), iClicker participation (15%), Question of the Day (10%), the midterm exams (15% each), and a final exam (20%). Extra credit earned through answering more than 3 in-class questions correctly will be added on to your cumulative grade.

Letter grade breakdown:

- **A** = 90%+
- **B** = 80 – 89%
- **C** = 70 – 79%
- **D** = 60 – 69%
- **F** = < 60%
**Tips for success**

- **Lectures:** Attend *every* lecture, as they are the key to your success in this course. Some aspects of the course material will be covered in more detail in class than is provided in the text, so it is highly recommended that you not only bring your body to class, but your mind and your concentration as well! There will also be the occasional in-class quiz (Question of the Day) that will count toward your grade (see grading policy below).

- **Homeworks:** Do *each* homework assignment, and submit each one on time. Homework assignments help you learn the material and are a great study guide for the exams.

- **Exams:** Do not miss an exam. Study. Read. Review.

- **Questions:** Questions are welcome and encouraged. Your questions are likely to help other students as well, so you should never feel intimidated to ask questions about course material.

- **Read:** Your course textbook will reinforce lecture material, so do complete each reading assignment. Read each week to keep up with course notes.

**Student Learning Objectives**

This course will aim to meet the following undergraduate student learning objectives, as established by the Department of Geology & Geophysics:

1. Students can explain the **relevance of geology and geophysics to human needs**, including those appropriate to Hawaii, and be able to discuss issues related to geology and its impact on society and planet Earth.
2. Students use the **scientific method** to define, critically analyze, and solve a problem in Earth science.
3. Students can **reconstruct, clearly and ethically**, geological knowledge in both oral presentations and written reports.
4. Students can **evaluate, interpret, and summarize** the basic principles of geology and geophysics, including the fundamental tenets of the sub-disciplines, and their context in relationship to other core sciences, to explain complex phenomena in geology and geophysics.

**Student Conduct and Academic Integrity:**

University guidelines for acceptable student conduct are very specific and will be strictly followed. Please read the guidelines (http://www.catalog.hawaii.edu/about-uh/campus-policies1.htm) and contact your instructors if you have any concerns.

- Cheating, of any form, will not be tolerated.
- Blind copying of intellectual material (text) from resources such as books, journals, and the internet is plagiarism and is illegal. Instead, you should write things in your own words with a proper reference to your source. If any homework exercises require you to look up an answer in something else than the class textbook, I will expect you to reference the source and write it in your own words. **Any plagiarized work will receive “0” for the whole assignment and cannot be re-done or made up.**

**Disability Access**

The Geology and Geophysics Department will make every effort to assist those with disability and related access needs. For confidential services, please contact the Office for Students with Disabilities (known as “Kokua”) located in the Queen Lili'uokalani Center for Student Services (Room 013): kokua@hawaii.edu

[www.hawaii.edu/kokua](http://www.hawaii.edu/kokua)