



Instructional Philosophy of the Course

The overarching goals of this course are for you to understand the nature of science through engagement with planetary science and astronomy and to develop a lifelong interest in understanding our solar system and the universe beyond. To meet these goals, I have designed a sequence of learning tasks and assessment procedures.

Course information

This is an online course that explores our Solar System. It requires students to be fairly skilled in the use of the Internet.

Course Technologies and Equipment

We will be communicating using Cengage Unlimited WebAssign course support which will provide access to online materials including the course textbook, uploaded audio, video and PowerPoint files, announcements, and additional reading. Online homework and exams will also be managed through WebAssign. A WebAssign link will be provided in Lulima. The link will provide instructions on how to purchase WebAssign and Textbook access.

Instructor

Peter Englert, Hawaii Institute of Geophysics and Planetology

Contact information: office - POST 508 B, penglert@hawaii.edu; phone: 8083843500

Office hours

If you have questions or concerns email me at the address provided or through the communication tools of WebAssign and I always respond as quickly as I can. I will “officially” be able to answer emails 3days/week, Tuesday through Thursday from 7am - 11pm. I will also respond to your messages throughout the remainder of the week and on weekends. I can also schedule office hour meetings through Zoom as needed. Please ask me for a Zoom meeting via email.

Textbook

Foundations of Astronomy by Michael A. Seeds and Dana E. Backman, 14th edition, Cengage 2019. The book will be available online through WebAssign. For your information: The ISBN of the softbound edition is 978-1-377-39991-0. The book will be available through WebAssign, see above.

Learning Objectives/Course Objectives

University-Level Learning Objectives

The design and structure of the course delivers learning outcomes aligned with the University of Hawaii Institutional Learning Objectives for Undergraduate Students. The course:

- Gives in depth experience in the conduct of scientific inquiry and research;
- Engages students in continuous practice with critical and creative thinking;
- Is structured around procedures of conducting research in Earth and planetary science;
- Engages students through intensive interaction with instructors and peers by means of classroom activities and projects;
- Directly cultivates the habits of scholarly inquiry and intellectual curiosity, including inquiry across disciplines.

Department-Level Learning Objectives

- Students can explain the relevance of Voyage through the Solar System outcomes to human needs;
- Students can apply knowledge of relevant research methods, and the supporting disciplines to solve real world problems;
- Students use the scientific method to define, critically analyze, and solve a problem in solar system science;
- Students can report solar system knowledge in both oral presentations and written reports;
- Students can evaluate, interpret, and summarize the basic principles of solar system science, and their context in relationship to other core sciences, to explain complex phenomena.

Course-Level Student Learning Objectives:

1. Explain how the Scientific Method works, apply it to evaluate good vs. bad science and to analyze and assess data and draw conclusions about the world;
2. Develop a better understanding and appreciation for the world we live in, extending beyond our home planet Earth; and
3. Demonstrate improved communication skills that will serve you throughout life by collaborating in writing, presenting & displaying data to communicate your knowledge, analysis, synthesis of data and ideas and your assessment of what it means.

Course Evaluation and Assessment

For this course I will use the following activities for grading:

- **Online homework:** Assigned weekly through WebAssign, following ‘lectures’ and major reading assignments.
- **‘Regular’ homework:** Up to five homework assignments that require essay style responses to questions related to ‘lectures’, regular or special reading assignments. These assignments will be posted online.

- **Exams:** Two midterms scheduled throughout the semester, and one final examination, scheduled during finals week.

Online homework rules

Online homework assigned through WebAssign will consist of different question categories, including multiple-choice questions, true/false questions, word-substitutions etc.

Please complete your online homework on time. If you miss a deadline, I will make the assignment available with an extended second deadline. If you miss the second deadline for a compelling reason, write to me.

Online homework assignments will generally allow you multiple attempts to solve a problem. The correct solution can be found in ‘lecture’ materials and textbook reading assignments. Feel free to use web-resources, but do so critically.

You are allowed to consult with others to complete your online homework. You must submit your own answers.

You must actively submit your homework before the deadline.

Regular homework rules

Regular homework will in general require written text answers. I will be grading these answers individually. Occasionally I will provide you with an opportunity to improve your regular homework.

Exam rules

Exams (midterms and finals) will be online. They will be based on your online homework assignments, ‘lecture’ materials, and textbook reading assignments.

Exams are cumulative. An exam will always cover materials from all preceding instruction. The number of exam questions increases from midterm 1 to midterm 2 to final exam.

Please complete your online exams on time. If you miss a midterm deadline, I will make the exam available with an extended second deadline. This does not hold for the final exam which you must complete during finals week.

- You will have two attempts to answer each exam question.
- The exam time depends on the number questions and difficulty of the question set. On average you will be given four minutes to answer a question.
- You may utilize all resources available to you to answer exam questions.
- You must actively submit your exams before the deadlines.

Contribution to grade

Each of the course activities will contribute to your course grade as follows:

- Online homework – 15%
- Regular homework – 10%
- Midterm 1 – 20%
- Midterm 2 – 25%
- Final – 30%

Note: Plagiarism and/or cheating will result with an F for the test or assignment.

Grading Scale: A=90-100%, B=80-89.99%, C=70-79.99%, D=60-69.99%, F=Less than 60%.

Tips for success

Lectures: Follow your reading assignments and associated Audio/Video and PowerPoint lecture materials, as they are the key to your success in this course.

Homework: 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 always ask questions about course material.

Read: Your reading assignment will reinforce lecture materials, so complete each assignment. Read each week to keep up with course notes.

Class participation: Be sure to always read class-related emails and online announcements to enhance your participation and stay current.

Students are expected to complete all reading assignments, follow all online presentations, and complete all assignments on time. Students are expected to ask relevant questions. Students are expected to pay attention to online announcements and course documents.

Please note: for any UH email you send me, please include in the subject line: your full name, course name (ERTH105), and the topic of your email (e.g. Valentino Rossi EARTH 105 Jupiter Module Quiz). If you just sign off with “KC” and the email came from awesomestudent@hawaii.com I won't be able to figure out who it is! Keep to one topic (the one indicated in the subject line) in your discussion. End with your full name since other students may have your same first name.

Types of Assignments

Audio/Video Lectures (topic lectures and any other videos I may post)

Readings (usually a textbook chapter but I may post other material too)

Online homework assignments (weekly)

Regular homework assignments (up to five in total)

Protocols for communicating with your instructor and other students via the Internet

- The most important rule of communicating electronically is, “**Think before you post!**”
- In the subject line of emails indicate who you are, which class you're in, and what the content of the email is, for example “**Kelsey Jones, EARTH 105: question on Chap 3 about Jupiter's atmosphere**”.
- **Sign off with your full name** at the end of your email.
- Emailing, messaging and posting on discussion boards in academia are different from emailing buddies and posting in newsgroups. You are expected to be courteous at all times.
- Email doesn't have the subtleties of spoken or face-to-face conversation, and it's remarkably easy to be misunderstood or to offend someone. Therefore, stay polite: “**I have been working on this assignment for the past 2 hours – but am not getting any further. I like you to give me some advice.**”
- Assume that the instructor is willing to help you with problems, “**Dr. Englert, please get back to me at your earliest convenience.**” Hence, intend to post using positive language. I am here to help you.

- Avoid internet slang such as btw (by the way), l8r (later), addy (address). Write in whole sentences with proper punctuation, grammar and spelling. Don't make it difficult for me to understand.
- If you are referring to a previous email, post, or textbook passage, include and quote the reference properly. It makes it more convenient for the instructor to be reminded of the original content and to not have to search for the original.
- If you believe someone has violated these procedures, do not post a follow-up to the offending post. Send a private email to your instructor about the violation and let the instructor handle the situation. Do not try to resolve it on your own. Be polite.
- Do not use all caps and do not use exclamation points. THAT'S LIKE SHOUTING!!!!!!
- Do not presume someone received your email – errors do occur. If it is an assignment or an important question, send it 'return receipt requested'.
- Allow the instructor time to respond. If you send an email or post a message on the weekend or on a weekday late afternoon, do not expect an instructor's response until later in the evening or the next business day.

Other Resources

Disability Access:

The Earth Science 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): 956-7511, kokua@hawaii.edu, www.hawaii.edu/kokua

Learning Assistance Center (LAC) is here to help students:

- Use appropriate study skills to achieve academic goals.
- Learn how to adjust learning approaches to fit their individual learning needs.
- Learn how to study effectively with others.
- Use effective learning practices.
- Use self-reliant learning behaviors.
- Have a functional understanding of course content. www.manoa.hawaii.edu/learning

Gender-Based Discrimination or Violence

University of Hawaii is committed to providing a learning, working and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. If you or someone you know is experiencing any of these, the University has staff and resources to support and assist you.

Staff can also direct you to community resources. Here are some options:

- If you wish to speak with someone **CONFIDENTIALLY**, contact the confidential resources available here:
<http://www.manoa.hawaii.edu/titleix/resources.html#confidential>
- If you wish to **REPORT** an incident of sex discrimination or gender-based violence, contact: **Dee Uwono**, Title IX Coordinator, Hawai'i Hall 124, t9uhm@hawaii.edu, (808) 956-2299
- **As members of the University faculty, your instructors are required to immediately report any incident of potential sex discrimination or gender-based violence to the campus Title IX Coordinator.** Although the Title IX Coordinator and your instructors

cannot guarantee confidentiality, you will still have options about how your case will be handled. Our goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.