

ERTH101L-online: Course Description and Syllabus

Welcome to Dynamic Earth Laboratory. In this online section of EARTH101L (CRN 88480), you will learn about the Earth and practice approaching problems the way geoscientists do.

Essential Information

Semester: Spring 2020 Credits: 1
 Instructors: Prof. Julia Hammer (jhammer@hawaii.edu) and
 Teaching Assistant: Ollie Beucler (abeucler@hawaii.edu)

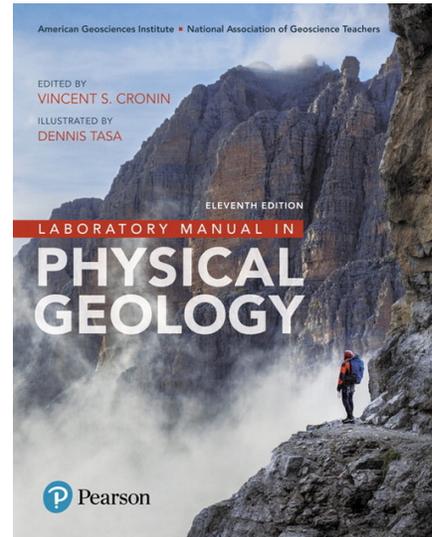
Requirements • Laboratory Manual in Physical Geology and *MasteringGeology* account; • access to computer with internet; • office supplies: pencil, eraser, metric ruler, scissors, colored pencils, etc. *You must buy the text.*

Organization and Grading

The only **required in-person activity** is participation in a **field trip**. Early in the term, the schedule of field trip options will be distributed. The field trips will take place on the weekends.

The content of the course is taught in video tutorials and assessed with two items that are due each week: (1) homework that you access through the textbook's *MasteringGeology* online system, and (2) Laboratory Exercises, hereafter called "labs", from the Laboratory Manual in Physical Geology by Cronin and Tasa. In addition, there is a final exam for this course. We use our section's *Laulima* site¹ to communicate performance throughout the semester. Here's the breakdown of the graded items:

1. Online **homework** assignments in the *MasteringGeology* system. These assignments typically include watching videos and participating interactively. They are designed to help you complete the Laboratory Exercises, and students typically complete them in under 40 minutes. The online assignments are worth **25%** of the course grade.
2. The **labs** comprise the bulk of this course's learning instruments are in the required text: Laboratory Manual in Physical Geology by Cronin and Tasa (11th Ed; Pearson publisher). These on-paper assignments are worth **50%** of the course grade. To grade assignments, the TA must be able to read and understand them. Spelling, rules of English composition and legibility count in grading.
3. Participation in one Oahu field trip is required for this course and counts **10%**.
4. The course has a final exam available online during finals week. The final will account for **15%** of the course grade. At the testing center (your choice of the Student Success Center on the UHM campus or the Kapiolani CC testing center at KCC), you will use a desktop computer to take the exam. You will login to your Pearson account, and a proctor will enter the password. You will then have two hours to complete the exam. The test is closed notes.



Required text for this course; contains all labs..

¹ If you are new to Laulima, google the Laulima Support for Students help page. During the semester, if technology questions arise, call the Information Technology Services (ITS) at (808) 956-8853 or Toll Free (800)-558-2669.

Time commitment. Even though we have only one physical meeting (the field trip; see above), you should expect to spend 3-3.5h per week on this course. FYI: The time commitment is similar to other UHM labs. E.g., the in-person sections of EARTH101L meet for 3h/week, and also are assigned homework.

Grade scale.

letter	score	Homework. Access homework assignments with the code included in the required text. Use the instructions at the end of this syllabus to get started. These assignments will appear on your Pearson account calendar once you create an account. Homework assignments will be due every Monday at 11:59 pm (~ midnight), with exceptions shown in the table below.
A+	≥96.7%	Labs. The <i>Laboratory Exercises</i> are all in the required text, Laboratory Manual in Physical Geology by Cronin and Tasa (11 th Ed). Video tutorials are provided on a Google Team Drive to help you complete the labs. If you have registered for the course but have not received an email inviting you to the Team Drive, please send an email to Hammer (jhammer@hawaii.edu). All of the tutorials are available at the start of the semester, and you are welcome to complete work for the labs well in advance. However, labs will be graded and released according to the schedule below. Turn in the lab papers to the drop box in the Campus Center computer lab by 7:00 pm each Wednesday. Late papers will not be accepted unless a prior agreement has been made, or in the event of a documented health issue or emergency. Pick up graded labs from Connie Tsui in POST606A the week following the stated due date.
A	93.3%	
A-	90.0%	
B+	86.7%	
B	83.3%	
B-	80.0%	
C+	76.7%	
C	73.3%	
C-	70.0%	
D+	66.7%	
D	63.3%	
D-	60.0%	
F	<60.0%	

Important: You will not have to complete every activity in the lab workbook. See the assignment description in the Schedule of Topics (p. 3), to make sure you don't do extra work.

Why paper labs? You'll be working many problems in these labs. Writing by hand on paper will save you from having to deal with equation and math formatting software and laying the papers out side-by-side will make it easier for us to grade them. Unfortunately, we are not setup to grade papers that are handwritten on separate sheets of paper or are printed from the e-text.

Important: The lab activities must be completed on the hardcopy (spiral bound) version of the text and then torn out and stapled together.

We have one TA grading all papers, and to be efficient, s/he needs to grade p.1 of each identically-formatted paper, then flip each stapled packet to p.2 and grade them all, etc. until all pages (generally ~10-15 sheets) are graded. The reason for not accepting the printouts from the e-text is that the pages are formatted differently. In some cases, the questions appear on different pages. You can imagine how hard it would be to grade a stack of 75 papers with different versions of each page (different page breaks). Also, the maps and figures print at a slightly different size depending on the printer used, so each student's paper would require a different key for the exercises where you have to measure something with a ruler. We understand that text book cost is an issue. We would have chosen a less expensive option if the material could be delivered and assessed equally well. The bundled paper + *Mastering* system from Pearson ensures quality and convenience of the online learning format.

Schedule of Topics

Week	Chapter/ topic		HW due		Lab due	Activities
1*	1: Filling Your Geoscience Toolbox	Tues.	1/21/20 11:59 PM	Wed.	1/22/20 11:59 PM	1,2,3,4
2*	2: Plate Tectonics	Tues.	1/21/20 11:59 PM	Wed.	1/22/20 11:59 PM	1,3,6,7
3	3: Mineral Properties, Identification, and Uses	Mon.	1/27/20 11:59 PM	Wed.	1/29/20 11:59 PM	1,2,5,6
4	4: Rock-Forming Processes and the Rock Cycle	Mon.	2/3/20 11:59 PM	Wed.	2/5/20 11:59 PM	2,3,4,5
5	5: Igneous Rocks and Processes	Mon.	2/10/20 11:59 PM	Wed.	2/12/20 11:59 PM	1,5,6,8
6*	6: Sedimentary Processes, Rocks, and Environments	Tues.	2/18/20 11:59 PM	Wed.	2/19/20 11:59 PM	2,5,7,8
7	7: Metamorphic Rocks, Processes, and Resources	Mon.	2/24/20 11:59 PM	Wed.	2/26/20 11:59 PM	1,2,3,5
8	8: Dating of Rocks, Fossils, and Geologic Events	Mon.	3/2/20 11:59 PM	Wed.	3/4/20 11:59 PM	1,2,3,4
9	9: Topographic Maps	Mon.	3/9/20 11:59 PM	Wed.	3/11/20 11:59 PM	1,2,4,6
SPRING RECESS						
10	10: Geologic Structures, Maps, and Block Diagrams	Mon.	3/23/20 11:59 PM	Wed.	3/25/20 11:59 PM	3,4,5,6
11	11: Stream Processes, Geomorphology, and Hazards	Mon.	3/30/20 11:59 PM	Wed.	4/1/20 11:59 PM	2,3,5,7
12	12: Groundwater Processes, Resources, and Risks	Mon.	4/6/20 11:59 PM	Wed.	4/8/20 11:59 PM	1,2,4,6
13*	13: Glaciers and the Dynamic Cryosphere	Mon.	4/13/20 11:59 PM	Wed.	4/15/20 11:59 PM	1,2,3,5
14	14: Desert Landforms, Hazards, and Risks	Mon.	4/20/20 11:59 PM	Wed.	4/22/20 11:59 PM	1,2,3,4
15	15: Coastal Processes, Landforms, Hazards, and Risks	Mon.	4/27/20 11:59 PM	Wed.	4/29/20 11:59 PM	1,2,3,4
16	16: Earthquake Hazards and Human Risks	Mon.	5/4/20 11:59 PM	Wed.	5/6/20 11:59 PM	1,3,4,5
17	Examination Period May 11-15: Take the exam at Sinclair Student Success Center or the KCC Testing Center					

*note different schedule these weeks, e.g., because of start-of-semester or holiday

Participation

Students who do not participate in class, that is, who consistently do not complete assignments will be dropped from the class for non-participation. Students are expected to:

- check email daily; Announcements will be sent to all students through Laulima
- complete the assigned homework (through the *Mastering Geology* site), read the assigned pages in Laboratory Manual in Physical Geology, and complete the indicated activities (also in Laboratory Manual in Physical Geology) on time.
- ask questions by emailing instructors in a timely fashion *before* assignments are due.

Communication

Email. You must use your UH account or make sure your mail is forwarded to other accounts if you use them. The instructors take no responsibility if you fail to check your UH email account.

Please include in every subject line: EARTH101L-007, and the topic of your email (e.g. EARTH101L-007 homework for Week 3).

Tips • Use appropriate greetings, such as “Dear Prof. Hammer”, or “Hello ___”, and sign off with your full name at the end of your email. • If you are referring to a previous email, include and quote the reference properly. • 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 a response until the next business day. Avoid internet slang such as btw (by the way), l8r (later), addy (address). Write in whole sentences with proper punctuation, grammar and spelling.

Technology issues. Since this is an online course it relies heavily on the internet and having a good internet connection. Accessing the lab video tutorials and completing your homework requires the Internet so make sure you are somewhere with a good connection.

Occasionally there are internal problems with UH's network or Lualima. Usually these problems are temporary, and your assignments will not be affected. More often than not there are external problems with your internet service or your connection. For this reason, I suggest that you complete assignments well before the deadline. If you have issues, and it is NOT within two hours of the deadline, email me and I will respond as promptly as I can. If you elect to complete assignments at the last minute and something goes wrong, then I may not be able to help.

Learning Objectives

The Department of Earth Sciences defines five student learning objectives (SLOs) for the undergraduate degree program related to the relevance of geology and 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 can apply technical knowledge of relevant computer applications, laboratory methods, and field methods to solve real-world problems in geology and geophysics.
3. Students use the scientific method to define, critically analyze, and solve a problem in earth science.
4. Students can reconstruct, clearly and ethically, geological knowledge in both oral presentations and written reports.
5. 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.

This course will introduce and begin to develop skills in SLOs 1, 2, 3, and 5. For example, regarding SLOs 1 and 2, you will learn why volcanoes erupt; how and why the volcanoes of Hawaii differ from those on the continents; and understand the differing hazards they pose. In pursuing hypotheses (SLO 3), for example, you'll determine the identity of an unknown mineral using a sequence of tests and apply a process of elimination, and then be asked to put the sample in geologic context. Regarding SLO 5, you will apply basic algebraic expressions relating density, volume, and mass; you'll use chemical formulae for mineral names and apply a quantitative treatment of data wherever possible, including calculation of averages, graphing of results, and estimation of measurement errors.

Policies

Cheating and plagiarism. Academic integrity is a basic principal that requires all students to take credit for the ideas and efforts that are their own. Cheating, plagiarism, and other forms of academic dishonesty are defined as the submission of materials in assignment, exams, or other academic work that is based on sources prohibited by the faculty member. This includes doing someone's lab for them or allowing someone to do your lab for you or copying from the instructor's manual. Academic dishonesty is defined further in the UHM "Student Code of Conduct." In addition to any adverse academic action, which may result from the academically dishonest behavior, the University specifically reserves the right to address and sanction the conduct involved through student judicial review procedures and the Academic Dispute Resolution Procedure specified in the University catalogue.

Kokua. If you have a **disability** and related access needs, the Department will make every effort to assist and support you. For confidential services students are encouraged to contact the Office for Students with Disabilities (known as Kōkua) located on the ground floor (Room 013) of the Queen Lili'uokalani Center for Student Services. If you need disability-related accommodations, please notify the KOKUA Program (808) 956-7511 or email: kokua@hawaii.edu.

To Sum-up:

- You are required to buy the course textbook and create a Pearson Mastering Geology account using the code provided (see p. 6).
- Use Laulima to view lab grades and course grade updates
- Access lab tutorials using our Google Team Drive
- Complete HW assignments (25%) using the Pearson Mastering Geology System (using the account access that you purchase with the text).
- Complete Lab assignments (50%) in the hardcopy workbook Laboratory Manual in Physical Geology by Cronin and Tasa. Tear the pages out, staple them together, put your name on the first page, and turn them in at the Campus Center computer on-time.
- Sign up for a (required, 10%) field trip as soon as the schedule comes out (usually by the 3rd week of semester).
- Register to take the final exam at the Student Success Center in Sinclair Library or the Kapiolani Community College Testing Center when prompted.
- Even though this is an online course, students are held to the usual standard of ethical and respectful behavior.

Got all that? Complete the Syllabus quiz/ Ethics Pledge/ Questionnaire located in the Laulima Resources directory and email it back to jhammer@hawaii.edu or place it in the physical drop box before the end of the first week of the semester.

Title IX information

The University of Hawai'i 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 on your campus to support and assist you. Staff can also direct you to resources that are in the community. Here are some of your options:

- 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.
- If you wish to remain ANONYMOUS, speak with someone CONFIDENTIALLY, or would like to receive information and support in a CONFIDENTIAL setting, use the confidential resources available here:

<http://www.manoa.hawaii.edu/titleix/resources.html#confidential>

- If you wish to directly REPORT an incident of sex discrimination or gender-based violence including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence or stalking as well as receive information and support, contact: Dee Uwono Title IX Coordinator (808) 956-2299 t9uhm@hawaii.edu.

Get started with Pearson's Mastering Geology

First, purchase the required text

1. The required text, Laboratory Manual in Physical Geology by Cronin and Tasa (11th Ed), is available from the UH bookstore.

Then, make sure you have these 3 things...

UHM email account username: You'll get email from your instructor at your UH address.

Course ID: **ERTH101L007HammerS20**

Access code: An access code card is packaged with your new book. Do not buy access separately from the text, as that would be duplicative.



Next, get registered and join your course!

2. Go to **www.pearson.com/mastering/geology**.
3. Under Register Now, select **Student**.
4. Confirm you have the information needed, then select **OK! Register now**.
5. Enter your instructor's Course ID (**ERTH101L007HammerS20**) and choose **Continue**.
6. Enter your existing Pearson account **username** and **password** and select **Sign in**.
 - a. You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyLab Math, MyLab IT, or Mastering Chemistry.
7. If you don't have an account, select **Create** and complete the required fields.
8. Select an access option.
9. Enter the access code that came with your textbook purchased from the bookstore.
10. From the "You're Done!" page, select **Go to My Courses**.
11. Select **Yes** and enter your Course ID to join your course. Click **Continue**.
12. If asked, enter your Student ID according to the instructions provided and click **Continue**.
That's it! You should see the Course Home page for the course.

To sign in later:

1. Go to **www.pearson.com/mastering/geology** and select **Sign In**.
2. Enter your Pearson account **username** and **password** from registration, and select **Sign In**.
 - If you forgot your username or password, select **Forgot your username or password?**