

ERTH 101L-online: Course Description and Syllabus

Welcome to Dynamic Earth Laboratory. In this online section of ERTH 101L (CRN 78093), you will learn about the Earth, and practice approaching problems the way geoscientists do.

Essential Information

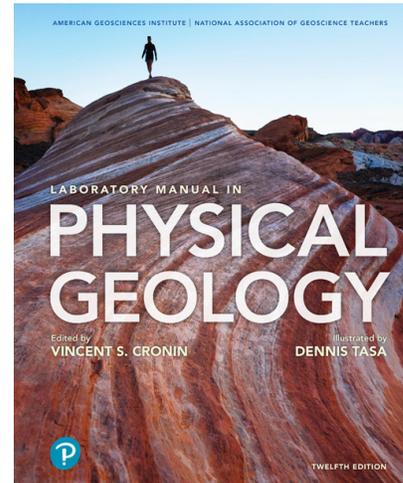
Semester: Fall 2020 Credits: 1

Instructors: Prof. Julia Hammer (jhammer@hawaii.edu) and

Teaching Assistant: Colin Ferguson (colinmf@hawaii.edu)

Requirements

- hardcopy Laboratory Manual in Physical Geology 12th Ed and *Modified MasteringGeology* account from Pearson
- access to computer with internet and means of capturing digital photos (for uploading some assignment components)
- office supplies: pencil, eraser, metric ruler, scissors, drafting compass, colored pencils, etc.



Required text for this course; contains all labs.

Organization and Grading

In response to COVID-19 precautions, there is **no required in-person activity** this semester. (Usually, we have a required field trip.)

The content of the course is taught in video tutorials and assessed with two graded 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 12e by Cronin and Tasa, which you complete using UHM/Laulima¹, *Tests&Quizzes* tool. In addition, there is a final exam for this course. We use our section's Laulima site 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 **20%** of the course grade.
2. Scheduled **reading** assignments in the *MasteringGeology* system. These readings support the Laboratory Exercises and are not graded. However, their completion (validated online in Pearson) is required and counts as the course participation score for **5%** of the course grade.
3. The **labs** comprise the bulk of this course's learning instruments, which are in the required text: Laboratory Manual in Physical Geology (12th Ed; Pearson publisher). These assignments are worth **60%** of the course grade and are submitted using the course's *Laulima* site.
4. The course has a final exam available online during finals week administered on the Pearson *MasteringGeology* system. The final exam accounts for **13%** of the course grade. You will have two hours to complete the closed-book, closed-notes exam.
5. A combined syllabus quiz/ ethics pledge/ questionnaire is worth **2%** of the course grade.

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. Expect to spend 3-3.5h per week on this course. FYI: The time commitment is similar to other UHM labs.

Grade scale.

letter	score	
A+	≥96.7%	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	93.3%	
A-	90.0%	
B+	86.7%	
B	83.3%	Labs. The <i>Laboratory Exercises</i> are in the required text/workbook, Laboratory Manual in Physical Geology by Cronin and Tasa (12 th Ed). Each lab is composed of four* Activities, at the back of the chapter. Use the course Laulima site, <i>Tests & Quizzes</i> tool to submit the lab assignments. Note that some of the questions posed in Laulima differ from the workbook. Video tutorials are provided on a <i>Google Team Drive</i> to help you complete the labs. If you have registered for the course but have not received an email inviting you to the <i>Team Drive</i> , please email the instructor. Some of the tutorials are available at the start of the semester, and you are welcome to complete work for the labs in advance. However, labs will be graded and released according to the schedule below.
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 do not have to complete every activity in the lab workbook. See the assignment description in the Schedule of Topics, below, to make sure you don't do extra work.

Schedule of Topics

Week	Chapter/ topic	HW due 11:59 pm (Pearson)	Lab due 11:59 pm (Laulima)	Lab Activity #
1*	1: Filling Your Geoscience Toolbox	Friday, September 4, 2020	Wednesday, September 9, 2020	2,4,6,7
2*	2: Plate Tectonics	Friday, September 4, 2020	Wednesday, September 9, 2020	4,6,7,8
3*	3: Mineral Properties, Identification, and Uses	Friday, September 4, 2020	Wednesday, September 9, 2020	1,2,6,7
4	4: Rock-Forming Processes and the Rock Cycle	Monday, September 7, 2020	Wednesday, September 16, 2020	1,3,4,5
5	5: Igneous Rocks and Processes	Monday, September 14, 2020	Wednesday, September 23, 2020	2,3,8,9
6	6: Sedimentary Processes, Rocks, and Environments	Monday, September 21, 2020	Wednesday, September 30, 2020	3,4,7,9
7	7: Metamorphic Rocks, Processes, and Resources	Monday, September 28, 2020	Wednesday, October 7, 2020	1,2,3,5
8	8: Dating of Rocks, Fossils, and Geologic Events	Monday, October 5, 2020	Wednesday, October 14, 2020	1,4,5,6
9	9: Topographic Maps	Monday, October 12, 2020	Wednesday, October 21, 2020	1,4,5,6
10	10: Geologic Structures, Maps, and Block Diagrams	Monday, October 19, 2020	Wednesday, October 28, 2020	2,4,5,6
11	11: Earthquake Hazards and Human Risks	Monday, October 26, 2020	Wednesday, November 4, 2020	1,2,3,4
12*	12: Stream Processes, Geomorphology, and Hazards	Monday, November 2, 2020	Thursday, November 12, 2020	2,3,5,7
13	13: Groundwater Processes, Resources, and Risks	Monday, November 9, 2020	Wednesday, November 18, 2020	2,3,4,5
14	14: Glaciers and 15: Deserts	Monday, November 16, 2020	Wednesday, November 25, 2020	1,4,5 + 1
15	16: Coastal Processes, Landforms, Hazards, and Risks	Monday, November 23, 2020	Wednesday, December 2, 2020	1,2,3,4
16	17: Earth's Dynamic Climate	Monday, November 30, 2020	Wednesday, December 9, 2020	1,3,4,6
17	Examination Period Dec 14-18: you may take the exam via Pearson at any point during exams week.			

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

Participation

Students are expected to:

- use UH username in the Pearson system; check email daily;
- complete the assigned homework (through the *Mastering Geology* site), read the assigned pages in Laboratory Manual in Physical Geology (indicating their completion in the *MasteringGeology* site), and complete the indicated activities (described in Laboratory Manual in Physical Geology and submitted via *Laulima Tests&Quizzes*) on time.
- ask questions by emailing instructors *before* assignments are due.

Communication

Email. You must use your UH account to register in the Pearson system. Check your UH email account regularly. When sending email, **include in the subject line: EARTH101L-007.**

Tips • Use appropriate greetings, such as “Dear Prof. Hammer”, 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 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. 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. Occasionally there are internal problems with *Laulima*. 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 before the deadline.

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.

Kōkua. 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.

Executive Summary:

- You are required to buy the course textbook and create a Pearson *MasteringGeology* account using the code provided (see last page of the syllabus).
 - Your next step is to complete the Syllabus Quiz/ Ethics Pledge/ Questionnaire in Lulima *Tests&Quizzes* tool.
 - Access lab tutorials using our *Google Team Drive*. The tutorials are still being created; as of 08/19 the tutorials are available for Labs01 - 04.
 - Complete homework and reading assignments using the Pearson *MasteringGeology* System.
 - Lab assignments are located in the Laboratory Manual in Physical Geology 12th Ed; submit your work using the Lulima *Tests&Quizzes* tool. The upload interfaces are still being created; as of 08/19 they are available for Labs01 - 04.
 - Use Lulima *Gradebook* to view lab grades and *PostEm* tools to view course grade snapshots (updated periodically throughout the semester) after the fourth week.
- Remember, students are held to the usual standard of respectful and ethical behavior. You'll be asked to confirm your adherence to the UHM Student Code of Conduct each time you submit a lab.

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.

Student Registration Instructions

To register for **Modified Mastering Geology for Laboratory Manual in Physical Geol:**

1. Go to <https://www.pearson.com/mastering>.
2. Under Register, select **Student**.
3. Confirm you have the information needed, then select **OK! Register now**.
4. Enter your instructor's course ID: **hammer36087**, and **Continue**.
5. Enter your existing Pearson account **username** and **password** to **Sign In**.
You have an account if you have ever used a MyLab or Mastering product.
 - » If you don't have an account, select **Create** and complete the required fields.
6. Select an access option.
 - » Enter the access code that came with your textbook or that you purchased separately from the bookstore.
 - » If available for your course,
 - Buy access using a credit card or PayPal.
 - Get temporary access.

If you're taking another semester of a course, you skip this step.
7. From the You're Done! page, select **Go To My Courses**.
8. On the My Courses page, select the course name **Modified Mastering Geology for Laboratory Manual in Physical Geol** to start your work.

To sign in later:

1. Go to <https://www.pearson.com/mastering>.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select the course name **Modified Mastering Geology for Laboratory Manual in Physical Geol** to start your work.

To upgrade temporary access to full access:

1. Go to <https://www.pearson.com/mastering>.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select **Upgrade access** for **Modified Mastering Geology for Laboratory Manual in Physical Geol**.
5. Enter an access code or buy access with a credit card or PayPal.