GG101 Dynamic Earth Fall 2017 - On line

I. Instructor
Brian N. Popp
E-mail: popp@hawaii.edu
Office location: POST 720, 956-6206

This is an online course that requires students to be fairly skilled in the use of the Internet. We will communicate through Laulima and WileyPlus through which you will access and submit all course materials. Through Laulima you will access linked videos on YouTube and other outlets, along with the instructor’s video lecture recordings. All quizzes, exams and readings will be through the WileyPlus web site.

II. Text
Physical Geology 3rd Edition (C. Fletcher)
REQUIRED TEXTBOOK: Physical Geology: The Science of Earth, 3rd Edition, 2017, Fletcher, C. Purchasing the eText on-line at WileyPlus will give you access to the textbook as well as all assignments. Important: you must register at wileyplus.com because all quizzes and exams will be taken on-line. To register for WileyPlus, go to www.wileyplus.com/WileyCDA/; choose students, register for a new class and type Manoa and then find; You should see a list with my name then click the green arrow next to my name; Create an account, agree to the terms and have a credit card handy. This will give you access to an on-line version of the textbook as well as future assigned quizzes and exams. You can purchase a loose leaf version of the text (hard copy) at the bookstore for an extra charge or you can download an eBook (again an extra charge) so that you can read the textbook without an internet connection.

III. Office Hours
If you have questions or concerns email me and I respond as quickly as I can. I will answer emails 5x/week: Monday through Friday until 5 pm (HST). If you have emailed me and haven’t received an immediate reply, please be patient before you try me again. I will respond, I promise! Normally I may be able to get back to you quickly.

IV. Course Technologies and Equipment
This course uses Laulima. If you are new to Laulima, you can follow this link to the Laulima Support for Student 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. You can also click on the “Help” button in the Laulima course shell and it will connect you to helpful resources to get you through just about any issue. Since we will only communicate using Laulima and email you will need to use your UH student email. I may be able to respond to your personal email but when I send you a message it will be to your UH account.

V. Course Description
(From the UH course catalog): The natural physical environment: the landscape; rocks and minerals, rivers and oceans; volcanism, earthquakes, and other processes inside the Earth; effects of human use of the Earth and its resources.
Why take a geology class?
1. To understand your home planet
2. To become a better steward of your community
3. To be an informed voter
4. To improve your critical thinking skills

Do you want an A? You cannot learn without studying.
1. Listen to every lecture on line
2. Take all quizzes on time
3. Do ALL the reading before listening to the lecture (2-3 hrs per week)
4. Participate and ask questions, and
5. Prepare for exams (2 hrs per week)
I do not grade on a curve – everyone can get an A.

VI. Course Objectives
This course will provide you with a new view of the world. For the rest of your life you will carry a special perspective that only an understanding of Environmental Geosciences can provide. A geology course can make you a better member of your community because you will 1) understand your home planet, 2) know how to avoid natural hazards, 3) know how to sustain natural resources, 4) understand that global warming is real, 5) become an informed voter, and 6) improve your critical thinking skills.

_Earth is the product of billions of years of evolution during which geologic processes have carved the land, mixed the seas and air, and shifted the continents—and continue to do so._

All life on Earth is the product of natural selection. Preserving biodiversity and natural habitats is critical to the continuation of Earth’s natural resources. Natural resources are geologically renewed but humans use resources faster than they can be naturally renewed. Today humans use 1.5 Earths; that is, the resources we use in 1 year, will take 1.5 years to replace. In the U.S. we use 5 Earths. This is not sustainable.

To ensure that heavily used resources are still here for future generations means that we must ultimately find alternative resources, augment the rate of natural renewal, or reduce our rate of consumption (or all the above). This is can lead to sustainability.

Regardless of your life work, knowledge of environmental geosciences can provide you with a level of awareness that will serve you in your career, your personal life, and your role as a community member of planet Earth. Here are 5 “Enduring Understandings” of geology that serve as semester-long learning goals.

1. _The study of Earth encompasses a vast range of time and space._ Geologists study nature from the length of the Solar System (trillions of kilometers) to the bonding of atoms (0.00000001 centimeters). We stretch our minds to understand the megascopic to the microscopic. Massive planets are constructed of the smallest minerals. Eons of time consist of long periods of slow and gradual change punctuated by short intervals of sudden violent convulsions in nature (i.e., earthquakes, floods, landslides). This immense span of time and space is one of the fundamental characteristics of the geological sciences.

2. _Plate tectonics control the geology of Earth’s surface._ The theory of plate tectonics has far reaching implications for the organization of the planet and its history. As plates move they perpetually change the way our planet looks. Mountain ranges rise when plates
collide only to be worn by erosion down to the sea. Ocean basins open and close as continents rift and collide again. Nearly every aspect of geology is related to how plates interact and change through time.

3. **Geologic systems are the product of interactions between solid Earth, oceans, atmosphere, and living organisms.** Earth is organized into overlapping geologic systems that influence and react to each other. Geologic systems consist of interdependent materials (such as rocks, sediments, organic compounds, and water) that interact with natural physical and chemical processes. In a broad sense, these interactions occur because solar energy, geothermal energy, and gravitational energy are at work mixing the air, ocean, and solid Earth.

4. **Change is ever present and accumulates over vast time. Humans are powerful agents of change.** You live upon an ancient and restless landscape that is changing under your feet. All forms of life have evolved partially in response to geologic change over time. Today’s Earth is the product of both gradual and instantaneous change accumulating over 4.6 billion years. Hence, our planet looked very different in the past and it will look different in the future.

5. **Rocks and sediments are pages in the book of Earth history.** Geologists read the story of Earth history in the crust. Earth history teaches us that Earth is very old, that evolution is responsible for life’s incredible diversity that ever-present change is a characteristic of geologic systems, and that geologic processes operate on an immense stage of time and space.

**VII. Student Learning Objectives**

The **Department of Geology and Geophysics** has established the following undergraduate student learning objectives. Keep especially objectives 1, 3, and 5 in mind as overarching targets of our curriculum in GG101.

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.

**VIII. Class participation:**

Be sure to always read the Laulima Announcements to enhance your participation and stay current.

- Students are expected to watch the presentations on Laulima, read the assigned readings, and complete all assignments on time.
- Students are expected to read the assigned sections in the text and any other sources provided.
• Students are expected to ask relevant questions.
• Pay attention to announcements and course documents posted on Laulima.
• The instructor will send emails to individual students. **You must use your UH email account or make sure it is forwarded to other accounts if you use them. The instructor takes no responsibility if you fail to check your UH email account.**
• Students enrolled in this online class are expected to keep up with all assignments on a timely basis.

**Please note:** for any email you send me, please remember that I get a lot of emails so please include in the subject line: your full name, course name (GG101), and the topic of your email (e.g. Valentino Rossi GG101 Streams Learning 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.

**IX. Types of Assignments**
• Watch the video lecture and any other videos I have posted
• Chapter Readings (typically the textbook but I could post other stuff too)
• Quizzes for each chapter based on the module topics
• Exams

**NOTE: Please read this section carefully and completely!**

Late Work will **NEVER** be accepted and I cannot extend the deadlines for any reason. Since you will be submitting all your assignments through WileyPlus, if you miss the weekly deadlines for assignments for any reason it will result in an automatic zero. You will always have over a full week to complete the weekly lecture modules, quizzes and exams but when the final submission time passes there will be nothing I can do to help you. This also applies if you elect to wait until the last minute to complete the work and then have a sudden life crisis or a computer issue. Get your work done well before the deadline and your life (and mine!) will be smooth.

Ok, so you got it??? Assignments, quizzes and exams may **NOT** be made up later than the due date, so please do not ask. **All the due dates and times are listed in the syllabus.**

**X. Network Outage Plan**
Since this is an online course it relies heavily on the Internet and having a good Internet connection. Your quizzes and exams are taken over the Internet so make sure you are somewhere with a good connection. Occasionally there are internal problems with UH’s network or Laulima and with WileyPlus. Usually these problems are temporary and your quizzes and exams will not be affected. More often than not there are external problems with your Internet service or your connection. For this reason I would suggest that you get your assignments completed well before the deadline approaches on the due date and time. If you have issues taking a quiz or exam, and it is **NOT** within two hours of the deadline, I will always happily reset a quiz or exam for you. Just email me and I will respond as promptly as I can. However, if it is within two hours of the deadline there may not be time for me to respond and you will not get a second chance. Just to be clear, you will normally have over seven days to complete your assignments. If you elect to
complete them at the last minute and something goes wrong with your life or your
Internet connection then I may not be able to reset your quiz or exam.

XI. Course Evaluation and Assessment:
Student final grades will be based on the total number of points received from weekly
quizzes and exams. Exams will be worth 60% and quizzes 40% of your grade. Note:
plagiarism and/or cheating will result with an F for the test or quiz.

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

XII: Audit Policy:
There are no requirements to auditing this class if you decide to change later in the
semester.

XIII: Plagiarism and cheating policy:
As per university policy: Academic integrity is a basic principal that requires all students
to take credit for the ideas and efforts that are their own. University of Hawaii has strict
rules against plagiarism. 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. Academic dishonesty is
defined further in the “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. If you are unfamiliar with the definition of
plagiarism and how to avoid it, you should look at
http://www.hawaii.edu/eli/students/plagiarism.html. Note in particular the advice at the
bottom of this web page.

XIV. Protocols for Communicating with your Instructor and other Students Via the
Internet:

- The most important rule of communicating electronically is, “Think before you
  post!”
- Send emails from an educational or a military account only. The instructor
  will not respond to any other email addresses (I get a lot of spam so messages
  I receive from addresses I don’t recognize I delete immediately.
- 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, GG101: question on
  Chap 3 about Mantle Melting”.
- Use appropriate greetings, “Hello Dr. Popp or Brian (not “Yo”),
- Sign off with your full name at the end of your email. Believe it or not, I may
  not recognize you if you just put “Chuckie”.
- Emailing, messaging and posting on discussion boards in academia are different
  from emailing buddies and posting in newsgroups. You have to be courteous at all
times, e.g. “I would like to ask …”. People are easily offended and take things
  the wrong way. If you have any question that what you are sending may not be ok,
have somebody else read it first.
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 would like you to give me some advice.” Be nice.

Assume that the instructor is willing to help you with problems, “Dr. Popp, please get back with 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 me 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 the next business day.

XV: Academic Success and Disability Support Services
Please feel free to talk to your instructor anytime about your performance in the course or possible ways you can improve. Excellent references are available on the web and there are support texts in the library and classroom. I encourage you to organize study groups with your fellow students.

Disability Access:
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 “Kokua”) located on the ground floor (Room 013) of the Queen Lili'uokalani Center for Student Services:

KOKUA Program
2600 Campus Road
Honolulu, Hawaii 96822

Office hours 7:45 AM – 4:30 PM
Voice: 956-7511
Email: kokua@hawaii.edu
URL: <www.hawaii.edu/kokua>
Title IX
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.
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<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Subject</th>
<th>Chapter</th>
<th>Quiz/Exam due date</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug 21</td>
<td>Introduction, Solar System</td>
<td>Chapters 1 &amp; 2</td>
<td>8/28 @ 7 pm</td>
</tr>
<tr>
<td>2</td>
<td>Aug 28</td>
<td>Plate Tectonics</td>
<td>Chapter 3</td>
<td>9/4 @ 7 pm</td>
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<tr>
<td>3</td>
<td>Sept 4</td>
<td>Minerals, Igneous rocks</td>
<td>Chapters 4 &amp; 5</td>
<td>9/11 @ 7 pm</td>
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<tr>
<td>4</td>
<td>Sept 11</td>
<td>Volcanoes</td>
<td>Chapter 6</td>
<td>9/18 @ 7 pm</td>
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<td><strong>Exam #1</strong></td>
<td><strong>Chapters 1 to 6</strong></td>
<td><strong>9/18 @ 7 pm</strong></td>
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<tr>
<td>5</td>
<td>Sept 18</td>
<td>Weathering</td>
<td>Chapter 7</td>
<td>9/25 @ 7 pm</td>
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<td>6</td>
<td>Sept 25</td>
<td>Sedimentary, Metamorphic Rocks</td>
<td>Chapters 8 &amp; 9</td>
<td>10/2 @ 7 pm</td>
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<tr>
<td>7</td>
<td>Oct 2</td>
<td>Mountain Building</td>
<td>Chapter 10</td>
<td>10/9 @ 7 pm</td>
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<td>8</td>
<td>Oct 9</td>
<td>Earthquakes</td>
<td>Chapter 11</td>
<td>10/16 @ 7 pm</td>
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<td><strong>Exam #2</strong></td>
<td><strong>Chapters 7 - 11</strong></td>
<td><strong>10/16 @ 7 pm</strong></td>
</tr>
<tr>
<td>9</td>
<td>Oct 16</td>
<td>Geologic Time</td>
<td>Chapter 12</td>
<td>10/23 @ 7 pm</td>
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<tr>
<td>10</td>
<td>Oct 23</td>
<td>Earth's History, Climate Change</td>
<td>Chapters 13 - 14</td>
<td>10/30 @ 7 pm</td>
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<tr>
<td>11</td>
<td>Oct 30</td>
<td>Glaciers and Paleoclimatology</td>
<td>Chapter 15</td>
<td>11/6 @ 7 pm</td>
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<tr>
<td>12</td>
<td>Nov 6</td>
<td>Mass Wasting</td>
<td>Chapter 16</td>
<td>11/13 @ 7 pm</td>
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<td><strong>Exam #3</strong></td>
<td><strong>Chapters 12 - 16</strong></td>
<td><strong>11/13 @ 7 pm</strong></td>
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<tr>
<td>13</td>
<td>Nov 13</td>
<td>Surface Water</td>
<td>Chapter 17</td>
<td>11/20 @ 7 pm</td>
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<td>14</td>
<td>Nov 20</td>
<td>Groundwater</td>
<td>Chapter 18</td>
<td>11/27 @ 7 pm</td>
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<tr>
<td>15</td>
<td>Nov 27</td>
<td>Deserts, Wind and Coastal Geology</td>
<td>Chapters 19 &amp; 20</td>
<td>12/4 @ 7 pm</td>
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<tr>
<td>16</td>
<td>Dec 4</td>
<td>Marine Geology</td>
<td>Chapter 21</td>
<td>12/11 @ 7 pm</td>
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<td><strong>Exam #4</strong></td>
<td><strong>Chapters 17 - 21</strong></td>
<td><strong>12/14 @ 7 pm</strong></td>
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*Please Note*: There are multiple single-day University holidays scattered throughout the semester. This schedule does not show their individual dates. You are not expected to perform University-related work on these holidays, so depending upon when they fall, please plan accordingly.