

PHYSICAL GEOLOGY - GEOL 101

Instructor: Simon Kattenhorn

Fall Semester 2007: MWF 10.30 - 11.20 a.m., Ag. Sci. 106

Course Objectives

Each of you depends on the Earth to survive. Each and every day, we rely on its water, its mineral resources, and its soil to grow our food. But do you know how the Earth works? Have you ever looked at a mountain or a lake or the rocks under your feet and wondered how they formed or why they are there? Have you ever stood by a flowing river and wondered how it formed the valley it flows through or why it takes such a winding path down to the ocean? Have you ever wondered where underground water comes from? What about the gas we put in our cars? Or the metal from which the car is made? Where does it all come from? Have you ever wondered why we have earthquakes? How tsunamis are produced? Why volcanoes erupt? How does the Earth impact on our lives? How do we impact on the Earth?

Our planet is full of mysteries, wonder, contradictions, and beauty. As citizens of this planet, it is our responsibility to understand what makes the Earth tick, consider how our planet initially formed, how it subsequently changed, and how it may continue to change. Also, a basic knowledge of geology is sure to help you throughout your life. For example, buying a home may be one of the most important things you ever do. So where is a safe place to buy a house? On a river flood plain where the land is fertile? At the top of a sea cliff with a beautiful view? Along the San Andreas Fault, with its associated rugged scenery? Next to a beautiful beach at the foot of a Hawaiian volcano? How can you assess these things without knowing anything about geology and the potential natural hazards it presents?

This course will help you develop an understanding of the processes that shape our planet and will hopefully give you a renewed appreciation for our natural wonders. You will learn about issues that will affect us all in times to come, including geologic hazards, global warming, and planetary exploration.

Course Logistics

Instructor: Simon Kattenhorn (please call me Simon!). I am an Associate Professor in the Department of Geological Sciences.

Office: McClure 303D. McClure is directly opposite the Mines Building on 7th St. It is wheelchair accessible from all entrances and has two elevators (NW and SW corners).

Office hours: Tuesdays from 3.00 pm - 4.00 pm and Thursdays from 2.30 pm - 3.30 pm. Please feel free to make an appointment to see me at a different time if the official office hours are not convenient for you.

Office phone: 885-5063 (5-5063 from on campus). The best time to reach me is during the office hours listed above. I have voice mail- if you would like me to call you back, leave your name, telephone number and a convenient time to call you and I will attempt to return your call as soon as possible.

Email: simkat@uidaho.edu (this is the most efficient way to get a hold of me!)

Mailbox: if you wish to leave items in my mailbox, it is in the room directly opposite the Geological Sciences departmental office (Mines 322).

Course Website: <http://www.uidaho.edu/~simkat/geol101.html>. You will use this website OFTEN!!! Use the course website to access lecture notes, course handouts, exam answer keys, exam grades, extra credit quizzes, and any information relevant to this class. Please note that lecture notes are fill-in-the-blank style, which means you MUST come to lectures to receive all the information you need for the exams.

Required textbooks:

Earth: An Introduction to Physical Geology, 9th Ed. (Tarbuck & Lutgens) – required for lectures
Physical Geology Exercises, 2nd ed. (Hinds) – unused copy absolutely required for labs

Required Clicker:

You are required to purchase a TurningPoint Technologies Student Response System (also called a “clicker”), which will be available at the UI Bookstore. Both the RF and XR systems are acceptable. This device is needed so that you can respond to in-class quizzes, which will occur during every lecture. In order to work properly, you will need to register the serial number of your “clicker” during the first week of class. Register your serial number on WebCT (<http://webct.uidaho.edu>). Log into WebCT using your UI computer account login name and password.

Exams

There will be 4 exams during the semester. Exam dates are shown below:

EXAM 1:	Wednesday, September 12th (in class)
EXAM 2:	Friday, October 12th (in class)
EXAM 3:	Wednesday, November 7th (in class)
EXAM 4:	Monday, December 10th (10am – 11am)

All exams will be held in our usual lecture hall- Ag. Sci. 106. All 4 exams will only cover the lecture material that was not covered in earlier exams (i.e., no comprehensive exams!!).

All exams use a multiple choice format. You must arrive on time for each exam or risk not being admitted to take the exam. **Bring your student ID with you to each exam!** Student ID cards will be examined. Answer keys will be posted on the course website as soon as possible after each exam. Grades for each exam will be posted online using WebCT to ensure confidentiality.

Missing Exams: I have one word of advice about missing exams. **DON'T!** You will NOT be permitted to take a missed exam without a *really* good excuse (e.g., doctor’s note; missing leg; psychotraumatic amnesia). If you miss an exam and have a *valid* excuse, contact me within 1 day after the exam you missed. If you know ahead of time that you will be unable to take an exam on a scheduled day, see me as soon as possible to make alternative arrangements (assuming you have a *valid* excuse).

Help sessions: these will be held before each exam, as scheduled below. All help sessions will be in Ag. Sci. 106 from **5-6 pm**. Attendance is optional, but recommended. The help session schedule is: EXAM 1: Monday, Sep. 10th. EXAM 2: Friday, Oct. 5th. EXAM 3: Monday, Nov. 5th. EXAM 4: Friday, Dec. 7th.

Grading

Your grade in the class will be made up of the following percentages:

Exams:	75%
In-class quizzes:	25% (based on clicker responses)
Attendance:	loss or bonus % (based on clicker responses)

Each exam will be worth 50 points. You MUST take all four exams. Your three highest exam grades will each count for 30% of your total exam grade. Your lowest exam grade will count for the remaining 10% of your total exam grade. HOWEVER, if you miss any exam, you will get a zero for that exam and each of your exam grades (including the zero) will then count for a full 25% of your overall exam grade. No exceptions. If you have any questions about a grade you received in an exam, you must speak to me about it within 1 week of the exam.

In-class quizzes will be held at the start of EVERY lecture beginning in week 2. Quiz questions will be based on the previous lecture. You will be required to bring your Student Response System (“clicker”) to class with you EVERY TIME in order to answer these questions. Clicker based questions during each lecture will be used to gauge attendance.

You will receive a waiver for 2 in-class quiz absences and 5 attendance absences. In essence, your 2 lowest in-class quiz grades will be discarded. For every absence in excess of 5 absences from class, you will lose 1% from your final grade, up to a maximum of 10%. If you have a 100% attendance record by the end of the semester, you will receive a 2% bonus on your final grade. If you have 5 absences or less, you will receive a 1% bonus.

The following grade scale will be used for each exam: **A:** ≥89%; **B:** 79-88%; **C:** 68-78%; **D:** 50-67%; **F:** ≤50%.

Please speak to me if you do not fully understand the grading policies for this course. Grades for each exam and quiz will be posted on WebCT.

Extra Credit

There will be several opportunities to obtain extra credit points, but don't expect extra credit opportunities to significantly make up for poor exam grades! Extra credit points will be added to the next exam grade following the awarding of the extra credit. Extra credit options include:

Online Quizzes: look for these on the class website, on the "Geology in the News" page. Quizzes appear randomly and without warning, so it's first come, first served. Check the website often! The first FIVE correct respondents to a quiz will win a 2% bonus in the next exam following the quiz (up to a maximum of 6% bonus per exam). Quiz questions can cover any material from lectures or from the "Geology in the News" articles.

Field Trip Participation: the field trip is optional, but you'll get a 1% bonus on your final OVERALL course grade should you decide to attend.

Special Event Attendance: events such as movie screenings will be held during the semester for extra credit. Details will be provided in class.

The Amazing GeoRace: oh, the lengths you can go to for extra credit! Or in this case, the distance you can go to. Listen out in class for details of the Amazing GeoRace (held around Thanksgiving).

Course Policy for Clickers

Please note that it is the responsibility of the student to bring the TurningPoint Technologies clicker to each class. If you are unable to respond to quiz questions as a result of forgetting to bring a clicker, you will receive a zero grade even if you were in attendance. Your attendance grade will not be affected if you show me a student ID at the end of class and provide me with a piece of paper on which you have written your name. It is also the responsibility of the student to ensure that clicker batteries are always in working order. You can tell that a clicker is working correctly if the green light illuminates when a button is pressed. You should always carry a spare set of batteries with you to class. If your clicker is ever lost or stolen, it is your responsibility to replace it as soon as possible. In the event of this occurring, please speak to me about it immediately.

Labs

The lab portion of this course (Geol 101L) is mandatory only if you are taking this course as a science core requirement. The lab grade is separate from the course grade. If you are repeating the course, you do not need to take the lab again if you previously passed the lab. See the Geol 101 course website for a list of lab sessions and associated lab instructors. You **MUST** attend the lab that you are officially enrolled in. If you miss a lab, you may be able to make it up during one of the other lab sessions that same week (with the permission of the appropriate lab instructor) or during a help session. But do not make a habit of this. Lab help sessions are on Monday and Tuesday evenings from 5.30-7.30 pm- specifics will be provided in the labs.

There are no labs during the first week of class (August 20-24th).

Field Trip

There will be one full-day field trip in October. Attendance is optional and there are a limited number of seats available. You have a choice of 2 different days to take the field trip (Saturday, October 20th or 27th).

Sign-up sheets will be posted outside my office (McClure 303D) in early October. On each day, you will have a choice of either leaving at 9.00 am and returning around 3.00 pm or leaving at 9.30 am and returning around 3.30 pm. Vans leave from the far end of the Kibbie Dome parking lot, along Perimeter Drive (across the street from the Facilities building with the blue roof). Bring a pen, a packed lunch, and water, and come prepared for the weather!

Disability Statement

Reasonable accommodations are available for students who have a documented disability. Please notify me during the first week of class regarding accommodation(s) needed for the course (including alternative exam scheduling). All accommodations must be approved through Disability Support Services located in the Idaho Commons, Room 306. Phone: 885-6307. Email: dss@uidaho.edu. Website: www.access.uidaho.edu.

Please note that students with documented disabilities who wish to take their exams administered through the DSS office must provide the instructor with the appropriate DSS form at least ONE WEEK prior to the scheduled exam. If you do not provide me with this form, I will assume that you have decided to take the exam along with the rest of the class in Ag. Sci. 106. Please speak with me if you have any questions about this policy.