# HNRS 212, Colloquium in Geology (in Ecuador), Summer

**Prep Lecture/Lab M-F, 9-5**

***Instructor:  Dr. Scott Linneman (he/him)***

Office:  BH418C; Phone:  360-650-3446; Email:  [scott.linneman@wwu.edu](mailto:scott.linneman@wwu.edu)

Class goals:  Geology is the study of the earth:  of what it is composed, how it formed, and what processes continue to shape it. This may sound like it has little to do with your daily life, but in fact geology is relevant to the non-scientist almost every day. While my ideal goal for this class is that you should all discover a latent passion for geology, change majors and become earth scientists, this is probably not entirely reasonable. Instead, my hope is that you should learn to see earth science in a way that is personally meaningful. In this class, you will learn how you are affected by your local and regional geology. This includes learning how to determine whether your home is in a seismically hazardous area, a flood plain or in a region prone to landsliding. What you learn in this class will hopefully improve your understanding of issues such as water use and global climate change. It is my hope that you will be more adept at reading about these issues in the newspaper and that you will be a more educated voter on issues related to the earth and its resources.  Most of all, you will learn how science really works, and how to determine if something is “good science”.

Another way to look at the class goals is through four “Big Ideas” on which we will focus.  These are as follows:

1. Geology is a scientific discipline, based on falsifiable principles and models of the Earth and other plants. These principles allow us to understand the Earth with and without direct observation.
2. Geology is a fundamental part of everyday life. Humans interact with the Earth via our use of resources, our political actions and the effects of natural hazards.
3. Geology relates to an interaction of complex systems that evolve over long (millions to billions of years) time periods.
4. Success at WWU requires fundamental skills including scientific literacy, study skills and habits of thought and action.

As we begin each major topic in the class you will also be provided with a list of learning targets that relate to both the topic at hand and one or more of the Big Ideas above.

## Required materials:

*Pick one:*

1. *Reynolds et al "Exploring Geology" (3e or 4e)*
2. *Lutgens & Tarbuck "Essentials of Geology" (12e - 15e)*
3. *Marshak "Essentials of Geology" (3e or 4e)*

Lab equipment: hand lens (7x or 10x), notebook, camera

## Policies:

Your comportment while abroad will be measured based upon a mature standard.  Visitation in another county is both an honor and a privilege.  Any conduct that is detrimental to the friendly interactions with our hosts, to the overall pedagogical experience, or to the safety and well-being of the group will result in a reduction of your course grade.  **Blatant disregard of the basic rules may result in being dismissed from the course at any point, including while abroad**.

Mature and Culturally Appropriate Participation in Group Activities:Individual students will receive a grade on their participation and ability to engage as responsible members of the learning community while traveling abroad. Students are expected to participate in all activities and field experiences. ***Students must arrive on time***, remain fully attentive and culturally sensitive.

As a group, we must commit to being considerate and supportive of each other. This entails, among other things: doing the readings and assignments, listening to each other with an open mind, provided constructive feedback when relevant, and being respectful of diverse points of view. Please be sensitive and respectful with regards to differences in gender, race, ethnicity, class, religion, nationality, physical ability and sexual orientation. Remember, the ways in which we are a diverse group of people are not necessarily apparent or readily evident.

Group Behavior Contract:Additionally, pre-departure, the class will collaboratively discuss group expectations as well as WWU rules for international travel programs and a rubric will be made to clarify expectations and scoring guidelines. As we are visitors in another culture, everything we say and do reflects on ourselves, our class, our university, and our country. **Therefore, respectable and safe behavior is expected at all times; disrespectful or unsafe behavior could mean a failing grade and/or an early trip home.**

## Grade:

Class Participation- 50%

Daily summaries- 10%

Illustrated Field Guide- 40%

Integrity and professionalism:Part of your job as a Western student is to behave in a manner that is professional and exhibited integrity.  This is not simply an academic matter:  most professions also include a code of ethics by which its members are bound, and geology is no exception (you can read a few geology codes of ethics at [http://www.agiweb.org/workforce/ethics.html (Links to an external site.)Links to an external site.](http://www.agiweb.org/workforce/ethics.html) and [http://www.geosociety.org/aboutus/ConductCode.htm (Links to an external site.)Links to an external site.](http://www.geosociety.org/aboutus/ConductCode.htm)).  Thus you are expected to behave in a professional manner in this class.  With respect to academics, you are responsible for knowing the university policies on Academic honesty and plagiarism (these may be found at [www.wwu.edu/integrity (Links to an external site.)Links to an external site.](http://www.wwu.edu/integrity)). In a nutshell, any ideas or phrasing that are not your own must be properly cited.  Use direct quotations only when absolutely necessary (there is no possible way to say the thing better), provide citations when discussing others’ work and use your own words when paraphrasing.  Note that it is not sufficient to change a few words or the order of clauses.  Paraphrasing involves completely rewriting someone else’s ideas in your own words.

Integrity also means that the work you turn it should be your own.  ***This means that although you and a friend may discuss the assignment, you must write them up completely separately.  Again*, *see me if this is not clear*.**  Assignments that are found to be non-original will earn a zero and can result in your failing the course.

 Professionalism also means being respectful to others in the class.  You can exhibit respect by attending class, arriving on time (or entering quietly if you must be late), listening to your peers, and engaging in polite discussion (even when you disagree). Please do not distract your classmates by using your phone or going on the web during class. Behavior such as this does not just affect you-- it can be distracting and frustrating to your peers.

## Tentative Schedule for Prep Week

|  |  |  |
| --- | --- | --- |
| Date | Topic *Activity* | Reading in TEXT |
| Mon 6/27 1-4pm | Intro to class; Plate tectonics  ***Plate tectonics*** | Plate Tectonics Chapter (usually Ch 2) |
| Tues 6/28 1-4pm | A Rock Cycle  ***Examining Mineral & Rocks*** | Chapters on Rocks (igneous, sedimentary, metamorphic) |
| Wed 6/29 1-4pm | Whole Earth Structure and History ***Geologic History Puzzles*** | Read GeoTimesarticle on Canvas in Modules |
| Thurs 6/30 1-4pm | Seismic and Volcanic Hazards  ***PNW Focus*** | Chapters on Earthquakes and Volcanoes |
| Fri 7/1 1-4pm | ***Discussion of Cotopaxi Hazards article***  ***Discussion of Galapagos article*** | View Toulkeridis Lecture  Videos & articles in Modules |
| Sat 7/2  7am-5pm | Field Trip to Mount Baker’s south side  ***Notes and Photos*** |  |
| Sun 7/3 1-4pm | Prep and Pack! |  |
| Mon 7/3 | Departure from Bham  Off we go!! |  |