

# Geology 1230: The Blue Planet: Our Habitable Home

**Spring 2015, CRN 27374**  
**TR 2:30 -3:20 pm**  
**Geology Room 123**



**Instructor:**

Dr. Lixin Jin, Office: 221A Geology,  
Tel: 747-5559, email: [ljin2@utep.edu](mailto:ljin2@utep.edu)  
Office hours: T R 1:30-2:20 pm and by  
appointment

**Textbook (essential):**

*The Blue Planet: an introduction to Earth system science*  
3<sup>rd</sup> edition, Skinner and Murck (ISBN 9780471236436)

**Grading:** Exams (60%); Homework and Quizzes (30%); Attendance (10%);

Grading scale:

A: 100-90%; B: 89-80%; C: 79-70%, D: 69-60%; F: below 60%.

**Course Objectives:** This course serves as an introduction to the topics of earth system science, exploring interactions within solid earth, water, atmosphere, and life. Students will learn the approach to study our home planet, for example, to understand how water affects life on the planet, how both biotic and abiotic factors control ocean and stream chemistry, soil chemistry, and the atmosphere. Students will also grow their scientific reasoning skills in the areas of construction and use of scientific models, making observations, data analysis and reasoning from evidence, and understanding the impact of Earth systems on human society and vice-versa.

**Class policies:** I follow University Policies as outlined in the academic regulations in the 2006-2008 Undergraduate Catalog (<http://www.utep.edu/catalogs/2006/2006-2008UG.pdf>). This includes the scholastic dishonesty policy as outlined in the UTEP Handbook of Operating Procedures that can be accessed under the student affairs link at <http://www.admin.utep.edu/hoop>. Cellular phones and pagers are to be turned off or placed in silent mode during class. Conducting telephone conversations or texting messages during class time are prohibited.

**Attendance Policy:** Class members are expected to attend all classes. I reserve the right to drop you from the course if you miss more than 4 class meetings. Absences for University-recognized activities (e.g. sports, professional conferences), and religious holidays will be excused provided that you tell me at least a week ahead of time.

**Missed Exam Policy:** NO MAKE-UP EXAMS WILL BE GIVEN!!! If you must be out of town on exam day, you must arrange to take the exam early. One exam with the *lowest* score will not be included in the grade compilation.

**Drop Date:** The UTEP drop deadline is April 6, 2015. Drop a class after this deadline will automatically receive an F.

<i>Week</i>	<i>Lecture topics</i>	<i>Reading materials</i>
1	Introduction, Logistics, Earth systems	Ch 1
2	Energy, Matter, and Time	Ch 2, 3, 4
3	Dynamic Solid Earth	Ch 5
4	Earthquakes and Volcanoes	Ch 6
5	Rock Cycle	Ch 7
<b>Exam I</b>		
6	The Liquid Earth: Hydrologic Cycle	Ch 8
7	Ice and Oceans	Ch 9, 10
9	The Atmosphere	Ch 11
10	Wind and Weather	Ch 12
11	Climate	Ch 13
<b>Exam II</b>		
12	Life on Earth	Ch 14
13	Cycle of life	Ch 15
14	Human and the Earth	Ch 17
15	Mineral and energy resources	Ch 18
16	The Anthropocene	Ch 19
<b>Exam III</b>		
17	<b>Final Exam (Thursday May 14<sup>th</sup>, 2:30-3:20)</b>	

*The schedule may vary slightly from what is outlined here*

### **Some advice:**

- We cover 18 chapters in the textbook and there are four exams. That is more than anyone can read the two nights before an exam. Conclusion: reading must proceed at a regular pace, along with, and preferably *before*, the corresponding lecture.
- **Quizzes** help students prepare for the typical questions on an exam and – in order to do well in the course – students need to be on a regular work-schedule preparing for quizzes and exams. Quizzes will be given during class. A missed quiz gives a zero score. One quiz with the *lowest* score will not be included in the grade compilation.
- Ask questions in class.
- Use web page to get notes, study guides...
- Combine class notes, textbook, old homework, and web materials - each provides a different perspective.
- Treat the quizzes and review handout like a practice test-where do you think I get test questions?!
- Pay attention to the news and current events to see how they relate to the Earth system.