

PHYSICAL GEOLOGY (GEO 111)

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Office Hours: 11:15 - 12:00 M-F, by appointment, or whenever you stop by.

Text *Earth: Portrait of a Planet* by Stephen Marshak 3rd Edition

Course Meeting Times: 9:15 – 11:15 am M – F; 1:15 – 3:00 pm (as scheduled)

Grading Scheme 15% Exam 1 20% Final Exam 15% Paper 20% Lab 10% Homework 10% Quizzes 10% Participation

Goals and Expectations – This course is intended to introduce you to the methods used to reconstruct the structure, history, and mechanisms for change within Earth and its systems including the lithosphere, hydrosphere, biosphere, cryosphere, and atmosphere. The immensity of geologic time and principles used to determine chronologies of events will also be discussed. To these ends, we will cover material in lecture, gain hands-on experiences in lab, work independently on relevant homework exercises, and take fieldtrips to see rocks in the field. In addition, each of you will research a topic of my choosing and write a paper on it.

Policy on Late Work - Homework assignments, papers, and exams are to be completed within the scheduled time frame. You will be penalized 25% for every day that the assignment is late. If you have a college-sanctioned excuse for missing class or an assignment deadline, notify me immediately.

Exams - Both lab and lecture exams are closed book; handouts, flowcharts, etc. used in class will not be used during tests. All exams, both in lab and lecture, are cumulative.

Academic Honesty - Cornell College expects all members of the Cornell community to act with academic integrity. An important aspect of academic integrity is respecting the work of others. A student is expected to explicitly acknowledge ideas, claims, observations, or data of others, unless generally known. When a piece of work is submitted for credit, a student is asserting that the submission is her or his work unless there is a citation of a specific source. If there is no appropriate acknowledgement of sources, whether intended or not, this may constitute a violation of the College's requirement for honesty in academic work and may be treated as a case of academic dishonesty. The procedures regarding how the College deals with cases of academic dishonesty appear in The Compass, our student handbook, under the heading "Academic Policies – Honesty in Academic Work."

Students with Disabilities - Students who need accommodations for learning disabilities must provide documentation from a professional qualified to diagnose learning disabilities. For more information see cornellcollege.edu/disabilities/documentation/index.shtml. Students requesting services may schedule a meeting with the disabilities services coordinator as early as possible to discuss their needs and develop an individualized accommodation plan. Ideally, this meeting would take place well before the start of classes. At the beginning of each course, the student must notify the instructor within the first three days of the term of any accommodations needed for the duration of the course.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<i>WEEK 1</i>				
9 - Earth Structure; research paper topics assigned 1:15 - NO LAB Ch. 1-2; Interlude D (330-340) Annotated Bibliography	9:15 – Minerals, Sedimentary Rocks, Depositional Environs, Weathering; <i>review questions due</i> 1:15 – Sedimentary Rocks & Minerals Lab Ch. 5, 7; Review Questions; Annotated Bibliography	9:15 – Geologic Time, Relative & Numerical Dating; <i>review questions due</i> 1:15 – Geology Timeline & Relative Age Lab Ch. 12; Sequence of Events; Review Questions; Annotated Bibliography	9:15 – SEISMIC computer exercise (Library 212) 1:15 - Intro to Plate Tectonics; <i>Sequence of Events due; review questions due</i> Ch. 3-4; SEISMIC exercise, World Plate Boundaries; Review Questions; Annotated Bibliography	9:15 – Igneous Rocks & Processes; <i>annotated bibliography due</i> 1:15- Ign Rx & Min Lab Ch. 6; Review Questions; First Draft of Paper
<i>WEEK 2</i>				
9:15 – Volcanoes; <i>review questions due</i> 1:15 - NOVA video (In the Path of a Killer Volcano) Ch. 9; Review Questions; First Draft of Paper	9:15 – Metamorphism; <i>review questions due</i> 1:15 – Metamorphic Rocks & Minerals Lab Ch. 8; Review Questions; First Draft of Paper	9:15 – Mt Building; Structure 1:15 - Structure Lab Ch. 10; 11; Review Questions; First Draft Paper; Structure Lab	9:15 – MIDTERM EXAM 1:15 – NO LAB First Draft of Paper; Structure Lab	9:15 – Structure Lab (cont'd) 1:15 – NO LAB Ch. 10-11 Review Questions; First Draft of Paper
<i>WEEK 3</i>				
9:15 – Earthquake video; <i>review questions due; Structure lab due; First draft of paper due</i> 1:15 – Karst and Groundwater Ch. ; Review Questions	9:15 – Streams & Flooding; <i>review questions due</i> 1:15 – NO LAB Ch. 17; Review Questions; 2 nd draft of paper	9:15 – Pre-Quaternary Paleoclimates 1:15 – Milankovitch Cycles Ch. 20, 22; Review Questions; 2 nd draft of paper; Paleoclimate HW	9:15 – Ice Records; <i>review questions due; Paleoclimate HW due</i> 1:15 – Teleconnections Ch. 23; 2 nd draft of paper; Paleoclimate HW #2	9:15 – 11:15 - Fieldtrip to Core Lab (meet at lab at 9:15); <i>review questions due; Paleoclimate HW #2 due</i> 1:15 – NO LAB Core Lab Report; 2 nd draft of paper
<i>WEEK 4</i>				
9:15 – Environmental Issues; review questions due; Core Lab Report due; 2 nd draft of paper due 1:15 - FINAL LAB EXAM Ch. 14; Review Questions; 2 nd draft of paper	9:15 – review session 1:15 – TBD Study for Final Exam	9:15 – FINAL EXAM		