

EASC 110 Introductory Geology, Spring 2009-2010
Syllabus (subject to change)

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Office hours: TR 11:30-12:45 and By Appointment

Course Description: (Catalog) "Earth processes and their effects on materials, structure, and morphology of Earth's crust. Laboratory includes fieldwork, computer simulations, study of minerals, rocks, photographs, and maps."

In addition, given your instructor's expertise the course will include significant content related to historical geology and paleontology. Also, the connection between geology and the liberal arts will be explored where appropriate. The required text and supplementary readings, discussions, or activities all reflect this broader approach.

Course Goals

The college expects the following of 100-level courses:

- Introduce students to basic vocabulary/concepts, methodologies, and applications of the discipline(s) relevant to the course.
- Explore broad subject matter of a given field (generally a survey course).
- Encourage development of strategies/skills (and tools) that could be applied across disciplines (ex: writing, computing, speaking, reading).
- Encourage critical thinking and advancing/acknowledging different ways of knowing.
- Deliberately prepare students for relevant 200-level courses in the discipline(s) related to the course.

With this in mind, the goals of EASC 110 Introductory Geology are as follows:

Students will have a basic understanding of, and be able to explain and discuss...

1. The unifying theory of plate tectonics, particularly how it explains and predicts most geologic phenomena.
2. The composition and properties of the important rocks and rock-forming minerals.
3. Natural processes that affect earth materials on the surface and within the earth.
4. Basic skills of geologic mapping and interpretation needed to reveal how the earth system has behaved through geologic time.
5. The evolution of organic life on earth.
6. The effects of geologic processes on humans and vice versa.

Required text: [The Changing Earth: Exploring Geology and Evolution](#), 5th edition (2008)

Attendance policy: Attendance will be taken in each class and laboratory period. Unexcused absences in excess of two will reduce the final average of a student at a rate of 1% per absence. Students have the responsibility to secure and present evidence of the nature of the excused absence. Consistent lateness will be treated as absences.

Classroom etiquette: Please turn off all cell phones during class (or set them to vibrate only) and do not engage in text messaging. Violators will be asked to leave the classroom, at which point attendance policies will apply.

Academic honesty policy: Students are expected to adhere to the academic honesty policy as found in the Student Handbook.

Assessment/Grading:

3 Lecture Exams (@ 15% each)	45%
Participation*	5%
Lab assignments	20%
Semester Project (TBD)	10%
Final Comprehensive Exam	20%

Final Exam: Wednesday, May 5 @ 8:30AM

***Participation:** Assessment of class participation is likely to differentiate between “active participation” (volunteering thoughtful answers on a regular basis) and “passive participation” (being there, taking notes, even looking attentive).

Note: It is within the instructor’s purview to apply qualitative judgment in determining grades for an assignment or for a course.

Additional information that may be of interest:

The Major in Geology

A major in geology consists of MATH170 and MATH171 (Calculus 1 and 2), CSCI115 (Intro to Computer Science), CHEM113 and CHEM114 (General Chemistry), PHYS111 and PHYS112 (Introductory Physics), EASC 110 and seven additional geology courses (to be taken at Lehigh University), one summer spent at an approved geology field camp, and two more courses in science or mathematics selected with approval of the major advisor.

The Minor in Earth Science

The minor in earth science consists of five courses: EASC 110, 120, and 130, plus two courses which may be taken through independent study or cross registration.

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Schedule of Lecture Topics and Exams (subject to change)

<u>Week</u>	<u>Topic</u>	<u>Readings</u>
Jan 19, 21	Introduction, Haiti EQ	None
Jan 26, 28	Plate Tectonics	Ch. 2
Feb 2, 4	Earthquakes & Earth's Interior	Ch. 8
Feb 9, 11	Igneous Rocks and Intrusive Activity	Ch. 4
Feb 16, 18	Review (16 th), Exam #1 (18 th)	
Feb 23, 25	Volcanoes, Mountain Building	Ch. 5, 10
Mar 2, 4	Weathering & Sedimentary Rocks, GC VFT	Ch. 6
Mar 9, 11	SPRING BREAK	
Mar 16, 18	Running Water	Ch. 12
Mar 23, 25	Glaciers, Deserts; Exam #2 (25 th)	Ch. 14, 15
Mar 30, Apr 1	Shorelines	Ch. 16
Apr 6, 8	Precambrian Earth	Ch. 19
Apr 13, 15	Paleozoic Era, Burgess VFT	Ch. 20, 21
Apr 20, 22	Exam #3 (Tues 20th), Mesozoic Era	Ch. 22
Apr 27, 29	Cenozoic Era	Ch. 23

Final Cumulative Exam: Wed, May 5th, 8:30am