

ENR 101 – Planet Earth - The Fragile Skin
THE OHIO STATE UNIVERSITY, WINTER QUARTER 2010

Lecture T, H 10:30-12:18; Mendenhall Lab (ML) Room 252 / Recitation H 2:30-4:18



Professor

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 Office hrs: Before/after class

Grades

3 Exams = 25%, 25%, 20% (lowest)
 Presentation = 20%
 Lecture Quizzes = 10%
 *There are **NO** make up exams!

Textbook

Various chapters from *Visualizing Environmental Science* by Berg and Hager (John Wiley & Sons) as well as other reading assignments

WEEK	DATE	TOPIC (these topics are subject to change)
1	Jan 5, 7	Syllabus; Introduction to the Earth's outer surface Interactions between the hydrosphere, lithosphere, biosphere, atmosphere, and soil
2	Jan 12, 14	Ecology, linkage between biology, geology, chemistry and physics at the Earth's surface Flow of energy and matter (e.g. C, water) between the biotic and abiotic realms
3	Jan 19, 21	The Earth's major biomes The evolution of life and its impact on the Earth's surface environment
4	Jan 26, 28	The evolution of life and its impact on the Earth's surface environment Human Population Growth; evolution of humans and its impact on the environment
5	Feb 2, 4	Impact of Humans on the Earth's surface environment Risk Analysis
6	Feb 9, 11	The atmosphere, human impact on the atmosphere resource; past climates on Earth; global climate change
7	Feb 16, 18	Global climate change; Carbon sequestration (plants, soil, subsurface, ocean); Energy resources, renewable vs. nonrenewable
8	Feb 23, 25	Freshwater resources; pollution of surface and groundwater; hypoxia in the Gulf; pharmaceuticals and pesticides in agricultural and urban runoff
9	Mar 2, 4	Mineral and soil resources; acid mine drainage Food and Agricultural Resources; pesticides, genetically-modified foods
10	Mar 9, 11	Mineral and soil resources; acid mine drainage Food and Agricultural Resources; pesticides, genetically-modified foods
TUESDAY Mar 16, 9:30-11:18, Mendenhall Room 252; COMPREHENSIVE FINAL EXAM		

Description

Attain a sense of self within our planet that prompts an interest in responsible stewardship of the Earth's natural resources (e.g., soil, water, air, biota, minerals, and fossil fuels).

Textbook

Outside readings will be assigned during the quarter. These will be announced during lecture. Many of these readings will be chapters from Visualizing Environmental Science by Berg and Hager.

Exams

Exams will be announced at least one week in advance. There are **NO** make-up exams except for valid medical reasons. If you are sick, you **MUST** have a note signed by your medical doctor (i.e. a licensed physician with a M.D.) or you will receive a zero on the exam.

Examinations will be multiple choice and short answer / essay. Bring your identification card, several sharpened #2 pencils, an eraser, and a calculator to every exam. A significant number of the questions on an exam will come from material presented in the lecture. Additional material will be drawn from the assigned readings. Be sure that you know how to operate your calculator BEFORE coming to an examination.

Class Attendance, Quizzes and Presentation

Class attendance will not be taken per se. However, unannounced quizzes will be given throughout the quarter. These quizzes will typically cover material from previous classes or assigned readings. One quiz score will be dropped. No makeup quizzes will be allowed even with a valid medical excuse.

Instructions on the class presentation will be presented during lecture.

Grading scale

The grading scale is 100-90 (A), 90-80 (B), 80-70 (C), 70-60 (D), <60 (E).

GEC Category and Expected learning outcomes

This course fulfills GEC Category 2, Breadth, Natural Science. Natural Science coursework fosters students' understanding of the principles, theories, and methods of modern science, the relationship between science and technology, the implications of scientific discoveries and the potential of science and technology to address problems of the contemporary world.

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students learn key events in the history of science.
3. Students provide examples of the inter-dependence of scientific and technological developments.
4. Students discuss social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/info_for_students/csc.asp).

Students with Disabilities

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>

Other

Periodic announcements and some lecture slides will be posted on Carmen at <http://telr.osu.edu/carmen/>.

I often communicate with the class using email. **I will use your [name.#@osu.edu](mailto:yourname#@osu.edu) account** for this purpose. I realize that many of you have other email accounts through services such as Goggle, Yahoo or Hotmail. You must remember to check your OSU account or you may miss important announcements.