

QUEENS COLLEGE -- SCHOOL FOR EARTH AND ENVIRONMENTAL SCIENCES
COURSE OUTLINE Fall 2008 -- GEOL 025 Natural Resources and the Environment

Instructor: Prof. Tim Eaton, Timothy.Eaton@qc.cuny.edu Office: E212 Phone: 997-3327
Scheduled Time: Mon, Wed 1:40-2:55 in C-207, Science Building, Office Hour MW 3-4 pm

REQUIRED TEXTBOOK: Rogers and Feiss. 1998. People and the Earth: Basic Issues in the Sustainability of Resources and Environment. Cambridge University Press.

*****Read the assignments **BEFORE** coming to class!*****

*****You must do all the readings and all the Comprehension Evaluations to pass this class!*****

GRADING: Midterm: 30%, Final exam: 30%. There will also be periodic Comprehension Evaluations (6) worth 30% of your final grade and Class Participation: 10%. Grading in this class will be mostly based on multiple-choice testing (closed book), however, unlike the individual midterm and final exams, the in-class Comprehension Evaluations will be partly individual, partly collaborative. If you take all six Comprehension Evaluations (or have a documented reason for absence (doctor's note or emergency), I will drop the lowest grade. If you skip class for any other reason, missed Comprehension Evaluations, Midterm or Final will count as zero. The Midterm or Final can only be made up if: 1) you are ill and have a physician's note to prove it, and 2) you call BEFORE the exam and leave a name and phone number at which you can be reached. Please sit in the assigned alphabetical order by last name, starting at the back of the class, so you will sit with your designated groups throughout the semester.

COURSE GOALS: This course is being redesigned to meet the PLAS area requirements in Natural Science (NS) and Abstract or Quantitative Reasoning (QR). We will cover basic principles underlying the operation of the natural world and how science has shaped the past and present. Along the way, you will build awareness of the importance of natural resources and the impact of science on modern society. We will explore how basic mathematical analysis (patterns and relationships between variables) can help understanding of the significance of data applied to the industrial, economic and political areas of modern life.

COURSE EXPECTATIONS: Class attendance is not optional for this course! To succeed, you must come to lecture, pay attention, read the assignments, think about the information in the text carefully, and participate in class. Do not write all the words on the lecture slides, but practice taking notes to remind you of important concepts. A scientific calculator is highly recommended for this course – you may need it on the evaluations and exams. No Blackboard, but lecture slides and coursework keys/grades will be provided on e-Reserve (password EAT25) at the QC Library webpage, usually within a week. Do not fall behind in the readings or wait until just before the exams to cram. Spend an hour or two every week reviewing course material as well as doing the readings. If you need help in this class, contact the Science Tutoring Center in Remson 114, **718-997-5695**. Come to my office hour immediately after class if you have more specific questions.

Please arrive promptly at the beginning of class, turn off your cellphones and do not talk during class time out of respect for your classmates. If you do not follow these simple rules, you will be asked to leave.

****Any form of cheating on classwork or exams, or plagiarism, will not be tolerated, and will result in a grade of F! No exceptions or second chances****

GEOL025 Natural Resources and the Environment

NOTE: Syllabus may change during the semester - changes will be announced

Date	Topic	Work	Rogers and Feiss Reading
27-Aug	Global change: what we are doing to the earth	lecture	Ch. 8.0, 8.1, 8.2
1-Sep	No class - Labor Day		
3-Sep	What are resources? Math reality check	lecture/discussion	Ch. 8.4, 8.5, pp. xix-xxii
8-Sep	Population growth/resource demands	lecture	Ch. 1 (entire)
10-Sep	Comprehension Evaluation 1	discussion	
15-Sep	Agriculture/Soil resources	lecture	Ch. 2.0, 2.1, 2.2, 2.3, 2.5
17-Sep	Biodiversity/Marine resources	lecture	Ch. 2.4, 8.3
22-Sep	Surface water resources/management	lecture	Ch. 3.6, 4.0, 4.1, 4.2,
24-Sep	Groundwater resources	lecture/discussion	Ch. 4.3, 4.4
29-Sep	No class	review reading!	
1-Oct	No class	review reading!	
6-Oct	Comprehension Evaluation 2		
8-Oct	No class - Yom Kippur - next week meet TUES!		
14-Oct	Groundwater/Water quality	discussion/lecture	Ch. 4.5, 4.6
15-Oct	MIDTERM		
20-Oct	Introduction to energy	lecture	Ch. 5.0, 5.1, 5.2 Ch. 5.3, e-Res article
22-Oct	Fossil Fuels	lecture	
27-Oct	Nuclear energy/waste	lecture	Ch 5.4, 7.4
29-Oct	Comprehension Evaluation 3	discussion	
3-Nov	Energy history/dependency	lecture	e-Res article ?
5-Nov	Current energy use	lecture	Ch. 5.5
10-Nov	Future energy options	lecture	e-Res article
12-Nov	Comprehension Evaluation 4	discussion	
17-Nov	Non-metallic minerals	lecture	Ch. 6.0, 6.1, 6.2
19-Nov	Metallic minerals	lecture	Ch. 6.3, 6.4
24-Nov	Mining, Laws, Consequences	lecture	Ch. 6.5, 6.6
26-Nov	Comprehension Evaluation 5	discussion	
1-Dec	Chemical and radioactive waste	lecture	Ch. 7.3, 7.4
3-Dec	Biologically active waste/Air pollution	lecture	Ch. 7.5, 7.6, 7.7
8-Dec	Sustainability	lecture	Ch. 9
10-Dec	Comprehension Evaluation 6	discussion	
15-Dec	last day of classes		
TBA	CUMULATIVE FINAL EXAM		