

Environmental Geochemistry - GLY 4241 and GLY 5243

Spring Term, 2011

Course Administration

- [Course syllabus - GLY 4241](#)
- [Course syllabus - GLY 5243](#) (Note: This is a graduate version of the class, with considerably tougher requirements)
- [Activity Schedule](#) - Updated frequently!
- Word List for Midterm 1 - Thursday, February 10, 2011
- Word List for Midterm 2 - Thursday, March 24, 2011
- Word List for Final Examination - Thursday, April 28, 2011 10:30 - 1:00 P.M.

Exams

- Midterm 1 4241 Key -
- Midterm 2 4241 Key -
- Final Examination 4241 Key -

Homework and Projects

- Project 1 - Due before class Tuesday, February 15, 2011
- Project 2 -
- Homework 1 - Key
- Homework 2 - Key
- Homework 3 - Key
- [Graduate Term Paper](#)

Lectures

All lectures are in Adobe PDF format. Links will be added as the lectures are prepared.

Lectures on Midterm 1	Lectures on Midterm 2	Lectures on Final Examination
<u>Introduction to Environmental Geochemistry</u>	Acids and Bases	Petroleum and the Environment - Part 1

<u>Elemental Distributions</u>	Radon 1	Petroleum and the Environment - Part 2: The Marine Environment
<u>Natural Geochemical Enrichments of Elements</u>	Radon 2	Petroleum and the Environment - Part 3: The Coastal Environment
<u>Chemical Equilibrium</u>	Redox Potentials and Equilibria	Petroleum and the Environment - Part 4: The Terrestrial Environment
The Earth's Atmosphere	Hypoxia	
Ozone Layer: Existence and Anthropogenic Depletion		
Ozone Layer: Natural Depletion and Current Status		

PowerPoint Presentations

These presentations accompany the lectures.

Lectures on Midterm 1	Lectures on Midterm 2	Lectures on Final Examination
<u>Introduction to Environmental Geochemistry</u>	Acids and Bases	Petroleum and the Environment - Part 1
<u>Elemental Distributions</u>	Radon 1	Petroleum and the Environment - Part 2: The Marine Environment
<u>Natural Geochemical Enrichments of Elements</u>	Radon 2	Petroleum and the Environment - Part 3: The Coastal Environment
<u>Chemical Equilibrium</u>	Redox Potentials and Equilibria	Petroleum and the Environment - Part 4: The Terrestrial Environment
The Earth's Atmosphere	Hypoxia	
Ozone Layer: Existence and Anthropogenic Depletion		

Ozone Layer: Natural Depletion and Current Status		
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Additional Information:

- [Useful web sites](#)
- [Developing story](#) - hijacking of a Very Large Crude Carrier (VLCC) with 2 million barrels of crude on board, 11/17/08
- [EU 'holds firm' on climate goals](#) - BBC news story, 10/16/08- this may not stay up for long
- [Science and Technology in the 2008 Presidential Election](#) - The American Association for the Advancement of Science has information about science and technology issues in the 2008 election. Both parties replied to a series of fourteen questions concerning science and technology. Much of this information has not been widely discussed in the media. There are also links to other sites with information in this area.
- [Climate Change Hazards: Weather and Extreme Storms](#) - USGS - This link is specific to Hurricane Ike
- [A Devils Hole Primer](#), J. M. Landwehr and I. J. Winograd, USGS, last updated 12/29/08.
- [Environmental Science Job List](#) One of the best sources of job information about Earth Science is this Earthworks site
- [EnviroLink Network](#) - EnviroLink is a non-profit organization - dedicated to providing comprehensive, up-to-date environmental information and news
- [Stratospheric Ozone An Electronic Textbook](#) - Part of a series called "Studying Earth's Environment from Space", this textbook was funded by NASA and is intended for high school to university level students. It was created by scientists from NASA's Earth Science Directorate, and faculty from Old Dominion University and the United States Coast Guard Academy. It contains much more detailed information about topics we will cover, and covers many of the stratospheric ozone problem than we will have time to cover.
- [American Association for the Advancement of Science \(AAAS\) message to members "ADDRESSING CRITICAL CLIMATE CHANGE ISSUES"](#)
- [United Nations Environment Programme \(UNEP\) Field Mission Report, "The Songhua River Spill, China, December, 2005"](#), is available for those wishing to read it.
- [Chlorofluorocarbons \(CFCs\)](#) - (published in The Chapman & Hall Encyclopedia of Environmental Science, edited by David E. Alexander and Rhodes W. Fairbridge, pp pp.78-80, Kluwer Academic, Boston, MA, 1999.)
- A sometimes useful, authoritative source of information about the earth is found at Earthportal organization, [here](#). The authors are credentialed experts, and their work is reviewed by editor conversant with the field. Many of their discussions concern environmental phenomena.

PageURL:

<http://www.geosciences.fau.edu/Resources/CourseWebPages/Spring2011/GLY4241/>



Questions or comments? <mailto:warburto@fau.edu>

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