Biology 111
Environmental Science
Fall 2008
T.R. Wade

"A mind, once stretched by a new idea, never regains its original dimensions."
Oliver Wendell Holmes

Environmental Science is an interdisciplinary study combining thoughts from many areas including biology, chemistry, geology, economics, politics, ethics, etc. According to G. Tyler Miller, Jr., the author of your textbook, it is a study of how the earth works, how we affect the earth's life-support systems (environment), and how we deal with environmental problems. In this course students begin with a study of natural ecological systems and principles in order to understand the interconnected complex workings of our world. Students then apply these ecological principles to local and global environmental problems as we study the human impact on the biosphere. Students will be confronted by new thoughts and ideas as we wrestle with various environmental issues and hopefully learn how to live more sustainably on this earth.

According to one environmental educator, the goals of environmental education are illustrated in several basic questions:

-What do I know about the place where I live?
-How am I connected to the earth and other living things?
- What is my responsibility as a human being?

Text: Environmental Science, Miller, 12th edition

Learnlink Class Conference: Be sure to add the icon to your desktop and check our conference regularly. I usually send an update on the readings and topics for the next weeks' lecture sometime on Friday.

Blackboard Website : Bio 111 also has a blackboard site that will be helpful to you for lecture, lab and research resources. You might even see yourself ☺ I'll let you know when it is available for use. From Oxford's home page type in: classes.emory.edu (Hint: do not type the www) Login with your opus user ID and password.

Lecture: Pierce 101, 10:00 a.m. - Tuesday/Thursday

Proposed Lecture Schedule

Date		Topic	Chapter/Section
Aug.	28	Tragedy of the Commons	1
Sept	2	Ecoeconomics	17
	4	Science as a way of Knowing	2-1
	9	Ecosystems: Interactions and Connections	3

	11	Energy: Gotta have it!	2-4,3
	16	Nutrient Cycles	3
	18	Nitrogen, Carbon, Water, Phosphates	
	23	Human Population Dynamics	7
	25	**Test I (Includes lecture and laboratory material.)**	
	30	Population Growth Rates and Predictions	7
Oct.	2	Water Resources	11
	7	Water: The Human Impact	11
	9	The Chattahoochee: a case in point	
	14	**Fall Break**	
	16	Everybody lives downstream of somebody	11
	21	Air Quality	15
	23	**Test II (Includes lecture and laboratory material.)**	
	28	Secondary Pollutants	15
	30	Global Climate Change: The Evidence	
Nov.	4	Ozone Thinning	15
	6	Air Quality Solutions	
	11	Power: Today's Issues	13
	13	Energy: Choices for the future	
	18	What is a species? How did they evolve?	4
	20	**TEST III (Includes lecture and laboratory material.)**	
	25	Evidence for Evolution	4
	27	**Thanksgiving Holidays**	
Dec.	2	Biodiversity: Threats, Protection and Policies	9
	4	Biodiversity: Conservation and Restoration	
	9	Ecosystem Approach	9

FINAL EXAM – Tues., Dec. 16, 2008- 2:00-5:00 (Test 4 and Cumulative Section)

Laboratory: Lab meets 2:30-5:30 Thursday afternoons in Pierce 101. There is no lab manual, handouts will be given when appropriate.

Proposed Lab Schedule

Sept.	4	Scientific Investigation - EXCEL
	11	Terrestrial Investigation – Oxhouse Science Center
	18	Rock Outcrop – Davison Arabia Mt. – Dekalb County
	25	How Wet is that Area?
Oct.	2	Wetland Investigation
	9	Stream Assessment: Data collection
	16	Stream Assessment: Sorting, results and conclusions
	23	Stream Protection: Water Reclamation
	30	Alcovy Watershed Project
Nov.	6	Logging Case Study: Timberrrrr!
	13	Logging Case Study: Data, Results & Discussion
	20	Invasives, Exotics and Other Aliens
	27	Thanksgiving Break
Dec.	4	Just how Smart is our Growth?

Lab schedule is subject to change based on any number of uncontrollable factors (the blooming of flowers, trees dropping their leaves, hurricane rains, etc.)

Lab/Writing Assignments: Students will be submitting various types of writing including lab reports, critiques, position papers, etc.

Evaluation:

Tests	300 points
Lab/Writing Assignments	100-150 points
Final Exam	about 150 points
*Total Points	550- 600 points

*Total points may vary based on possible changes in certain assignments over the semester. Grades are assigned on a plus-minus scale.

Office Hours: Wed./Fri. 9:00 a.m. – 11:30 a.m. or by appointment (4-8395) OR you can always just come look for me but remember I might be scurrying around the labs or out in the greenhouse. Check with Ms. Budensiek before you give up and leave Pierce.

HONOR CODE: The Honor Code of Oxford College applies to all work submitted for credit in this course. All such work will be pledged to be yours and yours alone. This is the case when you place your name on any work (tests, writing assignments, lab reports, research papers, etc.) submitted. There will be times when you may work in a group to collect data but the writing assignments will be on your own after that point. If you have any questions about how the honor code applies to any tests or assignments please ask me!!!

Absences: The absence policy is outlined in a separate handout. Unexcused absences or a failure to follow the procedures outlined in that handout will result in a reduction of your grade. Penalties are stiff so pay close attention to the handout. Additionally, tardiness is rude to other students and to the professor and will result in a decreased grade.

Cell Phones: They must be turned off if brought into class or lab. They must be left at the front of the classroom in your book-bag during tests.