Biology 111
Environmental Science
Fall 2006
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 four 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, 11th 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
Aug.	31	What's Your EQ?	
Sept	5	Science as a way of Knowing /Tragedy of the Commons	1& p.9-p.22
	7	Ecosystems: Interactions and Connections	3

	12	Energy: Gotta have it!	p. 29-34, Chpt. 3
	14	8:15 in Tarbutton: Sustainability Vision for Emory – Ciannat Howett, Director of Sustainability --Special Reading for this.	
	19	Nutrient Cycles	3
	20	Human Population Dynamics	7 (p.128-140)
	26	Population Growth Rates and Predictions	7(p.128-140)
	28	**Test I (Includes lecture and laboratory material.)**	
Oct.	3	What is a species? How did they evolve?	4
	5	Evidence for Evolution	4
	11	**Fall Break**	
	12	8:15 in Tarbutton: Emory's Sustainable Transportation-Laura Ray, Associate VP for Transportation and Parking	p. 140-153
	17	Biodiversity: Threats, Protection and Policies	9
	19	Biodiversity: Conservation and Restoration	9
	24	Food Supply: Resources and Availability Agricultural Impact	10
	26	**Test II (Includes lecture and laboratory material.)**	
	31	Break – Class will meet at 2:00 on **Friday Nov.3** in Tarbutton Peggy Barlett : The Animate Earth: Finding Sustainability	10
Nov.	2	**Debate 1**	
	7	Water Resources	11
	9	Water: The Human Impact	11
	14	Air Quality	15
	16	**Debate 2**	
	21	**TEST III (Includes lecture and laboratory material.)**	
	23	**Thanksgiving Holidays**	
	28	Global Climate Change/Ozone Thinning	16
	30	**Debate 3**	
Dec.	5	Power: Today's Issues	13
	7	Energy: Choices for the future	13
	12	Waste: Throw it Where?	17

FINAL EXAM – Fri., Dec. 15, 2005 - 2:00-5:00 (Test 4 and Cumulative Section)

Laboratory: Lab meets 2:00-5:00 Monday afternoons in Pierce 101. There is no Lab Manual, handouts will be given for various labs.

Proposed Lab Schedule

Sept.	4	**First Week – Labor Day Holiday**
	11	Scientific Investigation - EXCEL
	18	Terrestrial Investigation – Oxhouse Science Center
	25	Rock Outcrop – Davison Arabia Mt. – Dekalb County
	2	No Lab: We will View An Inconvenient Truth- (Film and Discussion) OS Event-**Tues. Night Oct.3, 7:00 p.m. in Williams Hall**
Oct.	9	**Fall Break**
	16	Stream Study: Data collection
	23	Stream Study: Sorting, results and conclusions
	30	Waste Water Treatment Plant
Nov.	6	Introduction to Wetlands
	13	Wetland Investigation
	20	Logging Case Study: Methods
	27	Logging Case Study: Data, Results & Discussion
Dec.	4	Sustainable Living
	11	TBA

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

Sophomore Writing : Biology 111, Environmental Science is a Writing Intensive course and counts as sophomore writing only if you have completed 30hrs. at Oxford College before you enroll in the class. Other regulations apply to transfer students (see p. 9 of the 2005-2006 Oxford Catalog). Students must complete the course with a C or better (not a C- or lower) to receive their writing credit.

Writing Assignments: Students will be submitting various types of writing including lab reports, critiques, position papers, etc. in addition to one major paper. Note below that writing assignments will account for about one forth of the final grade

Evaluation:

Tests	300 points
Writing Assignments	150 points
Final Exam	150 points
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*Total Points	600 points

*Total points may vary based on possible changes in certain assignments over the semester but the test will count for half the final grade and the exam and writing

assignments will each count for a forth of the final grade. 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.