

**Biology 111
Environmental Science
Spring 2003
T.R. Wade**

Proposed Lecture Schedule

Date	Topic	Chapter
Jan. 16	Science as a way of Knowing	3
21	Tragedy of the Commons	1
23	Ecosystem Structure	4
28	Ecosystem Function	4
30	Ecological Pyramids	4
Feb. 4	Biogeochemical cycles	4
6	Natural capital & Ecosystem services	2
11	What is a species? How did they evolve?	5
13	Test I (Includes lecture and laboratory material.)	
18	Biodiversity and Endangered Species	7,18
20	Alien, Indicator and Keystone Species	7
	Outline and 3 Primary articles due	
25	Population Interactions	8
27	Human Population: Dynamics	11
March 4	Water Resources	14
6	Test II (Includes lecture and laboratory material.)	
11	Spring Break no classes!!!!	
13	Spring Break no classes!!!!	
18	The Chattahoochee: Sediment, Sewage and Pathogens	14
20	The Chattahoochee: Pesticides, Herbicides and POPs	16,10
25	Atmospheric Resources and Pollution	12
27	Student Presentations (1-5) and at 2:30 (6-10)	
April 1	Global Climate Change: evidence and causes	13
3	TEST III (Includes lecture and laboratory material.)	
8	Ozone Thinning and the Montreal Protocol	13
10	Student Presentations (11-15)	

15	Sustainable Energy: Choices for the future	20
17	Student Presentations (16-20)	
22	Sustainable Agriculture & Conventional Farming	16
24	Frankenfoods	16
29	Catch-up and Wrap-up Day	

FINAL EXAM - Monday, May 5, 2003 - 9:00 p.m. - 12:00 p.m. (Test 4 and Cumulative Section)

Goals: “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. In this course students begin with a study of natural ecological systems and principles in order to understand the complex interconnected workings of our world. Students then apply these ecological principles to local and global environmental problems as we study the human impact. Students will be stretched by many new thoughts and ideas as we wrestle with various environmental issues, ultimately becoming better stewards of our earth as a result.

Text: Environmental Science, Miller, 9th edition

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

Laboratory: Pierce 101, 2:30 - 5:30 Thursday

Evaluation:

Tests	300 points
Lab Assignments, Critiques and other Writing	
Assignments	85 points
Environmental Issue Paper & Presentation	65 points
Final Exam	150 - 175 points

*Total Points	600- 625 points

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

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, papers, lab reports, etc.) submitted.

Office Hours: Wed./Fri. 9:00 a.m. - 11:00 a.m. or by appointment (4-8395).

Proposed Lab Schedule
Biology 111
Spring 2003
T. R. Wade

Lab meets 2:30-5:30 Thursday afternoons in Pierce 101. There is no Lab Manual, handouts will be given for various labs.

Jan. 16	Scientific Investigation- EXCEL
Jan. 23	TBA
Jan. 30	Terrestrial Investigation- Oxhouse Science Center
Feb. 6	Terrestrial Ecology Case Study
Feb. 13	Terrestrial Ecology Case Study
Feb. 20	Intro to Wetlands
Feb. 27	Student Conferences
March 6	Wetlands Delineation
March 13	Spring Break- No Lab
March 20	Computer Simulation of a Pond Ecosystem
March 27	Student Presentations (6-10)
April 3	Stream Investigation: Data Collection
April 10	Stream Investigation: Results and Conclusions
April 17	Primary Succession – Rock Outcrop
April 24	TBA

Lab schedule is subject to change based on any number of uncontrolled factors.