Biology 111
Environmental Science
Fall 2001
T.R. Wade
Proposed Lecture Schedule

Date		Topic	Chapter
Aug.	30	Science as a way of Knowing	3
Sept.	4	Tragedy of the Commons	1
	6	Ecosystem Structure	4
	11	Ecosystem Function and Ecological Pyramids	4
	13	Research Tips: Class will meet 8:30-9:15 a.m. in MM Lab	
	18	Biogeochemical cycles: nitrogen & phosphorus	4
	20	Natural capital, Ecosystem services and Biosphere 2	2
	25	What is a species? How did they evolve?	5
	27	**Test I (Includes lecture and laboratory material.)**	
Oct.	2	Species Interactions and Biodiversity	5
	4	Population Dynamics and Interactions	7
	9	Human Population: Dynamics and Distributions **Outline and 3 primary articles due**	9
	11	Water Resources	12
	16	**Fall Break**	
	18	Water Pollution	12
	23	The Chattahoochee, Pesticides and POPs	8,16
	25	**Test II (Includes lecture and laboratory material.)**	
	30	Atmospheric Resources and Pollution	10
Nov.	1	Student Presentations (1-5) **Rough Drafts due**	
	6	Global Climate Change: evidence and causes	11
	8	Student Presentations (6-10) **Rough Drafts due**	
	13	Ozone layer and the Montreal Protocol	11
	15	Student Presentations (11-15) **Rough Drafts due**	
	20	**TEST III (Includes lecture and laboratory material.)**	
	22	**Thanksgiving Break**	

	27	Student Presentations (16-20) **Rough Drafts due**	
	29	Energy: Choices for the future	20
Dec.	4	Frankenfoods	p. 395-398
	6	Environmental Justice for All	
	11	Catch-up and Wrap-up Day	

FINAL EXAM - Thursday, December 13, 2001 - 2:00 p.m. - 5:00 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 interconnected complex 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, 8th 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
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August 30	Pond Ecosystem - Clubhouse Pond Charlie Elliott Wildlife Center
September 6	Scientific Investigation - EXCEL Set up Lemna Study
September 13	Terrestrial Investigation - Oxhouse Lemna count Day 7
September 20	Primary Succession - Davidson Arabia Mt. Lemna count Day 14
September 27	Introduction to Wetlands
October 4	Wetland Investigation Research Proposal & Materials list for Lemna Investigation
October 11	Fall Break
October 18	Lemna Investigation
October 25	Stream Assessment - Bear Creek Lemna count Day 7
November 1	Stream Assessment Lemna count Day 14
November 8	Sampling Simulation
November 15	Field Sampling
November 29	Crunching Sampling Data
December 6	TBA

*Labs are subject to change.