Biology 111
Environmental Science
Spring 2004
T.R. Wade
Proposed Lecture Schedule

Date		Topic	Chapter
Jan.	15	Science as a way of Knowing	3
	20	Tragedy of the Commons/Ecosystem Structure	1/4
	22	Ecosystem Function	4
	27	Ecological Pyramids	4
	29	Biogeochemical cycles: H_2O & Carbon	4
Feb.	3	Biogeochemical cycles: Nitrogen & Phosphorus	4
	5	Natural capital, Ecosystem services and Biosphere	4/2
	10	What is a species? How did they evolve?	5
	12	**Test I (Includes lecture and laboratory material.)**	
	17	Biodiversity and Endangered Species	5,18
	19	Exotic and Indicator Species	7,18
	24	Keystone Species and their Ecosystems	7
	26	Population Interactions	8
March	2	Human Population: Dynamics	11
	4	**Test II (Includes lecture and laboratory material.)**	14
	9	**Spring Break no classes!!!!!**	
	11	**Spring Break no classes!!!!!**	
	16	Water Resources	14
	18	The Chattahoochee: Sediment, Sewage and Pathogens	14
	23	The Chattahoochee: Pesticides, Herbicides and POPs	16,10
	25	Atmospheric Resources	12
	30	Atmospheric Pollution	12
April	1	**TEST III (Includes lecture and laboratory material.)**	
	6	Global Climate Change: evidence and causes	13
	8	Ozone Thinning and the Montreal Protocol	13

13 15	Sustainable Energy: Choices for the future	20
20	Sustainable Agriculture & Conventional Farming	16
22	Frankenfoods	16
27	Catch-up and Wrap-up Day	

FINAL EXAM - Wednesday, May 5, 2004 - 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 (1/2 final grade)
Lab Assignments, Critiques and other Writing Assignments	(1/4 final grade) 85 points
Research Paper & Presentation	65 points
Final Exam	150 - 175 points (1/4 final grade)
*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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Lab meets 2:30-5:30 Thursday afternoons in Pierce 101. There is no Lab Manual, handouts will be given for various labs.

Jan. 15	First Week – no lab
Jan. 22	Scientific Investigation - EXCEL
Jan. 29	Terrestrial Investigation- Oxhouse Science Center
Feb. 5	Logging Case Study – Methods
Feb. 12	Research
Feb. 19	Logging Case Study – Data, Results & Discussion
Feb. 26	Introduction to Wetlands
March 4	Wetlands Investigation
March 11	Spring Break- No Lab
March 18	Stream Assessment – Data Collection
March 25	Stream Assessment – Results and Discussion
April 1	Pond Simulation
April 8	Research Symposium
April 15	TBA
April 22	Rock Outcrop – Davison Arabia Mt. – Dekalb County

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