Biology 111
Environmental Science
Fall 2003
T.R. Wade
Proposed Lecture Schedule

Date		Topic	Chapter
Aug.	28	Science as a way of Knowing	3
Sept.	2	Tragedy of the Commons/Ecosystem Structure	1/4
	4	Ecosystem Function and Ecological Pyramids	4
	9	Biogeochemical cycles: H_2O, Carbon	
	11	Research Tips: Kristina Jensen	
	16	Biogeochemical cycles: nitrogen & phosphorus	4
	18	Natural capital, Ecosystem services and Biosphere 2	2
	23	What is a species? How did they evolve?	5
	25	**Test I (Includes lecture and laboratory material.)**	
	30	Biodiversity and Endangered Species	7/18
Oct.	2	Exotic and Indicator Species	7
	7	Keystone Species and their Ecosystems	
	9	Population Dynamics and Interactions	8
	14	**Fall Break**	
	16	Population Cycles	
	21	Human Population: Dynamics and Distributions	11
	23	**Test II (Includes lecture and laboratory material.)**	
	28	Water Resources	14
	30	Water Pollution	14
Nov.	4	The Chattahoochee: Sediment, sewage and pathogens	
	6	The Chattahoochee: Pesticides and POPs	10/16
	11	Atmospheric Resources and Pollution	12
	13	Global Climate Change: evidence and causes	13
	18	Ozone Thinning and the Montreal Protocol	13
	20	**TEST III (Includes lecture and laboratory material.)**	

	25	Energy: Choices for the future	20
	27	**Thanksgiving Holidays**	**No Lab**
Dec.	2	Frankenfoods	16
	4	Catch-up	
	9	Wrap-up Day	

FINAL EXAM – Tues., Dec. 16, 2003 - 9:00-12:00 (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.

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
Research 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. – 11:30 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.

Aug.	28	First Week – no lab
Sept.	4	Scientific Investigation - EXCEL
	11	Terrestrial Investigation – Oxhouse Science Center
	18	Rock Outcrop – Davison Arabia Mt. – Dekalb County
	25	Research
Oct.	2	Pond Simulation
	9	Introduction to Wetlands
	16	Wetland Investigation
	23	Student Conferences
	30	Stream Assessment – Data
Nov.	6	Stream Assessment – Results and Discussion
	13	Logging Case Study – Methods
	20	Logging Case Study – Data, Results & Discussion
	27	Thanksgiving
Dec.	4	Research Symposium

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