

**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 | |

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| | 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:

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| 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.

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).