

HUMAN ECOLOGY - FALL 2002

BIOL 130

INSTRUCTOR: David A. White, Ph.D.

OFFICE: Monroe Hall 332

PHONE: 865-2288 or 2770

OFFICE HOURS: W - 4:00 - 5:00

R - 2:00 - 3:30

TEXTS: Diamond: "The Third Chimpanzee"

CLASS ROOM: Monroe 205

McPhee: "Encounters with the Archdruid"

CLASS TIME: MW - 2:30 - 3:45

Forsyth & Miyata: "Tropical Nature"

WEB SITE: www.loyno.edu/~dawwhite

Date

Lecture Topic/Discussion

Readings

August 26	Orientation & Introduction: Environmentalism vs Ecology	Raven + "Tropical Nature"
28	Bearing Witness & the Human Population	Reznick study
September 2	Holiday - Labor Day	
4	What is Science? Ecology as a Science	Kushlan article
9	Populations, Communities, Ecosystems - Discuss Kushlan	HO - terminology
11	Populations - the concept & characteristics	
16	Communities - the concepts & characteristics	
18	Communities continued	Wardle et al
23	Ecosystems - the concept & characteristics	Vitousek et al
24	Class was cancelled b/c of tropical storm Isidore	
30	Biogeochemical Cycles/Vitousek article	
October 2	Ecological Succession	
7	TEST incl. Tropical Nature	
9	Human History - ecological 'style' (Ecological Footprint)	'The Third Chimp'
14	Holiday - Loyola Day	
16	Biodiversity - what is it?	Pimental article
24	Limnology/Fishes of Streams & Dam Impacts	
23	Pollution - What is it?	
28	Pollution continued	
30	Lake Ponchartrain - the ecosystem	
November 4	Wetlands & their loss	
6	Discuss 'The Third Chimpanzee'	
11	TEST II incl. 'The Third Chimpanzee'	
13	The Pearl River Ecosystem - slide show & lecture	HO
18	Canoe Trip - White Kitchen Nature Preserve - 2:30 to 3:30	'Encounters . . . !'
20	Conservation Biology - the science	HO
25	Class cancelled	
27	Holiday - Thanksgiving	
December 2	Discuss 'Encounters with the Archdruid'	HO
4	Capstone lecture on 'Saving Humans'	
9	FINAL EXAM 2:00 - 4:00 p.m.	

IMPORTANT INFORMATION

This syllabus, I see as a "contract" between you and me. You will: come to class on time, take notes, show interest, take the tests and pop quizzes (if any), attend the field trip(s), read the books and articles and participate in class room discussion. I will: show up for class, give lectures that are at least wildly interesting, lead discussions, answer questions, makeup and grade tests and quizzes fairly, arrange and guide field trip, assign fair grades for your overall effort. This class **does** require note-taking skills - I can't say this more emphatically - 'this class **does** require note-taking skills'. For your information, the last time I taught this course students earned: 11 - A's, 9 - B's, 9 - C's, 1 - D, 3 - F's.

Class attendance is not mandatory (see below), BUT I have never had a student do well when more than one or two classes are missed. Please keep this in mind when you think about skipping a class. With this said and for the first time in my relatively long teaching career, I am going to take attendance each day of class. After the first full week of class, if you miss more than two classes, 25 points will be removed from your overall total points. In recent years more and more incidences of "academic dishonesty" are occurring on campuses, including at Loyola. In this class cheating and plagiarism are the common forms of dishonesty likely to be found and WILL NOT be tolerated. Please don't be stupid and try to 'cheat'.

The first portion of this course is a basic introduction to the science of Ecology. It will be the most tedious part of the course. You've got to have some background in the science before you can be presented with any serious coverage of the 'human' side of ecology! The second half of the course is much more of a blend of science and pertinent ecological issues of the times and region. You should come to class excited about this important opportunity for you to learn aspects of your impact on this planet. I am hoping to have some class time available for discussion on current topics. Please participate. Make sure you keep up with the readings, both the several books and shorter readings in the form of handouts. I will be handing out material according to the schedule on the syllabus that must be read for the next class unless otherwise indicated. You also have 3 paperback books to read - they are all greatly different and I have received rave reviews about the books from students in past courses.

There is an afternoon canoe trip into a local wetland area scheduled on November 25 (Monday of Thanksgiving week) or November 20 (Wednesday before), depending upon my schedule, leaving campus at 2:30 and returning about 8:30 p.m. - yes, that's returning at 8:30 p.m. (after dark) 'at night'. If you go on the trip you will receive 25 pts (course total then of 400 pts) and then if you write up a critique statement as to "what you learned on the trip" you will receive a maximum of an additional 25 pts (course total of 425 pts). The write-up must be turned in before the next class! If for some reason you cannot make the trip, then you can earn up to 25 pts [not the full total of 50 pts (25 trip + 25 critique)] by critiquing the book, 'Sand County Almanac' by Aldo Leopold (for a maximum course total of 400 pts), also due the class period after the trip. It is available in bookstores and if necessary you could even borrow one of my copies. If you do not do either critique nor make the trip, then I will calculate your grade out of 375 pts. (NOTE: I am also considering including an optional field trip to Jean Lafitte National Historical Park on Friday, October 4th from 3:30 until dark. This could be included as 'extra-credit' for a total of 25 pts. Otherwise there are NO other 'extra-credit' points available in this course.)

There are two required out-of-class assignments. The first is a position paper due November 20th at the time of class. It is worth 50 pts. For each day past 4:00 p.m. it is late, 5 pts will be deducted from your grade on the paper. This paper should be a maximum of 2 pages of 12 pt type, word processed and totally free of errors. It should be about some environmental topic and state your opinion about the topic. You have a very wide latitude on topic and style. No references are required. I simply want it to show that you've put work into a polished end product - to me, this shows you care. The second out-of-class assignment is a web-based effort that I title - your 'ecological footprint'. You can earn up to 25 pts for it. I have attached below an explanation statement on the exercise. This exercise is due by October 9th at the end of class. Each 24 hr period it is late I will deduct 5 pts from your total score.

ONLY two tests will be given in this course, each worth 100 pts. **There are NO makeup tests unless you contact me personally before the test AND have a legitimate excuse that might require a written letter of explanation.** Otherwise, you will NOT be given a makeup test. I hope this is clear. The final exam will be given on December 9 between 2:00 and 4:00. It also is worth a total of 100 pts. If you miss the final exam you WILL fail the course.

Grading:	2 tests @ 100 pts	= 200 pts	Grading Scale	85% - 100% A
	1 final exam @ 100 pts	= 100 pts		75% - 84% B
	Canoe Trip* + critique	= 50 pts		65% - 74% C
	Position paper	= 50 pts		50% - 64% D
	Ecological Footprint	= 25 pts		49% - 0% F

*Note that if you miss the canoe trip and don't want to read 'Sand County Almanac' your total number of points for the course will be 375; if you do critique the book your total possible points will be 400.

What's Your Ecological Footprint?

An "ecological footprint" represents the productive acreage of the earth required to support the lifestyle of one individual in a given population. It estimates the amount of land used for crops, grazing, forest products, and housing, the amount of ocean area exploited for food, as well as the amount of forests needed to absorb carbon dioxide from fossil fuel use. The average footprint of people in industrialised countries (20 acres per person) is four times as large as those in developing countries (5 acres per person). Humankind now uses one-third more resources than nature can sustainably replenish, which may lead to an overshooting of global carrying capacity.

To calculate your own ecological footprint, and how it compares to others in the U.S. and world, work through the information links, questions, and calculation sheets provided in the Redefining Progress websites at: <www.rprogress.org/programs/sustainability/ef/> and <www.lead.org/leadnet/footprint/default.htm>. Work through the information and questions for the short version, calculate your "footprint," print out the pages, and then provide a 1-2 page analysis and reaction to what you've learned through the exercise. Remember, that this is worth a maximum of 20 pts. Below are some additional environmental websites that can help you learn more about our national and global environmental problems.

The United Nations Environmental Programme: <www.unep.org>

The United States Environmental Protection Agency: <www.epa.gov>

The Worldwatch Institute: <www.worldwatch.org>

Greenpeace: <greenpeaceusa.org>

Population Reference Bureau: <www.prb.org>

PopNet: <www.popnet.org>

The World's Water: <www.worldwater.org>

The World Bank: <www.worldbank.org/data/>

Rocky Mountain Institute: <www.rmi.org>

The Nature Conservancy: <www.nature.org>

World Wildlife Fund: <worldwildlife.org>