

**California State University, Fresno**  
**Department of Biology**

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**Human Ecology**

*Fall 2007*

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*Course No:* BIOL 110

*Instructor:* Dr. Madhusudan Katti

*Unit Value:* 3

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*Location:* Science 324

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<http://zimmer.csufresno.edu/~mkatti/>

*Course Blog:* <http://reconciliationecology.blogspot.com/>

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**CATALOG DESCRIPTION: BIOL 110, Human Ecology, 3 units**

The study of the relationships between humans and their environment, both natural and man-made; emphasis on scientific understanding of root causes of current environmental problems.

**TEXTS:**

*Jared Diamond, Guns, Germs, and Steel. The Fates of Human Societies. 2005.* W. W. Norton & Co., NY. ISBN: 9780393061314

*Michael Pollan, The Omnivore's Dilemma. A Natural History of Four Meals. 2006.* The Penguin Press, NY. ISBN: 9780739474563.

*Alan Weisman, The World Without Us. 2007.* Thomas Dunne Books. ISBN:978-0312347291

I will also recommend other books and papers during class, on the class blog, and via Blackboard, so keep your eyes open for those.

**WEB SITE and other electronic issues:** There is a class web site accessed via Blackboard. If you have not used Blackboard before, I will give you instructions. I will post everything I can on the site – lectures, electronic presentations, etc. Email and Internet access are required for this course. If you don't have email, you **MUST** get an account: you are entitled to a free account as a CSU Fresno student. You will **ONLY** be able to access Blackboard if you have a CSU Fresno email login and password. In addition, extra goodies will be posted on the class blog (see above for URL), perhaps on a weekly basis, to expand your horizons.

**ABOUT THE COURSE:** This is an integrative upper division (GE) course that applies interdisciplinary scientific principles – but through an evolutionary biological lens – to an understanding of the ecology of a single species *Homo Sapiens*. Evolution is **the guiding paradigm** in the biological sciences, informs and guides ALL scientific inquiry in biology, and has had a profound and fundamental impact on our understanding of the structure of human society. An understanding of human ecology and evolution requires synthesis of knowledge and principles from biological, historical, and social sciences. Given the interdisciplinary nature of the material, and of the enrolled students, our classes will take the form of a seminar-discussion with a much more open flow of thoughts and ideas rather than me lecturing. When I do lecture, I don't use Powerpoint, as I prefer Apple's Keynote for

presentation. I can post lectures online (a few days after each class) in PDF format only, as it is easy for me to export them as PDFs without having to worry about formatting errors and such. I do not have the time to convert all the presentations into Powerpoint format, so don't ask me to do so. And note that my Keynote presentation slides are mostly skeletal outlines only—they will make limited sense without being fleshed out through classroom note-taking. Remember, this is your education – take responsibility for it. As this course is intended to develop your ability to think logically and critically, active discussion will be encouraged.

**ABOUT ME:** I'm an evolutionary ecologist with a primary research focus on how vertebrates respond and adapt (or not) to natural and man-made variation in the environment. I study birds, primarily, and, to a lesser extent mammals, especially primates. My research approach is integrative and addresses physiological, behavioral, and ecological mechanisms underlying patterns in the distribution / abundance of species, in the light of ongoing human influence. My current research focus is on understanding how bird species are responding to habitat changes associated with urbanization, locally in the San Joaquin Valley, as well as in cities elsewhere in the world. You are encouraged to visit my lab website for more on what I do, and for research opportunities if you are interested. If you have problems, questions, or interests – please come and see me. **My office is in Science 218, and I welcome you to drop in at any time to talk if I am relatively free at that moment.** You may also use the conference table in my lab to study / hold discussions if it is free. And I'm happy to arrange appointments outside my office hours.

**ASSESSMENT:** The course grade is based on classroom participation, two take-home exams, two critiques of recent papers, and a final term paper. In addition students will write two short essays in a more popular-writing format for posting to the class blog. Guidelines for the critiques and term paper are discussed below.

**Participation points** – these are awarded for some degree of engagement in the class activities, not merely warm bodies in the classroom. There are 40 points to be earned during the semester, 5-10 points at a time, awarded at random. Those individuals in class on a participation day get the points. Usually the days chosen actually have a participative component to them – interactive group exercises, demonstrations, etc.

**ASSESSMENT AND EXAM SCHEDULE AND GRADE CUTOFFS**

Exam	Points	Grade cutoffs
Take-Home (2)	100 each	A = > 85% B = 75 - 84.49% C = 65 - 74.49% D = 55 - 64.49% F = < 54.49%
Critiques (2)	50 each	
Term paper	100	
Blog Essay (2)	25 each	
Leading Discussion	50	
Class participation	50	
Total	550	

**MY POLICIES:** If you are going to come to class, please come on time. If you can't make it until half way through class, don't come. It is extremely disruptive to the learning of your fellow students to have a chain of latecomers. Food; no, too noisy: drink; OK until the first major spill. If you have electronic communication devices including iPods, cell phones, beepers, pagers, Palm Pilots, computerized watches, or whatever the next technological innovation is, **TURN THEM OFF**. If you absolutely have to communicate with someone, leave class to do so. If you need to bring a visitor to class, please see me before the day of the class. I don't take roll after the first two weeks; this is your education, so if you either can't make it to class, or don't wish to come to class, that is your choice. However, there are 40 points to be earned for class participation. These points are awarded are random, usually on days when we are doing something participative or interactive. If you miss a class, you may consult fellow students for notes; please do not expect me to do the entire lecture a second time during office hours, although I can help you catch up if you miss something substantial for valid reasons. I like to stimulate intellectual exchange as a part of the learning process, and therefore encourage collaboration among students. In that spirit, you are welcome to come to office hours as a group to discuss / debate / argue any topic at least tangentially relevant to the course. And you might enjoy forming a reading group to go over *The Origin of Species*.

Lastly, registration issues are your responsibility: please be aware of and follow this semester's deadlines from the schedule of classes.

**Withdrawal from the class (AKA dropping after the drop deadline):** It is possible under exceptional circumstances (**for serious and compelling reasons**) to withdraw from a class after the drop deadline (February 13), with the approval of the instructor (me) and the Dean of the College of Science and Mathematics (we both have to sign the form). If that is the case, then you must provide me with written documentation of your reasons for needing to withdraw from the class.

Here is the formal language from the current catalog:

*After the seventh day of instruction, a student may drop a course only for a serious and compelling reason that makes it impossible for the student to complete course requirements. A serious and compelling reason is defined as a medical, emotional, or other condition acceptable to and verified by the dean of the college/school in which the course is offered. The condition must be stated in writing on the drop form. Upon signing the form, the course instructor may add a written recommendation to the college/school dean in the space provided. The dean may require that the student provide written substantiation as deemed necessary. Failing or performing poorly in a class is not an acceptable serious and compelling reason within the university policy, nor is dissatisfaction with the subject matter, class, or instructor.*

*During the final three weeks of instruction, dropping an individual course is not permitted unless special approval is given by the registrar in cases such as accident or illness where the cause of the drop is due to circumstances beyond the student's control. If the student has completed a significant portion of the required coursework, incomplete grades are often assigned.*

Simply put – if you need to withdraw from the class, there needs to be a very good and documented reason, or neither the dean nor I will allow the withdrawal. Failing the class **IS NOT** a serious and compelling reason. The last possible date that you may withdraw from the class is **September 24**.

**UNIVERSITY POLICIES:** I fully support the university's policies, including, but not limited to, the following:

***Students with Disabilities:*** Upon identifying themselves to the instructor and the university, students with disabilities will receive reasonable accommodation for learning and evaluation. For more information, contact Services to Students with Disabilities in Madden Library 1049 (278-2811).

***Cheating and Plagiarism:*** "Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another student to do so. Typically, such acts occur in relation to examinations. However, it is the intent of this definition that the term 'cheating' not be limited to examination situations only, but that it include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means. Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual property) so used as one's own work." Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the university. For more information on the University's policy regarding cheating and plagiarism, refer to the [Class Schedule](#) (Policy/Legal Statements) or the [University Catalog](#) (University policies).

***Computers:*** "At California State University, Fresno, computers and communications links to remote resources are recognized as being integral to the education and research experience. Every student is required to have his/her own computer or have other personal access to a workstation (including a modem and a printer) with all the recommended software. The minimum and recommended standards for the workstations and software, which may vary by academic major, are updated periodically and are available from [Information Technology Services](#) or the University Bookstore. In the curriculum and class assignments, students are presumed to have 24-hour access to a computer workstation and the necessary communication links to the University's information resources."

***Disruptive Classroom Behavior:*** "The classroom is a special environment in which students and faculty come together to promote learning and growth. It is essential to this learning environment that respect for the rights of others seeking to learn, respect for the professionalism of the instructor, and the general goals of academic freedom are maintained. ... Differences of viewpoint or concerns should be expressed in terms which are supportive of the learning process, creating an environment in which students and faculty may learn to reason with clarity and compassion, to share of themselves without losing their identities, and to develop and understanding of the community in which they live . . . Student conduct which disrupts the learning process shall not be tolerated and may lead to disciplinary action and/or removal from class."

***Copyright policy:*** Copyright laws and fair use policies protect the rights of those who have produced the material. The copy in this course has been provided for private study, scholarship, or research. Other uses may require permission from the copyright holder. The user of this work is responsible for adhering to copyright law of the U.S. (Title 17, U.S. Code). To help you familiarize yourself with copyright and fair use policies, the University encourages you to visit its [copyright web page](#).

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## WRITING REQUIREMENTS

**Critique:** A major objective of this is to allow you the opportunity to write scientific prose and for me to edit and evaluate that writing BEFORE the term paper. In my other classes there have been students whose writing skills have needed significant improvement, and they have done poorly on the final term paper. Some among you may have had limited exposure to scientific writing. This way we collectively have an opportunity to reduce the chance of such a possibility.

The essay will be a critique of a published paper in the peer-reviewed literature. The topic will be in an area of evolutionary research. The critique will be 2-3 double-spaced typed pages. Precise requirements will be distributed with the paper.

**TERM PAPER:** Each student must submit a paper to fulfill the requirements of the course. The precise requirements for this paper are on a separate document to be handed out in class and posted on the class websites shortly. **To pass the class, you are required to have pre-approval of the topic of your paper, complete the paper and submit it electronically via Turnitin, AND obtain a passing grade.**

## PRIMARY LEARNING OUTCOMES

I expect that by the end of this class you will be able to write a short essay on ANY major topic in the field of human ecology, to communicate with academic as well as lay audiences. Secondly, I expect your term paper to demonstrate your ability to access primary information from the print and electronic media, and to use that information in a synthetic manner.