

Course requirements for

"Humans and their environments" **Biology 140, Biology 440**

Fall Semester, 2009 (not offered Spring Semester): 3:00 pm sharp - 4:20 pm, T-Th, Leidy Laboratory 10 (the large auditorium in the center of the building).

Instructor: Professor Daniel Janzen, Room 201 Goddard Labs; tel 215-898-5636; email djanzen@sas.upenn.edu

Teaching Assistant:

Bio. 140/440: Catharine Hoffman, office in 330 Leidy. Office hours by appointment; she will reply to email requests within 24 hours. E-mail is ecat@sas.upenn.edu

THERE ARE NO RECITATION SECTIONS FOR Bio.140/440.

Web site: <http://fusion.sas.upenn.edu/caterpillar/files/lecture.html>

Lectures: There will be a full lecture on Thursday, 10 September 2009, the first lecture of the course (and not a good one to miss). The lectures and exams for both courses - Biology 140 and Biology 440 - are the same events (see home page for dates). In addition, Biology 440 students have to write a term paper (see below). While the examinations are the same for both courses and given at the same time, they are graded/evaluated on different curves.

The lectures are given as digital image projected essays, mounted on a powerpoint background (digital images inserted into blank powerpoint pages). All images used in lecture are also present on the course web site. Each image on the web site is accompanied by a text paragraph approximating at least a substantial portion of the comments made about that image in lecture. The text paragraph will contain additional course material that there is not time to cover in lecture, but **that you are responsible for in the exams**. Additionally, each web site image can be acquired through the net in a high resolution form if you want to study it in detail (click on it in the checkerboard, which gives a larger single image, and then again on the button at the bottom of the page). I do NOT recommend attempting to do this course simply by browsing the images and their associated text. The web site images and text are the only way to "make up" a missed lecture (there are no "makeup lectures"), but again, I do not recommend doing the course just from that source. It is becoming more and more the case that in the lectures, I try to add to what is already on the web site as well as emphasize what is there.

Textbook:

Wilson, E. O. 1999 (new edition). The Diversity of Life. Norton & Co., 424 pages (there are various printings/editions, all are the same). This is to be read by all students

in its entirety during the semester. Since there is just one textbook, I assume that you will read it thoroughly and use the TA and Google to explore what seems fuzzy and incomprehensible (but recall that Wikipedia is an incredible zoo of fact, fiction and omission). I would strongly recommend not waiting to cram in the last few days before the examinations. **Up through page 215 will be covered by the first examination. The second half of the book will be covered in the second examination. The entire book will be covered in the final exam.**

The more you have absorbed from this book, the more the lectures will mean to you. It offers basic conceptual infrastructure for the course (and for your interactions with life and biology as a responsible human). This course assumes that you will read it thoroughly and absorb its messages. I do not believe in orally and explicitly repeating what Wilson has worked hard to say in clear prose.

Web site: <http://fusion.sas.upenn.edu/caterpillar/files/lecture.html>

Syllabus: The list of anticipated lecture titles is on the home page for the course at <http://fusion.sas.upenn.edu/caterpillar/files/lecture.html> (the previous web site URL was <http://condor.sas.upenn.edu/cf/caterpillar> and that should still function as well). Unforeseen circumstances may require a change in order of lectures, but a lecture will happen on the dates indicated and the examination dates are fixed.

Most lectures have pdf files listed at their beginning right under the title on the lecture home page on the web site. **All students are responsible for having read these pdf files**, just as if they were part of the textbook or text captions for the images. I do not expect you to absorb and be able to regurgitate the details of all of this reading. Rather, I expect you to attempt to read it and absorb as many of the punch lines, rationale, questions being addressed, etc. as your vocabulary and background allows. There will be 1-2 questions on the exams about each pdf reading. At the very beginning of the course, these pdfs are those from last year, and a few more will be added to some lectures close to the time of the lectures.

Examinations: There are two mid-semester exams (see syllabus for dates) and one final exam (about mid-December 2009 on the regular campus assigned date). All questions in all examinations will be multiple-choice and the entire class period is available to complete them. **A pdf file of a first mid-semester exam from year 2000 has been uploaded to the pdf files for the date of the first mid-semester exam (click on lecture 7), so that you can have a feeling for the structure of the exam. A hard copy old exam is also being given out on the first day of classes.** These exact questions will not reappear on the 2008 exams, and recall that in previous years lectures about other topics may have been discussed. All students in all courses will take the same exam, but the final grades will be assigned differently to the two courses. No letter grades will be assigned to the numerical scores on the two mid-semester exams, but you can compare your score with that of the curve for the two classes as units, which will be posted on the wall by the TA's office.

There are no make up exams. Under extenuating circumstances (written medical leave) we will drop your lowest grade on one of the exams, and assign a grade based on how you would have done based on how you do on the other two exams (two mid-semester exams and the final).

Course paper: Only those students registered for Bio. 440 are required to write a term paper. Each Bio. 440 student must send me a brief 1-2-paragraph statement by e-mail (djanzen@sas.upenn.edu) before midnight on 29 September, as to the subject of your semester paper, with a proposed title. Do not send as an attachment, but rather as the CONTENT of an email. Be certain that the first part of the email message contains your full name, last three digits of your social security number, and your FULL email address. **Without this statement by this date, you will get a failing grade in the course.** The topic of your semester paper must be a subject of interest to you personally, and must deal with some specific aspect of interaction between humans and their non-human biological environment. Your email message must include a third paragraph explaining your personal interest in the topic; please identify this paragraph as such. By midnight on 15 October, I need from each Bio. 440 student an e-mail message (not an attachment) containing a detailed outline (equivalent of 1-2 printed pages) of your semester paper; again, without this outline on this date, you will receive a failing grade in the course. Do not send as an attachment, but send it within the body of an email message.

The Bio. 440 term papers are due as e-mail electronic documents on the date and time of the final exam in mid-December 2008. Please send this document as an attachment **that you have converted to a pdf**. The paper should be 20-40 pages double-spaced typing in length, 12 point type. Send to my djanzen@sas.upenn.edu address. Additionally, on the same date, deposit a hard copy in my Biology Department mailbox in Leidy Lab, which is in the east end of Leidy Laboratory, first floor.

Unfamiliar terminology: This course is likely to occasionally use unfamiliar terminology. I recommend that you keep a list of such words and ask your Teaching Assistant during office hours, but also Google and Wikipedia can be useful to triangulate. Also make use of email to your TA for this purpose.

Questions: If you have questions, please ask the TA. Do not rely on rumor.

Names: ALWAYS put your first and last names on emails - there are many of you with the same first name (human taxonomy still acts like we are a little village).

Dan Janzen 10 September 2009 djanzen@sas.upenn.edu