

ANTH 102: Humans are cultural animals

Winter 2009

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Lectures: MWF 1-1:⁵⁰ Center Hall 113 **Sections:** WLH 2115, W @ 3:⁰⁰ & F @ 9:⁰⁰
OH: **Moore:** T 1-2, Th 11-12 or by appt. **Gidding:** F 10 - 12

Humans are cultural animals. This class examines humans from a comparative perspective; if we ignore culture, what's left? How do culture and biology interact? And how does biology inform cultural debates over race, sex, marriage, war, peace ... etc.? The goal is not to teach you all of biological anthropology (you should have the basics from ANTH 2), but to show the strength of a biocultural perspective on issues of anthropological interest and, for some, policy importance. Biological understandings do not determine policy, but policy decisions that ignore biology or are founded on mistaken biological premises are unlikely to produce the expected results.

Readings: Required (available at **Groundworks Bookstore**)

Wilson, D. S. (2007). Evolution for Everyone: How Darwin's theory can change the way we think about our lives. Delacourte Press. This has been described as two books in one, and we'll be reading it that way. The first part is an *excellent* introduction to evolution, natural selection theory, and how those ideas can help us interpret ourselves. The second part is a defense of Wilson's own ideas about the role of group selection in shaping religion, ethics etc. Not many scientists agree with him. The book thus serves two purposes: introductory text and exercise in critical reading/thinking. ("EfE")

Angeloni, E. (2008). Physical Anthropology 09/10 (18th edition). Annual Editions, McGraw Hill. This compilation of popular articles is a bit "lower division" but is a good way to painlessly convey concepts ("EA")

Articles: As noted in syllabus. I do not produce hardcopy readers on assumption you'd rather save money & trees.

Recommended

Any biological/physical anthropology textbook published in the last 5 years. ANTH 2 has used Stanford et al.'s *Biological Anthropology*. Other standards are Boyd & Silk *How Humans Evolved*; Relethford's *The Human Species*; and Jurmain et al.'s *Introduction to Physical Anthropology*. NOTE: most of these are outrageously expensive new; humans haven't changed that much lately so look for a used 'older' edition for < \$25. Lectures (and tests) will assume knowledge of the basics; objective Qs will *not* come from such sources, but they'd be helpful for e.g. "Explain the relationship between G, T, A, C and phenotype"; syllabus indicates topic to consult in whatever book you use if you need to brush up. If you did well in ANTH 2 (or similar course), you won't need this; if you've never had any biology or bioanthro, it'd be a good idea to get a text and 'follow along'. Generic text ("GT")

Lecture Notes: There will be AS Lecture notes available; I'll be going over them prior to their distribution.

Grades: There will be 140 points possible in the course. If you miss a test without *prior* arrangement (or doctor's note of *emergency* appointment), **zero points, no makeups**. It is up to you to meet all deadlines. NOTE: In the past there's been a paper required; if for some reason you need to do a paper, please see me.

Discussion questions: 10 points

Midterms: 2 at 40 points each

Final: 50 points, comprehensive (weighted to material since 2nd midterm)

Class discussions: Two lectures are designated for discussion of topics covered. These are *not* intended as review sessions, but as occasions when we can talk about the topics covered (not "what did you say?" but "what does everyone think *about* what the prof/reading said?"). At the preceding (Wednesday) lecture, you should hand in a topic question. Repeat: not "I didn't understand X", but something along the lines of "Lecture/reading stated X; I'd heard Y and it's important because of Z – what's up" would be great. What do you find interesting/important for discussion? Format doesn't matter as long as I can read it and it has your name on it – the questions will be "graded" on 1-5-point scale (1 = you really didn't think much about this, 5 = wow – that's insightful). No late or emailed questions accepted. I will draw them from a hat in lecture. Topics discussed will be considered for test questions ...

Sections: Wednesday at 3:00 and Friday at 9:00. They will start meeting 1st week unless announced otherwise in class.

What you're getting into: CAPE and ratemyprofessor reviews frequently mention that my lectures are too fast and disorganized, and that I am arrogant and unapproachable. I get pretty excited about the material (usually) and know that I try to cram too much in (leading to speed); I also tend to teach by examples (requiring you to work out connections and how they fit, and easily interpreted as disorganized if you don't do this). I'm trying to scale it all back this year. I honestly don't know where the arrogant/unapproachable thing comes from, since in fact interaction with students is probably my favorite part of teaching. It's very possible that I don't in my manner *invite* approach, but I think I'm very receptive to approaches. You're invited ☺ Anyhow, I mention these issues to put them on the table in hopes that it'll be easier to 'fix' them if you know I know.

I also get complaints about objective tests requiring memorization of facts, some of which seem picky. I've never understood this one. Foreign language requires memorization of words; chemistry of formulas; math, of equations; you get the idea. Of course if you learn X and I ask about Y it's frustrating and my choice of Y might seem picky, but you don't really want me to ask *everything* do you? ☺

Final exam is on Friday 20 March, 11:30 – 2:30

WEBSITE: Syllabus, some readings, and lecture notes will be available on the class website (<http://weber.ucsd.edu/~jmoore/courses/anth102/>), BUT: I have only so much disk space, and as a result the lecture notes might not be available indefinitely. I will post them ASAP after each lecture (within a few days); they will remain available for at least a week *but may be deleted anytime after that*. Please **do not** request copies of deleted files. If you want to consult the online notes, do so within a week of the lecture in question!

NOTE: the website will *not* include films or video clips; once shown, it's gone.

Reading Evolution for Everyone (EfE): This book introduces a way of thinking about the world; most assignments are not topically linked to specific lectures—they are just suggestions to space things out between tests. Some topics will be covered in lecture well after they are discussed in EfE; recursion is our friend.

LECTURE AND ASSIGNMENT SCHEDULE
(do reading **BY** date indicated; “[pdf]” indicates available on website)

Week 1

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|---|-----|---|---|
| 1 | 1/5 | M | Origins, essences, good and evil |
| 2 | 1/7 | W | History of biological anthropology: milestones & millstones; Tinbergen's “four questions” at HEART of understanding bioanthro: function, causation, development and history .
Hrdlicka, A. (1918) Physical anthropology: its scope and aims; its history and present status in America. <i>Amer. J. Phys. Anthropol.</i> 1 (1): 3-23. [pdf]
Lewis, H. S. (1998) The misrepresentation of anthropology and its consequences. <i>Amer. Anthropol.</i> 100 (3): 716-731. [pdf] [finish by Monday] |
| 3 | 1/9 | F | Three ways of knowing things; strong inference. How do you know, when you know you can't know?
Platt, J. R. (1964) Strong inference. <i>Science</i> 146 : 347-353. [pdf]
EfE: 1-6; EA: 1, 2 |

Week 2

- | | | | |
|---|------|---|---|
| 4 | 1/12 | M | Nothing in biology I: Evolution, deep time and how we know it.
Handout on dating methods [pdf]
Wiens, R. C. (2002) Radiometric dating: a Christian perspective. [pdf]
EfE: 7-10
http://www.nature.com/evolutiongems [pdf; reading linked papers is optional]
GT: Wiens is lengthy and assigned to demonstrate the lack of conflict between religion and science; dating methods section of GT will be fine and possibly easier read. |
|---|------|---|---|

- 5 1/14 W Nothing in biology II: Darwinism, Creationism, Intelligent Design.
Weston, P. (1998) *Forum Notes: Fallacy of racism* [pdf]
EfE: 11-13; **EA:** 5-7

Submit discussion questions

- 6 1/16 F **Discussion I:** Science as a way of knowing
EfE: 14 – 16; **EA:** 21

Week 3

- 7 1/19 M MLK HOLIDAY [chance for head start on genetics readings]

- 8 1/21 W Genotype & phenotype: cells, genes, genetics and heritability
EfE: 17, 18; **EA:** 3, 4, 8

GT: Be familiar with basics of cell, nuclear & mitochondrial DNA, relationships among chromosomes, genes, alleles, genotype, amino acids, proteins, and phenotype, heterozygote, homozygote, dominant, recessive, etc. You won't need the quantitative aspects (like Punnett squares) for this course, though they may help to visualize concepts.

- 9 1/23 F How do gene frequencies change (i.e., evolution happen): Drift and natural selection
EfE: 19-20

GT: population genetics; again, focus is concepts not quantitative manipulation; you will not need to calculate Hardy-Weinberg equilibria etc. Understand gene flow, drift, founder effect, natural selection, neutralism, positive/negative assortative mating, etc.

Week 4

- 10 1/26 M **Midterm 1**

- 11 1/28 W Nonhuman primates
EfE: 21, 22; **EA:** 9, 10, 17
Allometry handout [pdf]

GT: Basic characteristics of primates, taxonomy to level of Family.

- 12 1/30 F Chimpanzees: What our cousins can tell us about our great grandparents (and ourselves)
EfE: 23-25; **EA:** 11-13, 18

Week 5

- 13 2/2 M Hominins, hominans and hominids: our fossil record
EfE: 26, 27; **EA:** 22-26

GT: Before lecture, skim chapter on fossil record between ape-human split and the origin of *Homo*. Then use to clarify anything you didn't follow in the lecture. Should understand at least the nature of fossil data and the gracile/robust australopithecine distinction.

- 14 2/4 W The genus *Homo* and the Upper Paleolithic Revolution (that wasn't)
EfE: 28; **EA:** 27-31

GT: As above. Skim to get background, then use to clarify lecture.

- 15 2/6 F How chimpanzees and humans differ
EfE: 29; **EA:** 14-16

Week 6

- 16 2/9 M Guest: Margaret Schoeninger – Evolution of the human diet
Lee-Thorp, L. & M. Sponheimer (2006) Contributions of biogeochemistry to understanding hominin dietary ecology. *AJPA* **131**: 131-148. [pdf]

- 17 2/11 W Human variation, adaptation and acclimatization

AAPA Statement on Biological Aspects of Race: www.physanth.org/positions/race.html

EA: 32, 34, 35, 40

www.understandingrace.org [optional]

GT: Main point is the adaptive nature of some but ?not all of the variation we see in modern humans; read lightly.

Submit discussion questions

18 2/13 F **Discussion II:** The biology and evolution of humans
EfE: 30

Week 7

19 2/16 M **Midterm 2**

20 2/18 W Biocultural evolution: Mothers, children, & milk: Human life history and the invention of childhood
Hrdy, S. B. (2005) Evolutionary context of human development: the cooperative breeding model. In
Attachment and Bonding, CS Carter & L Ahnert (eds). Cambridge: MIT Press. [pdf]

21 2/20 F War
Are humans inherently violent? RW Wrangham/D Peterson; RW Sussman. (2001) Taking Sides:
Clashing Views on Controversial Issues in Anthropology, pp. 52-73. McGraw-Hill. [pdf]

Week 8

22 2/23 M Peace
EfE: 32

23 2/25 W Environment, race; sex, hope, and death
Chisholm & Burbank (2001) Evolution and inequality. *Int. J. Epidemiology* **30**: 206-211 [pdf]
EfE: 33; **EA:** 36, 42

24 2/27 F Sex differences: Girls just want to have sums
Dar-Nimrod, I. & Heines, S. J. (2006) Exposure to scientific theories affects women's math
performance. *Science* **314**: 345. [pdf]
The science of gender and science (debate between Steven Pinker and Elizabeth Spelke) online at
www.edge.org/3rd_culture/debate05/debate05_index.html

Week 9

25 3/2 M Sex & gender, continued
Start Hrdy (1997) Raising Darwin's consciousness. *Human Nature* **8**: 1-49. [pdf]

26 3/4 W Marriage
Finish Hrdy (1997)
EA: 33

27 3/6 F Violent crime (domestic and otherwise)
Daly & Wilson (1999) An evolutionary psychology perspective on homicide. Pp. 58-71 in MD Smith
& ME Zahn (eds) Homicide Studies: a Sourcebook of Social Research. Thousand Oaks CA: Sage.
[pdf]
EA: 19

Week 10

28 3/9 M The genetics of love: a rodent example to tie it all together.
Insel & Young (2001) Neurobiology of attachment. *Nature Reviews: Neuroscience* **2**:129-136. [pdf]

29 3/11 W Human biology and social policy
EA: 37-39; 44
GT: some (but not all) texts have a section on policy/the future. If yours does, have a look and see
what you think, might be good source for discussion questions.

30 3/13 F Wrapup
EfE: 34 - 36

FINAL EXAM: Friday, 20 March [You didn't plan to leave early, did you?]