Introduction to Biological Anthropology: Notes 1

Introduction to the course

- This is Anthropology 201: Introduction to Biological Anthropology
- I am Bruce Owen
- Enrollment
  - Please tick your name on the roster or sign the wait list
- This course satisfies the lower division "Specific Emphasis in Natural Sciences" General Education requirement (B3)
  - This is a science class
  - You will have to think carefully and logically, evaluate some slippery arguments, and work with real data
  - You don't need any background in anthropology or biology (although having some will make the class easier)
    - but I do expect you to deal with the information and reasoning presented in class and in the book
  - Some of the concepts are basically mathematical, but I will keep the math and numbers to a bare minimum.
    - You will have to understand graphs of data, though
  - The details of genetics are basically chemical, although we won't get into that too much, either
  - But I warn you -- a lot of students find this class to be harder than they expected
- This course will help you think about some basic questions about people:
  - Where do we come from?
  - Why are we physically the way we are?
  - Why do we behave the way we do?
  - How did we get to be this way?
- There are many ways to approach these questions
  - in this course, we focus on biological approaches
  - to understand how our biology affects our behavior and society, and to understand how we got to be the way we are
- This is the field of Biological Anthropology
  - The study of people as biological organisms
  - that are understandable (in part) in terms of how our physical bodies work and interact with the environment, including other people
- Biological anthropologists study
  - modern human biology
    - adaptations to different environments
    - reproduction
    - disease

    - diet
    - demography
    - movement and interaction of populations
    - and many others
    - this overlaps a lot with medical studies, but usually with a greater awareness of how culture interacts with biology
      - medical anthropology is a growing field right now
  - our living primate relatives, for the light they can shed on us
    - their ecology (environment, diet, predators, etc.)
    - their behavior (social groups, mating, parenting, communication, interactions…)
    - their relatedness to us
  - fossils of extinct primates
    - some of which were our ancestors
    - in order to reconstruct how, where, and maybe why we evolved as we did

- What ties this all together is the fact and the theory of evolution
  - the theory of evolution gives us a coherent system of explanations for a wide variety of interesting features of humans and society
  - evolution is a major focus of this course
  - Of course, evolution is not the only way to explain the nature of humans.
    - There are valid, scientific ways of understanding many features of humans that make little or no reference to evolution
      - including biochemistry, biomechanics, and psychology
      - not to mention sociology, cultural anthropology, linguistics, history, etc.
    - but evolutionary explanations are interesting, very useful for some purposes, and sometimes undoubtedly true

- This course is organized in four sections
  - 1. The fact and theory of evolution
    - Darwin's theory of natural selection
    - The origin of species
    - Enough genetics to understand some key arguments
    - Evolutionary theory is absolutely essential to understanding the rest of the course
      - like understanding algebra before you take calculus
      - once you get the evolutionary line, the whole rest of the course will make more sense
        - much as understanding a few concepts of supply and demand makes the rest of a microeconomics class obvious and easy
      - if you don't really get the theory of evolution clearly, the rest of the course will be muddy, unconvincing, and hard.
      - So read these first chapters carefully, ask questions in class or in my office hours, do the problem sets, and make sure that everything is crystal clear
  - 2. Living primates
    - They show what our kind of animal is capable of under different ecological and social circumstances
    - They provide analogues for what our own ancestors may have been like

- 3. The fossil (and other) evidence of evolution of the hominids
  - a very hot field right now; the textbooks really do have to be updated every two or three years
- 4. Applications to modern humans
  - The controversial issue of race
  - Other kinds of variation among people, including diseases, body shape, etc.
  - Evolutionary explanations for our own social behavior
  - especially concerning sex, marriage, and families
  - and much more

- By the end of this course, I hope that
  - you understand and can apply the theory of evolution, one of the most fundamental insights ever made into the nature of life
  - you appreciate and understand what we can learn from our non-human primate relatives
  - you have a reasonable idea of where humans came from, and some possible reasons why we are as we are
  - you look at people, animals, plants, and the world a little differently
    - with a greater appreciation of their complexity and inter-relatedness, and how they are not random, but make sense as a coherent pattern formed by the action of evolution

- Course mechanics, from the syllabus:
  - Key to the course: the class web page
    - You are responsible for checking it regularly
    - The web page takes precedence over the syllabus
    - It will change over the semester, so check it!
    - The web page features:
      - Class news, reminders, changes to assignments, deadlines, readings, test dates, etc.
        - These can be important!
      - The schedule of readings
        - Each day shows what you should read from the textbook, what parts of the CD you should look at, and any other readings or links
        - please do the readings *before* the class session
        - the readings range from 7 to 37 pages per class, averaging around 20 pages
          - plus sections of the CD
        - Note that the readings get longer and more detail-oriented towards the later part of the course
      - The schedule also has links to
        - lecture notes
          - usually posted before the class session
          - many students like to bring them to class and just annotate them, rather than trying to write everything down
          - the notes are also a good study aid
        - PowerPoint slides used in class
          - usually posted after the class session
          - also good for preparing for the tests

    - self-evaluated exercises
      - two-page problem sets that you can print
      - in one version with space for you to write answers
      - and another with the answers provided
      - these are completely optional, and you don't turn them in
        - they are just for you to use or ignore as you wish
      - so you can
        - do them and check your work
        - use them as study aids
        - ask questions about them in class, etc.
    - The schedule also shows dates of the tests
    - Virtual handouts
      - Downloadable syllabus
      - zoo project information
      - a few charts of primates and fossils
      - study guides, etc.
    - Links to other web sites
      - may be helpful in studying, doing assignments, or just fun or interesting
  - You can click to the class web page from the main SSU web page at sonoma.edu by clicking on "Information for…students", then "Class web pages", then the line for this class and section
  - To access some items, you will need a class user ID and password.
    - Class user ID:
    - Class password:
- We use the textbook *How Humans Evolved*, by Robert Boyd and Joan Silk, 2006, Fourth edition.
  - Available at Northlight Books, Amazon.com, and elsewhere
  - Used copies of earlier editions may be available, but please avoid them.
- The book comes with a CD , *Human Evolution: A Multimedia Guide to the Fossil Record*, by Phillip Walker and Edward Hagen, 2006.
  - We will use this CD for about eight class sessions, starting in March.
  - I will put a copy on reserve in the library, in case you bought a used copy of the textbook that did not include the CD.
- Grading is based on:
  - 20%: Non-human primate observation project
    - You print (at least) two copies of a primate observation form that will be posted on the class web page.
    - You visit the San Francisco or Oakland zoo (or another, if you wish), and observe two different species of non-human primates
    - While there, you complete the primate observation form for each species
    - You write a brief essay based on your observations, addressing issues that will be included in the assignment information

    - You submit the completed forms and the essay in class, along with your used admission ticket. No ticket, no credit.
  - 20%: Test 1: Evolutionary theory
    - In class. Multiple-choice and short-answer questions
  - 20%: Test 2: Living primates
    - Same general format
    - Mostly, but not exclusively, about the second portion of the course (some evolutionary thinking is necessary throughout the course)
  - 20%: Test 3: Evolution of humans
    - Same general format
    - Mostly, but not exclusively, about the third portion of the course.
  - 20%: Test 4: Cumulative final exam
    - During the scheduled final exam period
    - Similar format
    - Covers the whole course, including the last few sessions on modern humans after Test 3.
- Late assignment policy:
  - The zoo project is due on the last day of class, but I will accept it late at the final exam with a 15% grading penalty.
- Plagiarism
  - Don't do it!
  - I have failed students for plagiarism
  - I have posted an explanation of plagiarism on the course web site that you may want to look at
  - Please see me if you have any doubts or questions about this
- I don’t take roll (after the first week or so) or count attendance in your grade
  - but I do want you to come to class
  - coming to class exposes you to the material in different forms (reading, listening, writing notes, and seeing visuals), which has been shown to improve both your understanding and your memory of the material
  - I have found that people who come to class generally do better on the tests and assignments
  - I like to think that the class sessions are interesting
  - I think it easier to get ideas when someone explains them
  - you can ask questions and hear your colleagues ask questions you might not have thought of
  - You can turn in the homework assignments and participate in discussing the answers
- Disability accommodations
  - if you have a disability and think you may need some accommodations, please see me
  - the syllabus includes some more details on this
- University policies
  - the syllabus includes a link to University policies on adding and dropping, appealing grades, cheating, and other things you might want to know about

- The best ways to get in touch with me:
  - come to my office hours
    - Tuesday and Thursday 4:00-5:00
    - Thursday 12:30-1:30
    - Stevenson 3007
  - or see me after class
  - or arrange to see me at some other time, if none of these are convenient.
  - or email me at: bruce.owen@sonoma.edu, which I usually check at least once every day
  - don't bother with my office telephone or voice mail, since I am rarely in there except during office hours, and I often forget to check the voice mail.
  - I have a box in the Anthro department office, Stevenson 2054, where you can leave messages or papers for me
    - If the door to Stevenson 2054 is locked, go in through Stevenson 2070
    - please don't slide things under my office door, stick them to a nearby bulletin board, etc., because I share that office with several other people who may not correctly figure out what to do with your paper.
- Pre-class assessment
- Finally: mugshots