Anthropology 242 - Summer Session A  
Human Evolutionary Biology and Life History

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NOTE: Office hours via Zoom/phone are flexible and by appointment. Please contact me via email.

Course description
This course is designed to examine (and celebrate!) human biological diversity from the perspective of evolutionary and life history theory. Variation in growth, immune function, maturation, reproductive function, and senescence are reviewed in reference to their potential adaptive significance. We will discuss topics relevant to your everyday life, such as sleep, stress, and infectious disease. We will focus particular attention on non-western populations and their responses to environmental constraints such as energy expenditure and caloric intake. There is no prerequisite for this course.

Class meetings: via Zoom Mon-Wed, 1:00 – 4:15 PM

Grading
Midterm exam (25%), to be given during the first half of the meeting on Monday June 8th
Discussion Questions (25%), scheduled twice a week
Participation in class (5%)
Final exam (35%), to be given on Wednesday June 24th
Flash talks + one page summary (10%) to be presented via Zoom on the second half of Wed June 24th

Discussion questions
Once a week, I will post a question about the readings or some other material (current news, video clip, etc). These questions are designed to make you think about the topics we are discussing in class and you should be able to answer them in one or two short paragraphs. They are due on the day before our meetings at 11:59 pm, i.e. they are due on Sundays and Tuesdays before midnight (no exceptions). You will submit them as an assignment via Canvas. Answers are individual, we will rely on the honor system.

The midterm exam will consist of identifications, short answers, and essay questions. The final exam will be in the same format as the midterm and it will be cumulative.
For the flash talk and one page summary, you will have your choice of a number of possible topics that will give you a more in depth understanding of human biology. The point is to synthesize your ideas from the academic literature and present them clearly to the class. The one page summary will accompany your talk; preferably it will have a graphic, with the same purpose, to clearly represent the ideas in your talk. A more detailed set of guidelines will be posted on the course’s site.

Grading is NOT on the curve and will be based on the following cut-offs:

- 100% = A
- 93 - 100% = A
- 90 – 92% = A-
- 87 – 89% = B+
- 83 – 86% = B
- 80 – 82% = B-
- 77 – 79% = C+
- 73 – 76% = C
- 70 – 72% = C-
- 67 – 69% = D+
- 63 – 66% = D
- 60 – 62% = D-
- <60% = F

Required readings
There is no required textbook for the class. All required readings (book chapters and scientific articles) will be posted on the Canvas site.

Suggested readings:

ACADEMIC INTEGRITY
Please read the 2020 Summer Student Handbook for guidelines and regulations regarding academic honesty and plagiarism.

Inclusive Teaching, Inclusive Learning
I am committed to an inclusive learning environment, so your experience in class is very important to me. I will promote a PRO-VOICE environment in which we mindfully and respectfully hear everyone’s voice regardless of ethnicity and national origin, abilities, gender and gender identity, sexual orientation, class and religion.
Regarding special accommodations needed to facilitate your learning, please let me know so that we can discuss how best to accommodate your needs.
CONTENTS (The approximate schedule with dates will be available on the Canvas site, but bear in mind that we have a flexible teaching/learning style that prioritizes in-class discussions, so we may, at points, be out of track with the schedule).

1. Introduction to the course
   a. Teaching and learning philosophy – active learning
   b. Who we are and what we do
   c. Brief overview of the course
2. The ethics of human biology research
   a. Principles of ethics
   b. Discussion of case studies
3. Biological bases of life
   a. The building blocks: cell structure and function
   b. The organization of genetic material
   c. Principles of inheritance
4. Epigenetics
   a. Basic principles
   b. Application to human evolutionary biology
5. Evolutionary Theory
   a. How we explain variation
   b. Theory of evolution by natural selection
   c. Relevance of evolutionary perspective for our life
6. Human diversity
   a. Basic principles
   b. Theories of modern human origins
   c. Phenotypic and genotypic variation
   d. Biological vs socially constructed concept of race
7. Nutrition and Energetics
   a. Human evolution and dietary changes
   b. Energy expenditure
8. Stress
   a. What do we mean by “stress”?
   b. Coping with stress
9. Biological Rhythms
10. Life History Theory
    a. Understanding life histories
    b. Primate life histories
    c. Human life history
11. Human growth and development
    a. Human growth patterns
    b. Puberty and adolescence
12. Human Reproductive Ecology
    a. Conceptual framework
    b. Male and Female Reproductive Ecology
13. Evolution & Medicine
    a. Basic concepts
    b. Adaptations to infectious diseases