

Anthropology 4790/6790: Human Adaptation

Fall 2017
M, W, F 11:15-12:05

*The course syllabus is a general plan for the course, modifications may be necessary, and will be announced to the class by the instructor

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Course Description:

This course is about human variation: why it exists, how we study it, and how it is shaped by the social, cultural, and physical environment. We will begin with an introduction to the adaptations that help define the human species. Using an evolutionary and biocultural approach, we will then investigate how adaptation to the social and physical environment including temperature, altitude, nutrient availability, and infectious disease can help us understand current patterns of human variation.

This is an upper division course and I expect that students will take a high degree of responsibility for their learning. This includes regular class attendance, active participation in classroom discussions, careful attention to reading material, timely completion of course activities, and professional interactions with other class members. Throughout the course, students will be expected to develop:

- A factual understanding of human variation and adaptability
- An understanding of the history and theoretical basis of the study of human adaptation
- Reading, writing, and speaking skills consistent with your academic and professional goals

Course Materials: All recommended books on reserve at the Main Library.

Required readings:

eLC readings

Stinson S, Bogin B. Huss-Ashmore R, O'Rourke D. 2000. Human Biology: An Evolutionary and Biocultural Perspective. Wiley-Lyss. New York. (Textbook available through UGA library electronic access)

Selection of one of the following.

Brewis, A. 2011. Obesity: Cultural and Biocultural perspectives. Rutgers University Press

Leiberman, D. 2013. *The Story of the Human Body*. Random House LLC
Either: Jablonski, N. 2014. *In Living Color: The Biological and Social Meaning of Skin*.
University of California Press. Or Jablonski, N. 2006. *Skin: A natural history*. California
University Press.

Course Requirements and Grades: Your grade will reflect your performance on the following:

Attendance and Participation: 15% of course grade. You are expected to attend and participate in class discussion and activities. This will include short, in-class writing related to the readings and course topics. More than 3 absences will affect your attendance and participation score.

Exams : We will have two exams that are designed to test your comprehension of the topics and readings for the course. Each will be 20% of the course grade.

Short assignments: Additional information will be provided. Combined, these shorter assignments will make up 15% of course grade.

a) *Human Adaptation in the Media*. In this class, the first step in learning about human adaptation will be to consider how the media writes about human biological variation and anthropological research. Our first writing assignment asks students to identify one peer-reviewed article and one or two corresponding article about the research in the media. You will write a short paper the compares and contrast the peer-reviewed scholarship with the popular press coverage.

b) *Book review*. Students will present an article or book “critique” (or review) of an assigned reading. This assignment is based on a model book review from a peer-reviewed journal. It asks the students to identify the main argument of the book, evaluate the evidence and conclusions, and discuss the significance of the book to the larger field of anthropology. The class will be grouped into 3 presentation groups. Each group will cover a different book to be assigned by the professor.

c) *Writing response*. Students will write short summaries and reflections of the writing process throughout the semester. This will include how they have responded to previous comments and the writing process.

Research assignment The Past and Present: Reviewing Human Adaptation. (30% of grade with associated writing assignments). Students will write a final research paper for the course following the model of a systematic literature review on a research topic of their choosing that examines trends in research over the past 10 years in biological anthropology and human biology. Including the draft assignments outlined below, the paper is worth 30% of the course grade. We will provide additional information throughout the semester. The goal of the larger assignment is: a) to encourage you to develop an advanced understanding of a topic related to human variation and adaptation in order to better understand global patterns of human variation and biological anthropology, and b) practice relevant writing skills (constructing research questions, reviewing literature, collecting data, and presenting an argument that is supported by data collection).

1. Topic selection and 10 scholarly references: Students will write a one-page summary of their topic choice, including why the topic was selected, how it fits the assignment, and

- what they hope to learn from the research. They will also begin to document the process of a systematic literature review and identify 10 scholarly sources related to their topic.
2. Conference about topic. Students will be required to meet with the TA for 15-30 minutes to discuss their topic summary.
 3. Draft abstract, thesis statement, and detailed (3-4 page) outline of the research paper. After submission, students receive written comments from the TA and professor.
 4. Rough draft of paper. This will be submitted and, in groups, students will conduct a peer-review of the rough drafts. Students will be asked to comment on how they read and understand the draft papers. The professor and TA will supervise the peer-review process.
 5. Final draft of research paper. On the final day of class, students will also have the opportunity to discuss their research on the future of human variation and adaptation.

Graduate credit: In addition to the research paper, students registered for ANTH 6790 will be expected to prepare a 15-20 minute presentation on their research interests for the class in addition to developing an annotated bibliography on a topic of their choice.

Course policies:

Late or incomplete assignments: All exams and assignments will be due at the beginning of the class period unless otherwise noted. Late assignments will be docked 5 points for each day.

Academic Integrity: All UGA students and faculty are expected to adhere to the principles of academic honesty and integrity. All academic work must meet the standards contained in "A Culture of Honesty." All students are responsible to inform themselves about those standards before performing any academic work. Plagiarism and academic dishonesty will not be tolerated and will be punished following the guidelines provided in the above documents. If you have any questions or concerns regarding issues of academic integrity, please do not hesitate to speak with us.

Brief Course Outline (full outline with readings available on eLC)

This is a general guide for the class and is subject to change with notification. All modifications will be posted on eLC. It is your responsibility to be aware of these announced changes.

Week of	Topic	Assignments
Aug 14	Introduction to class	
Aug 21	What is adaptation? Understanding human variation	Fri: Writing #1 (popular press)
Aug 28	What is adaptation? Differing approaches	
Sept 4	Brains and birth: the biocultural nature of human adaptation	Mon: No class- Labor day
Sept 11	Living in the extremes: Altitude	
Sept 18	Human adaptation: From the Tropics to the Arctic	Fri: Research topic due
Sept 25	Human adaptation: From the Tropics to the Arctic	
Oct 2	Human variation: Skin	Mon: Research paper

		abstract and outline
Oct 9	Human variation: Skin	Fri: 1 st Student book presentation
Oct 16	Human variation: Current issues	Fri: Exam 1
Oct 23	The human life cycle	Wed: 1 st draft Fri: No class- Fall break
Oct 30	Current issues: Nutrition transitions	Fri: 2 nd Student book presentation
Nov 6	Current issues: Nutrition in context	
Nov 13	Current issues: Inequality and infectious disease	Mon: 2 nd draft due Fri: 3 rd student book presentation
Nov 20	Thanksgiving Break	
Nov 27	Current Issues: TBA	Mon: Peer-review due
Dec 4, 5	Wrap up and presentations	Final paper due

Course schedule in detail (full list of required readings available on eLC)

Week 1, Aug 14, 16, 18: Introduction to class

Mon: Introduction

Wed, Fri: Introduction to human adaptation

Hawks, J. 2014. Still evolving (after all these years). *Scientific American*, Sept 2014. P86-91.

Nesse, R., and Williams, 1998. Evolution and the Origins of Disease. *Scientific American*.

Week 2, Aug 21, 23, 25: What is adaptation? Understanding human variation

Mon/Wed: Mechanisms and levels of adaptation

Recommended text: Hush-Ashmore R. 2000. Theory in Human Biology: Evolution, Ecology, Adaptability, and Variation. In *Human Biology: An Evolutionary and Biocultural Perspective*. Eds. Stinson S, Bogin B, Huss-Ashmore R, O'Rourke D. Wiley-Liss, Inc. New York, NY. Pp. 1-26.

Kuzawa CW. 2008. The Developmental Origins of Adult Health: Intergenerational Inertia in Adaptation and Disease. In *Evolution and Health*, W Trevathan, EO Smith and JJ McKenna (eds). Oxford University Press. pp. 325-349.

Fri: Writing Assignment #1 due: Human adaptation in the popular press/blogosphere

An example of possible topic/articles:

Rosenberg, K.R. and W. Trevathan. 2002. The evolution of human birth. *Scientific American*.

Wong, Kate. 2012. Why humans give birth to helpless babies. *Scientific American Blog*. <http://blogs.scientificamerican.com/observations/2012/08/28/why-humans-give-birth-to-helpless-babies/>

Peer reviewed: Dunsworth, H.M. et al. 2012. Metabolic Hypotheses for human altriciality. *PNAS*. doi:10.1073/pnas.1205282109

Week 3, Aug 28, 30, 1: What is adaptation? Differing approaches

Hicks, K., and Leonard, W.R. 2014. Developmental Systems and Inequality: Linking Evolutionary and Political-Economic Theory in Biological Anthropology. *Current Anthropology* 55:5

Week 4, Sept 6, 8: Brains: the biocultural nature of human adaptation

Leonard WR, Robertson ML. 2002. Food for thought. *Scientific American* December. Pp. 108-115.

Leonard WR, Robertson ML, Snodgrass, JJ, Kuzawa CW. 2003. Metabolic correlates of hominid brain evolution. *Comparative Biochemistry and Physiology*. 136:5-15.

Week 5, Sept. 11, 13, 15: Living in the extremes: Altitude

Wills, Christopher. 1998. *Living at the Edge of Space*. From Children of Prometheus. Persues Books, LLC.

Weitz CA. 1981. Weathering Heights. *Natural History*. Nov 72-84