

**AANT 502: PROSEMINAR IN PHYSICAL ANTHROPOLOGY**  
**SPRING 2016 (CLASS 9814)**  
**THURSDAY 4:15-7:05, BBB 003**

Instructor: Adam Gordon, Ph.D.

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Office hours: Wednesdays, 10 am to noon, or by appointment. (NOTE: The best way to reach me is to come to office hours. The next best way is by email. However, please be aware that I receive a large volume of student email, so I will not be able to respond right away.)

### **COURSE DESCRIPTION**

Nearly all academic disciplines rely on an underlying body of theory, and physical anthropology is no exception. In this course we will read and discuss seminal works in the modern evolutionary synthesis, as well as works that apply that body of theory specifically to anthropology.

This course will use a discussion format, and you and your fellow students are responsible for leading and participating in the discussions. Do not expect to be passive note-takers. This course will be enjoyable and successful for you only if every student actively participates. Read every assigned reading closely and be prepared to comment on all of them during every class. There is **a lot** of reading for this course, and everyone is expected to do all of it!

The prerequisite for this course is graduate standing in the Department of Anthropology or permission of the instructor.

### **REQUIRED READINGS**

- Darwin, Charles. 1859. *On the Origin of Species*. (The 6<sup>th</sup> edition is available online for free at <http://www.gutenberg.org/ebooks/2009>)
- Dawkins, Richard. 1976. *The Selfish Gene*.
- Huxley, Thomas. 1863. *Evidence as to Man's Place in Nature*. (available for free online in three parts at <http://www.gutenberg.org/ebooks/2931>, <http://www.gutenberg.org/ebooks/2932>, and <http://www.gutenberg.org/ebooks/2933>)
- Mayr, Ernst. 1982. *The Growth of Biological Thought: Diversity, Evolution, and Inheritance*.
- McCalman, Iain. 2010. *Darwin's Armada*.
- Mendel, Gregor. 1866. Versuche über Pflanzen-Hybriden. *Verh. Naturforsch. Ver. Brünn* 4: 3–47 (in English in 1901, Experiments in Plant Hybridisation. *J. R. Hort. Soc.* 26: 1–32). (available for free online at <http://www.mendelweb.org/Mendel.html>)

Additional readings will be assigned for the guest lectures towards the end of the semester; we will discuss this in more detail on the first day of class.

### **GRADING**

This course uses the A-E grade system. Your final grade is determined based on two components: class participation (50% of grade) and a take-home final exam which will be modeled after a departmental comprehensive exam (50% of grade).

## **COURSE WEBSITE**

The course website can be found on Blackboard. Readings and announcements may be posted there. Check the website regularly for announcements about changes to office hours, readings, or anything else important.

## **COURSE STRUCTURE**

This course is roughly split into two halves. The first half of the course will focus on foundational readings for the discipline of physical anthropology, and the second half consist of a series of guest lectures by the department's physical anthropology faculty on their areas of expertise. Readings will be assigned for every class, and all students are expected to read all of the material for every class. In addition, every week each student will be assigned a subset of the week's reading for which they will be responsible for identifying important topics for discussion. We will begin each class in the first half of the course by writing these topics on the board to use as a starting point to select topics for class discussion. In the second half of the course, class style will likely vary by guest lecturer, but all students will be expected to have completed the assigned reading and be prepared to engage in discussion on the material.

## **ATTENDANCE**

Attendance is mandatory in this course and is reflected in your participation grade, although it is not the sole component of the participation grade! Poor attendance suggests that you are not committed to doing well in the course. I will allow excused absences in the case of religious holidays, documented illness, professional conferences, and possibly other activities, but please let me know about these absences with as much advance notice as possible. I understand that people have family emergencies, have car trouble, suffer power failures that render alarm clocks useless (although this should not be a problem for a 4:15 pm class), *etc.* – however, it is common courtesy to let me know in advance if you know you are going to miss a class, or to let me know afterwards why you missed a class.

## **ACADEMIC INTEGRITY**

Academic dishonesty of any kind will not be tolerated in this course. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Students who are found to be academically dishonest will receive academic sanctions as outlined in the university's Graduate Regulations and Degree Requirements:

[http://www.albany.edu/graduatebulletin/requirements\\_degree.htm#penalties](http://www.albany.edu/graduatebulletin/requirements_degree.htm#penalties)

## **STUDENTS WITH DISABILITIES**

If you have special needs, please notify me immediately; I will be happy to work with you. Let me know if you anticipate needing any type of special accommodation in this course or have questions about physical access. For more information about "reasonable accommodation", please see the Disability Resource Center's Reasonable Accommodation Policy:

<http://www.albany.edu/disability/docs/RAP.pdf>

## COURSE SCHEDULE

Note that this schedule is subject to change.

WEEK	READINGS
<b>1: 1/21</b>	Introduction to course (no readings)
<b>2: 1/28</b>	Mayr, <i>The Growth of Biological Thought</i> , Introductory chapters and Section I
<b>3: 2/4</b>	Mayr, <i>The Growth of Biological Thought</i> , Section II
<b>4: 2/11</b>	Darwin, <i>On the Origin of Species</i>
<b>5: 2/18</b>	McCalman, <i>Darwin's Armada</i>
<b>6: 2/25</b>	Huxley, <i>Evidence of Man's Place in Nature</i>
<b>7: 3/3</b>	Mayr, <i>The Growth of Biological Thought</i> , Section III Mendel, <i>Experiments in Plant Hybridisation</i>
<b>8: 3/10</b>	Dawkins, <i>The Selfish Gene</i>
<b>9: 3/17</b>	<b>NO CLASS (SPRING BREAK)</b>
<b>10: 3/24</b>	<p style="text-align: center;">Lecture: Jenkins, Miocene and Plio-Pleistocene in Hominoid Evolution</p> <p style="text-align: center;">Readings:</p> <ul style="list-style-type: none"> <li>• Pontzer H. 2012. Overview of hominin evolution. <i>Nature Education Knowledge</i>. 3(10):8. (<a href="http://www.nature.com/scitable/knowledge/library/overview-of-hominin-evolution-89010983">www.nature.com/scitable/knowledge/library/overview-of-hominin-evolution-89010983</a>)</li> <li>• Domínguez-Rodrigo M. 2014. Is the “savanna hypothesis” a dead concept for explaining the emergence of the earliest hominins? <i>Current Anthropology</i>. 55:59-81.</li> <li>• Wood B, Harrison T. 2011. The evolutionary context of the first hominins. <i>Nature</i>. 470:347-352.</li> </ul>
<b>11: 3/31</b>	<p style="text-align: center;">Lecture: Gordon, Evolution of Sex and Sex-Specific Strategies in Mammalian Evolution</p> <p style="text-align: center;">Readings (please read in the order given below):</p> <ul style="list-style-type: none"> <li>• Otto S. 2008. Sexual reproduction and the evolution of sex. <i>Nature Education</i>. 1(1):182. (<a href="http://www.nature.com/scitable/topicpage/sexual-reproduction-and-the-evolution-of-sex-824">www.nature.com/scitable/topicpage/sexual-reproduction-and-the-evolution-of-sex-824</a>)</li> <li>• Bull JJ. 2015. Evolution: Reptile sex determination goes wild. <i>Nature</i>. 523:43-44.</li> <li>• Clutton-Brock TH, Harvey PH, Rudder B. 1977. Sexual dimorphism, socionomic sex ratio and body weight in primates. <i>Nature</i>. 269:797-800.</li> <li>• Gordon AD. 2013. Sexual size dimorphism in <i>Australopithecus</i>: current understanding and new directions. In Reed KE, Fleagle JG, and Leakey RE, eds.: <i>The Paleobiology of Australopithecus</i>. Vertebrate Paleobiology and Paleoanthropology Series. Springer. pp.195-212.</li> <li>• Plavcan JM. 2012. Body size, size variation, and sexual size dimorphism in early <i>Homo</i>. <i>Current Anthropology</i>. 53:S409-S423.</li> </ul>
<b>12: 4/7</b>	<p style="text-align: center;">Lecture: Schell, Life History</p> <p style="text-align: center;">Readings:</p> <ul style="list-style-type: none"> <li>• Widdowson EM. 1951. Mental contentment and physical growth. <i>The Lancet</i>. 257:1316-1318.</li> <li>• Tanner JM. 1986. Growth as a mirror of the condition of society: secular trends and class distinctions. In: Dubuc MB, Demirjian A, eds. <i>Human Growth: A Multidisciplinary Review</i>.</li> </ul>

	<ul style="list-style-type: none"> <li>• Schell LM, Magnus PD. 2007. Is there an elephant in the room? Addressing rival approaches to the interpretation of growth perturbations and small size. <i>American Journal of Human Biology</i>. 19:606-614.</li> <li>• Schell LM. 1997. Culture as a stressor: A revised model of biocultural interaction. <i>American Journal of Physical Anthropology</i>. 102:67-77.</li> <li>• Schell LM. 2014. Reassessing the good and bad of modern environments: developing a more comprehensive approach to health trend assessment. In: Zuckerman MK, ed. <i>Modern Environments and Human Health: Revisiting the Second Epidemiologic Transition</i>.</li> <li>• Schell LM, Knutson KL, Bailey S. 2012. Environmental effects on growth. In: Cameron N, Bogin B, eds. <i>Human Growth and Development, Second edition</i>.</li> </ul>
<b>12: 4/14</b>	AAPA in Atlanta
<b>13: 4/21</b>	<p>Lecture: Jennings, Demography</p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• Malthus TR. 1830. <i>A Summary View of the Principle of Population</i>.</li> <li>• Boserup E. 1976. Environment, population, and technology in primitive societies. <i>Population and Development Review</i>. 2:21-36.</li> <li>• Wood JW. 1998. A theory of preindustrial population dynamics: Demography, economy, and well-being in Malthusian systems. <i>Current Anthropology</i>. 39:99-135.</li> <li>• Hajnal J. 1982. Two kinds of preindustrial household formation system. <i>Population and Development Review</i>. 8:449-494.</li> </ul>
<b>14: 4/28</b>	<p>Lecture: Gage, Demography</p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• Gage TB, DeWitte SN, Wood JW. 2012. Demography Part 1: Mortality and migration. In: Stinson S, Bogin B, O'Rourke DH, eds. <i>Human Biology: An Evolutionary and Biocultural Perspective, Second edition</i>. pp.697-757.</li> <li>• Gage TB. 2005 Are modern environments really bad for us?: Revisiting the demographic and epidemiologic transitions. <i>Yearbook of Physical Anthropology</i>. 48:96-117.</li> </ul>
<b>15: 5/5</b>	<b>READING DAY: TAKE-HOME FINAL EXAM DUE</b>