

**ANTHROPOLOGY 420: THE EVOLUTIONARY SYNTHESIS AND BIOLOGICAL
ANTHROPOLOGY
SPRING 2022 (CLASS 9944; 3 CREDIT HOURS)
MONDAY & WEDNESDAY 3:00-4:20 PM, LC 15**

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Office hours: Wednesdays, 9:30 to 11:30 am or by appointment. I will be holding office hours over Zoom, not in person. Here's the link:

<https://albany.zoom.us/j/94183920891?pwd=dkYrZXo2SFZERkhwam1oZDIEOHlrZz09>

Please note that the best way to reach me is to attend office hours. The next best way is by email. However, please be aware that I receive a large volume of email, so it may take several days before I respond.

Prerequisites: Students must have previously completed *Introduction to Human Evolution* (AANT 110) and *Human Population Biology* (AANT 211).

Course Description: Current research in human evolution and human biology is rooted in the modern evolutionary synthesis that emerged in the early 20th century. In this course we will read and discuss seminal works relating to the modern evolutionary synthesis, as well as works that apply that body of theory specifically to biological anthropology.

Course Overview: The course will be organized and conducted as a discussion seminar in which we will discuss a different set of readings related to the modern evolutionary synthesis and human evolution in each class. The seminar is a setting to exchange information, sharpen analytical abilities, and develop communication skills. The goal is to foster critical and creative thinking while acquiring knowledge, and the seminar format is designed to help individuals reach their own understanding of a topic. Therefore, you are expected to come to class prepared to discuss the assigned reading and ask questions. I don't expect you to understand everything in the readings before each class (after all, the point of the class is for you to learn new things!), but I **do** expect you to have completed all of the readings prior to coming to class and to be prepared to ask questions about things you don't understand.

I want to emphasize this point: **you and your fellow students are responsible for leading and participating in the discussion.** 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 them during every class. There is a large amount of reading for this course, and everyone is expected to do all of it!

Course Objectives: Upon completion of this course, students should be able to:

- 1) understand the historical development of natural selection theory and genetics, as well as the modern evolutionary synthesis
- 2) critically apply the concepts of the modern evolutionary synthesis to current concepts and questions
- 3) analyze multiple perspectives in debates
- 4) present ideas and analyses in both written and spoken form

Grading: Final grades will be given as A-E. Each student's grade will be based on class participation, short writing assignments, and a final presentation. More details are given below.

Course Materials and Website

Required texts:

- Darwin, Charles. 1859. *On the Origin of Species*. (The 6th edition is available online for free at <http://www.gutenberg.org/ebooks/2009>)
- Dawkins, Richard. 1976. *The Selfish Gene*. 30th Anniversary Edition (2006).
- 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>)
- 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>)
- Wood, Bernard. 2019. *Human Evolution: A Very Short Introduction*. 2nd Edition.

Additional readings will be made available on Blackboard. The readings required for class each day are shown at the end of this syllabus.

Blackboard: Readings other than the texts (e.g., journal articles) will be available on the Blackboard page for this course in a folder called “Readings.” In addition, this syllabus and any announcements will also be posted to Blackboard.

Course Requirements

Class participation and discussion: Active participation and regular attendance are essential for a successful seminar. Grading will be based upon the information volunteered and presented, considering both the content of the discussion and nature of questions asked. For each class, all students will be asked to reflect upon the readings and engage with the material from informed perspectives (meaning that you’ve done the reading!). **This requires that everyone read all of the assigned readings for every class.** I reserve the right to incorporate quizzes or additional writing assignments into this portion of the grade if it becomes apparent that people aren’t doing all of the required reading.

Short writing assignments: For each class, each student will be expected to generate and turn in a list of the key points being made in each chapter or paper of that day's reading assignment. Moreover, each student will be assigned one chapter or paper from the reading for that week and will be expected to write and turn in a short (500 words) summary of the key points in the chapter.

Book analysis presentation: Each student will choose a non-fiction book related to some aspect of biological anthropology to analyze from an evolutionary perspective. In the last three weeks of the semester, each student will give a 12-minute presentation on their book analysis to the class, followed by several minutes to respond to questions from the class. The use of visual aids such as PowerPoint or handouts is strongly encouraged. All proposed books must be approved by me by **March 2nd**. Submit the details (title, author, year, brief overview of topic) to Blackboard. This means that you should search for a book of interest to you and have access to it by **March 2nd**. Keep in mind that Interlibrary Loan can take a few days to a week or more to deliver a book.

Grading:

Class participation and discussion:	50%	Short writing assignments:	30%
Book analysis presentation:	20%		

Your final grade is based on your overall percentage according to standard cutoffs. Below are the minimum percentages required for each grade:

A: 93.33%	A-: 90%	B+: 86.67%	B: 83.33%	B-: 80%	C+: 76.67%
C: 73.33%	C-: 70%	D+: 66.67%	D: 63.33%	D-: 60%	E: below 60%

Course Policies

The following policies are included to provide clear guidelines on issues that students often face throughout the semester.

Attendance and Assignment Completion: Regular attendance and the timely submission of assignments are essential for success in any course. In a discussion seminar, the point of the class is the interaction that develops in the discussion, so attendance is critical. Please arrive to class on time and ready to participate. Excused absences will be granted only 1) with *proof* of dire emergency or illness, 2) with advance notice of a compelling time conflict *in some cases* (see web link below), or 3) due to religious observance per New York State Education Law ([Section 224-A](#)). Please note that missing class for any reason, other than for those excused absences listed above, will result in a zero for class participation for that day (class participation accounts for half of your final grade). If you anticipate missing a class meeting or deadline, please let me know as far in advance as possible. Contact the Office for Undergraduate Education with documentation in the case of serious illnesses, family emergencies or other events that contribute to extended absences or missed assignments. Please refer to the “Attendance and Timely Compliance with Course Requirements” section of the university’s Undergraduate Academic Regulations for more details (http://www.albany.edu/undergraduate_bulletin/regulations.html). Be aware that the University Health Center will provide medical excuses only under very specific situations (http://www.albany.edu/health_center/medicalexcuse.shtml).

Late Assignments: In general, I will not accept assignments late. **If** for some reason I do agree to accept an assignment late, I will assess a late penalty. Also, if you miss class for any reason you are still responsible for keeping up with what happens in class. This applies to the content of the class, handouts, and announcements about class policies, events, deadlines, etc. In particular, I reserve the right to modify assignments and deadlines, and you will be held to those changes regardless of whether you were in class for the announcement or not. Announcements and amendments to this syllabus will be posted on Blackboard, but it is easy to miss pertinent information if you are absent from class.

Grades: The grade you receive, either on an individual assignment or as your final grade, is not subject to negotiation. However, I will be happy to talk with you to go over why you received a particular grade.

IMPORTANT NOTE: If you are struggling in the course, **please come for help during the semester** when there is still time for me to help you. Take advantage of my office hours or make an appointment with me. **Do not wait until the course is over** and ask me to change your grade because you are trying to graduate, you are on academic probation, or you have had a tough time with your personal life this semester. By then it is too late for me to help you.

Cell Phones and Laptops: Please show respect for the other members of the class and silence your phones before you enter the classroom. You are welcome to bring a laptop, tablet, e-reader, *etc.* to class for taking notes and accessing electronic copies of reading assignments downloaded from Blackboard, but please limit their use to course-related activities. Please silence all speakers before class begins.

Conduct and Civility: Civil conduct is important for ensuring a productive learning environment. Debate about ideas is both allowed and encouraged, but attacks on individuals, especially your classmates, is not conducive for learning and is not acceptable.

Academic Integrity: The following statement is a quote from the University's Standards of Academic Integrity Policy:

“Every student has the responsibility to become familiar with the standards of academic integrity at the University. Faculty members must specify in their syllabi information about academic integrity, and may refer students to this policy for more information. Nonetheless, student claims of ignorance, unintentional error, or personal or academic pressures cannot be excuses for violation of academic integrity. Students are responsible for familiarizing themselves with the standards and behaving accordingly, and UAlbany faculty are responsible for teaching, modeling and upholding them. *Anything less undermines the worth and value of our intellectual work, and the reputation and credibility of the University at Albany degree.*”

Students who violate university policy on academic integrity are subject to disciplinary penalties, including the possibility of a failing grade for the course, disciplinary probation, suspension, or expulsion from the University. Prohibited activities include, but are not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor), or the attempt to commit such an act. For more information, refer to the section “Standards of Academic Integrity” in the Undergraduate Academic Regulations (http://www.albany.edu/undergraduate_bulletin/regulations.html).

In written assignments, make sure you do your own work except where collaboration is explicitly permitted or required. In research, properly credit the work of others through the accurate citation and documentation of sources from which you borrow ideas or language. To do otherwise is to commit plagiarism. The library provides resources on practicing academic integrity (<https://library.albany.edu/infolit/playlists/academic-integrity>). If you have specific questions about how this may apply to your own assignments, please talk to me about them as soon as possible.

Students with Disabilities: If you require a disability-related academic accommodation for this class, please register with Disability Access and Inclusion Student Services (DAISS) as soon as possible and ask them to communicate with me regarding any reasonable accommodation for the course or instructions about physical access. Please be aware that DAISS will communicate directly with me regarding any modifications to the course absence policy for a specific student, and in the absence of such communication DAISS has instructed faculty to follow the stated absence policy in the course syllabus. For more information about “reasonable accommodation”, please see DAISS’s Reasonable Accommodation Policy: <http://www.albany.edu/disability/docs/RAP.pdf>

Other Resources: If you feel stressed or overwhelmed, please know that you are not alone. The University offers many different resources to help you academically and personally. They include, but are not limited to:

- Undergraduate Student Resources: https://www.albany.edu/undergraduate_bulletin/undergraduate_resources_services.html
- Counseling and Psychological Services: https://www.albany.edu/counseling_center/index.shtml
- Behavioral Health: <https://www.albany.edu/behavioralhealth/>
- Survivors of Sexual Violence:
 - <https://www.albany.edu/titleIX/resources-for-victims-survivors.php>
 - <https://www.albany.edu/advocacycenter/>
- Office of Intercultural Student Engagement: <https://www.albany.edu/multicultural/programs.php>
- Gender and Sexuality Resource Center: <https://www.albany.edu/lgbt/index.php>

COURSE SCHEDULE & READINGS

Week 1

M 1/24 Introduction

W 1/26 **Readings:**

- Mechanisms: the processes of evolution. (<https://evolution.berkeley.edu/evolution-101/mechanisms-the-processes-of-evolution/>). pp. 1-21.
- Mayr, Ernst and Provine, William B. (1981). The evolutionary synthesis. *Bulletin of the American Academy of Arts and Sciences*. 34:17-32.

Week 2

M 1/31 **Reading:**

- Darwin, Charles. (1859). *On the Origin of Species*. Beginning through Chapter III (Struggle for existence).

W 2/2 **Reading:**

- Darwin, Charles. (1859). *On the Origin of Species*. Chapter IV through Chapter VII (Miscellaneous objections to the theory of natural selection).

Week 3

M 2/7 **Reading:**

- Darwin, Charles. (1859). *On the Origin of Species*. Chapter VIII through Chapter XI (On the geological succession of organic beings).

W 2/9 **Reading:**

- Darwin, Charles. (1859). *On the Origin of Species*. Chapter XII through Chapter XV (Recapitulation and conclusion).

Week 4

M 2/14 **Reading:**

- Huxley, Thomas. (1863). *Evidence as to Man's Place in Nature*. Part 1.

W 2/16 **Reading:**

- Huxley, Thomas. (1863). *Evidence as to Man's Place in Nature*. Parts 2 and 3.

Week 5

M 2/21 **Reading:**

- McCalman, Iain. (2010). *Darwin's Armada*. Prologue through Part Three (pp. 1-220).

W 2/23 **Reading:**

- McCalman, Iain. (2010). *Darwin's Armada*. Part Four through Epilogue (pp. 221-373).

Week 6

M 2/28 **Reading:**

- Mendel, Gregor. (1866). *Experiments in Plant Hybridisation*.

W 3/2 **(Book selection deadline)**

Reading:

- Mayr, Ernst. (1980). Some thoughts on the history of the evolutionary synthesis. In *The Evolutionary Synthesis: Perspectives on the Unification of Biology*, E. Mayr and W.B. Provine, eds. pp. 1-43.

Week 7

M 3/7 Book project discussion

W 3/9 Charles Darwin and the Tree of Life

Week 8

M 3/14 NO CLASS (Spring Break)

W 3/16 NO CLASS (Spring Break)

Week 9

M 3/21

Reading:

- Dawkins, Richard. (1976). *The Selfish Gene*. Introduction through Chapter 7 (pp. i-122).

W 3/23

Reading:

- Dawkins, Richard. (1976). *The Selfish Gene*. Chapters 8-13 (pp. 123-266).

Week 10

M 3/28

Reading:

- Wood, Bernard. (2019). *Human Evolution: A Very Short Introduction*.

W 3/30

Additional discussion

Week 11

M 4/4

Readings:

- Jablonski, Nina G. (2004). The evolution of human skin and skin color. *Annual Review of Anthropology*. 33:585–623.
- Marks, Jonathan. (2010). Ten Facts about Human Variation. In *Human Evolutionary Biology*, M.P. Muehlenbein, ed. pp. 265–276.
- Weiss, Kenneth M. and Fullerton, Stephanie M. (2005). Racing around, getting nowhere. *Evolutionary Anthropology: Issues, News, and Reviews*. 14:165–169.
- AAPA Statement on Race & Racism. (2019). *American Association of Physical Anthropology*.

W 4/6

Additional discussion

Week 12

M 4/11

Readings:

- Hodgson, Jason A. and Disotell, Todd R. (2010). Anthropological genetics: Inferring the history of our species through the analysis of DNA. *Evolution Education Outreach*. 3:387–398.
- Bellwood, Peter. (2018). The search for ancient DNA heads east. *Science*. 361:31–32.
- McColl, Hugh, *et al.* (2018). The prehistoric peopling of Southeast Asia. *Science*. 361:88–92.

W 4/13

Readings:

- May, Thomas. (2018). May 2018 Sociogenetic risks - Ancestry DNA testing, third-party identity, and protection of privacy. *The New England Journal of Medicine*. DOI: 10.1056/NEJMp1805870.
- Walajahi, Hina; Wilson, David R., and Chandros Hall, Sara. (2019). Constructing identities: the implications of DTC ancestry testing for tribal communities. *Genetics in Medicine*. 21:1744–1750.
- Benn Torres, Jada. (2020). Anthropological perspectives on genomic data, genetic ancestry, and race. *Yearbook of Physical Anthropology*. 171:74–86.
- Quinn, Paul and Quinn, Liam. (2018). Big genetic data and its big data protection challenges. *Computer Law & Security Review*. 34:1000–1018.

Week 13

M 4/18 Final project working day
W 4/20 Book analysis presentations

Week 14

M 4/25 Book analysis presentations
W 4/27 Book analysis presentations

Week 15

M 5/2 Book analysis presentations
W 5/4 Book analysis presentations