

Introduction to Biological Anthropology

ANT 270 Section 001

Fall 2015, Lecture

Dr. Christopher Lynn

Office Hours and Contact Information

Instructor	Office	Phone	Email	Office Hours
Dr. Lynn	12 ten Hoor	(205) 348- 4162	cdlynn@ua.edu but preferred contact is via Blackboard email to ensure the Subject includes "ANT 270"	T/R 3- 4 PM
Jacob Aronoff	23A ten Hoor		jaronoff@crimson.ua.edu	M/W 1-2 PM
Juliann Friel	37A Rowand- Johnson		jmfriel@crimson.ua.edu	M/W 12-1 PM

Prerequisites

UA Course Catalog Prerequisites

No prerequisites or none listed.

Course Description

UA Course Catalog Information

Introduction to the study of human biological and cultural evolution.

This course provides an introduction to the current scientific consensus about human biological variation and evolution with an emphasis on the interaction of social behavior and biological change. The first section of the course begins with a review of the scientific method, then presents evolutionary theory and the underlying genetic and biological principles. The second section of the course is a brief survey about what we know regarding the behavior and evolution of the non-human primates. Learning about primates, which are our closest mammalian relatives, can help us understand human evolution and behavior. The third section of the course explores the evolution of hominids, the human ancestors and their close relatives, through the emergence of modern humans. Finally, we address modern human biological variation from the perspective of biocultural adaptation and culture change in living populations. The objective of the course is to give the student an appreciation for the place of humans in nature from a biocultural and evolutionary perspective and to provide the background necessary to critically evaluate statements about human biology.

Student Learning Outcomes

At the end of this course, students should be able to:

1. Explain and quantitatively apply the respective roles of selection, random forces, and equilibrium in population genetics and human evolution.
2. Communicate scientific information that common ancestry of humans and other primates is supported by multiple lines of empirical evidence.
3. Identify major distinguishing morphological characteristics of hominid paleospecies, modern humans, and living primates and describe their functional significance.
4. Apply biocultural, evolutionary, and adaptive critical thought processes to new problems in human biology, especially those encountered among global modern human populations.

Required Texts

UA Supply Store Textbook Information

- WRANGHAM / CATCHING FIRE **(Required)**
- WRANGHAM (RENTAL) / (RENTAL) CATCHING FIRE **(RENTAL)**
- HENS (RENTAL) / (RENTAL) METHOD & PRACTICE IN BIOLOGICAL ANTHROPOLOGY (LOOSE-LEAF) **(RENTAL)**
- HENS / METHOD & PRACTICE IN BIOLOGICAL ANTHROPOLOGY (LOOSE-LEAF) **(Required)**
- NUMBERS / DARWINISM COMES TO AMERICA **(Optional)**
- NUMBERS (RENTAL) / (RENTAL) DARWINISM COMES TO AMERICA **(RENTAL)**
- NYE, BILL / UNDENIABLE:EVOLUTION AND THE SCIENCE OF CREATION **(Optional)**
- NYE, BILL (RENTAL) / (RENTAL) UNDENIABLE:EVOLUTION AND THE SCIENCE OF CREATION **(RENTAL)**
- HAVILAND / EVOLUTION & PREHISTORY (LOOSE-LEAF) **(Required)**

- HAVILAND (RENTAL) / (RENTAL) EVOLUTION & PREHISTORY (LOOSE-LEAF) **(RENTAL)**

Other Course Materials

The course has a Blackboard site that you can access through myBama under the "Academics" tab, or by going directly to <https://ualearn.blackboard.com>. The Blackboard site will feature links to course-related content, including Tegrity files of the lectures, PDFs of PowerPoint presentations, Gradebook, announcements, and a discussion forum where you can ask class-related questions.

Ensure that your Blackboard settings include the correct email address so course messages arrive in your inbox.

You can also ask questions or post course-related information for the entire class in the class Facebook group, which you can join here: <http://www.facebook.com/groups/179401388799455/>.

Let Dr. Lynn or your GTA know if you have any difficulty accessing Blackboard at the start of the course.

Outline of Topics

Week/Date	Day: Topic	Readings Activity
<u>Week 1</u>		<u>Orientation</u>
Aug 19	W: Meeting the instructors, syllabus	
Aug 21	F: LAB	Lab manual (Hens) chapter 1
<u>Week 2</u>		<u>Essence of Anthropology</u>
Aug 24	M: Anthropological perspective	Evolution & Prehistory (EP) 3-15
Aug 26	W: Science, humanities, ethics	EP 16-23
Aug 28	F: Lab	Hens ch 2
		Catching Fire (CF) Introduction
<u>Week 2</u>		<u>Biology, Genetics, & Evolution</u>
Aug 31	M: Theory of evolution	EP 24-39

Sept 2	W: Human population biology	EP 40-51	CF ch 1
<i>Sept 4</i>	<i>F: LAB</i>	<i>Hens ch 3</i>	
<u>Week 3</u>	<u>Living Primates</u>		
Sept 7	M: NO CLASS, LABOR DAY		
Sept 9	W: Primate characteristics	EP 52-67	CF ch 2
<i>Sept 11</i>	<i>F: LAB</i>	<i>Hens ch 4</i>	
<u>Week 4</u>	<u>Living Primates & Behavior</u>		
Sept 14	M: The living primates	EP 68-79	
Sept 16	W: Primate social organization	EP 80-92	CF ch 3
<i>Sept 18 F LAB</i>	<i>F: LAB</i>	<i>Hens ch 5</i>	
<u>Week 5</u>	<u>Primate Behavior</u>		
Sept 21	M: Communication & learning	EP 92-101	
Sept 23	W: EXAM 1 Anthropology, Evolution, Genetics, Primates	covers EP chaps 1-4, Hens chaps 1-5	
<i>Sept 25</i>	<i>F: LAB</i>	<i>Hens ch 10</i>	
<u>Week 6</u>	<u>Methods in Paleoanthropology</u>		
Sept 28	M: Recovering remains	EP 102-115	
Sept 30	W: Analyzing remains	EP 115-129	CF ch 4
<i>Oct 2</i>	<i>F: LAB</i>	<i>Hens ch 11</i>	

<u>Week 7</u>		<u>First Primates</u>	
Oct 5	M: Primate origins	EP 130-137	
Oct 7	W: Origins of bipedalism	EP 137-154	CF ch 5
Oct 9	F: LAB	Hens ch 12	
<u>Week 8</u>		<u>Origins of Genus Homo</u>	
Oct 12	M: Ancestral contenders	EP 154-163	
Oct 14	W: Early <i>Homo</i>	EP 164-172	CF ch 6
Oct 16	F: LAB	Hens ch 6	
<u>Week 9</u>		<u>Homo Genus</u>	
Oct 19	M: <i>Homo erectus</i>	EP 172-183	
Oct 21	W: Archaic <i>Homo sapiens</i> & Neandertals	EP 183-195	CF ch 7
Oct 23	F: LAB	Hens ch 13	
<u>Week 10</u>		<u>Global Expansion</u>	
Oct 26	M: EXAM 2 Fossils & primate & human origins	covers EP Chaps 5-7, Hens chaps 6, 10-12	
Oct 28	W: Out of Africa	EP 196-206	
Oct 30	F: MID-SEMESTER BREAK, NO CLASSES		
<u>Week 11</u>		<u>Human Revolutions</u>	
Nov 2	M: Upper Paleolithic revolution	EP 206-223	

Nov 4	W: Neolithic revolution	EP 224-238	CF ch 8
Nov 6	F: LAB	Hens ch 8	
<u>Week 12</u>	<u>Human Civilization</u>		
Nov 9	M: Neolithic settlements	EP 238-247	
Nov 11	W: Civilization	EP 248-258	CF Epilogue
Nov 13	F: LAB	Hens ch 13	
<u>Week 13</u>	<u>Diversity & Variation</u>		
Nov 16	M: Cities & cultural change	EP 258-273	
Nov 18	W: Human classification	EP 274-287	
Nov 20	F: LAB	Hens ch 14	
<u>Week 14</u>	<u>Human Variation</u>		
Nov 23	M: Human biological diversity	EP 287-297	Catching Fire paper due
Nov 25	W: NO CLASS, HAPPY THANKSGIVING!		
Nov 27	F: NO CLASS, THANKSGIVING BREAK		
<u>Week 15</u>	<u>Human Adaptation & Modernity</u>		
Nov 30	M: Human adaptation	EP 298-309	
Dec 2	W: Science, illness, & disease	EP 310-325	
Dec 4	F: LAB	Hens ch 15	

Dec 9, 11:30AM-
2PM:

W: FINAL EXAM

Exams and Assignments

Exams: There will be 3 exams, including the final. The final exam is cumulative, in addition to covering material since the 2nd exam. Exams will cover material as indicated on the Outline of Topics below and can include material from the text, the Hens lab manual, or information from the lectures. Lectures will be administered via PowerPoint presentations, which will be made available for study on Blackboard as PDFs before the respective exam. These do not replace taking your own notes. I purposely minimize the amount of text on PowerPoint slides to encourage you to take notes because the process of *handwriting* will help you remember. Also, material often comes up in the course of lecture discussions that is also fair game for exams. This material will also be available via Blackboard as Tegrity capture files when possible. However, utilizing Blackboard is no substitute for coming to class, as I cannot guarantee that I will always remember to turn it on or that it will be of a quality that suits you. Statistics gathered within our department demonstrate that students who go to class, take systematic notes, participate in discussions, AND use online study resources do MUCH better than students who use online resources alone.

Paper: A 5-page paper will be due the week before Thanksgiving. The paper will be based on the questions drawn from Wrangham's *Catching Fire*. The reading assignments for this book are only guidelines to ensure you have completed reading it. I will assign the term paper question at least two weeks before the paper is due with all the instructions for completing the assignment. These will be turned in on the assigned date to your lab instructor.

Labs: When you registered for the class, you selected a lab section—check your schedule for the correct time and place. BEFORE EACH LAB MEETING, read the introductory text from the appropriate *Hens* lab manual chapter. Then, there will be several exercises to be completed DURING THE LAB. Some are book work, others are group exercises, and still others are hands-on work (individual or collaborative) using materials such as skeletal casts. You will never do all of the exercises in the *Hens* lab manual for any chapter (there isn't enough time). At the beginning of each lab we'll announce which exercises will be used for that day and guide you through them. You will not usually have to turn them in—instead, your lab session instructor will monitor full participant and grant credit based on what you do in class. You will use these in-class exercises to be able to complete the post-lab questions that you will turn in. Post-lab questions are found at the end of each lab workbook chapter. These are due at the very beginning of the next regular class session after the lab (i.e., usually Monday at 10 AM—or Wednesday, when we have an exam). You may type your answers and email them to your lab instructor, turn them in to her mailbox in the Anthro Department Office (ten Hoor 19), or you may pull the pages out of your manual and hand them in at the beginning of the next lecture. Late labs can receive half credit if they're turned in within 1 week of the date of the lab. Late labs receive no credit after that. Your GTA is not authorized

to waive this policy, so please do not ask.

Grading Policy

Exam 1	20%
Exam 2	20%
Final exam	25%
Labs	20%
<u>Paper</u>	<u>15%</u>
TOTAL	100%

Attendance Policy

Attendance is required and will be checked during each lecture by the GTAs. You have two "free" absences for which no excuse is required. After that you will lose 5 course points for each absence, unless excused by Dr. Lynn.

Separate from lecture attendance, 20% of your overall grade for the course is based on your participation during the labs (including both in-class participation and adequately completing post-lab questions). There are no free absences for this part of your grade. You lose points for each absence, including the first, unless excused. Please DO NOT ask your TA for permission to miss a lab---s/he is not allowed to grant it. Only Dr. Lynn can excuse missed labs.

Policy on Missed Exams & Coursework

1. If you miss any exam for any reasons whatsoever, make-ups will consist of completing a 15-page paper on a topic of Dr. Lynn's choosing.
2. There is no way to make up for a missed lecture. You get two "free" absences, but after that each absence must be excused by Dr. Lynn for good cause (for example, significant illness that requires a doctor's visit). There is no guarantee an absence will be excused until you have asked Dr. Lynn and received a response. Therefore, unless you encounter a true emergency where advance notice is not possible, you are strongly encouraged to contact Dr. Lynn at least 24 hours before the absence.
3. Post-lab questions receive only half credit if turned in any time after the very beginning of the next lecture. Labs receive no credit if turned in more than 1 week after the lab session. This policy is waived only under exceptional circumstances where there is clearly no reasonable way you could have completed the questions in the time allotted.

Extra Credit Opportunities

You can earn up to 6 extra credit course points during the semester in increments of 2 points per opportunity (unless stated otherwise elsewhere) in the following ways:

- Attend any ALLELE talk hosted during the semester. To verify your attendance, you must take a "selfie" with the speaker in the background. A dropbox for these will be created on Blackboard. Please contact your GTA if you do not see where to turn them in.
- Go to a zoo and complete the Supplemental Post-Lab Exercises for "Primate Observations at the Zoo" in Chapter 12 of your lab manual for one species.
- Other miscellaneous opportunities as posted by Dr. Lynn.

Please turn all extra credit in to your GTA.

Facebook

There is a closed Facebook group for this course at <http://www.facebook.com/groups/179401388799455/>. Please join us. It will be a forum for exchanging information about items in the news, pop culture, and other events (or your dirty little secrets, if you choose to expose them, I suppose). This is not required, but I have found it works better than Blackboard forums designed for the same purpose.

Also, "like" the UA Department of Anthropology (www.facebook.com/UAAnthroDept) and the ALLELE series (www.facebook.com/ALLELEseries) on Facebook so that we can keep in touch with you and you can stay informed about our events and activities.

Evolutionary Studies

This course fulfills a core requirement in both the Anthropology major and minor and a new minor in [Evolutionary Studies \(EvoS\)](#). If you are not an Anthropology major or minor and have not already decided to declare a minor in EvoS, we hope this course leads you to consider doing so. EvoS is an interdisciplinary minor, housed in the Department of Anthropology and is designed to introduce students to the fundamental importance of evolutionary theory as an explanatory model for life and behavior. This course fulfills a requirement as a foundational course in the EvoS minor. Other requirements of the minor include two capstone courses (including ANT 150, offered every Spring), a 200-level course in the biological principles of evolution. Additionally, minors are required to complete six elective hours in two separate disciplines.

This program is integrated with UA's [Evolution and Origins Working Group \(EVOWOG\)](#) and its [Alabama Lectures on Life's Evolution \(ALLELE\)](#) speaker series ("Like" us on Facebook www.facebook.com/ALLELEseries to stay informed!). You are strongly encouraged to attend the ALLELE lectures presented this semester. This minor is part of a larger [EvoS Consortium](#), which includes approximately 42 other institutions worldwide, though we are only one of four full-fledged minors. We take pride in this fact, given that Alabama recently scored at the very bottom of the 50 states in teaching evolution at the k-12 levels (even worse than Mississippi!).

As part of the EvoS program, there is an [EvoS Club](#). You are welcome to become part of this club

whether you declare yourself an EvoS minor or simply maintain an abiding interest in evolutionary theory and its myriad applications and implications. The activities of the Club include helping with the ALLELE series, organizing Darwin Day events, and a fossil-hunting field trip.

If you are interested in the EvoS minor (either to declare or for more information), contact Dr. Lynn (cdlynn@ua.edu).

Emergency Contact Information

UA's primary communication tool for sending out information is through its web site at www.ua.edu. In the event of an emergency, students should consult this site for further directions. Additional course information will be posted using Blackboard Learn.

Severe Weather Guidelines

The guiding principle at The University of Alabama is to promote the personal safety of our students, faculty and staff during severe weather events. It is impossible to develop policies which anticipate every weather-related emergency. These guidelines are intended to provide additional assistance for responding to severe weather on campus.

UA is a residential campus with many students living on or near campus. In general classes will remain in session until the National Weather Service issues safety warnings for the city of Tuscaloosa. Clearly, some students and faculty commute from adjacent counties. These counties may experience weather related problems not encountered in Tuscaloosa. Individuals should follow the advice of the National Weather Service for that area taking the necessary precautions to ensure personal safety. Whenever the National Weather Service and the Emergency Management Agency issue a warning, people in the path of the storm (tornado or severe thunderstorm) should take immediate life saving actions.

When West Alabama is under a severe weather advisory, conditions can change rapidly. It is imperative to get to where you can receive information from the [National Weather Service](http://www.nws.gov) and to follow the instructions provided. Personal safety should dictate the actions that faculty, staff and students take.

The Office of University Relations will disseminate the latest information regarding conditions on campus in the following ways:

- Weather advisory posted on the UA homepage
- Weather advisory sent out through UA Alerts to faculty, staff and students
- Weather advisory broadcast over WVUA at 90.7 FM
- Weather advisory broadcast over Alabama Public Radio (WUAL) at 91.5 FM
- Weather advisory broadcast over WVUA-TV/WUOA-TV, and on the website at <http://wvuatv.com/content/weather>. WVUA-TV Home Team Weather provides a free service you can subscribe to which allows you to receive weather warnings for Tuscaloosa via e-mail or cell phone.

Check <http://wvuatv.com/content/free-email-weather-alerts> for more details and to sign up for weather alerts.

In the case of a tornado warning (tornado has been sighted or detected by radar; sirens activated), all university activities are automatically suspended, including all classes and laboratories. If you are in a building, please move immediately to the lowest level and toward the center of the building away from windows (interior classrooms, offices, or corridors) and remain there until the tornado warning has expired. Classes in session when the tornado warning is issued can resume immediately after the warning has expired at the discretion of the instructor. Classes that have not yet begun will resume 30 minutes after the tornado warning has expired provided at least half of the class period remains.

Policy on Academic Misconduct

All students in attendance at The University of Alabama are expected to be honorable and to observe standards of conduct appropriate to a community of scholars. The University of Alabama expects from its students a higher standard of conduct than the minimum required to avoid discipline. At the beginning of each semester and on examinations and projects, the professor, department, or division may require that each student sign the following Academic Honor Pledge: “I promise or affirm that I will not at any time be involved with cheating, plagiarism, fabrication, or misrepresentation while enrolled as a student at The University of Alabama. I have read the Academic Honor Code, which explains disciplinary procedure resulting from the aforementioned. I understand that violation of this code will result in penalties as severe as indefinite suspension from the University.”

See the [Code of Student Conduct](#) for more information.

Disability Statement

If you are registered with the Office of Disability Services, please make an appointment with me as soon as possible to discuss any course accommodations that may be necessary.

If you have a disability, but have not contacted the Office of Disability Services, please call (205) 348-4285 (Voice) or (205) 348-3081 (TTY) or visit 1000 Houser Hall to register for services. Students who may need course adaptations because of a disability are welcome to make an appointment to see me during office hours. Students with disabilities must be registered with the Office of Disability Services, 1000 Houser Hall, before receiving academic adjustments.