

## ANT 270: INTRO TO BIOLOGICAL ANTHROPOLOGY



Fall 2020 / Lectures: Mon/Wed 12-1:15 / ten Hour 30 &/or online

### Your Hosts

#### **Dr. Christopher Lynn**

Email: [cdlynn@ua.edu](mailto:cdlynn@ua.edu)

Website: <http://cdlynn.people.ua.edu/>

Zoom Office Hours: Mon/Wed 1-2

Zoom ID: 335-348-1388

#### **Kohl Dothage**

Email: [kdothage@crimson.ua.edu](mailto:kdothage@crimson.ua.edu)

Website: <http://kdothage.people.ua.edu/>

Zoom office hours: Wed/Thurs 1:00-2:30

Zoom ID: 842-553-0259

#### **Julia Sponholtz**

Email: [jgsponholtz@crimson.ua.edu](mailto:jgsponholtz@crimson.ua.edu)

Zoom Office Hours: Tues/Thurs 11-12:30

Zoom ID: 312-180-4518

#### **Michael Smetana**

Email: [mismetana@crimson.ua.edu](mailto:mismetana@crimson.ua.edu)

Zoom Office Hours: Tues/Thurs 1-2:30

Zoom ID: 799-608-4006

**ANT 270 Course Description:** 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, and 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 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.

*The course is an approved elective toward the natural science core curriculum requirements.*

**Student Learning Outcomes:** By the end of this term, you 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 biological, especially those encountered among global modern human populations.

## **COURSE MATERIALS**

### **Required Texts**

- Robert Boyd and Joan Silk, *How Humans Evolved*.
- Elizabeth Soluri and Sabrina Agarwal, *Laboratory Manual and Workbook for Biological Anthropology*.
- Brian Hare and Vanessa Woods *Survival of the Friendliest*
- Richard Wrangham, *Catching Fire*.

The Supe Store lists the Wrangham and Hare/Woods books as “choose one,” but I have decided to assign them both and to eliminate a paper I had previous students write. I will note that if reading is either something you do not like to do or if you have more reading than you can keep up with during a week, I highly recommend using Audible (which requires a paid subscription) or scanning material in and using a pdf reader (vBooks is an app that costs \$5 and Microsoft ReadAloud is free). I use them all and “read” most of the material in this and all of my classes this way (though I no longer need to take notes like you do).

### **Blackboard**

This course will use Blackboard to distribute additional material. Access Blackboard via myBama. There is a box called Blackboard on the Academics tab that should list your courses that are currently let up with Blackboard.

We will also use Blackboard to turn in all assignments. I recommend you set up Blackboard to send you email notifications when things are posted, updated, due, or have been graded. To do this, follow these instructions:

1. Log in to Blackboard.
2. Toggle the arrow next to your name at the upper right hand corner of your screen.
3. Select "Settings" at the bottom of the screen that appears.
4. Select "Edit Notification Settings."
5. Select this course from the list.

6. Under "2. Settings," check the box above Email so it notifies you when any actions are taken.
7. Be sure to click the "Submit" button to save these settings.

### **Lectures and Attendance**

Attendance for each lecture and lab *in some form* is mandatory. We have structured the class to be split in half and for each half to attend one in-person class session per week OR for you to take the course via synchronous Zoom feed or a combination thereof.

You are required to come to class either in person or synchronously and participate. Attendance will be monitored a short (1-3 question) Blackboard quiz to complete after each lecture. Each quiz will be based on material covered in the lecture and may or may not be in the book. I may even say, "today's quiz will ask you my dog's name so write it down" or something to that effect. Thus, showing up is really only half the battle—paying attention is actually the objective of going to class. You can miss 3 lectures (not labs) for any reason whatsoever with no penalty. However, if you miss more than 3 lectures, whether excused or unexcused, 5 course points will be deducted from your course grade for each additional absence. Excessive absence will result in a failing grade in the course.

In-person: If your last name starts with A-K, you can attend in-person class on Monday. If your last name starts with L-Z, you're on Team Wednesday.

You may choose to complete the entire course online or come to some of your in-person days and participate in other lectures online.

When you attend in-person, *you must wear a mask AND a face shield*. This step is more than the University requires, but the GTAs and I have family members who are at high risk, so I am requiring this extra precaution. Here is an example on Amazon that can be purchased for a low price: <https://www.amazon.com/All-Round-Protection-Headband-Lightweight-Transparent/dp/B08CWXRJH4/>. Here is a local supplier: <https://www.facebook.com/southernppesupply/>

Synchronous class via Zoom: For any day you do not attend in person, you must attend lecture via Zoom. The meeting ID for this semester will be 951-2220-1591. I will send everyone an invitation with a recurring ID for the entire semester and post it to Blackboard. You will either go to your email or Blackboard and click on the link or pull up Zoom, select Join Meeting, and input the ID.

You must keep your video and microphone on. We want to see your face and enable you to participate in class discussions. I do not want to spend the whole semester simply talking *at* you, so be prepared for interaction. Participating will enable me to learn who you are better and remember you. For instance, some day you might want me to write you a letter of recommendation. I remember those who are active participants in my classes.

We highly recommend making a dedicated space for Zooming for class. Treat it like a class. Don't sit in your bed for class. Learning happens in a context, and your brain tags information based on that context, which means you will want to learn in the same conditions you will be in when it comes time to remember.

Getting your money's worth: Though you've come to campus for the in-person college experience, I'm not going to subject any of us to unnecessary risk to make that happen. We are restarting classes with higher local rates of COVID-19 than when we closed campus in the spring, hence the flexibility for this course. However, I will be doing things we would not ordinarily do to enhance your experience. For instance, I will be modifying the syllabus during the semester to accommodate guest speakers via Zoom. I have many contacts in biological anthropology willing to join us online for Q&A about their work, giving you access to expertise that you would not otherwise have without going to their universities or attending conferences where they are presenting.

## ASSIGNMENTS AND EXAMS

### Tests and Final Exam

Exams: There will be 4 exams, including the final, and all exams will be administered via Blackboard. The midterm and final exams are cumulative. Exams will cover material as indicated on the Outline of Topics below and can include material from the text, the 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 minimize the amount of text on PowerPoint slides to encourage you to take notes because the process of *handwriting* will help you recall information.

Also, material often comes up in the course of lectures that is also fair game for exams. This material will also be available via Blackboard as Panopto capture files. However, utilizing Blackboard and Panopto recordings are not substitutes for coming to class. Statistics gathered within our department demonstrate that students who come to class, take systematic notes, participate in discussions, AND use online study resources do MUCH better than students who use online resources alone.

Final Exam Exceptions: The third exam will be administered at the end of the regular semester.

- If you have an A in the course after the 3rd exam, you have the option to not have to take the final exam.
- If you have a B in the class after the 3rd exam and have not been absent more than 3 times (for whatever reasons, excused or unexcused), you do not have to take the final exam.
- If you have a C in the course and have not missed any classes, you do not have to take the final exam (but you may want to and benefit in getting your grade up).

If you opt out of the final exam, weighting for exams 1-3 will be adjusted accordingly (see below).

Discussion Labs: All lab meetings will take place via Zoom this semester. Your GTA will provide you with a recurring Zoom link for your section.

While conducting labs virtually is unfortunate because one value of our labs is the opportunity to handle our fossil casts. However, this gives us an opportunity to try something different. We will be integrating the reading of two trade books (*Survival of the Friendliest* and *Catching Fire*) into these sessions as discussions and use these discussions to explore our lab manual in a new way.

Though virtual, there will be assignments and activities associated with these, but you will be choosing activities based on things you could do at home or by viewing our materials via Zoom. You must read the assigned material from the Soluri and Agarwal lab manual and tradebook for each week before attending your lab meeting.

You will never do all of the exercises in the lab manual for any chapter. 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 your participation and give 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 noon) and should be turned in electronically. Your GTA will inform you of their preferred strategy for receiving these labs. 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

TEST 1=	15%
MIDTERM EXAM=	20%
TEST 3=	15%
LABS=	30%
<u>FINAL EXAM=</u>	<u>20%</u>
	100%

\*If you opt for the Final Exam exemption, Test 1 and 3 will be worth 20% each, the Midterm Exam 25%, and Labs 35%.

### OUTLINE OF TOPICS\*

Week/Date	Day: Topic	Readings/Activity
WEEK 0 8/19	W:	
8/21	F: LAB	Lab manual (LM) chapter 1, Hare/Woods Introduction
WEEK 1 8/24	M: Anthropological perspective	Haviland et al. pp. 3-15 (Blackboard)
8/26	W: Science, humanities, ethics	Haviland pp. 16-23
8/28	F: LAB	LM ch 4, Hare/Woods ch 1
WEEK 2	M: Theory of evolution	Boyd & Silk (B&S) ch 1

8/31		
9/2	W: Principles of inheritance	B&S ch 2
9/4	F: LAB	LM ch 2, Hare/Woods ch 2
WEEK 3 9/7	M: LABOR DAY, NO CLASSES	
9/9	W: Modern synthesis & population genetics	B&S ch 3
9/11	F: Lab	LM ch 2, Hare/Woods ch 3
WEEK 4 9/14	M: Speciation & phylogeny	B&S ch 4
9/16	W: Review/catch-up/something else	
9/18	F: LAB	LM ch 9, Hare/Woods ch 4
<b>Exam 1 will be administered online. Instructions will be sent Monday morning.</b>		
WEEK 5 9/21	M: <i>Social Climbers</i>	B&S ch 5
9/23	W: Primate characteristics	B&S ch 6
9/25	F: LAB	LM ch 10, Hare/Woods ch 5
WEEK 6 9/28	M: Primate diversity	B&S ch 7
9/30	W: Primate social behavior	B&S ch 8
10/2	F: LAB	LM chaps 11-12, Hare/Woods ch 6
WEEK 7 10/5	M: Recovering remains	B&S 206-213
10/7	W: Primate origins	B&S pp. 214-231
10/9	F: LAB	LM ch 13, Hare/Woods ch 7
WEEK 8 10/12	M: Miocene hominoids	B&S pp. 232-237
10/14	W: Review/catch-up/something else	
10/16	F: LAB	LM chaps 5-6, Hare/Woods ch 8
<b>Comprehensive midterm exam will be administered online.</b>		
WEEK 9 10/19	M: Hominid evolution	B&S pp. 238-259
10/21	W: Early hominids	B&S pp. 260-274
10/23	F: LAB	LM 14, Wrangham Intro & ch 1
WEEK 10 10/26	M: Early <i>Homo</i>	B&S pp. 275-295
10/28	W: <i>Dawn of Humanity</i>	B&S pp. 296-304
10/30	F: LAB	LM 15, Wrangham ch 2
WEEK 11 11/2	M: Early <i>Homo</i> (cont'd)	B&S pp. 305-321
11/4	W: <i>Neandertime</i>	B&S pp. 322-343

11/6	F: LAB	LM ch 16, Wrangham ch 3
<b>WEEK 12</b> 11/9	M: Hominid dispersals	B&S pp. 344-353
11/11	W: Archaic <i>Homo sapiens</i>	B&S pp. 354-379
11/13	F: LAB	LM chaps 7-8, Wrangham ch 4
<b>WEEK 13</b> 11/16	M: Upper Paleolithic	Haviland et al ch 8 (196-223 Blackboard)
11/18	W:	
11/20	F: LAB	Wrangham ch 5-7
<b>WEEK 14</b> 11/30	M: Neolithic transition	Haviland et al. ch 9 (224-247)
12/2	W: Race concept	B&S pp. 417-426, B&S pp. 379-384
12/4	F: LAB	Wrangham rest of book
Exam 3 will be administered online		
<b>Comprehensive Final Exam will be administered online and due by 12/9 at 9:30pm</b>		

\*Subject to change.

## OTHER COURSE MATERIAL

### Policy on Missed Exams and 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. If you miss a lecture, watch the recording on Blackboard. You get three "free" absences, period. If you waste them early and need them later, that's on you.
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.