

**ANTH 222: Introduction to Ecological & Evolutionary Anthropology**  
Fall, 2015

Professor Tanya Icaza, [ticaza@umd.edu](mailto:ticaza@umd.edu)

Lecture: Tuesday & Thursday 4:30 pm- 5:45 pm  
Hornbake Library 0103

Lab: Friday 10 am-12:30 pm **or** 12:30-3:00 pm  
Woods Hall 0124

Office hours: By appointment

**Midterm Exam:** October 20 **Final Exam:** TBA

## **I. Course Description**

An introductory course in Ecological and Evolutionary Anthropology is an opportunity for students to learn basic concepts and methods for the interdisciplinary study of:

- the evolution of human physiology and human behavior
- the relationship between hominids and non-hominid primates
- the study of relationships between a population of humans (historic, contemporary, or future) and their biophysical environment

Students will explore the evolution of the human species and the nature of contemporary human variation. Course learning begins with the principles of ecology, evolutionary theory, and genetics to establish a framework for the study of human evolutionary biology. Fossil evidence for human evolution will then be considered, including comparisons with non-human primate ecology and evolution, to reconstruct prehistoric life-ways. Finally, discussion turns to modern human variation and diversity, paying particular attention how biocultural adaptations to environmental stressors like climate, nutrition, disease, and culture have shaped our species - and continue to do so.

## **II. Learning Objectives**

By the end of the semester, students should be able to:

- Articulate basic principles of evolution and human genetics, including a history of the ideas leading to our current scientific understandings of these principles and how they are applied in contemporary society
- Identify similarities and differences between humans and non-human primate species, including the biological basis for cooperation and competition
- Demonstrate an understanding of the major trends in hominin evolution, including the fossil and molecular evidence for the origins of anatomically modern humans
- Evaluate influences of genetic, ecological, and sociocultural factors on biological variation, diversity, and adaptation in non-human primates and in contemporary human populations
- Apply biocultural and ecological perspectives to explicate human reproductive biology, growth and development, disease patterns, diet/foodways, and livelihoods.

## **III. Outcome Assessment Items**

- Midterm exam and final exam will evaluate students' understanding of important anthropological terms and concepts while evaluating their ability to critically think about ecological and evolutionary anthropology.
- Lecture quizzes will assess the student's progress in their comprehension of the material. Lecture quizzes are available on CANVAS. They open on Thursday after lecture and close on the following Tuesday before class
- The submission of the Annotated Bibliographies will be via CANVAS. You will upload them in a WORD document file as an attachment. This will cut down on deforestation and allow for a prompt response on my part.
- Laboratory Quizzes will be taken at the start of lab. Note that two of the labs have a pre-lab instead which must be completed prior to class.
- Laboratory Assignments will be submitted via CANVAS and instructions can be found on CANVAS

## IV. Grading Policy-

- **Evaluation-** Students will be evaluated based on their performance on exams, paper, quizzes, and classroom participation. The final grade in this class will be determined based on the following rubric:

A+ = 970-1000	B+=860-899	C+=760-799	D+=660-699	F=599 or below
A =931-969	B =831-869	C =731-769	D =631-669	
A- =900-930	B- =800-830	C- =700-730	D- =600-630	

Bear in mind that the total POINTS you receive for each assignment is more important than the letter grade assigned to each as your points are what will add up to your final grade.

- **Extra Credit-** Up to 10 extra credit points will be available for students interested in increasing his/her grade. The deadline for extra credit is **December 1**. You must contact me to find out what the extra credit is.
- **Contention of Grade-** Any contention or disagreement with grades must be presented within **7 days** of receiving the original grade. Please come prepared to defend your position. The instructor maintains the final say in grades, but is open to discussing them. If you are concerned about your grades or have questions about the assignments, please come to office hours, arrange to meet with the instructor or email the instructor. Sooner rather than later is better.
- **Laboratory Assignments-** The required lab assignments will aid the student in a complete comprehension of the material needed for this course. All labs are to be submitted via CANVAS. There are no exceptions. Please see the syllabus due date schedule. Any issues with the lab must first be addressed with the lab instructor. If no solution can be found, please feel free to contact me. Missing **3 or more** labs for any reason will result in the failure of the course.

## V. Assigned Textbook (ebooks are allowed)

- Marks, Jonathan (2011). *The Alternative Introduction to Biological Anthropology*. Oxford University Press: New York.
- Sobo, Elisa (2013). *Dynamics of Human Biocultural Diversity: A Unified Approach*. Left Coast Press: Chicago.
- Some weeks may also require supplementary readings. All PDFs are available on CANVAS in that week's wikipage and are listed on the syllabus reading schedule in italics.

## VI. Course Requirements

- **Exams (200 points each)** - There will be two exams in the course- a **midterm** and a **final**. Each exam will consist of a combination of multiple choice and short answer. The exams will evaluate the student's understanding of the main terms and concepts from readings and lecture. The final exam is not cumulative. The dates of the exams are listed at the top of the syllabus.
- **Annotated Bibliographies (80 points)** – During the semester, you will be expected to summarize 4 peer reviewed journal articles. These articles *must* be on a topic from the course and *must* be from an anthropological journal. Each will be worth 20 points towards your final grade. For detailed instructions and an example, please see CANVAS.
- **Lecture Participation (50 points)** - students are expected to attend all class sessions. Engaging in classroom discussions will allow for a better understanding of the topics as well as an opportunity to demonstrate the students' interest in the course.
- **Lecture Quizzes (50 points)**-There are a total of 6 quizzes which will be completed at home via CANVAS. They will be based on your readings, short videos, and lecture material. The quizzes will be open notes/book. You will only be allowed to complete each quiz once. You will have 15 minutes for each quiz. There are 6 quizzes; your lowest grade will be **dropped**. They will be open from the end of lecture on Thursday until the start of lecture the following Tuesday.

- **Laboratory Quizzes (120 points)** - Prior to each laboratory session, you should read through the lab directions and review any materials (short videos, readings, websites, etc.) that have been assigned with the lab. These extra materials have been chosen to help you better understand what you will learn in the lab session – i.e. provide additional and important background. You will then be quizzed on this material prior to the beginning of your lab session. Question types will vary based on the background materials (label a diagram, do a math problem, compare in a table, etc.). The quiz will start promptly at the beginning of the assigned lab time and you will have 15 minutes to complete it. The quiz must end at quarter past the hour so that you have enough time to complete the lab. It is essential that you arrive a little early or just on time to have the full 15 minutes. Three labs have a pre-lab instead of a quiz which must be completed prior to coming to class. **THERE ARE NO MAKE UPS!!**
- **Laboratory Assignments (300 points)** - There is a lab assigned to this course. It is **mandatory** that you attend these labs. Please come prepared each day for lab by having read the lab on CANVAS and completed any pre-lab assignment. The labs consist of a quiz or pre-lab and a lab answer sheet which will be turned in for points. One lab is off campus but are able to be completed within a set time frame. Two and a half hour labs are held on Fridays either at 10 am or 12:30 pm.

If you miss a lab due to school related activity, illness, death in the family, or religious observance it will be up to the lab instructor as to how you make up the lab. You must notify the lab instructor as early as possible via email or in person of any absence. All religious absences must be **submitted in writing by the second lab** to your lab instructor.

- If you miss more than three (3) labs for any reason, **you will fail the course.**
- If you are more than 10 minutes late to lab, **you will not be allowed to participate.**
- Attending another section is not possible unless pre-approved by your lab instructor.
- If you have any questions about the lab material, email your lab instructor to set up a time to go over your questions.
- Food and beverages are not allowed in the lab.
- Your lab instructor will try to return your labs to you within 2 weeks unless prior arrangements have been made.
- If you have questions about your lab grade, you have 48 hours after it is returned to email your lab instructor with your question about the grade.
- Assignments are due by the due date and times in CANVAS and on the syllabus. No exceptions.

## VII. College Rules and Regulations

- **Accommodations for Students with Documented Disabilities**- Students having documented disabilities and who wish to discuss academic accommodations should contact the course instructor during the first week of classes so that adequate accommodations can be provided. Students requiring documentation should contact Office of Disability Support Services, (301-314-7682).
- **Academic Integrity**- Academic integrity is the foundation of learning. The university has approved a Code of Academic Integrity available on the web at <http://www.studenthonorcouncil.umd.edu/code.html> The code outlines prohibitions on cheating on the exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures.

If you are caught you will be referred to the Student Honor Council/Office of Student Conduct for investigation and possible disciplinary action. If you are found in violation of the Code of Academic Integrity, the usual penalty is an XF for the course. I do not make exceptions, which is why it is important that you **CITE** your sources using the appropriate citation style (in the case of this course, it is APA style).

On each assignment and on each exam, you must copy the following statement:  
*"I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/paper/examination. Signature MM/DD/YYYY"*

- **Religious Observances** - The University of Maryland provides that students should not be penalized because of the observance of their religious beliefs; students shall be given an opportunity, whenever feasible, to make up within a reasonable time, any academic assignment that is missed due to individual participation in religious observances. You must notify the instructor of any classes that will be missed **in writing by the second week of classes.**

- **University Emergency Closing** -- In the event that the University is closed for an emergency or extended period of time because of inclement weather and campus emergencies, I will communicate to you via CANVAS to make schedule adjustments, including rescheduling of assignment due dates. Official closures and delays are announced on the campus website <http://www.umd.edu>. The snow phone line is 301-405-SNOW, as well as local radio and TV stations.
- **Course Evaluations** – Please be aware that each semester I reevaluate this course, my syllabus, and all course assignments as to their effectiveness in conveying the course information and assessment of the students' comprehension of the material. I take your feedback seriously. Please be sure to complete the campus wide *Course Evaluation UM* for this and all your courses. The evaluation will be open to students in November at [www.courseevalum.umd.edu](http://www.courseevalum.umd.edu)

## VIII. Technology in the Classroom

Technology is an important part of the learning experience. We will be making use of CANVAS for lab assignments, assignment instructions, supplemental reading assignments, and information that will help the student understand each week's topics better. Students are allowed to use computers to take notes during class. Power points will be available prior to each lecture to supplement the student's notes. However a few rules:

- Cell phones – for calls or texting- are not permitted in class. Phones must be off during class time. Please speak with the instructor if you believe that you are an exception to this rule. The instructor reserves the right to confiscate the cell phone until the end of the class if you choose to break this rule.
- If a student is found using Facebook, Twitter, Tumbler, the Internet or any other program other than one for taking notes, the student will no longer be able to use the computer during class time.
- During online (CANVAS) and email communication with me or fellow students, please be courteous. DO NOT SCREAM! ☺ Feel free to express emotions by using emoticons as tone and sarcasm and humor do NOT translate into text. Open and close comments and emails with greetings and regards. Give credit where credit is due, be it to fellow students, myself, or authors of papers. Use proper spelling and grammar. Remember that what you write is a reflection of who you are!

## IX. Asking for Help

Your Lab Instructor and I are here to help you be successful in this course, however, if you do not tell us that you need help, we will not know! We are not mind-readers and although we do our best to stay in touch with each of our students, we cannot be aware of everything going on in your lives. If you are struggling with content, deadlines, or personal issues that are affecting your ability to participate in this course, please let us know ASAP. There is no shame in asking for help, especially in a demanding course such as this one.

ANTH 222 Schedule Prof. Icaza

Week	Date	Reading Assignment	Class Lecture Topic	Lab	Assignment Due Dates
1	September 1	<i>Biological Anthropology time line</i>	Syllabus Review, Introduction		
	September 3	Sobo 19-31 Marks 1-19	What is Anthropology?		
	September 4			No Lab	
2	September 8	Marks 20-60 <i>Malakoff: Revealing the Past Through DNA</i>	Origins of Evolutionary Thought		
	September 10	Marks 61-79 Sobo 33-37	Genetics		
	September 11			L1: Anthropometrics & Statistics	
3	September 15	Marx 80-100 Sobo 37-50	Forces of Evolution		
	September 17	<i>Carey: Epigenetics in Action</i> <i>The Ghost in Your Genes (video 1 hour)</i> Sobo 51-71 (optional)	Epigenetics		L1
	September 18			L2: Population Genetics	
4	September 22	<i>Dobbs: Beautiful Brains</i> <i>Hawkes: The Grandmother Effect</i> <i>Mace: Evolutionary Ecology of Human Life History</i>	Life History: Growth & Development		Quiz 1
	September 24	<i>Jablonski &amp; Chaplin: Vitamin D &amp; Depigmentation</i>	Genetic & Developmental Adaptation		L2
	September 25			L3: Adaptation	
5	September 29	<i>Benton: The Red Queen &amp; the Court Jester</i> <i>Lambert: Primates in Communities</i> <i>Moon: Direct &amp; Indirect Interactions</i>	Ecological Concepts: Biotic		
	October 1	<i>McGlynn: Effects of Biogeography on Community Diversity</i>	Ecological Concepts: Abiotic		L3
	October 2			L4: Running the Park	
6	October 6	Marks 101-120 <i>Quammen: The Left Bank Ape</i>	Speciation, Systematics, & Extinction		Quiz 2
	October 8	Marks 121-140	The Other Primates		L4
	October 9			L5: Primate Diversity	
7	October 13	Marks 141-161	Primate Social Structure & Behaviors		
	October 15	<i>DeWaal: The Bipolar Ape</i>	Our Inner Ape		L5 & Annotated Bibliographies Part I
	October 16			L6: Smithsonian Museum of Natural History	L6 Pre-Lab Quiz Online

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8	October 20		Midterm Exam		Quiz 3
	October 22	Marks 178-198	What can Fossils Tell Us?		L6
	October 23			L7: Primate Behavior & Evolution (at home)	L7 Pre-Lab Quiz Online
9	October 27	Marks 162-177, 199-214 <i>Fischman: Part Ape Part Human</i> <i>Shreeve: Birth of Bipedalism</i>	Bipedalism		
	October 29	Marks 215-229	Neandertals, Hobbits, & Denisovans		
	October 30			L8: Bipedalism	
10	November 3	Sobo 72-86 <i>Wrangham: Brain Food</i>	Rise of genus <i>Homo</i>		
	November 5	Sobo 87-94 <i>Curry: Coming to America</i>	Modern Human Dispersal		L8
	November 6			L9: Hominins Pt 2 (UMD Collections)	L7 Draft
11	November 10	<i>Basic Demographic Concepts</i>	Human Population Dynamics & Ecology		Quiz 4
	November 12		Human Population Dynamics & Ecology		L9
	November 13			L10: Human Demography	L10 Prelab
12	November 17	Sobo 141-148 <i>Sinclair Ch. 2 Why Agriculture</i> <i>Anderson Ch. 5 Basics</i>	Agricultural Revolution		
	November 19	Sobo 115-139 <i>Bates: Procurement Systems, Adaptation, &amp; Food</i> <i>Einstein: The First Supper</i>	Subsistence Strategies		L10
	November 20			L11: Diet & Disease	L11 Prelab L7 Final
13	November 24	Sobo 148-164, 266-274 <i>Sinclair Ch. 5 Human Nutrition &amp; Diet</i>	Agricultural Impacts		L11
	Nov. 26/27	Thanksgiving	No lecture	No Lab!	
14	December 1	Sobo 165-202 <i>Conniff: The Body Electric</i> <i>Despommier: Parable of the Parasite</i>	Disease Ecology		Quiz 5
	December 3	Marx 230-255 Sobo 94-110, 233-262 <i>Wade: Race, IQ, Genetics</i>	Modern Human Diversity		Annotated Bibliographies Part II
	December 4			L12: Race, Sex, & Gender	L12
15	December 8	<i>Unleashing the Potential of Urban Growth</i>	<i>Surviving the Urban Jungle (film)</i>		
	December 10	<i>Owen: Future Humans</i>	Humanity's Future		
	December 11			L13: A Sustainable Future	L13
	December 15				Quiz 6
	TBA		Final Exam		

