

**SYLLABUS
SPRING 2017
Anthropology 102: INTRODUCTION TO HUMAN EVOLUTION
M TH 10:55 am - 12:15 pm, LOR-022**

HOW THIS SYLLABUS IS ORGANIZED

The syllabus is meant to be a complete document and *everything* in the syllabus is important. The *most important* things come first. The syllabus also contains links to more detailed descriptions like this one, <http://ctaar.rutgers.edu/integrity/policy.html#Integrity>, on academic integrity which is very important.

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BOX 1Core Curriculum Learning Goals Met by this Course**NS:** Natural Sciences

- ✓ Understand and apply basic principles and concepts in the physical or biological sciences.
- ✓ Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis.

HST: Historical Analysis

- ✓ Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in social and historical analysis.
- ✓ Explain the development of some aspect of a society or culture over time, including the history of ideas or history of science.

PREREQUISITES

This is an introductory course and there are no prerequisites. Lectures and laboratories will cover the basic concepts that are required to understand the material. A science background is not necessary for the successful completion of the course.

REQUIREMENTS FILLED BY THE COURSE

The course fills a requirement of the major in Evolutionary Anthropology, the minor in Evolutionary Anthropology, or the minor in Anthropology. Additionally, the course serves as a prerequisite for a Certificate in Evolutionary Medicine.

REQUIRED TEXTS

The Alternative Introduction to Biological Anthropology by Jonathan Marks.

Your Inner Fish: A Journey into the 3.5-Billion-Year History of the Human Body by Neil Shubin. *There will be a writing assignment on the book which will be half of your Writing Assignment grade.*

Some other readings will be provided on sakai in Resources as pdf documents or as links.

OTHER REQUIREMENTS

An *i>clicker student remote* is also required for the class.

A **notebook** is also required for class. You will need this to take notes in during lecture because the use of laptops is prohibited during class.

Lab assignments, review sheets, class announcements, etc. can be downloaded from the class Sakai site. Enter this site via the Rutgers Sakai portal (<http://sakai.rutgers.edu/portal>).

CATALOG DESCRIPTION

Evolutionary processes, including adaptation and speciation; fossil and archaeological records of human morphological and social-behavioral evolution

COURSE OBJECTIVES

- Understand the biology, ecology and behavior of a number of living primate species, including humans.
- Understand the application of the scientific method (*i.e.*, how to construct and test a hypothesis). [\[EA1\]](#)
- Be able to summarize and describe simple quantitative and qualitative observations and react to such observations critically. [\[EA2\]](#)
- Understand the theory of evolution at both the molecular and organismal levels. [\[EA1\]](#)
- Understand the nature of the fossil record and the geologic context of fossils.
- Understand the evidence for primate and human evolution.
- Understand how the biology, ecology and behavior of extinct hominin species are reconstructed.
- Be able to discuss critical events and ongoing issues in human evolution.
- Begin to develop skills needed to be a critical consumer and ultimately user of the primary scientific literature (e.g., access and use Web of Science, critical consumption of online information). [\[EA3\]](#)

COURSE NARRATIVE

First we will discuss evolutionary anthropology and the study of human evolution. What is the point and why do we care? What do we study and how do we do it? What might be some big questions?

We use scientific method and thinking to explore these questions. What is that and how is it done? What are its strengths and weaknesses?

Observation and theory are critical elements of science. Darwin made many observations and developed our key theory that still structures the discipline. What were Darwin's influences and observations? What were his contributions? What was Darwin's big idea?

Darwin could observe that many characteristics were heritable. However, he had no understanding of the mechanisms of inheritance. These are very important and a great deal of science since Darwin has helped us

understand these mechanisms. We will explore the basis and mechanisms of inheritance and understand some things that Darwin never knew!

As characteristics are inherited from parent to child, we also observe changes over time. We call changes like these that happen in populations of organisms over time microevolution. We will discuss the four major ways in which this change – mediated by the mechanisms of inheritance – happens. These include Darwin's big idea, natural selection, as well as mutation, gene flow, and genetic drift. Our understanding of these forces of evolutionary change make up what is referred to as the "modern synthesis."

We can use our understanding of microevolution to explore and explain human biological variation. Thus, we focus on some examples of human variation and the relevance of evolutionary theory to understanding these examples (malaria resistance, lactase persistence, and variation in skin color). We discuss our understanding of humans as a biocultural species and the implications of this idea. This part of the course will include a guest lecture by Dr. Dave Raichlen on the evolution of human physical activity and inactivity.

As inheritance from parent to offspring gives way to changes in populations over the course of generations these changes can be magnified over deep geological time leading to speciation (the origin of new species) and adaptive radiation. These changes lead to the diversity of life including our own species and leave us with a great tree of life. We explore macroevolution and how to think in terms of trees. What is a species, how does speciation happen, and what is a phylogeny? What is adaptation? How do we classify life and how can we visualize this using Darwin's metaphor of a great tree?

Next, we turn our attention to the Order Primates. This branch of the tree of life includes our closest relatives and observations about primates can potentially tell us about ourselves and help us develop and test hypotheses about human evolution. In particular, we focus on observations of locomotion, diet and social behavior in primates. How might these aspects of primate biology been shaped by evolutionary forces?

Humans are primates too and have also been shaped by evolutionary forces. We can explain characteristics that all humans share using evolutionary theory. What are some of these characteristics? What are possible key primate and human adaptations? How do primate origins influence humans?

With humans front and center, we turn to the fossil record of human evolution and evaluate the evidence. We start with primate origins, consider our close fossil ape relatives, and lay out a broad framework of our close relatives in the fossil record, the hominins. We consider the evolution of key human adaptations with respect to locomotion, diet, and social behavior (topics that we have already explored among our primate relatives). To these we add observations about encephalization, the use of technology, and globe spanning human migrations including the recent migration into the New World.

At this point, we have a broad picture of what we know about the human journey, some ideas on what being human means, and a sense of the nature and scope of human evolution. With all we have learned in mind, the course concludes with discussion of the fundamentally anti-racist theoretical contributions of evolutionary anthropology.

GRADING AND ASSESSMENT**BOX 2**Assignment of Grades

Grades will be calculated based on the following:

<u>Assignment, Exercise, or Exam</u>	<u>Percent of Final Grade</u>
Midterm Exam (~100 questions)	~25%
Cumulative Final Exam (~100 questions)	~25%
In-Lecture Pop Quizzes	~10%
Writing Assignments	~15%
Lab Attendance	~10
Lab Assignments and Quizzes	~10
Lab Participation	~5%
TOTAL	100%*

Point Deductions

Points will be deducted from your average due to missed classes on the following basis:

- Your regular and timely class attendance is expected.
- For every missed recitation section without a valid excuse (substantiated with written documentation and reported using the Absence Reporting System: <https://sims.rutgers.edu/ssra/>), you will lose 2 points. If you have more than 2 unexcused absences you should see the Dean of Students. Late arrival or early departure, without prior permission from your TA is considered an unexcused absence. You may not make up missed in-class writing assignments due to an unexcused absence.

Extra Credit

You may earn 2 points of extra credit by attending an additional outside University-sponsored lecture approved by your TA and writing a one paragraph thesis and significance statement. You may earn another 2 points of extra credit when you participate in the scavenger hunt activity at during the field trip to the American Museum of Natural History.

Students are often interested in the questions “How will my grade be assigned?” and “What will be on the test?” The answer to both of these questions relates to the Course Objectives (see above) and the Rutgers SAS Core Curriculum Learning Goals fulfilled by this course. Your grade will be higher if course assignments show your achievement of Course Objectives and Core Curriculum Learning Goals is higher. All exam questions and writing assignments are explicitly tied to one or more learning goals.

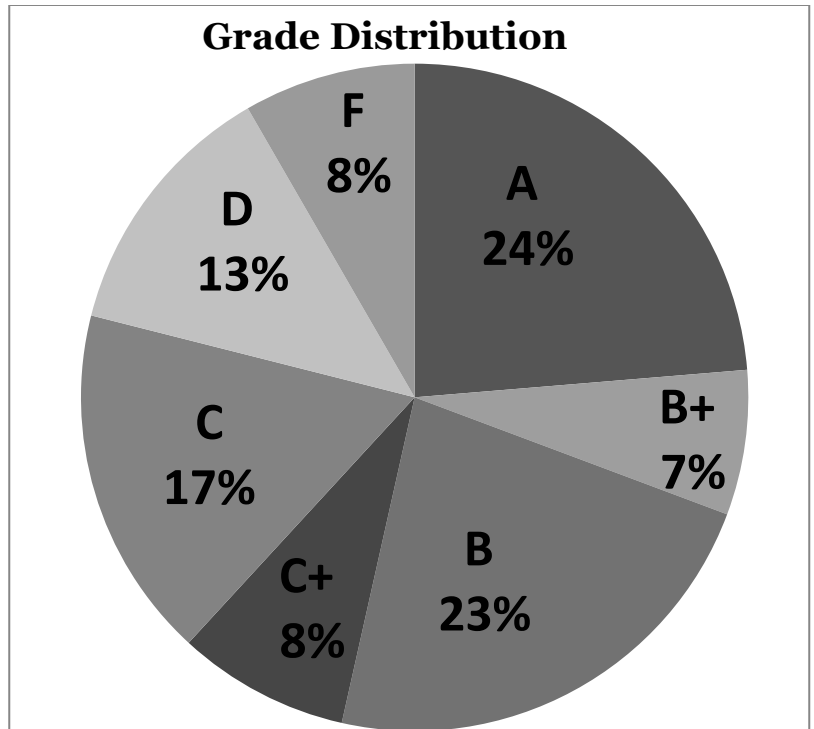
Final grades are assigned at or just slightly below the standard Rutgers cut-offs (90%, 85%, 80%, 75%, 70% and 60%). There is no “curve” or “rounding-up.” Requests for higher grades after grades have been assigned are denied except in the case of genuine errors in assigning of grades.

In some cases, students may have cause to quibble about issues and some random noise creeps into grades. These issues are dealt with and remedied on a course-wide basis. Indeed, remedies are already built into the syllabus: the outside lecture extra credit option already exists and exams include some extra credit questions. Other remedies could include dropping the lowest quiz grade or setting grade cut-offs just slightly below the standard Rutgers cut-offs.

The pie chart at the right is the final distribution of grades in this course previously. The 8% of students who received Fs were nearly universally students who simply did not turn in work, come to exams, take quizzes, or show up to recitation. It is very easy to avoid falling in that 8%.

Two other important points can be drawn from this data:

1. More than half of the class will likely earn a B or better.
2. Of those who 'show up' – more than one in five will likely earn an A.



BOX 3

Assessment of Core Curriculum Learning Goals Met by this Course

Learning Goals can be assessed because writing assignments and exam questions are linked and built around at least one learning goal. The overall degree to which this course achieves the core curriculum learning goals will be determined using evaluative rubrics applied to a selected writing assignment (describe-and-explain essay).

GRADED COURSE WORK

Exams

There will be two exams, a midterm and final, which will test students' substantive knowledge of the class material including lectures (both inside and outside of class), films, and readings. To pass the course both exams must be taken. The final will be cumulative in that the second part of the course builds on the first part.

In a course such as this with an enrollment exceeding 250 students, we are forced to rely on Scantron, multiple choice type exams. This means that in total you will answer ~200 of these style questions over the course of the midterm and final.

Laboratory Section (Assignments, Quizzes, Attendance, Participation)

No lab sections meet during the first week of class! Labs begin January 23!

Active participation in weekly laboratory sections, supervised by teaching assistants, is **mandatory**. Your participation grade (~5% of final grade) will be based on your **active** and **informed** participation in class discussions and activities. Attendance is separate from participation. Attendance will be recorded and is 10% of your grade.

Periodic in-lab quizzes and assignments will count for 10% of your grade and will be assigned zero grades in cases of unexcused absence from lab.

Schedule: Labs begin during the second week of classes.

Writing Assignments

Two short writing assignments will be submitted on sakai added and graded by your TA. Writing assignment grades will contribute ~15% to your final grade. The writing assignments will be:

1. A **book review and report** of *Your Inner Fish* by Neil Shubin (2 pages)
2. A **describe-and-explain essay** on a selected topic related to one of the Core Curriculum Learning Goals fulfilled by this class. This assignment is linked with a visit to American Museum of Natural History (3 pages)!

All writing assignments must be formatted with double-spaced 12 pt Times New Roman font and 1 inch margins. Punctuation must also have the same formatting.

Writing assignments are due electronically on sakai to your TA no later than NOON on the Friday of the week in which they are due.

DO NOT PLAGIARIZE. Turn-It-In is used on each writing assignment and identifies cases of suspected plagiarism which will be investigated. *The University [Academic Integrity Policy](#) will be enforced.*

More details on the writing assignments will be made available on <https://sakai.rutgers.edu/portal> and in lab section.

In-Lecture Quizzes

You will only succeed in this course if you come to lecture and recitation, pay attention and participate in class, and prepare for class. Short quizzes will be given in lecture and will cover previous lectures and required readings.

Extra Credit

You may earn 2 points of extra credit toward your final grade by attending an additional outside University-sponsored lecture approved by your TA and writing a one paragraph summary statement about the lecture. The statement will be submitted on sakai and run through Turn-It-In. Plagiarism is still plagiarism even if it involves extra credit and the penalties are the same.

You may earn another 2 points of extra credit when you participate in the scavenger hunt activity at during the field trip to the American Museum of Natural History.

COURSE POLICIES

Laptop Policy

Laptop use during lecture is prohibited. You will need a notebook for recording notes during lecture. The reason for this policy is because laptop use is linked both to use of the internet during class and to lower test scores.

Academic Integrity

All students must strictly adhere to the Rutgers Academic Integrity Policy, which identifies and defines violations including cheating, fabrication, facilitating academic dishonesty, plagiarism, and denying others access to information or material. Full definitions of each of these violations, as well as the consequences of violating the Academic Integrity Policy, are available as part of the student handbook. For details see: <http://ctaar.rutgers.edu/integrity/policy.html#Integrity>. *You are responsible for knowing what constitutes plagiarism and academic dishonesty.*

Unusual and Extenuating Circumstances (aka “please consult a Dean of Students”)

In a large class, it is typical that some students will encounter some form of unusual or extenuating circumstances that may affect them as students. The course policy is to help and accommodate such circumstances as appropriate. However, the Professor and Teaching Assistants do not have sufficient qualifications or time to investigate and adjudicate such circumstances. Therefore, in all cases, when *unusual and extenuating circumstances* occur students are strongly

encouraged to see a Dean of Students. A Dean of Students may suggest in writing any accommodations that might be appropriate and these may or may not be offered. With respect to ***unusual and extenuating circumstances***, a key principle that will guide resolution is the how early the student sought help from a Dean of Students. Thus, as soon as possible after an extreme issue arises, please consult a Dean of Students.

What are unusual and extenuating circumstances? These include things like:

- major disturbances caused by a death in the family or a similar loss
- chronic health problems
- extreme emotional or psychological distress
- mandatory court appearances
- the loss of home or means of support

Attendance

You are required to attend all class meetings (lecture and lab). If you expect to miss one or two lectures or one recitation section, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. An email is automatically sent to me. ***Do not email me about absences outside of this system.*** If you expect to miss more than two lectures or more than one recitation section, you must see the Dean of Students who will verify any special circumstances. If you have reported two or more absences and expect another, use the Absence Reporting System and also make an appointment with the Dean of Students. This class operates according to the ***notify and document principle***. What this means is that you must **notify** the appropriate person or persons (professor and/or teaching assistant) of any circumstance which could require some special permission. In the case of absences, notification must be via the University-wide Absence Reporting System (<https://sims.rutgers.edu/ssra/>) prior to the absence and **documentation** must be available after the absence. Please note that notification of the absence must be ***prior to the absence and retroactive notifications are not acceptable. Without notification (before) and documentation (after), a missed lab section will not be excused.***

Late Work

Writing assignments are due electronically on sakai to your TA no later than **noon** on the Friday of the week in which they are due. No late papers will be accepted except under very unusual circumstances and with a valid excuse, which must be documented in writing by an appropriate authority (e.g., physician). The occurrence of such unusual circumstances must be brought to the attention of your TA within **48 hours** of the missed deadline. If lateness of work also involves absence from class you must also use the Absence Reporting System (<https://sims.rutgers.edu/ssra/>). Although submission of writing assignments may be allowed by the sakai system after the deadline, this does not mean late submissions will be graded. You are responsible for confirming all electronic submissions on sakai.

Lateness

Please come to class on time – it is very disruptive to professor and classmates when students arrive late to class.

Exams

No make-up exams will be given except under very unusual circumstances and with a valid excuse, which must be documented in writing by an appropriate authority (e.g., physician). Since a missed exam also involves a missed class period, you must use the Absence Reporting System (<https://sims.rutgers.edu/ssra/>) to provide notification of any special circumstances. In addition, contact us (your TA and Prof. Scott) by email within 48 hours of any missed exam. Such very unusual circumstances will need to be verified later and in a timely fashion with appropriate documentation. On exam days, you are **required** to bring **your student ID** and a **pencil**. NO CHEATING will be tolerated, and anyone found cheating will receive an “F” grade for the exam.

Courtesy

You are expected to act with courtesy in lecture and recitation. This includes:

- All cell phones must be turned off (***no texting***)
- Address Prof. Scott as “Professor Scott or Dr. Scott” (not as “Professor”) and address guest lecturers by the appropriate **title and name**

- Learn your TA's name and address them accordingly
- Behave respectfully to instructors and other students
- No Facebooking
- No playing games or cards
- No headphones or listening to music
- Be prepared to discuss
- No reading the newspaper or other non-course material
- Be polite to instructors and other students

Final Exam

The final exam is scheduled for May 8, 2017 from 8 am to 11 am.

Lecture Schedule, Lab Schedule, and Readings

AIBA = Alternative Introduction to Biological Anthropology

Required readings, videos, animations, interactives, and other resources other than *Your Inner Fish* or *Alternative Introduction to Biological Anthropology* can be found in Resources on Sakai (<https://sakai.rutgers.edu/portal>) and/or by following the links below.

Day of the Week	Month	Day	Lecture	Lab Section	Reading
Th	Jan	19	Introduction: evolutionary anthropology		AIBA Ch. 1
M	Jan	23	How to do science	1. Scientific Method & Evolution by Natural Selection	AIBA Ch. 2 “ 10 Scientific Ideas That Scientists Wish You Would Stop Misusing ” compiled by A. Newitz “How Science Works” at http://undsci.berkeley.edu/article/howscienceworks_01 Daily Double Musical Break at https://www.youtube.com/watch?v=Y6ljFaKRTrI AND https://www.youtube.com/watch?v=9kf51FpBuXQ
Th	Jan	26	Evolution and Darwin		AIBA Ch. 3 “The History of Evolutionary Thought: Pre 1800” at http://evolution.berkeley.edu/evolibrary/article/0_0_0/history_01 “The History of Evolutionary Thought: 1800s (up to Natural selection)” at http://evolution.berkeley.edu/evolibrary/article/0_0_0/history_index_02 Video: “The Making of a Theory: Darwin, Wallace, and Natural Selection” at https://www.youtube.com/watch?v=XOiUZ3ycZwU “Darwin on the Origin of Species” by Asa Gray
M	Jan	30	Inheritance	2. DNA Replication & Protein Synthesis	“Gregor Mendel and the Principles of Inheritance” by I. Miko “Mendelian Genetics Patterns of Inheritance and Single-Gene Disorders” by H. Chial “Genetic Dominance: Genotype-Phenotype Relationships” by I. Miko “Developing the Chromosome Theory” by C. O’Connor “Thomas Hunt Morgan”, Genetic Recombination, and Gene Mapping Musical Break (a recombination and crossing over theme song) at https://www.youtube.com/watch?v=AjPau5QYtYs
Th	Feb	2	Inheritance		“Resource - DNA Structure and Organization”

					<p>“Resource - DNA Replication and Protein Synthesis”</p> <p>“RNA Functions” by S. Clancy</p> <p>“Discovery and Types of Genetic Linkage” by I. Lobo and K. Shaw</p> <p>“Chromosome 11 Flyover” at https://www.dnalc.org/resources/3d/chr11.html</p> <p>“What is a Gene? Colinearity and Transcription Units” by L. Pray</p>
M	Feb	6	Inheritance	3. Polygenic Inheritance of Height	<p>AIBA Ch. 4</p> <p>“Things Genes Can’t Do” by A. Buchanan and K. Weiss</p> <p>“Polygenic Inheritance and Gene Mapping” by H. Chial</p> <p>“Pleiotropy: One Gene Can effect Multiple Traits” by I. Lobo</p>
Th	Feb	9	Inheritance		<p>Video: “Why Women Are Stripey” from Veritasium at https://www.youtube.com/watch?v=BD6h-wDj7bw</p> <p>Video: “The Epigenome at a Glance” at http://learn.genetics.utah.edu/content/epigenetics/intro/</p> <p>“Activity - Change the Shape of the Gene”</p> <p>“Phenotype Variability: Penetrance and Expressivity” by I. Miko</p> <p>“Environmental Influences and Gene Expression” by I. Lobo</p>
M	Feb	13	Microevolution: Mutation and gene flow	4. Mendelian Inheritance and Hardy-Weinberg II	<p>AIBA Ch. 5</p> <p>Video: “Evolution” at https://www.youtube.com/watch?v=XdddbYILeI0</p> <p>“The Hardy-Weinberg Principle” by C. A. Andrews</p> <p>“Mutations Are the Raw Materials of Evolution” by J. L. Carlin</p> <p>Video: The Origins of Human Color Vision” at https://www.youtube.com/watch?v=1zw2RE-PavQ</p> <p>“Resource – Gene Flow” by R. S. Scott</p>
Th	Feb	16	Microevolution: Genetic drift and natural selection		<p>AIBA Ch. 5</p> <p>Video: “Genetic Drift: Founder Effect and Bottleneck Explained” at https://www.youtube.com/watch?v=-UfrN11V9SM</p> <p>Video: “Galapagos Finch Evolution” at https://www.youtube.com/watch?v=mcM23M-CCog</p> <p>Video: “Moth Miimicry: Using Ultrasound to Avoid Bats” at https://www.youtube.com/watch?v=NeCmSL_N65A</p> <p>“Sexual Selection” by P. L. R. Brennan</p> <p>“Neutral Theory: The Null Hypothesis of Molecular Evolution” by L Duret</p>
M	Feb	20	Modern human variation & adaptation:		<p>“Case Closed: Famous Royals Suffered From Hemophilia from Science Magazine at http://www.sciencemag.org/news/2009/10/case-</p>

			Malaria resistance, lactase persistence, and skin color		closed-famous-royals-suffered-hemophilia “Huntington's Disease: The Discovery of the Huntingtin Gene” by H. Chial <i>Video</i> : “The Evolution of Lactose Tolerance” at https://www.youtube.com/watch?v=MA9boI1qTuk “Digestive Enzymes of Human and Nonhuman Primates” by M. Janiak
Th	Feb	23	Guest: Dave Raichlen on “The evolution of human physical activity and inactivity”		<i>Video</i> : “The Biology of Skin Color” OR read “Human skin pigmentation as an example of adaptive evolution” by N. Jablonski <i>Video</i> : “Malaria and Sickle Cell Anemia” “Natural Selection: Uncovering Mechanisms of Evolutionary Adaptation to Infectious Disease” by C. Pardis and M. D. Sabeti Musical Break: https://www.youtube.com/watch?v=yVK3tTBJze4 “Still Evolving After All These Years” by J. Hawks
M	Feb	27	Macroevolution: Speciation, tree thinking and the primate branch	6. Taxonomy, Species, Systematics, Phylogeny (Tree Thinking)	AIBA Ch. 6 & 7 “Reading a Phylogenetic Tree: The Meaning of Monophyletic Groups” by D. Baum “Why Should We Care about Species?” by J. Hey <i>Video</i> : “Speciation in Galapagos Finches” at https://www.youtube.com/watch?v=mcM23M-CCog “Darwin's Finches Tracked to Reveal Evolution in Action” by D. Cressey “Speciation: The Origin of New Species” by R. J. Safran
Th	March	2	Macroevolution: Speciation, tree thinking and the primate branch		AIBA Ch. 6 & 7 “Hybridization and Gene Flow” by L. Stevison “Characteristics of Crown Primates” by E. C. Kirk “Macroevolution: Examples from the Primate World” by P. S. Clee and M. K. Gonder
M	March	6	Midterm.	Midterm week, no lab	have read at least half of <i>Your Inner Fish</i>
Th	March	9	Non-human primates: Locomotion		AIBA Ch. 8 “Primate Locomotion” by D. L. Gebo “Resource – Primates in Motion”
M	March	13	Spring Break. No class	No lab	
Th	March	16	Spring Break. No class		
M	March	20	Non-human primates: Diet	7. The Feeding Game	AIBA Ch. 8 (Others TBD)
Th	March	23	Non-human primates: Social behavior		AIBA Ch. 8 (Others TBD)
M	March	27	The fossil record: Dating, evolution, fossils, & earth	8. Biostratigraphy	AIBA Ch. 9 & 10 “How to Become a Primate Fossil” by H. Dunsworth Musical Break: https://www.youtube.com/watch?v=-tJYN-

			history		eG1zk “Dating Rocks and Fossils Using Geologic Methods” by D. J. Peppe and A. L. Deino
Th	March	30	Primate evolution; Miocene apes		AIBA Ch. 9 & 10 Video: “First Primates” at https://www.youtube.com/watch?v=W_X5ciqtbG0 “Timing the Primate Explosion” by B. Switek “Hominoid Origins” by L. M. MacLachy, W. J. Sanders, and C. L. Wuthrich “Planet of the Apes” by D. Begun “ <i>Ardipithecus ramidus</i> ” by A. Gibbons
M	April	3	Overview of hominin evolution: general issues and major events		AIBA Ch. 9 & 10 “Human Evolutionary History” by E. K. Boyle and B. Wood
Th	April	6	The first hominins: The origin of bipedal locomotion	9. Osteology	AIBA Ch. 11 Video: “Ancient Human Ancestors Walking in the Woods” at https://www.youtube.com/watch?v=CrebQed8b2 Daily Double Musical Break” at https://www.youtube.com/watch?v=F69PBQ4ZyNw AND https://www.youtube.com/watch?v=DUT5rEU6pQM
Saturday	April	8	AMNH Field Trip		
M	April	10	Lucy in the Sky (Who Fell From a Great Height)		AIBA Ch. 11 Video: “How ‘Lucy’ got her name” at https://www.youtube.com/watch?v=SKYjpetqYWI “Lucy: A marvelous specimen” by C. M. Schrein Musical Break: https://www.youtube.com/watch?v=3AVWJzHvhFE Video: “Walking with Lucy” at https://www.youtube.com/watch?v=xT8Np0gIIdI “The ‘Lucy’ fossil rewrote the story of humanity” by M. Hogenboom Video: “Early Hominid Lucy May Have Died by Falling out of a Tree” at https://www.scientificamerican.com/video/early-hominid-lucy-may-have-died-by-falling-out-of-a-tree/
Th	April	13	Early <i>Homo</i> : Origins, stone tools, and behavior	10. Bipedalism in Comparative Context	AIBA Ch. 11 (Others TBD)
Friday	April	14	Your Inner Fish review due at NOON		
M	April	17	<i>Homo erectus</i> : A new adaptive strategy	11. Early Hominins	AIBA Ch. 11 (Others TBD)
Th	April	20	AAPA		

			(possible guest lecture)		
M	April	24	Neanderthals and Modern Human Origins	12. Later Hominins	AIBA Ch. 12 (Others TBD)
Th	April	27	Evidence from ancient DNA and modern DNA		AIBA Ch. 12 (Others TBD)
Friday	April	28	Describe and Explain essay due at NOON		
M	May 1	27	Contributions of Evolutionary Anthropology		AIBA Ch. 13 & 14 (Others TBD)

The final exam is scheduled for May 8, 2017 from 8 am to 11 am.