

# **Anthropology 1020: Human Origins, Evolution & Diversity**

**University of Utah Fall Semester 2017**

**Tuesdays/Thursdays 10:45 AM to 12:05 PM**

**Instructor: Shawn W. Carlyle, Ph. D. ([carlyle@anthro.utah.edu](mailto:carlyle@anthro.utah.edu))**

**Office Hours (102 Stewart Building): T/H 12:15pm-1:15pm**

**Teaching Assistant: Peter Yaworski (details TBA)**

## **Course Overview**

Anthropology 1020 is an introduction to biological anthropology. Modern biological anthropology recognizes humans as bio-cultural beings; living in *both* a cultural and natural setting. Anthropology 1020 provides an introduction to evolutionary concepts in general, and human evolution specifically.

Biological anthropology is a scientific discipline firmly rooted in the scientific method. Therefore, the class will discuss how science “works”: basic theory-building and testing, replication, and the difference between faith and science. The scientific theory of evolution known as Natural Selection proposed by Charles Darwin in 1859 is placed in its historical context with an emphasis on what factors and evidence led Darwin to his conclusions—despite persistent and effective protest to the contrary.

Basic molecular biology is covered, including discussion of DNA, genes, chromosomes, and mutations, concluding with simple (Mendelian) and complex inheritance. Next the four forces of “microevolution” are discussed, followed by macroevolution (the science of speciation).

Anthropologists and biologists recognize that humans are by their very nature mammals and primates. In order to better understand humankind's place in nature, Anthropology 1020 covers basic mammalian and modern primate anatomy and diversity. Detailed morphological differences (and similarities) between modern humans and apes are discussed, with an aim towards understanding what separates humans from apes.

An introduction to the fossil record of human evolution covers all major groups of early humans, including *australopithecines*, *Homo habilis*, *Homo erectus*, and the Neanderthals (among others). This class also addresses major issues pertaining to the evolution and eventual appearance of our own species (*Homo sapiens*)—are some of us the direct descendants of Neanderthals?

## **Required Textbooks**

Larsen, Spencer Clark. 2014. Our Origins, Discovering Physical Anthropology, 3rd Edition. New York: WW Norton and Company.

Rogers, Alan R. 2011. The Evidence for Evolution. University of Chicago Press, Chicago.

## **Thanksgiving Break**

Fall Break	Tuesday, Oct. 10/Thursday, Oct. 12	No Class
Thanksgiving Break	Tuesday, Nov. 21/Thursday, Nov. 23	No Class

## **Grading**

Students will be graded through five bulletin board assignments worth 20pts each (100 pts total), and three midterm exams worth 100 points each. There will therefore be 400 total points available. No extra credit work will be accepted.

## **Bulletin Board Assignments (submit through CANVAS)**

Students will use the links provided within CANVAS to find an article about anthropology. Remember that anthropologists study humans—human evolution, behavior, biology, and culture. We also study non-human primates. If your article is about dinosaurs, it is not anthropology. Anthropology is a very broad discipline—you should have no trouble finding an article to write about using the provided links. Students will provide a link to the actual article if possible, and write at least two paragraphs on the article (rubric will be provided). Each bulletin board assignment is worth 20points each, and students must submit five by their stated deadlines (below).

Bulletin Board ONE	DUE no later than	Saturday, Sept. 16
Bulletin Board TWO	DUE no later than	Saturday, Oct. 7
Bulletin Board THREE	DUE no later than	Saturday, Oct. 28
Bulletin Board FOUR	DUE no later than	Saturday, Nov. 18
Bulletin Board FIVE	DUE no later than	Saturday, Dec. 9

## **Midterm Exams (taken through CANVAS)**

Three midterm exams worth 100 points each will test the student on class lectures/powerpoints, movies, and assigned class readings (including the Larsen and Rogers textbooks). The midterms are take-from-home, open-book, and open-notes timed exams. Each midterm will be taken through the course CANVAS portal (use the “quizzes” link on the left-hand side of the CANVAS site).

Students will normally have four days, Thursday through Sunday to take their midterm exams. Students can only take/open each midterm once, so ensure that you have the

time and resources necessary to take the exam. Exams will typically be open for ~100-120 minutes. Students must take all three exams within their scheduled time period (below), unless previous arrangements are made.

Exam One	Open: Friday, Sept. 15—Wednesday Sept. 20
Exam Two	Open: Friday, Oct. 27—Wednesday Nov. 1
Exam Three	Open: Friday, Dec. 8—Wednesday Dec. 13

**The final grading scale will follow the standard University of Utah format:**

100-93%	A	79-77%	C+
92-90%	A-	76-73%	C
89-87%	B+	72-70%	C-
86-83%	B	69-67%	D+
82-80%	B-	66-63%	D
		62-60%	D-

**Learning Outcomes: Anthropology 1020**

**At the end of the course, the student will be able to:**

- 1) Describe variation among humans and their closest relatives across the world and through time.
  - a. Student shall understand the extent of modern primate diversity, and the basic and essential differences between prosimians, monkeys, apes and humans.
  
- 2) Explain aspects of human variation using evolutionary theory.
  - a. Student shall evaluate the extent and diversity of early hominids (bipedal apes), including the Australopithecines, *Homo erectus/ergaster*, and archaic sapiens such as Neanderthals.
  
  - b. Discuss various models relating to the appearance of fully modern humans (*H. sapiens*), with a focus on understanding how the physical process of colonization may have shaped modern human diversity.
  
- 3) Apply anthropological research methods to answer a question or solve a problem.
  - a. For example, can genomic analyses of Cro-Magnon, Neandertals, and fully modern humans (*H. sapiens*) tell us if these were three separate species or just one highly variable species?

## **Attendance, Participation, & Student Behavior**

Class attendance is strongly encouraged and mandatory for a passing grade. ***Several required movies will be shown throughout the semester. It shall be the student's responsibility to arrange to view any movies they may have missed through non-attendance.***

Participation in class discussion is encouraged. Alternate explanations and opinions are also encouraged. As adults, I expect you to respect (while not necessarily agreeing with) the opinions of your peers. Student behavior that becomes disruptive to the learning environment may be cause for discipline under the student code.

## **CANVAS**

There is a CANVAS website associated with this class. All powerpoint lectures, study guides, and handouts will be posted to the site. Students will also submit their Bulletin Board assignments, and take their midterms through the CANVAS portal. Emergency and other critical announcements may also be made through the CANVAS site—so please check it regularly. Students can also email me through the CANVAS site, by using the “mailbox” function on the left-hand side.

## **Syllabus Modification**

This syllabus is intended to give the student guidance in what will be covered during the course, and will be followed as close as possible. However, the syllabus as handed out (and posted) during the first week of the semester ***may be modified by the instructor as circumstances dictate.***

**Table One: Bulletin Board and Midterm Exam Schedules (Combined)**

Bulletin Board ONE	Due No Later Than	Saturday, Sept. 16
MIDTERM ONE	Open Between	Friday Sept. 15-Wed. Sept 20
Bulletin Board TWO	Due No Later Than	Saturday, Oct. 7
MIDTERM TWO	Open Between	Friday Oct. 27-Wed. Nov. 1
Bulletin Board THREE	Due No Later Than	Saturday, Oct. 28
Bulletin Board FOUR	Due No Later Than	Saturday, Nov. 18
MIDTERM THREE	Open Between	Friday Dec. 8—Wed. Dec. 13
Bulletin Board FIVE	Due No Later Than	Saturday, Dec. 9

# ANTHROPOLOGY 1020: MASTER READING SCHEDULE

## FALL 2017

WEEK BEGINS	Author/Textbook	Subject/Chapter	Pages Assigned	
1	August 21st	Larsen: Our Origins, 3rd Ed.	Introduction	pp. 1-20
1	August 21st	Larsen: Our Origins, 3rd Ed.	Pre-Darwinian Science	pp. 26-35
1	August 21st	Rogers: Evidence Evolution	1. Darwin's Mockingbird	pp. 1-4

2	August 28th	Larsen: Our Origins, 3rd Ed.	Darwin's "Natural Selection"	pp. 21-26, 40-41
2	August 28th	Rogers: Evidence Evolution	2. Do species change?	pp. 5-16

3	September 5th	Larsen: Our Origins, 3rd Ed.	Basic Molecular Biology	pp. 43-51, 52-83
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### END SECTION ONE

**Exam One Open on CANAVS:**

**Friday Sept 15-Wednesday Sept. 20**

### BEGIN SECTION TWO

5	September 18th	Larsen: Our Origins, 3rd Ed.	Mendelian/Polygenic Inheritance	pp. 37-39, 42-43
5	September 18th	Rogers: Evidence Evolution	3. Does evol make big changes?	pp. 17-31
5	September 18th	Rogers: Evidence Evolution	4. Can evolution explain design?	pp. 33-50

6	September 25th	Larsen: Our Origins, 3rd Ed.	Microevolution	pp. 43-45, 84-117
6	September 25th	Larsen: Our Origins, 3rd Ed.	Macroevolution	pp. 85-90
6	September 25th	Rogers: Evidence Evolution	5. Peaks and valleys	pp. 51-62
6	September 25th	Rogers: Evidence Evolution	6. Islands in the 21st century	pp. 63-70
6	September 25th	Rogers: Evidence Evolution	7. Has there been enough time?	pp. 71-80

7	October 6th	Larsen: Our Origins, 3rd Ed.	Mammals and Primates	pp. 156-172
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8	October 16th	Larsen: Our Origins, 3rd Ed.	Modern Primate Diversity	pp. 172-185, pp. 193-212
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### END SECTION TWO

**Exam Two Open on CANVAS:**

**Friday Oct. 26<sup>th</sup>-Wednesday Nov 1st**

### BEGIN SECTION THREE

10	October 30th	Larsen: Our Origins, 3rd Ed.	Human :Ape Morphology	pp. 186-192,
				pp. 287-296
11	November 6th	Larsen: Our Origins, 3rd Ed.	The Australopithecines	pp. 301-327
11	November 6th	Rogers: Evidence Evolution	8. Did humans evolve?	pp. 81-92
12	November 13th	Larsen: Our Origins, 3rd Ed.	Genus: <i>Homo (habilis &amp; erectus)</i>	pp. 328-361
13	November 27th	Larsen: Our Origins, 3rd Ed.	Archaic sapiens (Neandertals)	pp. 362-388
13	November 27th	Rogers: Evidence Evolution	9. Are we still evolving?	pp. 93-98
14	December 4th	Larsen: Our Origins, 3rd Ed.	Appearance of <i>H. sapiens</i>	pp. 388-415
14	December 4th	Rogers: Evidence Evolution	10. Conclusions	pp. 99-102

### END SECTION THREE

**Exam Three Open on CANVAS: Friday Dec. 8<sup>th</sup>—Wednesday Dec. 13**

## Department and University Policies

**ADA Statement:** The Americans with Disabilities Act. The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

**Addressing Sexual Misconduct:** Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

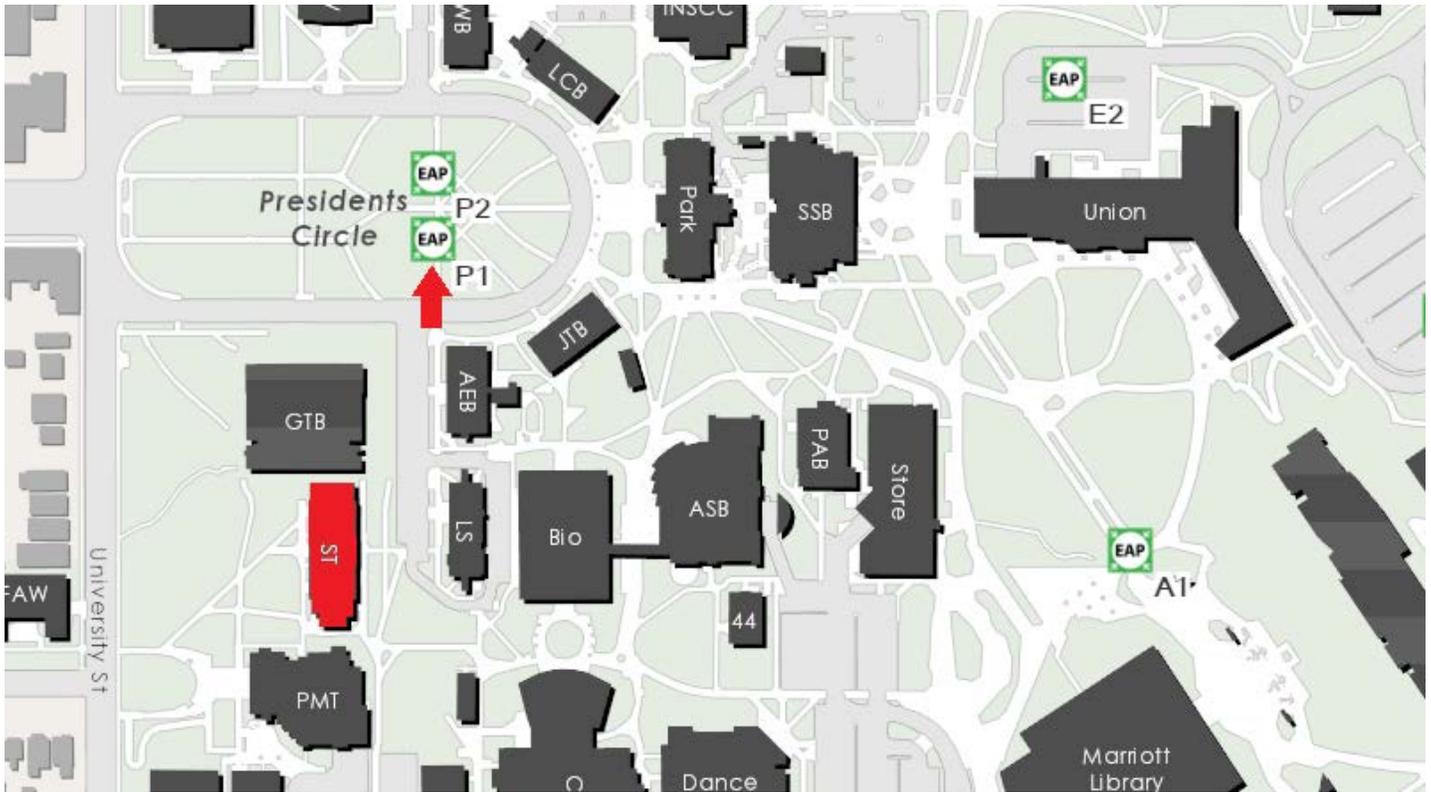
**Wellness Statement:** Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness ([www.wellness.utah.edu](http://www.wellness.utah.edu); 801-581-7776).

**Student Code:** (Policy 6-400) All students are expected to maintain professional behavior in the classroom setting, according to the Student Code ([regulations.utah.edu/academics/6-400.php](http://regulations.utah.edu/academics/6-400.php)). Students have specific rights in the classroom as detailed in S. II of the Code. The Code also specifies standards of behavior (S. III) and academic conduct (S. V). "Students must adhere to generally accepted standards of academic honesty, including but not limited to refraining from cheating, plagiarizing, research misconduct, misrepresenting one's work, and/or inappropriately collaborating" (S. VB). According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors. Students have the right to appeal such action to the Student Behavior Committee.

**Incomplete Policy:** An "I" will only be given for work not completed because of circumstances beyond the student's control, providing the student is passing the course and needs to complete 20% or less of the work. Valid reasons for an "I" grade include: (a) An illness (documented by a medical statement) that precludes the ability of the student to perform; (b) an accident or situation that prevents the student from physically being present (documentation may be required); (c) Extreme emotional or other mental circumstances that are severe enough to interfere with a student's normal academic performance. If you do receive an "I", do not register for the course again. You must complete the required work in the time agreed by you and the instructor. If the work is not completed within one year, the grade will change to an "E". ***Faculty will not accept additional work to change the grade after that one-year period.*** If a student has a problem with the course, please deal with it immediately. It is the student's responsibility to contact instructors and submit necessary forms.

Note: The syllabus is not a binding legal contract. It may be modified by the instructor when the student is given reasonable notice of the modification.

# CSBS EMERGENCY ACTION PLAN



## BUILDING EVACUATION

EAP (Emergency Assembly Point) – When you receive a notification to evacuate the building either by campus text alert system or by building fire alarm, please follow your instructor in an orderly fashion to the EAP marked on the map below. Once everyone is at the EAP, you will receive further instructions from Emergency Management personnel. You can also look up the EAP for any building you may be in on campus at <http://emergencymanagement.utah.edu/eap>.



## CAMPUS RESOURCES

**U Heads Up App:** There's an app for that. Download the app on your smartphone at [alert.utah.edu/headsup](http://alert.utah.edu/headsup) to access the following resources:

- **Emergency Response Guide:** Provides instructions on how to handle any type of emergency, such as earthquake, utility failure, fire, active shooter, etc. Flip charts with this information are also available around campus.
- **See Something, Say Something:** Report unsafe or hazardous conditions on campus. If you see a life threatening or emergency situation, please call 911!

**Safety Escorts:** For students who are on campus at night or past business hours and would like an escort to your car, please call **801-585-2677**. You can call 24/7 and a security officer will be sent to walk with you or give you a ride to your desired on-campus location.