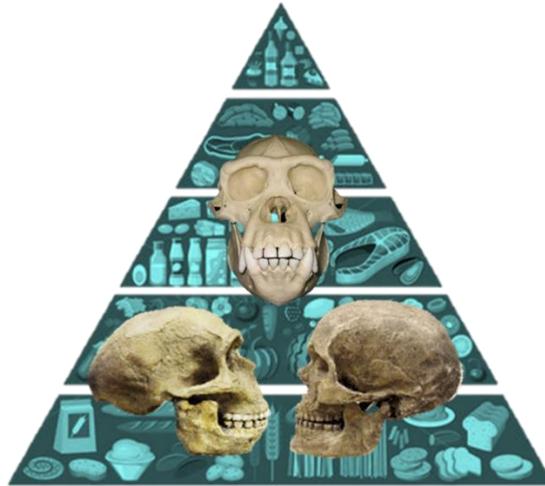


Summer Session 1 2021
ANTH 110F
EVOLUTION OF HUMAN DIET
University of California at Santa Cruz
Department of Anthropology



Instructor: Dr. Vicky M. Oelze
Email: voelze@ucsc.edu
Office: home office
Office hours: via email

Class time: asynchronous
TA: Renee Boucher
GE-requirements: PE-H (Human Behavior)

Course outline

This online lecture will discuss the evolution of human diet and subsistence from a biological anthropological perspective, including evidence on past human behaviors revealed by paleoanthropology, archaeology, archaeometry, primatology, genetics and osteology. It will introduce the students to the main hypothesis related to the evolution of dietary behavior from our early ancestors up to the transition to agriculture and animal husbandry, from man the hunted - to man the hunter - to man the cook – to man the farmer. The course will emphasize how the respective scientific paradigms changed over time, and still are in flux as new archaeological and paleontological sites are discovered and methods are developed. We will also discuss how reconstructing the dietary ecologies of early fossil hominins, Neanderthals and extant great apes is used to understand the varieties of dietary niches occupied by *Homo* in the past. The course will explain the most important bioanthropological methods to assess past diets (stable isotopes, dental microwear, lipid residue analysis, paleopathology, zooarchaeology, paleobotany, paleogenomics, etc.), including newer cutting-edge approaches (ZooMS, phytomicroremains, microbiome). By reading the research articles on these above topics and methods, students will also gain a deeper understanding on how to critically read the primary scientific literature and follow the scholarly discourse.

Materials and texts:

- all lectures videos are recorded on video and uploaded onto Google Drive and can be watched at your own time and your own pace, they remain accessible until the end of the class
- the instructor will also record and upload weekly or biweekly Question & Answer (Q&A) videos based on anonymous student questions sent to her via email. This will be sort of a virtual discussion which students can participate in remotely. So please send Vicky your questions regularly!
- lecture material (slides as pdfs) and papers for reading will be made available on CANVAS, no textbooks needed, taking notes is your own responsibility

Course requirements and exams:

Watch the lecture slides with full attention and make notes, particularly on points and key terms highlighted in teal color in the slides, they will be subject to exam questions. There will be two written exams, provided as multiple choice and/or short answer format tests, and we will do several speed quizzes on scientific papers you will be asked to read.

Midterm Theory & Method Exam – 30% (Wednesday July 7th): covering all lectures and texts since the start of course, with a strong focus on the basic theories and methods. Exam will be held online on CANVAS during regular class time. Also pay attention to our TAs reminder emails!

Speed Quizzes - 20% (tba): we will do 2 or 3 just a few-minute long quizzes here through CANVAS, giving you 48h to read a paper from the readings and asking you to answer a few simple questions related to that reading (to keep you guys engaged and make you actually read! :)

Final Exam – 50% (Friday July 23rd): covering all lectures, videos, guest lectures, and Q&A videos of the entire course. Exam will be held online on CANVAS during finals week.

Missing exams/presentations:

missed exams or quizzes are scored as zero. In the event of illness or emergency you are responsible to inform the instructor, TA or the anthropology dept. main office (831-459-2615) BEFORE the exam/presentation. Only if you do this and provide a valid documentation (i.e. doctor's note) we can schedule a make-up test.

Student Accommodations:

UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your “Accommodation Authorization Letter” from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, as soon as possible in the academic quarter, preferably within 1 week and please not later than 2 weeks. I also am open to and want to encourage you to discuss with me ways I/we can ensure your full participation in this course. If you have not already done so, I encourage you to learn more about the many services offered by the DRC. You can visit their website (<http://drc.ucsc.edu/index.html>) make an appointment, and meet in-person with a DRC staff member. The phone number is 831-459-2089 or email drc@ucsc.edu.

Learning outcomes:

By actively participating in and passing the course the students will

- have shown their ability to comprehend the basic theoretical and methodological approaches to study past human dietary behavior, including the most recent and cutting-edge approaches used in bioanthropology.
- gain experience in reading the most relevant scientific literature in this field and improve their skills in scientific thinking and argumentation.
- be exposed to the various scenarios on how dietary behavior shaped and evolved over time and which aspects of diet are key aspects to our species and make us human.

Further recommended (not mandatory) books, in case any of you get hooked on the subject

- Wrangham (2009): “Catching fire- how cooking made us human”
- Ungar (2006): “Evolution of the Human Diet: The Known, the Unknown, and the Unknowable”
- B. Stanford and H. T. Bunn (2001): “Meat-Eating and Human Evolution”

Course online schedule – Summer 2021

Week	General topic	topic
1 21-25 th June	Diet - basics & theory	Intro to teacher, topic and syllabus
		Defining diets & subsistence
		Theories on human paleodiet
	Reconstructing past diets	Methods to study diet 1
		Methods to study diet 2
2 28 th June-2 nd July	Origins of human diet	Great ape diets
		Fossil hominin diets
	Hunter-gatherers	Meat eating & human evolution
		Plant eating & human evolution
3 5-9 th July	midterm	<i>No class- independence day break</i>
		Midterm Theory & Methods, Wed 7th of July (1.5h)
	Adapting and Cooking	Genetic adaptations to diet
		Cooking: Fire, tubers and starches
4 12-16 th July	Domesticating the world	Domesticating animals
		Domesticating plants
	Exploiting the oceans	Marine foods in human evolution
		<i>Guest lecture</i> Eréndira M. Quintana Morales
5 19-23 th July	Diet & health	(Mal)nutrition & the skeleton
		The gut microbiome
	Special foods	The drunken monkey hypothesis
		Final Exam, Friday 23rd of July (2h)