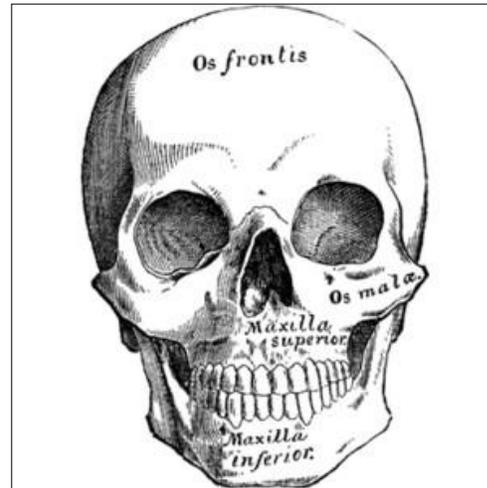


ANTH-3372/6372
Human Osteology
Fall 2017

T/TH 11:00 a.m. - 12:15 p.m.
Location: Garland 109
Instructor: Keitlyn Alcantara
Email: keitlyn.alcantara@vanderbilt.edu
Office hours (Garland 109):
T 9:00 a.m.-10:30 a.m.
W 10:00 a.m. -12:00 p.m.



Course Description:

Human osteology, the study of human bones, is applicable in a variety of contexts, including medical, forensic, biological and bioarchaeological settings. In this course we will take an anthropological approach, focusing on the human skeleton not only as a reflection of an individual's life history, but also as a site of social meaning in life and after death. Throughout the semester, you will learn to identify the 206 bones and 32 teeth of the human body, and learn the standard methods for the estimation of sex, age, and stature. In addition to mastering osteological methods, the readings for each week will challenge you to think about the different contexts in which osteology is applied, and the types of questions that can be asked through skeletal analysis.

This course covers complex material, and requires that students be able to quickly learn large amounts of new skeletal anatomy each week. This knowledge will be tested through timed weekly quizzes in which you must identify complete and/or fragmentary bones, and specific anatomical features. In order to master the material, you should expect to spend several hours each week (**outside of class**) studying skeletal material in the lab.

Structure of the Course:

There will be a mixture of lectures, videos, readings, discussions, and lab study. You are expected to attend all classes and read all materials. Preparation is essential so that you can contribute to class discussion and participate in laboratory study of the skeletal material. You will be quizzed on your knowledge of skeletal anatomy and related material **every Tuesday** at the beginning of class (with some exceptions; see weekly schedule). There is one midterm and a final exam, both of which are cumulative.

Required Texts

White, Tim D., Pieter A. Folkens. 2005. *The Human Bone Manual*. 1st ed. San Diego, Calif.: Academic Press.

Martin, Debra L., Ryan P. Harrod, Ventura R. Perez. 2013. *Bioarchaeology: An Integrated Approach to Working with Human Remains*. Springer.

Additional readings are listed at the end of the syllabus and will be uploaded to Brightspace. All readings should be completed for the day under which they are listed. *I reserve the right to delete or add articles to your reading list throughout the semester.*

Grading

Participation	10%
Weekly Quizzes	30%
Midterm	15%
Skeletal Report	10%
Research Paper	10%
Final Exam	25%

Assignments:

Participation:

Participation grades are determined through class attendance, active participation in discussions, and demonstrated engagement with materials. I hope to cultivate a sense of community within the classroom, where you feel comfortable to express your opinions, ask for clarifications, and contribute comments and critiques. However, to create such a community requires active and respectful participation from you, the student. This means coming to class prepared, listening to your fellow students, and reflecting on discussions. I am aware that not all students feel comfortable speaking out in class. While this is a useful life skill to develop, and I encourage you to do so, I also view contributions such as thoughtful written responses or visits during office hours as valid demonstrations of participation.

Weekly Quizzes:

Weekly quizzes are cumulative, covering the material taught in the previous weeks. This includes identification of bone fragments, as well as short answer questions relating to the weeks' readings. Quizzes are administered on **Tuesdays**, at the beginning of class. I will be available for lab hours (9-10:30 AM) preceding the quiz, but will ask all students to exit the lab in the half hour before the quiz. We will grade the quizzes together in class, so that you can make note of any errors and be aware of what you need to study for the next week. Quizzes are not intended to be a source of stress, but rather a way of

“checking in” on your mastery of the material. Each quiz is worth three points. There will be ten quizzes, two of which may be dropped at the end of the term. Because two scores may be dropped, there will be *no make-up opportunities for missed quizzes*.

Midterm:

The midterm will be composed of a practical section (similar to the weekly quizzes), and a short answer section, in which you will be expected to respond to questions about the readings and concepts discussed throughout the semester. The midterm is during normal class hours on **October 10th**.

Skeletal Report:

At the beginning of the semester, you and a partner will be assigned a Teaching Skeleton. As we progress through the semester, you will learn the methodology for developing a complete biological profile and element inventory of the skeleton. The Skeletal Report will be a formal report documenting this information. More detailed instructions and a grading rubric will be distributed after fall break. Each group of 2-3 students will submit a single document. Final reports are due **December 5th at 12 p.m. (noon)**.

Research Project:

Each of you decided to take this course for unique and varied reasons. Perhaps you took the course as a pre-med requirement, or maybe you broke your leg once and have always been fascinated by how it healed. This paper is an opportunity for each of you to conduct an in-depth exploration of an aspect of osteology that interests you. The topic is your choice (pending instructor approval), and can include a more thorough examination of a topic covered in class, or something completely different. To ensure that the project is well developed, and to give me an opportunity to hear about your interests, there will be several points throughout the semester where you will check in with me.

- Before October 17th: Informal chat with instructor to discuss topic ideas
- October 17th: Brief paragraph (3-4 sentences) giving rough idea of paper topic (due in class)
- November 7th: Abstract and bibliography due in class
- November 13th: I will provide class time for last minute research paper questions
- **November 16th: Final paper due by 4 p.m.** The paper must be submitted in printed form, to my mailbox in Garland 124 (Anthropology Main Office)

Final Exam:

The final exam is cumulative and will be in a similar format to the midterm, with a practical and written component. The final exam time is set by the university and cannot be changed. The final exam date is **Saturday, December 16th at 3 p.m.** An alternate exam is scheduled for **Tuesday Dec. 12 at 12 p.m. (noon)**.

Missed Exam/Late Assignment Policy

It is the policy of Vanderbilt to make every reasonable effort to allow members of the university community to observe their religious holidays without academic penalty. Please make arrangements with the instructor by **September 1st** if you expect to miss class or an examination because of a religious holiday or observance.

Makeup dates cannot be scheduled for Weekly quizzes. A single alternate date will be scheduled for the midterm and final exams. The Skeletal Report and Research Paper must be received by the due date. I will deduct a third of the letter grade for every day that an assignment is late (thus after one day an A drops to an A-, after two days, it drops to a B+ etc.).

Course Materials:

Powerpoint Slides

The evening after each class, I will upload the PowerPoint slides to Brightspace. These slides are intended to help you study, *not as a substitute for attending lecture*. Each class will consist of discussion or other group activities, thus there will likely be material covered in class that does not appear in the PowerPoints. This material can be included in quizzes and exams, so it is to your benefit to attend every lecture.

Readings

The readings for each week can be found on Brightspace under the "Readings" tab, or in your required textbook. I reserve the right to add or change weekly readings, and will notify you of any changes via email.

Teaching Skeleton

At the beginning of the semester, you and a partner will be assigned a teaching skeleton. For the duration of the semester, you will be responsible for this skeleton. Please remember that these are not simply class materials- each teaching skeleton represents **a person** who donated their body to science for your learning benefit. As such, each skeleton should be treated with respect and handled with utmost care. Please refer to the instructions posted in class regarding how to properly handle and protect the skeletal material.

Osteology Lab

The osteology lab will be available for study during "open lab hours" outside of regularly scheduled class time and during office hours. You may either request a lab key from me, or obtain one from the Anthropology Office Assistant and Manager (Frank Midgley or Sarah Nagy in Garland 124). The Anthropology Office is open Monday-Friday 9 a.m.-4 p.m. Open lab hours will be posted on the lab door. The lab will be closed for the 30 minutes before each class.

Course Policies

Laptop and smartphone use during lecture is not allowed, in an attempt to minimize distractions and increase retention of material.

If you have a documented disability, please see the instructor as soon as possible for classroom accommodation. You may also contact Disability Services at EAD, at Phone: 615-322-4705. The office is located in the Baker Building, Suite 108.

Honor Code

The Vanderbilt Honor Code applies to all tests, examinations, and other assignments in this class. If you have any questions regarding what constitutes a violation of academic integrity in this course, please consult with your instructor. Also, refer to the detailed description of the Honor System in the 2015/2016 Student Handbook:

http://www.vanderbilt.edu/student_handbook/the-honor-system/

Readings (found on Brightspace)

Cattaneo, Cristina. 2007. "Forensic Anthropology: developments of a classical discipline in a new millennium". *Forensic Science International* 165:185-193.

Cucina, Andrea, and Vera Tiesler Blos. 2003. "Dental Caries and Antemortem Tooth Loss in the Northern Peten Area, Mexico: A Biocultural Perspective on Social Status Differences Among the Classic Maya." *American Journal of Physical Anthropology* 122: 1–10.

Feltham, Patricia Jane. 2002. "Yungas and Yauyos - The Interface Between Archaeology and Ethnohistory as Seen from the Lurin Valley." In: *Wars and Conflicts in Prehispanic Mesoamerica and the Andes: Selected Proceedings of the Conference Organized by the Société Des Américanistes de Belgique with the Collaboration of Wayleb (European Association of Mayanists)*: Oxford: John and Erica Hedges Ltd, p. 128-145.

Gould, Stephen Jay. 1981. "Measuring Heads: Paul Broca and the Heyday of Craniology." In *The Mismeasure of Man*, New York: Norton, p. 73–112.

Gravlee, Clarence C. 2009. How Race Becomes Biology: Embodiment of Social Inequality. *American Journal of Physical Anthropology* 139:47-57.

Judd, Margaret. 2008. "The Parry Problem." *Journal of Archaeological Science* 35(6): 1658–66.

- Katzenberg, Margaret Anne. 2000. "Stable Isotope analysis as a tool for studying past diet, demography and life history". In: *Biological Anthropology of the Human Skeleton*.
- Klaus, Haagen D., Clark Spencer Larsen, Manuel E. Tam. 2009. "Economic Intensification and Degenerative Joint Disease: Life and Labor on the Postcontact North Coast of Peru". *American Journal of Physical Anthropology* 139:204-221.
- Klesert, Anthony L., and Shirley Powell. "A Perspective on Ethics and the Reburial Controversy." *American Antiquity* 58, no. 2 (1993): 348–54.
- Larsen, Clark Spencer. "Ch. 5: Activity Patterns: 1. Articular and Muscular Modifications." In *Bioarchaeology: Interpreting Behavior from the Human Skeleton*, 161–94. Cambridge: Cambridge University Press, 1997.
- Lukacs, John R. 1998. "Fertility and Agriculture Accentuate Sex Differences in Dental Caries Rates". *Current Anthropology* 49(5):901-914.
- Marquez Morfin, Lourdes, and Andres del Angel. "Height among Prehispanic Maya of the Yucatán Peninsula: A Reconsideration." In *Bones of the Maya: Studies of Ancient Skeletons*, edited by Stephen L. Whittington and David M. Reed, 51–61. Tuscaloosa, AL: University of Alabama Press, 2006.
- Mummert, Amanda, Emily Esche, Joshua Robinson, George J. Armelagos. 2011. Stature and Robusticity during the agricultural transition: Evidence from the bioarchaeological record. *Economics and Human Biology* 9:284-301.
- Meighan, Clement W. 1992. "Some Scholars' Views on Reburial." *American Antiquity* 57(4): 704–10.
- Nystrom, Kenneth C. "The Bioarchaeology of Structural Violence and Dissection in the 19th Century United States." *American Anthropologist* 116, no. 4 (2014): 1548–1433.
- Pollan, Michael. 2006. "The Plant. Corn's conquest." In: *The Omnivore's dilemma: a natural history of four meals*. New York: Penguin Press.
- Phillips, Shawn M. "Worked to the Bone: The Biomechanical Consequences of 'Labor Therapy' at a Nineteenth Century Asylum." In *Human Biologists in the Archives*, edited by D. Ann Herring and Alan C. Swedlund. Cambridge: Cambridge University Press, 2003.
- Smay, Diana, and George J. Armelagos. 2000. "Galileo Wept: A Critical Assessment of the Use of Race in Forensic Anthropology." *Transforming Anthropology* 9(2): 19–29.

- Stone, Pamela K. "Binding Women: Ethnology, Skeletal Deformations, and Violence against Women." *International Journal of Paleopathology* 2 (2012): 53–60.
- Torres Rouff, Cristina. 2002. Cranial Vault Modification and Ethnicity in Middle Horizon San Pedro de Atacama, Chile. *Current Anthropology* 43(1):163-171.
- Walker, Philip L., and Della Collins Cook. 1998. "Gender and Sex: Vive La Difference." *American Journal of Physical Anthropology* 106(2): 255–59.
- Walker, Philip L. 2001. "A Bioarchaeological Perspective on the History of Violence." *Annual Review of Anthropology* 30: 573–96.
- Weiss, E., and R. Jurmain. 2007. "Osteoarthritis Revisited: A Contemporary Review of Aetiology." *International Journal of Osteoarchaeology* 17: 437–50.
- Worthman, Carol M. 1995. Hormones, Sex and Gender. *Annual Review of Anthropology* 24:593-616.