

# Bioarchaeology

Proposed Course

**Instructor:** Kathryn Meyers Emery

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## **Course Description**

The human skeletal system is incredible- it is the underlying structure that maintains our soft tissue, it keeps a record of the diseases and trauma we experience in life, and it changes throughout our life. By examining the way the skeletons of humans today and in the past we can learn about who these people were, what they experienced, and the general quality of their lives. Bioarchaeology is the study of human remains, and gives us fantastic insight into past populations.

This course will provide you with an introduction to bioarchaeology method, theory and development of the study of the dead. The course is focused around the study of the human skeleton and how we can use this information to learn more about the past.

## **Course Objectives**

In this course, students will be able to:

1. Explain how these bones can be used to interpret human behavior and identities of past people
2. Understand how this type of evidence fits into broader studies of past populations, as well as how to apply this knowledge to modern populations
3. Gain an understanding of the role the human skeleton plays in solving modern forensic cases

## **Texts**

Buikstra, J.E. and L.A. Beck. 2006. Bioarchaeology: The Contextual Analysis of Human Remains. Academic Press. (B&B) (Not necessary to buy)

Other articles and texts will be provided online. Please check online for these materials. They will be listed in the syllabus. If you have trouble accessing a text, please alert the instructors prior to the due date. It is your responsibility to make sure you have access to everything you need to succeed in this course. Technical issues do happen and as long as you alert us we will do our best to fix the problems.

## **Course Requirements**

**Reading:** All readings are mandatory for the class, and must be completed prior to the due date.

**Participation:** While there is no attendance grade, this course is based on discussion. Your participation in these discussions is based on your completion of the readings and assignments, as well as attendance in the course.

**Assignments:** You will be expected to complete a number of writing assignments throughout this course. The assignment is due at the beginning of class each day. All assignments can be found online on D2L.

**Practical Exams:** Throughout the semester, there will be three practical exams to demonstrate knowledge of the human skeleton. More details will be given prior to the exams.

**Presentation:** All students will present a ten-minute presentation of a bioarchaeological case study- details will be given during the course.

**Final Exam:** The final exam will be conducted at the end of the semester and completed in class. You will have 1 hour and 20 minutes to complete the exam, which will be made up of multiple choice and practical examination of a skeleton.

## **Class Schedule**

### **Week 1**

#### **Class 1: Course Introduction**

Reading Due: None

#### **Class 2: Introduction to Bioarchaeology**

Reading Due:

Parker Pearson, Michael. Chapter 1: Learning from the Dead. 1999 The Archaeology of Death and Burial. College Station: Texas A&M University Press.

### **Week 2**

#### **Class 1: Introduction to Bioarchaeology**

Reading Due: B&B Ch. 1-2

#### **Class 2: Introduction to Bioarchaeology**

Reading Due: B&B Ch. 4

### **Week 3**

#### **Class 1: Ethics & NAGPRA**

Reading Due:

Walker, P.L. 2008. Bioarchaeological ethics: A historical perspective on the value of human remains. In: Biological Anthropology of the Human Skeleton, 2nd ed., M.A. Katzenberg and S.R. Saunders, eds., Wiley, pp. 3 - 40.

#### **Class 2: Taphonomy**

Reading Due:

Stodder, A.L.W. 2008. Taphonomy and the nature of archaeological assemblages. In: Biological Anthropology of the Human Skeleton, 2nd ed., M.A. Katzenberg and S.R. Saunders, eds., Wiley, pp. 71 - 114.

### **Week 4**

#### **Class 1: Interpreting Individuals**

Reading Due:

Zvelebil, M., & Weber, A. (2012). Human bioarchaeology: Group identity and individual life histories – Introduction Journal of Anthropological Archaeology DOI: 10.1016/j.jaa.2012.01.003

Mayes, A.T. and S.B. Barber 2008. Osteobiography of a high-status burial from the lower Río Verde Valley of Oaxaca, Mexico. *In* International Journal of Osteoarchaeology 18(6): 573-588.

#### **Class 2: Interpreting Individuals**

Reading Due:

A.T. Boutin (2011). Crafting a bioarchaeology of personhood: osteobiographical narratives from Alalakh. In: Breathing New Life into the Evidence of Death: Contemporary Approaches to Bioarchaeology, 109-133.

Killgrove, K. 2012. Pros and Cons of Osteobiography. Powered by Osteons.  
<http://www.poweredbyosteons.org/2012/11/pros-and-cons-of-osteobiography.html>

## **Week 5**

### **Class 1: Interpreting Populations**

Reading Due:

Zakrzewski, Sonia 2011. Population Migration, Variation, and Identity: An Islamic Population in Iberia. *In Social Bioarchaeology*. Agarwal and Glencross, eds. Blackwell Publishing.

### **Class 2: Interpreting Populations**

Reading Due:

Larsen, C.S. et al. 2001. Frontiers of Contact: Bioarchaeology of Spanish Florida. *Journal of World Prehistory* 15(1)

## **Week 6**

### **Class 1: Mummification**

Reading Due:

Selections from Taylor, John H. and Daniel Antoine 2014. *Ancient Lives New Discoveries: Eight Mummies, Eight Stories*.

### **Class 2: Cannibalism**

Reading Due:

S. Jones, H. Walsh-Haney, & R. Quinn (2012). Kana Tamata or Feasts of Men: An Interdisciplinary Approach for Identifying Cannibalism in Prehistoric Fiji *International Journal of Osteoarchaeology*.

## **Week 7**

### **Class 1: Cremation**

Reading Due:

Williams, Howard 2008 Towards an Archaeology of Cremation. *In The Analysis of Burned Human Remains*. C. Schmidt & S. Symes, eds. Great Britain: Academic Press. p. 239-269.

### **Class 2: Secondary Burial**

Reading Due:

Weiss-Krejci, Estella. 2005 Excarnation, Evisceration, and Exhumation in Medieval and Post-Medieval Europe. *In Interacting with the Dead: Perspectives on Mortuary Archaeology for the New Millennium*. G. Rakita, J. Buikstra, L. Beck and S. Williams, eds. Gainsville: University Press of Florida. Pp. 155-172.

## **Week 8**

### **Class 1: Gender**

Reading Due:

Readings on 'How the Prince Became a Princess' from various authors.

<https://bonesdontlie.wordpress.com/2013/10/22/archaeological-oops-the-prince-is-actually-a-female/>

### **Class 2: Life Course**

Reading Due:

Barrett, Autumn and Michael Blakley. 2011. Life Histories of Enslaved Africans in Colonial New York. *In* Social Bioarchaeology. Agarwal and Glencross, eds. Blackwell Publishing.

Halcrow, Siân E. & Nancy Tayles 2008. The Bioarchaeological Investigation of Childhood and Social Age: Problems and Prospects Journal of Archaeological Method Theory 15: 190–215.

### **Week 9**

#### **Class 1: Diet**

Reading Due:

Lightfoot E, Slaus M, & O'Connell TC (2012). Changing cultures, changing cuisines: Cultural transitions and dietary change in iron age, roman, and early medieval croatia. American journal of physical anthropology, 148 (4), 543-56 PMID: 22552855

#### **Class 2: Diet**

Reading Due:

Reitsema LJ, & Vercellotti G (2012). Stable isotope evidence for sex- and status-based variations in diet and life history at medieval Trino Vercellese, Italy. American journal of physical anthropology, 148 (4), 589-600 PMID: 22553011

### **Week 10**

#### **Class 1: Behavior and Activity**

Reading Due:

Palmer, J., Hoogland, M., & Waters-Rist, A. (2014). Activity Reconstruction of Post-Medieval Dutch Rural Villagers from Upper Limb Osteoarthritis and Enthesal Changes International Journal of Osteoarchaeology DOI: 10.1002/oa.2397

#### **Class 2: Behavior and Activity**

Reading Due:

Gladiators: Back from the Dead

### **Week 11**

#### **Class 1: Trauma**

Reading Due:

Readings on Prehistoric Violence

Fibiger L, Ahlström T, Bennike P, & Schulting RJ (2013). Patterns of violence-related skull trauma in neolithic southern scandinavia. American journal of physical anthropology, 150 (2), 190-202 PMID: 23184653

**Class 2: Trauma**

Reading Due:

Constantinescu, M., Gavrilă, E., Greer, S., Soficaru, A., & Ungureanu, D. (2015). Fighting to the Death: Weapon Injuries in a Mass Grave (16th-17th Century) from Bucharest, Romania International Journal of Osteoarchaeology DOI: 10.1002/oa.2450

**Week 12****Class 1: Pathology (Malnutrition)**

Reading Due:

Case study readings on rickets and scurvy

**Class 2: Pathology (Infectious Disease)**

Reading Due:

Case study readings on leprosy, tuberculosis and syphilis

**Week 13****Class 1: Forensic Case Studies**

Reading Due:

Selections from Sachs, J.S. 2001. Corpse. Perseus Books Group.

**Class 2: Forensic Case Study**

Reading Due:

Selections from Sachs, J.S. 2001. Corpse. Perseus Books Group.

**Week 14****Class 1: Forensic Case Studies**

Reading Due:

Selections from Sachs, J.S. 2001. Corpse. Perseus Books Group.

**Class 2: Communicating Bioarchaeology Presentations**

Reading Due:

Meyers Emery, K., Killgrove, K. (2015). Bones, Bodies, and Blogs: Outreach and Engagement in Bioarchaeology, Internet Archaeology 39.

<http://dx.doi.org/10.11141/ia.39.5>

**Week 15****Class 1: Communicating Bioarchaeology Presentations**

Reading Due:

None

**Class 2: Communicating Bioarchaeology Presentations**

Reading Due:

**None**

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