

ANTH 430 Advanced Forensic Anthropology Spring 2016

Instructor: Maranda A. Kles, Ph.D
mkles@louisiana.edu

Class Time and Room: Mouton 109/ Burke-Hawthorne 137
Monday and Wednesday 1:00-2:15

Office Hours and Location: Mouton Hall 109B
Monday, Wednesday, Friday 10:00-10:50
Wednesday 2:30-4:00
Or by appointment

Course Description: This course will be an in-depth review and discussion of methods and theory in forensic anthropology. Forensic anthropology focuses the wider scope of skeletal biology on problems of medicolegal significance, primarily in determining personal identity and cause of death from human remains. This class will teach forensic techniques and we will discuss the full range of problems associated with human skeletal identification and trauma analysis.

Course Objectives: By the end of this course the student should be able to:

- Discuss in detail the biological profile
- Identify the key methods for evaluating each aspect of the biological profile.
- Discuss the shortcomings of these methods.
- Develop a biological profile for a set of human skeletal remains.

Recommended Textbook: Christensen, A, Passalacqua, N, and Bartelink, E. 2014. Forensic Anthropology: Current Methods and Practice. Academic Press. ISBN: 978-0-12-418671-2

Grading policy: Grades will be assessed based on class attendance (50pts), participation (50pts), topic presentation (50 pts), final case presentation (50 pts), and a final case report (100pts). Attendance is taken in class. Final grades will be:

A	270-300
B	240-269
C	210-239
D	180-209
F	≤179

Participation: Students are expected to attend each class meeting and take an active part in discussion and activities. Active participation requires that you read all assignments and prepare questions and discussion points. I will evaluate your participation on the quality of your contributions, not just the quantity of contributions, participation includes raising insightful questions and discussing articles.

If you know in advance you will be absent please notify me. If you will be absent for an extended period of time please contact the Office of Student Life and Conduct (Martin Hall; 482-6276).

Class presentations: Students will work in groups of 3-4 to prepare a discussion/presentation on trauma. Each group must submit 5 articles to Dr. Kles and select 2 for the class to read. In class each group will be prepared to give a brief overview of the topic and then have discussion questions prepared for the class. Non-presenting groups must read the assigned articles and be prepared to participate as usual.

Final Case Report and Presentation: The class will be divided into two groups and each group will be assigned a case. At the end of the semester each student will turn in an individually written report on the case they analyzed. The report will be written based on the report guidelines presented in class, including citations. Reports will be due at the beginning of the last day of class. During class each group will present the final case results, each student will participate by presenting a portion of the results.

Student behavior, academic honesty, and accommodations: Students must turn off cell phones during class and computers can only be used for note taking. If a student is found to be violating either of these policies they will first be asked to stop the activity, if it continues they will be asked to leave the class room. **No photos or recordings can be taken in class**, unless permission is provided by the instructor.

Due to the sensitive nature of this class students will be required to sign a lab conduct agreement. Any violation of this agreement will result in failure of the course and possible pursuit of additional academic and legal charges.

Any students caught cheating will be receive an "F" for the course. Cheating includes, but is not limited to: working together on exams or the online quizzes, using notes during exams, using information/ assignments from previous semesters, or plagiarizing. Students are expected to adhere to the University of Louisiana at Lafayette's Code of Academic Honesty (found in the Academic Catalog).

Students needing academic accommodations for a disability must first be registered with the Office of Disability Services (ODS; 482-5252) to verify the disability and to establish eligibility for accommodations. Students with accommodations should contact Dr. Kles at their earliest convenience, accommodations cannot be applied retroactively. Slides are always available for additional review during office hours.

Course Outline: General topics and reading assignments. Subject matter is subject to change at the discretion of the professor depending on current events and student interests.

Web Resources:

www.swganth.org

http://anthropology.si.edu/writteninbone/forensic_anthro.html

http://www.pathology.vcu.edu/paleo/a_contents_table.html

***Required Readings**

Chapters from Christensen et al.

Week 1 (January 13):

Introductions

Week 2 (January 20):

Medicolegal Aspects of Death: Cause and manner of death; when is a forensic anthropologist needed?

Forensic Anthropology What is it? How was it developed? Where is it going?

*Cattaneo, C. (2007) Forensic Anthropology: developments of a classical discipline in the new millennium. *Forensic Science International* 165: 185-193.

*Dirkmaat, D. C., L. L. Cabo, et al. (2008). "New perspectives in forensic anthropology." Yearbook of Physical Anthropology 51: 33-52.

Chapter 1 and 4

Week 3 (January 25-27):

Postmortem damage and taphonomy: Taphonomy and time since death - from the biosphere to the lithosphere; Carnivore and scavenger damage.

*Mann RW, Bass WM, Meadows L (1990) Time since death and decomposition of the human body: Variables and observations in case and experimental field studies. *Journal of Forensic Sciences* 35:103–111.

*Ubelaker, D. (1997) Taphonomic Applications in Forensic Anthropology. In Haglund, W. and Sorg, M. Forensic Taphonomy: The postmortem fate of human remains. Boca Raton: CRC Press. 77-90.

Chapter 5

Week 4 (February 1-3):

Osteology and Osteometry: Skeletal anatomy, osteometry and the tools of skeletal analysis. Statistics and reference populations.

Processing remains into evidence

Chapter 2 and 7

Introduction to the set of remains to be analyzed for the final case report.

Week 5: NO CLASS- Mardi Gras

Week 6 (February 15-17):

Determination of biological sex: Skeletal indicators of sex; Anatomical considerations for biological.

*Phenice TW (1969) A newly developed visual method of sexing the os pubis. *American Journal of Physical Anthropology* 30:297-301.

*Rogers, TL (2005) Determining the sex of human remains through cranial morphology. *Journal of Forensic Sciences* 50(3): 1-8

Chapter 8

Week 7 (February 22):

Age at death: Growth and development, and maturation and degeneration; determination of age at death in juveniles; the correlation between stature and age in fetuses and children; Age-related pathology and metamorphic changes in bone.

*Buckberry JL and Chamberlain AT (2002) Age estimation from the auricular surface of the ilium: A revised method. *American Journal of Physical Anthropology* 119:231-239.

Lovejoy CO, Meindl RS, Pryzbeck TR, Mensforth RP (1985) Chronological metamorphosis of the auricular surface of the ilium: A new method for determination of adult skeletal age at death. *American Journal of Physical Anthropology* 68:15-28.

*Hoffman JM (1979) Age estimation from diaphyseal lengths: two months to twelve years.

Journal of Forensic Sciences 24(2):461-466.

*İşcan MY, Loth SR, Wright RK (1984) Age estimation from the rib by phase analysis: White males. Journal of Forensic Sciences 29:1094-1104.

İşcan MY, Loth SR, Wright RK (1985) Age estimation from the rib by phase analysis: White females. Journal of Forensic Sciences 30:853-863.

*Brooks S, Suchey JM. (1990) Skeletal age determination based on the os pubis: A comparison of the Ascadi-Nemeskeri and Suchey-Brooks methods. Human Evolution 5(3):227-38.

Ubelaker D (1999) Estimating age at death. In Human skeletal remains: Excavation, analysis, interpretation. Taraxacum; Manuals of Archaeology. p. 63-71

Chapter 10

Week 8 (February 29- March 2):

Forensic Stature: Determining stature from bones; Anatomical stature vs. recorded stature.

*Trotter M (1970) Estimation of stature from intact long limb bones. In Personal Identification in Mass Disasters, Stewart TD (editor), pp. 71-83. Washington, DC: National Museum of Natural History, Smithsonian Institution.

*Cardoso, H (2009) A test of three methods for estimating stature from immature skeletal remains using long bone lengths. Journal of Forensic Sciences 54(1):13-19.

Searching, mapping, and recovery of remains.

*Haglund, W. (2001) Archaeologists as Forensic Investigators: Defining the Role. Historical Archaeology 35(1):26-34)

Chapter 11 and 6

Field Recovery opportunity (Saturday March 5th)

Week 9 (March 7-9):

Ancestry/ Race: Clinal variation and population affinities; Cultural vs. biological factors.

Edgar HJH (2005) Prediction of race using characteristics of dental morphology. Journal of Forensic Sciences 50:269-273.

*Rhine S (1990) Non-metric skull racing. In Skeletal Attribution of Race: Methods for Forensic Anthropology, Gill and Rhine (editors), pp. 9-20. Albuquerque, NM: Maxwell Museum Anthropological Papers No. 4.

*Ousley, S., R. Jantz, et al. (2009). "Understanding race and human variation: Why forensic anthropologists are good at identifying race." American Journal of Physical Anthropology 139(1): 68-76.

*Edgar, H. J. H. (2009). "Biohistorical approaches to "race" in the United States: Biological distances among African Americans, European Americans, and their ancestors." American Journal of Physical Anthropology 139(1): 58-67.

Birkby, W, Fenton, T, and Anderson, B. (2008) Identifying Southwest Hispanics Using Nonmetric Traits and the Cultural Profile. Journal of Forensic Sciences 53(1):29-33

Chapter 9

Week 10 (March 14-16):

FORDISC

Class presentation preparation meetings.

Week 11 (March 21-23):

Individual Characteristics and Personal Identification: Unique biological markers; medical hardware; comparison of antemortem and postmortem radiographs.

Chapter 12 and 14

Week 12: NO CLASS- SPRING BREAK

Week 13 (April 4-6):

Class Presentations

Trauma and Cause of Death: Blunt trauma and patterned injuries and sharp force.

Chapter 13

Week 13 (April 11-13):

Class Presentations

Trauma and Cause of Death: Ballistic trauma and fire damage

Week 14 (April 18-20):

Lab time for case analysis

Week 15 (April 25-27):

Lab analysis

Case presentations and final paper submission