

ANT 3520 Section 9265 - Skeleton Keys: A Survey of Forensic Anthropology

Instructor: Dr. Michael Warren (<u>mwarren@ufl.edu</u>) phone 273-8320

T.A. Taylor Polvadore (taylorpolvadore @ufl.edu)

Class Time and Room: Monday, Period 6 (12:50--1:40pm); Little Hall; Room 0101.

Wednesday, Periods 5 & 6 (11:45-1:40pm); Little Hall; Room 0101.

Office Hours: Monday, 3:00pm - 5:00pm, in the C.A. Pound Human Identification Laboratory, Cancer & Genetics Building, Ground Floor. Ms. Polvadore's office hours will be held in Turlington B-325 on Wednesdays from 10:00-11:30am, and Thursdays from 1:00 – 2:30pm.

Course Objectives: This course provides a broad overview of forensic anthropology — an applied field of biological 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. While I will not be teaching proficiency in forensic techniques in this class, we will discuss the full range of problems associated with human skeletal identification and trauma analysis. These problems will serve as a model for understanding the broader aspects of applied anthropology.

Required Textbook: Warren MW, Parr NL, Skorpinski KE and Zambrano CJ. <u>Bare Bones: A Survey of Forensic Anthropology, 2nd Edition</u>. Kendall-Hunt Publishing. ISBN: 978-0-7575-8785-60. The book is available in the campus bookstore, Orange and Blue Textbooks, Amazon.com, and Kendall-Hunt Publishing. *Note: The authors do not receive royalties from the sale of this textbook*.

Grading policy: There will be 3 exams. Attendance and classroom contribution will be heavily considered. I will attempt to reward attendance by constructing the exams so that students who come to class do better on the tests. Final grades will be A (93-100), A- (90-92), B+ (87-89), B (83-86), B- (80-82), C+ (77-79), C (73-76), C- (70-72), D+ (67-69), D (63-66), D- (60-62), E (<60). Students are responsible for all of the information provided in the textbook. Make-up exams for excused absences will be administered on the last day of classes. Any students caught cheating will be receive an "E" for the course.

Students with letters from the Disability Resource Center should contact Dr. Warren at their earliest convenience. We will employ a note-taker to record the lectures and PowerPoints will be distributed to students requiring accommodations.

Course Outline: General topics and reading assignments. Page numbers may be inaccurate due to new text. Subject matter is subject to change at the discretion of the professor depending on current events and student interests.

January 7th: Introduction and Ground Rules: Announcement of course number, meeting times and

location; Format, evaluations, text and grades; What is Forensic Anthropology? How can

anthropology help solve crimes?

January 12th: No Classes; Office of Scientific Area Subcommittee Meeting, NIST.

January 14th: Medicolegal Aspects of Death: The circumstances of human death - unattended death

and/or suspicious circumstances; the origin of skeletal cases; Cause and manner of

death; when is a forensic anthropologist needed? (Reading: Chapter 1)

January 19th: Dr. Martin Luther King Day; no classes.

January 21st: Consulting and collaboration – the team approach. A Case Study (Reading: Chapter 2).

January 26th: The Medical Examiner and Coroner systems; the relationship between the pathologist and the

anthropologist - the ME office or the field; death investigations

January 28th: Handling of evidence; the law and retention of anatomical specimens for evidence;

biophotography and documentation of evidence. (Chapter 1)

February 2nd: Field Recovery of Human Remains: Ground penetrating radar and other geophysical

techniques for discovering clandestine graves. (Chapter 3)

February 4th: Field Recovery of Human Remains II: Mapping the site. (Chapter 3)

February 9th: Processing Remains into Evidence: Documentation and processing; maceration. (Chapter 3)

February 11th: Laboratory Protocols, Procedures and Quality Assurance

February 16th: Postmortem damage and taphonomy: Taphonomy and time since death - from the biosphere to

the lithosphere; Carnivore and scavenger damage; Forensic Entomology; Ritual use of human

skeletal material - Santeria and Palo Mayombe (Chapter 4)

February 18th: Osteology and Osteometry: Skeletal anatomy, osteometry and the tools of skeletal analysis

(Chapter 5)

February 23rd: Skeletal Analysis: statistics and reference populations (Chapter 5)

February 25th: Midterm Test 1
March 2nd: Spring Break
March 4th: Spring Break

March 9th: Group Characteristics I - Sex and the skeletal biology of birth (*Chapter 6*)

March 11th: Group Characteristics II – 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 (*Chapter 8*)

March 16th: Group Characteristics II – Age at death: Age-related pathology and metamorphic changes in bone (Chapter 8)

March 18th: Group Characteristics IV: Race - fact or fiction? Clinal variation and population affinities.

Assessment of Ancestry (*Chapter 7*)

March 23rd: Group Characteristics III – Forensic Stature: Determining stature from bones; Anatomical stature vs. recorded stature (*Chapter 9*)

March 25th: Individual Characteristics and Personal Identification: Antemortem data - medical records and family histories; Frontal sinuses, 12th ribs and other unique biological markers; old fractures and medical hardware; Forensic Odontology; comparison of antemortem and postmortem radiographs (Chapter 10)

March 30th: Forensic Art: Two and three-dimensional facial approximation; computer-enhanced forensic art (*Chapter 11*)

April 1st: Midterm Test 2

April 6th: Trauma and Cause of Death: Antemortem and perimortem trauma – definitions; mechanisms of injury (*Chapter 12*)

April 8th: Trauma and Cause of Death: Ballistic trauma, blunt trauma and sharpforce trauma. (Chapter 12)

April 13th: Burned Bodies and Cremation: Can a body be destroyed by fire? The process of commercial cremation; mortuary, dental and medical artifacts in personal identification; the anthropometry of cremation. (Chapter 13)

April 15th: Mass Fatalities: Disaster Mortuary Teams and jurisdiction; the World Trade Center & Hurricane Katrina (*Chapter 14*) Human Rights Missions: Documenting human rights abuses; Working with non-governmental organizations; Case history - Atrocities in the Balkans. (*Chapter 15*)

April 20th: Missing in Action - Military Identifications: The U.S. Army Central Identification Laboratory
April 22nd: Midterm Test 3: All make-up exams for excused absences will be administered during this
final class period.