

ANT 3520- Skeleton Keys: Introduction to Forensic Anthropology Spring 2012

Instructor: Maranda A. Kles, M.A., M.S.
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Class Time and Room: Turlington L005
Tuesday 3:00-4:55 pm
Thursday 4:05-4:55 pm

Office Hours and Location: Turlington B327
Tuesday 5:00- 6:00
Thursday 2:00-4:00
Contact for additional times.

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, Zambrano, CZ, and Skorpinski, K. Bare Bones: A Survey of Forensic Anthropology, 2nd edition. Kendall-Hunt Publishing. ISBN: 978-075758756

Grading policy: There will be 3 exams (100pts each), an online quiz (5pts), and a case study (30pts). The exams are constructed so that attendance is rewarded. The case study consists of 3 short answer questions, further details will be provided in class. Attendance is taken in the form of various extra credit opportunities in class. Final grades will be:

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| A | 300-335 |
| B+ | 290-299 |
| B | 279-289 |
| B- | 268-278 |
| C+ | 257-267 |
| C | 245-256 |
| C- | 234-244 |
| D+ | 223-233 |
| D | 211-222 |
| D- | 200-210 |
| E | <200 |

Students are responsible for all of the information provided in the textbook and lecture. Make-up exams for excused absences will be administered during finals week. Students who are absent from class with an excuse should contact Ms. Kles for notes or an outline of the material missed; slides will not be distributed due to content concerns. Students without an excuse can come to office hours to review the missed.

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. Photos cannot be taken in class, unless permission is provided by the instructor. Several handouts are provided to help with studying. Slides are always available for review during office hours. Similar material can also be found on the internet for review.

Any students caught cheating will be receive an "E" for the course. Cheating includes, but is not limited to: working together on exams, the online quiz, or the final take home project, using notes during exams, or using information/ assignments from previous semesters. Students are expected to adhere to the University of Florida Honor Code/ Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

Students with letters from the Disability Resource Center should contact Mrs. Kles at their earliest convenience. A note-taker may be employed to record the lectures and outlines may be distributed to students requiring accommodations. Slides will not be distributed due to content concerns, but they are always available for additional review.

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.

Week 1: **Introduction and Ground Rules:** Syllabus Review; Instructor's background and interests; Student backgrounds; Review of the syllabus; Discussion of the somber subject matter and need for a professional demeanor.

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? (Chapter 1)

The Medical Examiner and Coroner systems; the relationship between the pathologist and the anthropologist - the ME office or the field; Death investigations. (Chapter 1)

Week 2: **What is Forensic Anthropology?** Brief history of Physical and Forensic Anthropology; Osteology, human variation and life history theory; Applied Anthropology. (Chapter 2)

Consulting and Collaboration: The team approach. Players involved in Medico-legal death investigation

Week 3: **Field Recovery of Human Remains:** Mapping; Techniques for discovering clandestine graves; Forensic photograph; Forensic Archaeology (Chapter 3).

Case presentation: Case highlighting search and recovery and anthropological techniques.

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

Week 4: **Postmortem damage and taphonomy:** Taphonomy and time since death - from the biosphere to the lithosphere; Carnivore and scavenger damage; Forensic Entomology (Chapter 4).

Week 5: **Osteology and Osteometry:** Skeletal anatomy, osteometry and the tools of skeletal analysis. Statistics and reference populations (Chapter 5).

Review

Exam I- February 9th

- Week 6:** **Valentine's Day Massacre:** Forensic tales surrounding Valentine's Day and forensic techniques.
- Group Characteristics I - Determination of biological sex:** Skeletal indicators of sex; Anatomical considerations for biological sex (Chapter 6); Case histories.
- 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; Age-related pathology and metamorphic changes in bone (Chapter 8); Case histories.
- Week 7:** **AAFS meetings**
- Video**
- Online Quiz**
- Week 8:** **Group Characteristics III – Forensic Stature:** Determining stature from bones; Anatomical stature vs. recorded stature (Chapter 9).
- Group Characteristics IV: Race - fact or fiction?** Clinal variation and population affinities (Chapter 7); Cultural vs. biological factors; Case histories
- FORDISC Example:** Case presented for age, sex, and ancestry assessment. FORDISC utilized for metric analysis; used, advantages, and short-comings of the program.
- Week 9:** **SPRING BREAK March 5-9**
- Week 10:** **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).
- Forensic Art:** Two and three-dimensional facial approximation; computer-enhanced forensic art (Chapter 11).
- Week 11:** **Bone Toxicology:** Determination of drug use from bone samples; utility in identification; research development process; review of drugs of abuse.
- Review**
- Exam II- March 22nd**

Week 12: **Trauma and Cause of Death:** Blunt trauma and patterned injuries (Chapter 12).

Trauma and Cause of Death: Sharp force trauma (Chapter 12).

Trauma and Cause of Death: Ballistic trauma (Chapter 12).

Week 13: **Burned Bodies and Cremation:** The process of commercial cremation; mortuary, dental and medical artifacts in personal identification; other fire-related deaths- anthropological findings (Chapter 13).

The Profession of Forensic Anthropology: Education, career paths, and organizations (Chapter 16).

Professionalism and Ethics: Ethical behavior and considerations in forensics and anthropology in particular

Week 14: **Mass Fatalities:** Disaster Mortuary Teams and jurisdiction; Techniques in identification; Theoretical approach to a new problem: passenger lists and missing persons (Chapter 14).

Mass Fatality Case Histories: ValuJet Flight 592, the World Trade Center and Hurricane Katrina (Chapter 14).

Human Rights Missions: Documenting human rights abuses; Working with non-governmental organizations; Case history - Atrocities in Bosnia and Kosovo (Chapter 15).

Case study released on WebCT

Week 15: **Missing in Action - Military Identifications:** The U.S. Army Central Identification Laboratory - Hawaii; The POW/MIA issue; Fieldwork in Indochina - ancient villages and scrap metal; The nature of forensic identification in high-speed jet crashes; The importance of studies based on military repatriation data.

Lab Tours?

Review

Week 16: **Exam III- April 24th - Case Study due before Exam**

All make-up exams for excused absences will be administered during finals week.