

ANT 3520

Skeleton Keys: Introduction to Forensic Anthropology

Fall 2024, Online

Course Instructor: Sheridan Lea, MSc

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Online Office Hours: Monday 12-2pm and Friday 10am-12noon (available to answer emails and Canvas messages)

Zoom Office Hours: By appointment only (please email to set up)

Teaching Assistant (TA): Shima Pourmomeni

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Zoom Office Hours: By appointment only (please email to set up)

Course Objectives:

*****Some lectures will include disturbing and graphic images. Consider your reaction to this material before taking this course. You will be responsible for all course material.*****

This course provides an introduction to the field of forensic anthropology. Forensic anthropology is an applied area of biological anthropology that focuses on the identification of human skeletal remains in a medicolegal context. This course will introduce you to basic terms and principles of forensic anthropology, focus on concepts and their applications, and present case histories.

This is not intended to be a “how-to” course but a general overview of the discipline. Upon completion of this course, you should be able to:

- Define the field of forensic anthropology and its purview
- Have a general understanding of basic human osteology
- Understand the basic concepts underlying determination of the biological profile, including sex, age, ancestry, and stature
- Describe different types of skeletal trauma, and differentiate between antemortem and postmortem trauma

Course Topic Structure:

To meet the above-stated objectives, the course is structured in a series of 16 modules. Each module is structured to contain lecture video material, requires weekly reading from the Bare Bones text, and has graded assignments linked to the module topic. These modules are partitioned into four main sections:

- 1) Introduction to the Course and Forensic Anthropology
- 2) The Biological Profile and Personal Identification
- 3) Skeletal Trauma and Burned Bone
- 4) Applications and the Profession of Forensic Anthropology

Section 1: Introduction to the Course and Forensic Anthropology

The first two modules describe the field of forensic anthropology – historically and the current science – as well as the larger medicolegal system. In this section, the purpose and the place of forensic anthropology within this larger system will be described. The third and fourth modules more specifically describe the duties of the forensic anthropologist in the field and in the laboratory. Module 5 focuses on taphonomy, which discusses the variety of processes that can alter the body after death, such as decomposition.

Section 2: The Biological Profile and Personal Identification

The sixth module (osteology and osteometry) introduces a much more nuanced look into the anatomy of human bones. The sixth module lays the foundation of the remaining modules in this section, as forensic anthropologists analyze the variation of the human skeleton to help identify individuals, which can be done using the biological profile – basically, a list of an individual's biological demographic descriptors consisting of their sex, age, ancestry, and stature – as well as idiosyncratic skeletal features. Aspects of the biological profile and how we can recognize these aspects in the skeleton are covered in Modules 7 through 10. Idiosyncratic skeletal features and how they are used to personally identify an individual from their skeletal remains are the topic of Module 11, and Module 12 shows how forensic art can aid personal identification efforts. Section 3: Skeletal Trauma and Burned Bone While Section 2 shows how forensic anthropologists can interpret features of the skeleton to assist with the identification of human remains.

Section 3 (Modules 13 and 14): Interpretation of Skeletal Trauma and Burned Bone

The interpretation of skeletal trauma and burned bone can help answer important questions such as, what happened to this individual? When did it happen – before they died, or around the time of death? What sort of implement may have caused the injury to bone?

Section 4: Applications and the Profession of Forensic Anthropology

The final section of this course is presented in Modules 15 and 16 with discussions of the application of forensic anthropology in various contexts (such as with responses to mass fatalities, human rights investigations, and recovering/identifying the remains of the war dead) and the potential, various career paths that forensic anthropologists may pursue.

Course Materials:

Required: Warren MW et al. 2011 Bare Bones: A Survey of Forensic Anthropology. 2nd edition. Kendall Hunt Publishing.

Additional readings will be provided by the instructor and posted on Canvas. Required readings are listed below in the course schedule. All graded assignments will only reference required materials.

Optional readings and videos are also provided in each module to give you additional avenues to learn about forensic anthropology and its specific applications, but will not be required to complete graded assignments or exams successfully.

Grading:

Letter grades are assigned based on the following scale:

A 93% or above	B- 80-82.99%	D+ 67-69.99%
A- 90-92.99%	C+ 77-79.99%	D 63-66.99%
B+ 87-89.99%	C 73-76.99%	D- 60-62.99%
B 83-86.99%	C- 70-72.99%	E below 60%

Grades ending in a fraction of a percentage point will be rounded to the nearest whole number (ex. a grade of 89.6 becomes a 90.0). Further information on current UF grading policies for assigning letter grades can be found here: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Course Mechanics:

Because this is an online class, students are expected to be self-motivated. During the sixteen-week period the class is in session there will be sixteen modules with one a week – excepting the first week, in which you have an introductory module to the course and Canvas along with Module #1. Assignments from the first week of the course will be due with assignments from the second week of the course to accommodate those who add the course late during the drop/add period. All other assignments for the modules must be completed during the week they are assigned and will be due each **Friday at 11:59pm** Eastern Time (ET) except for discussions (see below), **DON'T wait until the last minute to complete the assignments.**

The instructions and materials needed for each assignment can be found under the relevant module. Please make sure you read the syllabus and familiarize yourself with Canvas. Students are responsible for all the material in each module and need to view all required links posted on the course's website (e.g., lecture videos, films, articles).

Assignments:

You will have 1-3 online assignments per module, all of which are associated with each the content presented in each module. To facilitate self-motivated distance learning, *all work for a week's given modules must be completed during the seven-day window for that week (from 8:00 am Saturday through 11:59 pm ET Friday).*

There is one quiz for each of the sixteen modules. This means there will be one quiz per week. Each quiz is multiple choice and worth 10 points (160 points total). The quizzes make up **47%** of your grade. **Quizzes are due at 11:59pm ET on Fridays of the week they are assigned.**

Students will also need to complete ten online activities. This averages about one a week. The activities range from 5 to 10 points (79 points total) and are approximately **23%** of the total grade. Every week there will be a discussion topic. Students must post a substantive original comment to the discussion by **Wednesday at 11:59pm ET** (worth 5 points total). They must then make two substantive responses to other individual's comments by **Friday at 11:59 pm ET** (worth 2.5 points each). This means there are 6 original comments and 12 responses. Participation in these discussions is

approximately **18%** of the final grade. Online discussion groups will be assigned by the instructor once the Add/Drop period has closed.

There will be a cumulative final exam administered online. You must complete this by the indicated date. This exam covers material from the entirety of the course, is worth 40 points, and is **12%** of the final grade.

There may be opportunities for extra credit at the purview of the instructor.

Online attendance and Late Policy:

Late work will not be accepted without official documentation. It is the student's responsibility to provide the instructor with the appropriate documentation and meet with the instructor to devise a schedule for completing the missed work. If possible, the student must notify the instructor that they will miss an exam before the examination period begins. No make-ups will be accepted after two weeks past the original exam/assignment/quiz if practicable. If a student misses an exam, quiz, or assignment without making the appropriate arrangements with the instructor, they will be assigned a grade of E (0 points). Note that the format of the make-up exam(s) may differ from that of regularly scheduled exams (e.g., primarily composed of essay questions). Documentation for late or missed work, including exams, should be provided within 48 hours of the excused period of absence.

Academic Honesty:

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor 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." The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions.

Students are expected to uphold the UF student Honor Code. Plagiarism and/or cheating on any exam, assignment, or quiz will not be tolerated. Plagiarism is representing the work of another as all or any portion of student's own work. This includes quoting published or unpublished work without proper attribution. Students found to be engaging in these behaviors will receive zero (0) points for that exam, assignment, or case report. Plagiarism will result in zero (0) credit regardless of the student's intent. Disciplinary action will follow university policy outlined by the Dean of Students. See <https://sccr.dso.ufl.edu/students/student-conduct-code/>. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Accommodations:

Students requesting classroom accommodation should first register with the Dean of Students Office (<https://disability.ufl.edu/get-started/>), who will then provide the necessary documentation for the course instructor. It is the student's responsibility to provide the necessary documentation to the instructor. Accommodations cannot be applied retroactively, so be sure to submit documentation to the instructor as soon as possible. Allow for 3 (three) business days of processing time before the accommodations will begin. If you are experiencing personal problems that are interfering with your studies, you are encouraged to take advantage of the available university resources:

- UF Counseling and Wellness Center: 3190 Radio Road, (352) 392-1575
- Student Mental Health: Student Health Care Center, (352) 392-1171
- Sexual Assault Recovery Services: Student Health Care Center, (352) 392-1161

U Matter We Care:

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Fall 2023 Topics and Readings Schedule:

Below is a tentative schedule of topics to be discussed over the course of the semester. Dates and topics are subject to change; however, the instructor will make all attempts to notify the class of any changes as they arise. Due dates for assignments and exams will not change except for university wide cancellation of courses. Additional readings and study guides will be assigned and announced on the Canvas site.

Dates of Access	Topic	What to Read	What to Watch	Assignment
“Start Here” Module: Introduction to the Course and Canvas				
Week 1: Aug 22 – 23 DUE SEP 6	Introduction and Ground Rules: what to expect from an online course; syllabus review; course policies	Syllabus “Start Here” module	Canvas Overview Video	1) Syllabus Quiz
Module 1: The History of Forensic Science				
Week 1: Aug 22 – Aug 23 DUE SEP 6	What is Forensic Anthropology?	<i>Bare Bones</i> Chapter 2	Lecture: What is Forensic Anthropology	1) Discussion 1 2) Mod 1 Quiz
	History of Forensic Anthropology at UF (and beyond!)		Lecture: History of Forensic Anthropology at UF	
Module 2: The Medicolegal System				
Week 2: Aug 24 – 30 DUE SEP 6	Medicolegal Aspects of Death	<i>Bare Bones</i> Chapter 1	Lecture: Medicolegal Aspects of Death	1) Mod 2 Quiz 2) Activity 1: Medicolegal matching exercise
Module 3: Forensic Anthropology in the Field				
Week 3: Aug 31 – Sep 6 (Sept 2 nd is Labor Day, no class)	Recovery of Human Remains I: Site Locations and Site Survey	1) <i>Bare Bones</i> Chapter 3 2) Articles on CSI effect (online)	Lecture: Recovery of Human Remains I	1) Discussion 2 2) Mod 3 Quiz 3) Activity 2: Recovery scene activity
	Recovery of Human Remains II: Mapping, Excavation, and Documentation		Lecture: Recovery of Human Remains II	
Module 4: Forensic Anthropology in the Laboratory				
Week 4: Sep 7 – 13	Processing Remains into Evidence	1) <i>Bare Bones</i> Chapter 3 2) Supplementary “Lab SOP” (online)	Lecture: Processing Remains into Evidence	Mod 4 Quiz
	Laboratory Protocols, Procedures, and Quality Assurance		Lecture: Laboratory Protocols	
Module 5: Taphonomy – from biosphere to lithosphere				
Week 5: Sep 14 – 20	What Happens After Death? Pt I	1) <i>Bare Bones</i> Chapter 4 2) Article: Stock et al. 2017 3) Practice activity (online)	Lecture: What Happens After Death? Part I	1) Mod 5 Quiz 2) Activity 3: Taphonomy matching exercise 3) Discussion 3: Taphonomy and Forensics
	What Happens After Death? Pt 2		Lecture: What Happens After Death? Part II	

Module 6: Anatomy, Osteology, Measurement, and Statistics				
Week 6: Sep 21 – 27	Skeletal Anatomy and Osteology	1) <i>Bare Bones</i> Chapter 5 2) Practice activity (online)	Lecture: Skeletal Anatomy and Osteology	1) Mod 6 Quiz 2) Activity 4: Osteology matching exercise
	Osteometry		Lecture: Osteometry	
Module 7: Group Characteristics I: Biological Sex				
Week 7: Sep 28 – Oct 4	Sexual Dimorphism, Birth, and Locomotion	<i>Bare Bones</i> Chapter 6	Lecture: Sexual Dimorphism, Birth and Locomotion	Mod 7 Quiz
	Methods of Sex Discrimination		Lecture: Methods of Sex Discrimination	
Module 8: Group Characteristics II: Age-at-death				
Week 8: Oct 5 – 11	Estimating Age in Children	<i>Bare Bones</i> Chapter 8	Lecture: Estimating Age in Children	1) Mod 8 Quiz 2) Activity 5: Age matching exercise
	Estimating Age in Adults		Lecture: Estimating Age in Adults	
	Estimating Age in Adults		Lecture: Methods of Age Estimation	
Module 9: Group Characteristics III: Stature				
Week 9: Oct 12 – 18 (Homecoming is Oct 18 th -19 th , but you will still have access to the module on those dates)	Living vs Forensic Stature; Methods of Stature Estimation	1) <i>Bare Bones</i> Chapter 9 2) Ousley 1995 (online) 3) Jantz et al 1995	Lecture: stature	1) Mod 9 Quiz 2) Activity 6: Stature exercise
Module 10: Group Characteristics IV: “Race” ... fact or fiction?				
Week 10: Oct 19 – 25	Race Fact or Fiction Clinal Variation and Population Affinities Determination of Ancestry: Do anthropologists cheat?	1) <i>Bare Bones</i> Chapter 7 2) PBS Website 3) Sauer 1992	Lecture: “Race” ... Fact or Fiction Lecture: Clinal Variation Lecture: Determination of Ancestry	1) Mod 10 Quiz 2) Activity 7: Sorting people exercise 3) Discussion 4
Module 11: Individual Characteristics and Personal Identification				
Week 11: Oct 26 – Nov 1	Individuating Skeletal Characteristics	1) <i>Bare Bones</i> Chapter 10 2) Practice Activity	Lecture: Individuating Skeletal Characteristics	1) Mod 11 Quiz 2) Activity 8: Radiographic comparison matching exercise
	Ante and Postmortem Radiographic Comparison		Lecture: Antemortem and Postmortem ...	
	Personal Identification in Action		Video: Finding Anastasia	
Module 12: Forensic Art				
Week 12: Nov 2 – 8	Forensic Reconstructions: Art or Science?	<i>Bare Bones</i> Chapter 11	Lecture: Forensic Reconstructions; Video: Forensic Files Saving Face	1) Mod 12 Quiz 2) Discussion 5

Module 13: Trauma				
Week 13: Nov 9 – 15 (Fri, Nov 11 th is Veterans Day)	Trauma and Cause of Death: Ante- vs Postmortem	1) <i>Bare Bones</i> Chapter 12 2) Langley 2007	Lecture: Trauma and Cause of Death I	1) Mod 13 Quiz 2) Activity 9: Trauma matching exercise
	Trauma and Cause of Death: Blunt- vs Sharp-force		Lecture: Trauma and Cause of Death II	
	Trauma and Cause of Death: Ballistics and Gunshots		Lecture: Trauma and Cause of Death III	
Module 14: Cremation				
Week 14: Nov 16 – 22	Burned Bodies and Cremated Remains	<i>Bare Bones</i> Chapter 13	Lecture: Burned Bodies and Cremated Remains	1) Mod 14 Quiz 2) Activity 10: Cremation artifact identification exercise
	What Survives Cremation?		Lecture: What Survives Cremation?	
Module 15: Mass Fatalities				
Week 15: Nov 23 – 29 (Nov 25 - 30 th is Thanksgiving Break but you will still have access to the Module on those dates) DUE DEC 4	Mass Fatality Case History I: ValuJet Flight	<i>Bare Bones</i> Chapter 14	Lecture: Mass Fatality Case History I	1) Mod 15 Quiz 2) Discussion 6
	Mass Fatality Case History II: World		Lecture: Mass Fatality Case History II	
	Mass Fatality Case History III: Hurricane Katrina		Lecture: Mass Fatality Case History III	
Module 16: Career Paths and Applications of Forensic Anthropology				
Week 16: Nov 30 – Dec 4 (Reading days are Dec 5 – 6 but you will still have access to the module on those dates)	Human Rights Missions	<i>Bare Bones</i> Chapters 15 and 16	Lecture: Human Rights Missions	Mod 16 Quiz
	Military Identifications		JPAC Video Links	
Finals Week: Dec 7 - 13	*** FINAL EXAM DUE DECEMBER 13TH BY 11:59 PM ***			
	The final exam may be completed any time between December 7 th at 8am to December 13 th at 11:59pm, <i>but the December 13th 11:59 pm (ET) deadline is firm and absolutely no late work will be accepted beyond this deadline.</i>			