# **ANT 3520**

# Skeleton Keys: Introduction to Forensic Anthropology

**Spring 2025** 

## Course Instructor

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# 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 Design:

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: 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%

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 module per 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 at the same time as 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 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). Quizzes, the final exam, and all assignments are open-note – and students are welcome to use their textbooks, lecture slides and notes, and/or other materials provided by the course. The use of ChatGPT or other AI language generative software is prohibited and a violation of the UF Academic Honesty policy and Honor Code (detailed below).

#### Quizzes

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.

#### Module Activities

Students will also need to complete ten online activities, which averages less than one per week. The activities range from 5 to 10 points (79 points total) and are approximately 23% of the total grade. All necessary instructions and materials for each assignment are explained in more detail on Canvas.

## **Discussion Posts**

There will be six (6) group discussions for students to participate in throughout the course of the semester. Online discussion groups will be assigned by the instructor once the Add/Drop period has closed. Students must post a substantive original comment to the discussion by Wednesday at 11:59pm ET (worth 5 points total). Students must then make two substantive responses to the other individual's comments by Friday at 11:59pm ET (worth 2.5 points each). In summary, there are 6 original comments and 12 responses – across Modules 1, 3, 5, 10, 12, and 15. Participation in these discussions is 18% of the final grade.

## Final Exam

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.

## Extra Credit

One extra credit opportunity is available. Students are to watch a film or episode of television that includes forensic science or anthropology. A list of recommended media will be provided, but students are welcome to put forward their own suggestions for instructor

approval. The assignment is a paper, guided by questions provided by the instructor about the techniques used in the media, comparing and contrasting them to what they have learned in class, and more. The paper must be font size 12 Times New Roman, single spaced, 1-inch margin, and no longer than 2 pages. The assignment is worth up to 2 additional points added to your final grade in the course. All submissions should be uploaded via Canvas no later than April 26<sup>th</sup> at 11:59pm EST. File formats that cannot be viewed by the instructor will not receive credit.

# 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 communicate with the instructor to devise a schedule for completing the missed work. The student must notify the instructor if they will miss the exam before the examination period begins. No make-ups will be accepted two weeks past the original assignment/quiz due dates. 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 the exam, should be provided within 48 hours of the excused period of absence.

# Academic Honesty:

As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University." 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 Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions — prohibited behavior includes the use of AI applications to write assignments. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class. The latest student honor code and student conduct code can be found at <a href="https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/">https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/</a>

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 <a href="https://sccr.dso.ufl.edu/students/student-">https://sccr.dso.ufl.edu/students/student-</a>

<u>conduct-code/</u>. If you have any questions or concerns, please consult with the instructor or TAs in this class.

## Accommodations:

Students requesting classroom accommodation must first register with the Dean of Students Office (<a href="https://disability.ufl.edu/get-started/">https://disability.ufl.edu/get-started/</a>), who will 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.

# **UF Counseling Services:**

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: 401 Peabody Hall/1500 Union Rd AND 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
Additionally, student web-based resources on sexual harassment are available at <a href="http://www.ufsa.ufl.edu/students/sh/sexualharassment.shtml">http://www.ufsa.ufl.edu/students/sh/sexualharassment.shtml</a>

# 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.

# **Spring 2025 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	Topic	What to Read	What to Watch	Assignment	
	"Start Here" Module: Introduction to the Course and Canvas				
	Introduction and	Syllabus "Start	Canvas Overview	1) Syllabus Quiz	
	Ground Rules: what	Here" module	Video		
Week 1:	to expect from an				
Jan. 13-17	online course;				
	syllabus review;				
	course policies				
		1: The History of Fo	rensic Science		
	What is Forensic	Bare Bones	Lecture: What is	1) Discussion 1	
	Anthropology?	Chapter 2	Forensic	2) Mod 1 Quiz	
Week 1:			Anthropology		
Jan. 13-17	History of Forensic		Lecture: History of		
	Anthropology at UF		Forensic		
	(and beyond!)		Anthropology at UF		
	Modu	le 2: The Medicole	gal System		
Week 1:	Medicolegal Aspects	Bare Bones	Lecture: Medicolegal	1) Mod 2 Quiz	
Jan. 13-17	of Death	Chapter 1	Aspects of Death	2) Activity 1:	
				Medicolegal	
				matching exercise	
	Module 3:	Forensic Anthropo	logy in the Field		
	Recovery of Human	1) Bare Bones	Lecture: Recovery of	1) Discussion 2	
	Remains I: Site	Chapter 3	Human Remains I	2) Mod 3 Quiz	
Mook 2	Locations and Site	2) Article on		3) Activity 2:	
Week 2:	Survey	CSI effect		Recovery scene	
Jan. 20-24	Recovery of Human	(online)	Lecture: Recovery of	activity	
1/20 MLK day	Remains II: Mapping,		Human Remains II		
	Excavation, and				
	Documentation				
	Module 4: For	rensic Anthropolog	y in the Laboratory		
	Processing Remains	1) Bare Bones	Lecture: Processing	Mod 4 Quiz	
	into Evidence	Chapter 3	Remains into		
Week 3:		2) Supplement	Evidence		
Jan 27-Jan31	Laboratory Protocols,	ary "Lab	Lecture: Laboratory		
	Procedures, and	SOP"	Protocols		
	Quality Assurance	(online)			
Module 5: Taphonomy – from biosphere to lithosphere					
	What Happens After	1) Bare Bones	Lecture: What	1) Mod 5 Quiz	
	Death? Pt I	Chapter 4	Happens After	2) Activity 3:	
		2) Article:	Death? Part I	Taphonomy	
Week 4:	What Happens After	Stock et al.	Lecture: What	matching exercise	
Feb. 3-7	Death? Pt 2	2017	Happens After	3) Discussion 3:	
		3) Practice	Death? Part II	Taphonomy and	
		activity		Forensics	
		(online)			
	Module 6: Anatom	ny, Osteology, Mea	surement, and Statistics		

Г	Skolotal Anatomy and	1) Bare Bones	Lecture: Skeletal	1) Mod 6 Quiz
	Skeletal Anatomy and	•		· ·
Week 5:	Osteology	Chapter 5 2) Practice	Anatomy and	· •
Feb. 10-14	Ostoomotru	activity	Osteology	Osteology matching exercise
	Osteometry	(online)	Lecture: Osteometry	matching exercise
	Module 7: G	roup Characteristic	s I: Biological Sex	
	Sexual Dimorphism,	Bare Bones	Lecture: Sexual	Mod 7 Quiz
Week 6:	Birth, and Locomotion	Chapter 6	Dimorphism, Birth	,
Feb. 17-21	•		and Locomotion	
160.17-21	Methods of Sex		Lecture: Methods of	
	Discrimination		Sex Discrimination	
	Module 8: G	roup Characteristic	s II: Age-at-death	
	Estimating Age in	Bare Bones	Lecture: Estimating	1) Mod 8 Quiz
	Children	Chapter 8	Age in Children	2) Activity 5: Age
Week 7:	Estimating Age in	•	Lecture: Estimating	matching exercise
Feb 24 Feb 28	Adults		Age in Adults	
	Estimating Age in		Lecture: Methods of	
	Adults		Age Estimation	
	Module	9: Group Characte	ristics III: Stature	
	Living vs Forensic	1) Bare Bones	Lecture: stature	1) Mod 9 Quiz
	Stature; Methods of	Chapter 9		2) Activity 6: Stature
Week 8:	Stature Estimation	2) Ousley		exercise
Mar. 3-7		1995		
Widi. 5 7		(online)		
		3) Jantz et al		
		1995		
			/: "Race" fact or fiction	
	Race Fact or Fiction	1) Bare Bones	Lecture: "Race"	1) Mod 10 Quiz
	Clinal Variation and	Chapter 7 2) PBS	Fact or Fiction	2) Activity 7: Sorting
Week 9:	Population Affinities Determination of	2) PBS Website	Lecture: Clinal Variation Lecture:	people exercise 3) Discussion 4
Mar. 10-14	Ancestry: Do	3) Sauer 1992	Determination of	3) Discussion 4
	anthropologists	3) Sauci 1332	Ancestry	
	cheat?		, moestry	
L		BREAK IS MARCH	15 <sup>th</sup> -MARCH 23 <sup>rd***</sup>	
Module 10 wi	II open during Week 9, if			ents ahead of the break.
Module 10	Quiz and Activity 7 will b	e due on Sunday, N	March 23 <sup>rd</sup> . All discussion	posts (both original
<mark>respo</mark>	onses and responses to cl	assmates) should a	lso be submitted by Sund	<mark>lay March 23<sup>th</sup>.</mark>
T			and Personal Identificat	
l		<ol> <li>Bare Bones</li> </ol>	<ul> <li>In the second control of the se</li></ul>	1) Mod 11 Quiz
	Individuating Skeletal	•	Lecture: Individuating	,
	Individuating Skeletal Characteristics	Chapter 10	Skeletal	2) Activity 8:
West 44	Characteristics	Chapter 10 2) Practice	Skeletal Characteristics	2) Activity 8: Radiographic
Week 11:	Characteristics  Ante and Postmortem	Chapter 10	Skeletal Characteristics Lecture: Antemortem	2) Activity 8: Radiographic comparison
Week 11: Mar. 17-21	Characteristics  Ante and Postmortem Radiographic	Chapter 10 2) Practice	Skeletal Characteristics	2) Activity 8: Radiographic
	Characteristics  Ante and Postmortem Radiographic Comparison	Chapter 10 2) Practice	Skeletal Characteristics Lecture: Antemortem and Postmortem	2) Activity 8: Radiographic comparison
	Characteristics  Ante and Postmortem Radiographic Comparison Personal Identification	Chapter 10 2) Practice	Skeletal Characteristics Lecture: Antemortem and Postmortem Video: Finding	2) Activity 8: Radiographic comparison
	Characteristics  Ante and Postmortem Radiographic Comparison	Chapter 10 2) Practice Activity	Skeletal Characteristics Lecture: Antemortem and Postmortem Video: Finding Anastasia	2) Activity 8: Radiographic comparison
Mar. 17-21	Characteristics  Ante and Postmortem Radiographic Comparison Personal Identification in Action	Chapter 10 2) Practice Activity  Module 12: Forer	Skeletal Characteristics Lecture: Antemortem and Postmortem Video: Finding Anastasia nsic Art	2) Activity 8: Radiographic comparison matching exercise
Mar. 17-21 Week 12:	Characteristics  Ante and Postmortem Radiographic Comparison Personal Identification in Action  Forensic	Chapter 10 2) Practice Activity  Module 12: Forer Bare Bones	Skeletal Characteristics Lecture: Antemortem and Postmortem  Video: Finding Anastasia  nsic Art Lecture: Forensic	Activity 8:     Radiographic     comparison     matching exercise      Mod 12 Quiz
Mar. 17-21	Characteristics  Ante and Postmortem Radiographic Comparison Personal Identification in Action  Forensic Reconstructions: Art	Chapter 10 2) Practice Activity  Module 12: Forer	Skeletal Characteristics Lecture: Antemortem and Postmortem Video: Finding Anastasia nsic Art	2) Activity 8: Radiographic comparison matching exercise
Mar. 17-21 Week 12:	Characteristics  Ante and Postmortem Radiographic Comparison Personal Identification in Action  Forensic	Chapter 10 2) Practice Activity  Module 12: Forer Bare Bones	Skeletal Characteristics Lecture: Antemortem and Postmortem  Video: Finding Anastasia nsic Art Lecture: Forensic Reconstructions	Activity 8:     Radiographic     comparison     matching exercise      Mod 12 Quiz
Mar. 17-21 Week 12: Mar. 24-Mar28	Characteristics  Ante and Postmortem Radiographic Comparison Personal Identification in Action  Forensic Reconstructions: Art	Chapter 10 2) Practice Activity  Module 12: Forer  Bare Bones Chapter 11	Skeletal Characteristics Lecture: Antemortem and Postmortem  Video: Finding Anastasia nsic Art Lecture: Forensic Reconstructions	Activity 8:     Radiographic     comparison     matching exercise      Mod 12 Quiz
Mar. 17-21 Week 12:	Characteristics  Ante and Postmortem Radiographic Comparison Personal Identification in Action  Forensic Reconstructions: Art or Science?	Chapter 10 2) Practice Activity  Module 12: Forer Bare Bones Chapter 11  Module 13: Tra	Skeletal Characteristics Lecture: Antemortem and Postmortem  Video: Finding Anastasia asic Art Lecture: Forensic Reconstructions	2) Activity 8: Radiographic comparison matching exercise  1) Mod 12 Quiz 2) Discussion 5

	Trauma and Cause of Death: Blunt- vs Sharp-force Trauma and Cause of Death: Ballistics and Gunshots	2) Langley 2007	Lecture: Trauma and Cause of Death II Lecture: Trauma and Cause of Death III		
	Module 14: Cremation				
Week 14: Apr. 7-11	Burned Bodies and Cremated Remains	Bare Bones Chapter 13	Lecture: Burned Bodies and Cremated Remains	1) Mod 14 Quiz 2) Activity 10: Cremation artifact identification	
	What Survives Cremation?		Lecture: What Survives Cremation?	exercise	
		Module 15: Mass	Fatalities	<u> </u>	
	Mass Fatality Case History I: ValuJet Flight	Bare Bones Chapter 14	Lecture: Mass Fatality Case History I	1) Mod 15 Quiz 2) Discussion 6	
Week 15: Apr. 14-18	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 Applicati	ons of Forensic Anthrop	ology	
Week 16: Apr. 21-25	Human Rights Missions	Bare Bones Chapters 15 and	Lecture: Human Rights Missions	Mod 16 Quiz	
(Reading days are May 1/2	Military Identifications	16	JPAC Video Links		
	***	FINAL EXAM DUE	May 2nd BY 11:59 PM	VI ***	
Finals Week: Apr 26– May 2		ay 2 <sup>nd</sup> at 11:59 p	om (ET) deadline is f	o <sup>th</sup> at 9am and May 2 at Tirm and absolutely no	