

ANT 3520 (online)

Skeleton Keys: Introduction to Forensic Anthropology

Spring 2022

Instructor: Trevor Duke

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Office Hours: Online, Tuesday 2:00 – 3:00 pm and Thursday 10:00 am – 12:00 noon
(Available to answer emails and monitor discussions)

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Teaching Assistant (TA): Autumn Rose

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Office Hours: Online, Monday 1:00 – 3:00 pm and Tuesday 2:00 – 3:00 pm
(Available to answer emails and monitor discussions)

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 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 different antemortem trauma, perimortem trauma, and postmortem damage.
- Understand the practical applications of forensic anthropology and the profession of the field.

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 Bones; and
- 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) discusses additional, important tasks of the forensic anthropologist: 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 may be provided by the instructor and posted on Canvas.

Grade Distribution:

Final grades will be calculated as a percentage of the total available points as follows:

A	93% - 100%	B-	80% - 82%	D+	67% - 69%
A-	90% - 92%	C+	77% - 79%	D	63% - 66%
B+	87% - 89%	C	73% - 76%	D-	60% - 62%
B	83% - 86%	C-	70% - 72%	E	59% or less

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). Should you have questions, please feel free to consult the University of Florida’s current grading policies and procedures at the following website:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

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 11:59 p.m. 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 links posted on the course's website (e.g., lecture videos, films, articles). All of the material is fair game when it comes to quizzes, discussions and activities.

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. Each quiz is multiple choice and worth 10 points (160 total points). The quizzes make up **47%** of your grade. Quizzes are due by **Friday at 11:59 p.m. ET** of the week they are assigned.

Students will also need to complete ten online activities. This averages less than one activity per week. The activities range from 5 to 10 points (79 total points) and are worth **23%** of the total grade.

There will be 6 discussion topics throughout the semester. Student must post a substantive, original comment to the discussion by **Wednesday at 11:59 p.m. ET** (worth 5 points). They must then make two substantive responses to other individual's comments by **Friday at 11:59 p.m. ET** (worth 2.5 points each, totaling 5 points). This means there are 6 original comments and 12 responses (60 total points). Participation in these discussions is worth **18%** of the final grade.

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 discretion of the instructor.

Online attendance and Late Policy:

Assignments must be turned in by 11:59 ET on Fridays for full credit. No late work will be accepted and the student will be given a zero.

For the discussion topics, the original Discussion is due by Wednesday at 11:59 ET. One point will be deducted for each day that is late. All assignments for a given week must be submitted by the Friday deadline unless otherwise specified, or due to a holiday for that week. No late work will be accepted, and the student will receive zero credit (there is no partial credit). Only students with DOCUMENTED excused absences may turn in work after the Friday deadline, including quizzes, discussions and activities. Students must notify the instructor at least 48 hours before the absence or excuse impeding work productivity.

University Honesty Policy:

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 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. 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 or TAs in this class.

Cheating and plagiarism, intentional or otherwise, during the course will not be tolerated. Students found cheating will receive a score of zero (0) points for the assignment. Disciplinary action will follow university policy as outlined by the Dean of Students. I advise that you visit this website - <http://mediasite.video.ufl.edu/mediasite/Viewer/?peid=adaa44500eaf460a84f238e6b9a558f9> - for a video discussion of what constitutes plagiarism, citing references, and use of quotes in writing. **However, if you are not sure if something is plagiarism, please ask!**

Materials and Supplies Fees:

Students enrolled in this online course will incur a \$105 M&S fee.

Accommodations:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Counseling and Wellness Center:

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 someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit umatter.ufl.edu/ to refer or report a concern and a team member will reach out to the student in distress. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

Counseling and Wellness Center: Visit counseling.ufl.edu/ or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need or visit <https://shcc.ufl.edu/>.

University Police Department: Visit police.ufl.edu/ or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; ufhealth.org/emergencyroom-trauma-center.

Academic Resources:

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu/.

Library Support: cms.uflib.ufl.edu/ask various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring. teachingcenter.ufl.edu/

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/

Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

On-Line Students Complaints: distance.ufl.edu/student-complaint-process/

SCHEDULE

please note: week's 1 and 7 consist of more than one module

	Dates of Access	Topic	What to Read	What to Watch	What is Due
SECTION 1: Introduction to the Course and Forensic Anthropology	“Start Here” Module: Introduction to the Course and Canvas				
	Week 1: Jan. 5 - 7	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 (cont.) Jan. 5 - 7	What is Forensic Anthropology?	Bare Bones 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: Jan. 10 -14	Medicolegal Aspects of Death	Bare Bones Chapter 1	Lecture: Medicolegal Aspects of Death	1) Mod 2 Quiz 2) Activity1: Medico-legal matching exercise
	Module 3: Forensic Anthropology in the Field				
	Week 3: Jan. 17 - 21	Recovery of Human Remains I: Site Location and Site Survey	1) Articles on CSI effects (online) 2) Bare Bones Chapter 3	Lecture: Recovery of Human Remains I	1) Discussion 2 2) Mod 3 Quiz 3) Activity 2: Recovery
		Recovery of Human Remains II: Mapping, Excavation, and Documentation		Lecture: Recovery of Human Remains II	

Module 4: Forensic Anthropology in the Laboratory				
Week 4: Jan. 24 – Jan. 28	Processing remains into Evidence	1) <i>Bare Bones</i> Chapter 3	<u>Lecture:</u> Processing Remains into Evidence	1) Mod 4 Quiz
	Laboratory Protocols, Procedures, and Quality Assurance	2) Supplementary “Lab SOP” (online)	<u>Lecture:</u> Laboratory Protocols	
Module 5: Taphonomy – from Biosphere to Lithosphere				
Week 5: Jan. 31- Feb. 4	What Happens After Death? Part I	1) <i>Bare Bones</i> Chapter 4	<u>Lecture:</u> What Happens After Death? Part I	1) Mod 5 Quiz
	What Happens After Death? Part II	1) Article: Stock et al. 2017 2) Practice Activity (online)	<u>Lecture:</u> What Happens After Death? Part II	2) Activity 3: Taphonomy Matching Exercise 3) Discussion 3: Taphonomy and Forensics
Module 6: Anatomy, Osteology, Measurements, and Statistics				
Week 6: Feb. 7 - 11	Skeletal Anatomy and Osteology	1) <i>Bare Bones</i> Chapter 5	<u>Lecture:</u> Skeletal Anatomy and Osteology	1) Mod 6 Quiz
	Osteometry	2) Practice Activity (online)	<u>Lecture:</u> Osteometry	2) Activity 4: Osteology Matching Exercise.
Module 7: Group Characteristics I: Biological Sex				
Week 7: Feb. 14 - 18	Sexual Dimorphism, Birth, and Locomotion	<i>Bare Bones</i> Chapter 6	Lecture: Sexual Dimorphism, Birth, and Locomotion	1) Mod 7 Quiz
	Methods of Sex Discrimination		Lecture: Methods of Sex Discrimination	

Module 8: Group Characteristics II: Age-at-death					
SECTION 2: The Biological Profile and Personal Identification	Week 7 (cont.) Feb. 14 - 18	Estimating Age in Children	Bare Bones Chapter 8	<u>Lecture:</u> Estimating Age in Children	1) Mod 8 Quiz 2) Activity 5: Age Matching Exercise
		Estimating Age in Adults		<u>Lecture:</u> Estimating Age in Adults	
		Methods of Age Estimation		<u>Lecture:</u> Methods of Age Estimation	

Module 9: Group Characteristics III: Stature					
	Week 8: Feb. 21 - 25	Living vs. Forensic Stature; Methods of Stature Estimation	1) Bare Bones Chapter 9 2) Article: Ousley 1995 (online) 3) Article: Jantz et al. 1995	<u>Lecture:</u> Stature	1) Mod 9 Quiz 2) Activity 6: Stature Exercise
Module 10: Group Characteristics IV: “Race”... Fact or Fiction?					
	Week 9: Feb. 28 – Mar. 4	Race Fact or Fiction	1) <i>Bare Bones</i> Chapter 7 2) PBS website 3) Sauer 1992	<u>Lecture:</u> “Race”... Fact or Fiction?	1) Mod 10 Quiz 2) Activity 7: Sorting People Exercise 3) Discussion 4
		Clinal Variation and Population Affinities		<u>Lecture:</u> Clinal Variation	

	Determination of Ancestry: Do anthropologists cheat?		<u>Lecture:</u> Determination of Ancestry	
Module 11: Individual Characteristics and Personal Identification				
Week 10: Mar. 14 - 18	Individuating Skeletal Characteristics	1) <i>Bare Bones</i> Chapter 10 2) Practice Activity	<u>Lecture:</u> Individuating Skeletal Characteristics	1) Mod 11 Quiz 2) Activity 8: Radiographic Comparison Matching Exercise
	Ante and Postmortem Radiographic Comparison		<u>Lecture:</u> Antemortem and Postmortem...	
	Personal Identification in Action		<u>Video:</u> <i>Finding Anastasia</i>	
Module 12: Forensic Art				
Week 11: Mar. 21 - 25	Forensic Reconstructions: Art or Science?	<i>Bare Bones</i> Chapter 11	<u>Lecture:</u> Forensic Reconstructions	1) Mod 12 Quiz 2) Discussion 5
			<u>Video:</u> <i>Forensic Files</i> Saving Face	

Module 13: Trauma				
Week 12: Mar. 28 – Apr. 1	Trauma and Cause of Death: Ante- vs. Postmortem	1) <i>Bare Bones</i> Chapter 12 2) Article: Langley 2007	<u>Lecture:</u> 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		<u>Lecture:</u> Trauma and Cause of Death II	
	Trauma and Cause of Death: Ballistics and Gunshots		<u>Lecture:</u> Trauma and Cause of Death III	

SECTION 3: Skeletal Trauma and Burned Bone	Module 14: Cremation				
	Week 13: Apr. 4 - 8	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 Exercise
		What Survives Cremation?		Lecture: What Survives Cremation?	
SECTION 4: Applications and Profession	Module 15: Mass Fatalities				
	Week 14: Apr. 11 - 15	Mass Fatality Case History I: ValuJet Flight	Bare Bones Chapter 14	Lecture: Mass Fatality Case History I	1) Discussion 6 2) Mod 15 Quiz
		Mass Fatality Case History II: World Trade Center		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 15: Apr. 18 – 22 (Reading days are Apr. 21 and 22, but you will still have access to this Module on those dates)	Human Rights Missions	1) Bare Bones Chapter 15	Lecture: Human Rights Missions	1) Mod 16 Quiz
		Military Identifications	2) Bare Bones Chapter 16	Videos: JPAC Command and Honored, Identified, and Loved	

FINALS WEEK:*****FINAL EXAM DUE April 29TH BY 11:59 PM*****

Apr. 23 - 29

The final exam may be completed any time between April 23rd at 8 am and April 29th at 11:59 pm. The April 29th, 11:59 pm (ET) deadline is **FIRM** and absolutely no late work will be accepted beyond this deadline.