

**ANT 3520 (online)**

**Skeleton Keys: Introduction to Forensic Anthropology**

**Spring 2023**



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Office Hours (online): Tuesday 2:00 - 3:00 pm

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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 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 – <https://www.img.ufl.edu/wiki/images/Plagiarism.pdf> - for a guide on how to avoid plagiarism. *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](mailto:umatter@ufl.edu), 352-392-1575, or visit - <https://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 <https://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/](https://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; <https://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](mailto:helpdesk@ufl.edu).

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

*Library Support:* <http://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 <https://teachingcenter.ufl.edu/>

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

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

*On-Line Students Complaints:* <http://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. 9 - 13  All week 1 tasks are not due until after drop/add (1/13)	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  Due Wednesday 01/18
	Module 1: The History of Forensic Science				
	Week 1 (cont.) Jan. 9 - 13  All week 1 tasks are not due until after drop/add (1/13)	What is Forensic Anthropology?	Bare Bones Chapter 2	Lecture: What is Forensic Anthropology	1) Discussion 1  Original discussion post due Wednesday 01/18; responses to two classmates due Friday 01/20  2) Mod 1 Quiz  Due Friday 01/20
		History of Forensic Anthropology at UF (and beyond!)		Lecture: History of Forensic Anthropology at UF	
	Module 2: The Medicolegal System				
	Week 2: Jan. 17 – 20  Monday the 16 <sup>th</sup> is a Holiday, no class	Medicolegal Aspects of Death	Bare Bones Chapter 1	Lecture: Medicolegal Aspects of Death	1) Mod 2 Quiz  Due Friday 01/20  2) Activity1: Medico-legal matching exercise  Due Friday 01/20
	Module 3: Forensic Anthropology in the Field				
Week 3: Jan. 23 - 27	Recovery of Human Remains I: Site Location and Site Survey	1) Articles on CSI effects (online)	Lecture: Recovery of Human Remains I	1) Discussion 2  2) Mod 3 Quiz	

			2) <i>Bare Bones</i> Chapter 3		3) Activity 2: Recovery
		Recovery of Human Remains II: Mapping, Excavation, and Documentation		<u>Lecture:</u> Recovery of Human Remains II	
	Module 4: Forensic Anthropology in the Laboratory				
	Week 4: Jan. 30 – Feb. 3	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: Feb. 6 - 10	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  2) Activity 3: Taphonomy Matching Exercise
		What Happens After Death? Part II	2) Article: Stock et al. 2017  3) Practice Activity (online)	<u>Lecture:</u> What Happens After Death? Part II	
	3) Discussion 3: Taphonomy and Forensics				
	Module 6: Anatomy, Osteology, Measurements, and Statistics				
Week 6: Feb. 13 - 17	Skeletal Anatomy and Osteology	1) Bare Bones Chapter 5	<u>Lecture:</u> Skeletal Anatomy and Osteology	1) Mod 6 Quiz  2) Activity 4: Osteology Matching Exercise	
	Osteometry	2) Practice Activity (online)	<u>Lecture:</u> Osteometry		
Module 7: Group Characteristics I: Biological Sex					
Week 7: Feb. 20 - 24	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				
<b>Week 7 (cont.)</b> Feb. 20 - 24	Estimating Age in Children	<i>Bare Bones</i> 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				
<b>Week 8:</b> Feb. 27 – March 3	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?				
<b>Week 9:</b> March 6 – 10  <i>Have a great Spring Break!! (March 11–17)</i>	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: Question of Race  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				
<b>Week 10:</b> March 20 - 24	Individuating Skeletal Characteristics	1) Bare Bones 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		Video: <i>Finding Anastasia</i>	
	Module 12: Forensic Art				
Week 11: March 27 - 31	Forensic Reconstructions: Art or Science?	Bare Bones Chapter 11	Lecture: Forensic Reconstructions	1) Mod 12 Quiz  2) Discussion 5	
			Video: <i>Forensic Files</i> Saving Face		
Module 13: Trauma					
Week 12: April 3 - 7	Trauma and Cause of Death: Ante-vs. Postmortem	1) Bare Bones Chapter 12  2) Article: 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 13: April 10 - 14	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?		
Module 15: Mass Fatalities					
Week 14: April 17 - 21	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		<u>Lecture:</u> Mass Fatality Case History III	
	<b>Module 16: Career Paths and Applications of Forensic Anthropology</b>				
	<b>Week 15:</b> April 24 - 26  <i>(Reading days are April 27 and 28, but you will still have access to this Module on those dates)</i>	Human Rights Missions  Military Identifications	1) <i>Bare Bones</i> Chapter 15  2) <i>Bare Bones</i> Chapter 16	<u>Lecture:</u> Human Rights Missions  <u>Videos:</u> JPAC Command and Honored, Identified, and Loved	1) Mod 16 Quiz
<b>FINAL EXAM</b>	<b>FINALS WEEK:</b> <div> <div>May 1 - 5</div> <div>           The final exam may be completed any time between May 1st at 8 am and the 5<sup>th</sup> by 11:59 pm. The May 5th, 11:59 pm (ET) deadline is <b>FIRM</b> and <u>absolutely no late work will be accepted</u> beyond this deadline.         </div> </div>				