## **ANT 3520 (Online)**

# **Skeleton Keys: Introduction to Forensic Anthropology**

### **Summer B 2019**

#### **Instructor: Janet Finlayson**

Email: jfinlayson@ufl.edu or via the Conversations (Inbox) tool in Canvas Office Hours: Online, Tuesday 2 - 3 pm and Friday 10 am -12 noon (available to answer emails and monitor discussions)

### **Teaching Assistants (TAs):**

### **Ashley Deutsch**

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#### Siobhan Summers

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Office Hours: Online, Monday, 10 am – 1 pm

(available to answer emails and monitor discussions)

#### **Kylie Williamson**

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Office Hours: Online, Wednesday 12 – 3 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 differentiate between 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 Bone; 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%	$\mathbf{D}$ +	67% - 69%
A-	90% - 92%	C+	77% - 79%	D	63% - 66%
<b>B</b> +	87% - 89%	$\mathbf{C}$	73% - 76%	D-	60% - 62%
B	83% - 86%	C-	70% - 72%	$\mathbf{E}$	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/ugrad/current/regulations/info/grades.aspx

#### **Course Mechanics:**

Because this is an online class, students are expected to be self-motivated. Sixteen modules will be covered during the six weeks of this summer semester, so expect to have a workload of two to three (2-3) modules per week; each module has up to three assignments. All assignments for the modules must be completed during the week they are assigned and will be due each Friday at 11:59p.m. 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, unless otherwise specifically noted by the instructor.

### **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 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 48% of your grade. Quizzes are due by **Friday at 11:59 p.m.** of the week they are assigned.

Students will also need to complete nine online activities. The activities range from 5 to 10 points (73 total points) and are worth 22% 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.** (worth 5 points). They must then make two substantive responses to other individual's comments by **Friday at 11:59 p.m.** (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 11:59pm 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. 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.

### **Academic Honesty:**

Every registered student at the University of Florida 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."

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 (<a href="http://mediasite.video.ufl.edu/mediasite/Viewer/?peid=adaa44500eaf460a84f238e6b9a558f9">http://mediasite.video.ufl.edu/mediasite/Viewer/?peid=adaa44500eaf460a84f238e6b9a558f9</a>) 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!** 

See <a href="http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php">http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php</a> for more information on student academic honesty, rights, responsibilities, and behavior consequences.

### **Accommodations:**

If you have a documented disability for which you need accommodations, please provide me with documentation from the Disability Resource Center/Dean of Students Office within the first week of class. If you are requesting a classroom accommodation, you must register with the Dean of Students Office, which will provide documentation to you. You must provide this documentation to me, the course Instructor, when requesting accommodation. I encourage you to meet with me as soon as possible to discuss accommodations. You can visit <a href="http://www.dso.ufl.edu/drc">http://www.dso.ufl.edu/drc</a> for more information.

### **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: 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 <a href="mailto:umatter@ufl.edu">umatter@ufl.edu</a> 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.

## **SCHEDULE**

	Dates of Access	Topic	What to Read	What to Watch	What is Due	
	"Start Here" Module: Introduction to the Course and Canvas					
	Week 1: July 1-12	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	
ogy	Module 1: The History of Forensic Science					
CTION 1: Introduction to the Course and Forensic Anthropology	Week 1: July 1-12	What is Forensic Anthropology?  History of Forensic Anthropology at UF (and beyond!)	Bare Bones Chapter 2	Lecture: What is Forensic Anthropology Lecture: History of Forensic Anthropology at UF	2) Discussion 1 3) Mod 1 Quiz	
rse ar	Module 2: The medicolegal system					
ction to the Cour	Week 1: July 1-12	Medicolegal Aspects of Death	Bare Bones Chapter 1	Lecture: Medicolegal Aspects of Death	4) Mod 2 Quiz 5) Activity 1: Medico-legal matching exercise	
trodu	Module 3: Forensic Anthropology in the Field					
SECTION 1: Int	Week 2: July 6-12	Recovery of Human Remains I: Site Location and Site Survey Recovery of Human Remains II: Mapping, Excavation, and Documentation.	1) Articles on CSI effect (online) 2) Bare Bones Chapter 3	Lecture: Recovery of Human Remains I Lecture: Recovery of Human Remains II	1) Discussion 2 2) Mod 3 Quiz 3) Activity 2: Recovery	
		n the laboratory				
	Week 2: July 6-12	Processing Remains into Evidence	1) Bare Bones Chapter 3	Lecture: Processing Remains into Evidence	4) Mod 4 Quiz	

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		Laboratory Protocols,	2) Supplementary	Lecture: Laboratory		
		Procedures, and	"Lab SOP"	Protocols		
		Quality Assurance	(online)			
	Module 5: Taphonomy – from biosphere to lithosphere					
				<del>-</del>	5) M 15 O :	
	What Happens After Death? Part I	1) Bare Bones Chapter 4	Lecture: What Happens after	5) Mod 5 Quiz		
			Chapter	death? Part 1	6) Activity 3:	
	Week 2:	What Happens	2) Article: Stock	Lecture: What	Taphonomy	
	July 6-12	After Death? Part II	et al. 2017	Happens After Death? Part II	Matching exercise	
		Part II	3) Practice	Death? Part II	exercise	
			activity (online)		7) Discussion 3:	
					Taphonomy and	
					forensics	
		Module 6: Anatomy	, osteology, measur	rement, and statisti	cs	
		Skeletal	1) Bare Bones	<u>Lecture</u> : Skeletal	1) Mod 6 Quiz	
	Week 3:	Anatomy and Osteology	Chapter 5	Anatomy and Osteology	2) Activity 4:	
u <sub>0</sub>	July 13-19	Osteonetry	2) Practice	Lecture:	Osteology	
cati			activity (online)	Osteometry	Matching	
tific					exercise	
Iden	Module 7: Group Characteristics I: Biological sex					
nal ]		α 1	n n			
		Sexual	Bare Bones	<u>Lecture</u> : Sexual	3) Mod 7 Quiz	
rson		Dimorphism,	Chapter 6	Dimorphism,	3) Mod 7 Quiz	
l Person	Week 3:	Dimorphism, Birth, and		Dimorphism, Birth, and	3) Mod 7 Quiz	
and Person	Week 3: July 13-19	Dimorphism,		Dimorphism,	3) Mod 7 Quiz	
file and Person		Dimorphism, Birth, and Locomotion		Dimorphism, Birth, and Locomotion  Lecture: Methods of Sex	3) Mod 7 Quiz	
Profile and Person		Dimorphism, Birth, and Locomotion Methods of Sex		Dimorphism, Birth, and Locomotion Lecture:	3) Mod 7 Quiz	
ical Profile and Personal Identification		Dimorphism, Birth, and Locomotion Methods of Sex Discrimination		Dimorphism, Birth, and Locomotion Lecture: Methods of Sex Discrimination	3) Mod 7 Quiz	
100		Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grown  Estimating Age	Chapter 6  up Characteristics  Bare Bones	Dimorphism, Birth, and Locomotion  Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture:	3) Mod 7 Quiz  4) Mod 8 Quiz	
		Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grow	Chapter 6	Dimorphism, Birth, and Locomotion  Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age	4) Mod 8 Quiz	
	July 13-19	Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grown  Estimating Age in Children	Chapter 6  up Characteristics  Bare Bones	Dimorphism, Birth, and Locomotion Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age in Children	4) Mod 8 Quiz 5) Activity 5:	
	July 13-19 Week 3:	Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grown  Estimating Age	Chapter 6  up Characteristics  Bare Bones	Dimorphism, Birth, and Locomotion  Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age	4) Mod 8 Quiz	
	July 13-19	Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grow  Estimating Age in Children  Estimating Age in Adults	Chapter 6  up Characteristics  Bare Bones	Dimorphism, Birth, and Locomotion  Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age in Children  Lecture: Estimating Age in Adults	4) Mod 8 Quiz 5) Activity 5: Age matching	
	July 13-19 Week 3:	Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grown  Estimating Age in Children  Estimating Age in Adults  Estimating Age	Chapter 6  up Characteristics  Bare Bones	Dimorphism, Birth, and Locomotion  Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age in Children  Lecture: Estimating Age in Adults  Lecture:	4) Mod 8 Quiz 5) Activity 5: Age matching	
	July 13-19 Week 3:	Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grow  Estimating Age in Children  Estimating Age in Adults	Chapter 6  up Characteristics  Bare Bones	Dimorphism, Birth, and Locomotion  Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age in Children  Lecture: Estimating Age in Adults	4) Mod 8 Quiz 5) Activity 5: Age matching	
SECTION 2: The Biological Profile and Person	July 13-19 Week 3:	Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grown  Estimating Age in Children  Estimating Age in Adults  Estimating Age in Adults	Chapter 6  up Characteristics  Bare Bones	Dimorphism, Birth, and Locomotion Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age in Children Lecture: Estimating Age in Adults Lecture: Methods of Age Estimation	4) Mod 8 Quiz 5) Activity 5: Age matching	
	July 13-19  Week 3: July 13-19	Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grown  Estimating Age in Children  Estimating Age in Adults  Estimating Age in Adults	Chapter 6  The property of the control of the contr	Dimorphism, Birth, and Locomotion Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age in Children Lecture: Estimating Age in Adults Lecture: Methods of Age Estimation	4) Mod 8 Quiz 5) Activity 5: Age matching	
100	July 13-19 Week 3:	Dimorphism, Birth, and Locomotion Methods of Sex Discrimination  Module 8: Grown  Estimating Age in Children  Estimating Age in Adults  Estimating Age in Adults  Module 9: Grown	Chapter 6  The property of the components of the	Dimorphism, Birth, and Locomotion  Lecture: Methods of Sex Discrimination  II: Age-at-death  Lecture: Estimating Age in Children Lecture: Estimating Age in Adults Lecture: Methods of Age Estimation  cs III: Stature	4) Mod 8 Quiz 5) Activity 5: Age matching exercise	

	Stature Estimation	2) Article: Ousley 1995 (online) 3) Article: Jantz et al 1995		2) Activity 6: Stature exercise	
Module 10: Group Characteristics IV: "Race" fact or fiction?					
Week 4: July 20-26	Race fact or fiction  Clinal Variation and Population Affinities  Determination of Ancestry: Do anthropologists cheat?	1) Bare Bones Chapter 7 2) PBS website 3) Sauer 1992	Lecture: "Race" Fact or Fiction?  Lecture: Clinal Variation  Lecture: Determination of Ancestry	3) Mod 10 Quiz 4) Activity 7: Sorting people exercise 5) Discussion 4	
Module 11: Individual characteristics and personal identification					
	Individuating Skeletal Characteristics	1) Bare Bones Chapter 10 2) <b>Practice</b> activity	Lecture: Individuating Skeletal Characteristics	6) Mod 11 Quiz 7) Activity 8: Radiographic Comparison	
Week 4: July 20-26	Ante and Postmortem Radiographic Comparison		Lecture: Antemortem and Postmortem	matching exercise	
	Personal Identification in Action		<u>Video</u> : Finding Anastasia		
Module 12: Forensic art					
Week 5: July 27-Aug 2	Forensic Reconstructions: Art or science?	Bare Bones Chapter 11	Lecture: Forensic Reconstructions;  Video: Forensic Files Saving Face	1) Mod 12 Quiz 2) Discussion 5	

one	Module 13: Trauma					
d Burned Bo		Trauma and Cause of Death: Ante- vs. Postmortem	1) Bare Bones Chapter 12 2) Article:	Lecture: Trauma and Cause of Death I	3) Mod 13 Quiz 4) Activity 9: Trauma	
SECTION 3: Skeletal Trauma and Burned Bone	Week 5: July 27-Aug 2	Trauma and Cause of Death: Blunt- vs. Sharp- force	Langley 2007	Lecture: Trauma and Cause of Death II	matching exercise	
		Trauma and Cause of Death: Ballistics and Gunshots		Lecture: Trauma and Cause of Death III		
LION	Module 14: Cremation					
SECI	Week 5: July 27-Aug 2	Burned Bodies and Cremated Remains	Bare Bones Chapter 13	Lecture: Burned Bodies and	5) Mod 14 Quiz	
	Module 15: Mass fatalities					
4: Applications and Profession	Week 6: Aug 3-9	Mass Fatality Case History I: ValuJet Flight Mass Fatality Case History II: World Trade	Bare Bones Chapter 14	Lecture: Mass Fatality Case History I Lecture: Mass Fatality Case History II	1) Discussion 6 2) Mod 15 Quiz	
4: Applicatio		Center  Mass Fatality Case History III: Hurricane Katrina		Lecture: Mass Fatality Case History III		
	Module 16: Career paths and applications of forensic anthropology					
SECTION	Week 6: Aug 3-9	Human Rights Missions Military Identifications	Bare Bones Chapter 15 Bare Bones Chapter 16	Lecture: Human Rights Missions JPAC Video links	3) Mod 16 Quiz	
FINAL EXAM	Week 6: Aug 3-9	*** FINAL EX	•	ST 9 <sup>th</sup> BY 11:59 PM	***	