# ANT 3520 (Online)

# Skeleton Keys: Introduction to Forensic Anthropology Spring 2020

**Instructor:** Janet Finlayson

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**Office Hours:** Online, Tuesday 2:00 -3:00 pm and Friday 10:00 am -12:00 noon (available to answer emails and monitor discussions)

Teaching Assistant (TA): Jessi Jenkins

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**Office Hours**: Online, Wednesday 12:00 noon – 3:00 pm (available to answer emails and monitor discussions)

Teaching Assistant (TA): Siobhan Summers

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**Office Hours**: Online, Thursday 1:00 pm - 4:00 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 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% | D+ | 67% - 69%   |
|----|------------|----|-----------|----|-------------|
| A- | 90% - 92%  | C+ | 77% - 79% | D  | 63% - 66%   |
| B+ | 87% - 89%  | C  | 73% - 76% | D- | 60% - 62%   |
| В  | 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 11:59p.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 (<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!

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 <a href="https://disability.ufl.edu/students/get-started/">https://disability.ufl.edu/students/get-started/</a>. 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 <a href="mailto:umatter@ufl.edu">umatter@ufl.edu</a>, 352-392-1575, or visit <a href="mailto:umatter.ufl.edu">umatter.ufl.edu</a> 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 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; <u>ufhealth.org/emergency-room-trauma-center.</u>

## **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 <u>career.ufl.edu/</u>.

*Library Support*: <a href="mailto:cms.uflib.ufl.edu/ask">cms.uflib.ufl.edu/ask</a> 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**

|   | Dates of<br>Access   | Topic  | What to Read   | What to Watch  | What is Due   |  |
|---|--|--|--|--|---|--|
|   | "Start Here" Module: Introduction to the Course and Canvas |  |  |  |   |  |
| gy  | Week 1:  Jan 6-17 (extended to accommodate drop/add week)  | Introduction and<br>Ground Rules:<br>what to expect<br>from an online<br>course; syllabus<br>review; course<br>policies          | Syllabus "Start<br>Here" module  | Canvas<br>Overview Video   | 1) Syllabus Quiz  |  |
| olodo.  | Module 1: The History of Forensic Science                  |  |  |  |   |  |
| N 1: Introduction to the Course and Forensic Anthropology | Week 1:  Jan 6-17 (extended to accommodate drop/add week)  | What is Forensic Anthropology?  History of Forensic Anthropology at UF (and beyond!)   | Bare Bones<br>Chapter 2  | Lecture: What is Forensic Anthropology Lecture: History of Forensic Anthropology at UF | 1) Discussion 1 2) Mod 1 Quiz                               |  |
| to th   | Module 2: The medicolegal system                           |  |  |  |   |  |
|   | Week 2:<br>Jan 11-17                                       | Medicolegal<br>Aspects of Death  | Bare Bones<br>Chapter 1  | Lecture:<br>Medicolegal<br>Aspects of Death  | 1) Mod 2 Quiz 2) Activity 1: Medico-legal matching exercise |  |
| SECTIO  | Module 3: Forensic Anthropology in the Field               |  |  |  |   |  |
| <b>S</b>  | Week 3:<br>Jan 18-24                                       | Recovery of Human Remains I: Site Location and Site Survey Recovery of Human Remains II: Mapping, Excavation, and Documentation. | 1) Articles on<br>CSI effect<br>(online)<br>2) Bare Bones<br>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       |  |

|   | Module 4: Forensic anthropology in the laboratory         |   |  |  |   |  |  |
|---|---|---|--|--|---|--|--|
|   | Week 4:<br>Jan 25-31                                      | Processing Remains into Evidence  Laboratory Protocols, Procedures, and Quality Assurance | 1) Bare Bones<br>Chapter 3  2) Supplementary "Lab SOP" (online)                              | Lecture: Processing Remains into Evidence Lecture: Laboratory Protocols                  | 1) Mod 4 Quiz   |  |  |
|   |   | Module 5: Tapho   | onomy – from biosj   | ohere to lithosphere   | e   |  |  |
|   | Week 5:<br>Feb 1-7  | What Happens After Death? Part I What Happens After Death? Part II                        | 1) Bare Bones<br>Chapter 4 2) Article: Stock<br>et al. 2017 3) Practice<br>activity (online) | Lecture: What Happens after death? Part 1 Lecture: What Happens After Death? Part II     | 1) Mod 5 Quiz 2) Activity 3: Taphonomy Matching exercise 3) Discussion 3: Taphonomy and forensics |  |  |
|   | Module 6: Anatomy, osteology, measurement, and statistics |   |  |  |   |  |  |
| Biological Profile and Personal<br>Identification | Week 6:<br>Feb 8-14                                       | Skeletal<br>Anatomy and<br>Osteology<br>Osteometry  | 1) Bare Bones<br>Chapter 5<br>2) <b>Practice</b><br>activity (online)                        | Lecture: Skeletal Anatomy and Osteology Lecture: Osteometry                              | 1) Mod 6 Quiz 2) Activity 4: Osteology Matching exercise  |  |  |
| Biolog  | Module 7: Group Characteristics I: Biological sex         |   |  |  |   |  |  |
| SECTION 2: The Biological Pro-<br>Identification  | Week 7:<br>Feb 15-21                                      | Sexual Dimorphism, Birth, and Locomotion Methods of Sex Discrimination                    | Bare Bones<br>Chapter 6  | Lecture: Sexual Dimorphism, Birth, and Locomotion Lecture: Methods of Sex Discrimination | 1) Mod 7 Quiz   |  |  |

| Module 8: Group Characteristics II: Age-at-death             |  |   |  |   |  |
|--|--|---|--|---|--|
| Week 7:<br>Feb 15-21   | Estimating Age in Children  Estimating Age in Adults  Estimating Age in Adults   | Bare Bones<br>Chapter 8   | Lecture: Estimating Age in Children Lecture: Estimating Age in Adults Lecture: Methods of Age Estimation | 1) Mod 8 Quiz 2) Activity 5: Age matching exercise                    |  |
|  | Module 9: G  | Froup Characterist  | ics III: Stature   |   |  |
| Week 8:<br>Feb 22-28   | Living vs. Forensic Stature; Methods of Stature Estimation   | 1) Bare Bones<br>Chapter 9  2) Article:<br>Ousley 1995<br>(online)  3) Article: Jantz<br>et al 1995 | Lecture: Stature   | 1) Mod 9 Quiz 2) Activity 6: Stature exercise                         |  |
| Module 10: Group Characteristics IV: "Race" fact or fiction? |  |   |  |   |  |
| Week 9:<br>Mar 7-13  | Race fact or fiction  Clinal Variation and Population Affinities  Determination of Ancestry: Do anthropologists cheat? | 1) Bare Bones<br>Chapter 7<br>2) PBS website<br>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 10:<br>Mar 14-20   | Individuating Skeletal Characteristics  Ante and Postmortem Radiographic Comparison  Personal Identification in Action                                | 1) Bare Bones<br>Chapter 10<br>2) Practice<br>activity     | Lecture: Individuating Skeletal Characteristics  Lecture: Antemortem and Postmortem  Video: Finding Anastasia      | 1) Mod 11 Quiz 2) Activity 8: Radiographic Comparison matching exercise |  |
|   | Module 12: Forensic art   |   |  |  |   |  |
|   | Week 11:<br>Mar 21-27   | Forensic<br>Reconstructions:<br>Art or science?   | Bare Bones<br>Chapter 11                                   | Lecture: Forensic Reconstructions;  Video: Forensic Files Saving Face  | 1) Mod 12 Quiz 2) Discussion 5  |  |
| Burned                                    |   | na  |  |  |   |  |
| SECTION 3: Skeletal Trauma and Bu<br>Bone | Week 12:<br>Mar 28-Apr 3  | Trauma and Cause of Death: Ante- vs. Postmortem Trauma and Cause of Death: Blunt- vs. Sharp- force Trauma and Cause of Death: Ballistics and Gunshots | 1) Bare Bones<br>Chapter 12<br>2) Article:<br>Langley 2007 | Lecture: Trauma and Cause of Death I  Lecture: Trauma and Cause of Death II  Lecture: Trauma and Cause of Death II | 1) Mod 13 Quiz 2) Activity 9: Trauma matching exercise                  |  |

|  | Module 14: Cremation   |                                 |                       |                             |                    |  |
|--|--|---------------------------------|-----------------------|-----------------------------|--------------------|--|
|  |  |                                 |                       |                             |                    |  |
|  |  | Burned Bodies and Cremated      | Bare Bones Chapter 13 | Lecture: Burned Bodies and  | 1) Mod 14 Quiz     |  |
|  | Week 13:   | Remains                         |                       | Cremated                    | 2) Activity 10:    |  |
|  |  | What Survives                   | Bare Bones            | Remains                     | Cremation artifact |  |
|  | Apr 4-10   | Cremation?                      | Chapter 13            | Lecture: What Survives      | identification     |  |
|  |  | Cremation.                      | Chapter 13            | Cremation?                  | exercise           |  |
|  | Module 15: Mass fatalities   |                                 |                       |                             |                    |  |
|  |  | Mass Fatality                   | Bare Bones            | Lecture: Mass               | 1) Discussion 6    |  |
|  |  | Case History I:                 | Chapter 14            | Fatality Case               |                    |  |
|  |  | ValuJet Flight                  |                       | History I                   | 2) Mod 15 Quiz     |  |
| ion                                    | <b>33</b> 71-14.   | Mass Fatality                   |                       | Lecture: Mass               |                    |  |
| ess                                    | Week 14:   | Case History II:<br>World Trade |                       | Fatality Case<br>History II |                    |  |
| rof                                    | Apr 11-17  | Center                          |                       | Thistory if                 |                    |  |
| d P                                    | 110111   | Mass Fatality                   |                       | Lecture: Mass               |                    |  |
| an                                     |  | Case History III:               |                       | Fatality Case               |                    |  |
| suc                                    |  | Hurricane                       |                       | History III                 |                    |  |
| atio                                   |  | Katrina                         |                       |                             |                    |  |
| SECTION 4: Applications and Profession | Module 16: Career paths and applications of forensic anthropology  |                                 |                       |                             |                    |  |
| <b>.</b>                               | Week 15:   | Human Rights                    | Bare Bones            | Lecture: Human              | 1) Mod 16 Quiz     |  |
| <b>Z</b>                               |  | Missions                        | Chapter 15            | Rights Missions             |                    |  |
| [0]                                    | Apr 18-22  | Military                        | Bare Bones            | JPAC Video                  |                    |  |
| CI                                     | (Donding days  | Identifications                 | Chapter 16            | links                       |                    |  |
| SE                                     | (Reading days are Apr 23 and   |                                 |                       |                             |                    |  |
|  | 24, but you  |                                 |                       |                             |                    |  |
|  | will still have  |                                 |                       |                             |                    |  |
|  | access to this   |                                 |                       |                             |                    |  |
|  | Module on  |                                 |                       |                             |                    |  |
|  | those dates)   |                                 |                       |                             |                    |  |
|  | DINALC WEEK.   |                                 |                       |                             |                    |  |
| M                                      | FINALS WEEK:  *** FINAL EXAM DUE MAY 1st BY 11:59 PM ***   |                                 |                       |                             |                    |  |
| XA                                     | Apr 25-May 1   |                                 |                       |                             |                    |  |
| E                                      | The final exam may be completed any time between April   |                                 |                       |                             |                    |  |
| FINAL EXAM                             | 1:59pm, but the Ma   | •                               |                       |                             |                    |  |
| 12                                     | 11:59 pm (ET) deadline is <u>firm</u> and absolutely no late work will be accepted beyond this deadline. |                                 |                       |                             |                    |  |
|  |  |                                 |                       |                             |                    |  |