

# ANTH 4406.001/.002: *Human Osteology*, Fall 2015

**INSTRUCTOR:** Dr. Naomi Cleghorn  
Dept. of Sociology and Anthropology, Room 421  
Email: Cleghorn@uta.edu  
Office Hours: Thursday 9:15 – 10:15 am, *or by appointment* (email me!)  
Dept. of Sociology and Anthropology Phone: 817-272-2661

**LECTURE:** Tuesday & Thursday 2:00 – 3:20 pm University Hall, room 468  
**LABORATORY:** Friday 2:00 – 3:50 pm University Hall, room 468  
**OPTIONAL LAB HOURS:** Thursday 9:15 – 10:15 am & Friday 9:30 – 1:30

## **COURSE DESCRIPTION:**

A complete understanding of the human skeleton is essential to the study of any sub-field of biological anthropology, including bioarchaeology, human anatomy, paleoanthropology, forensic analysis, and related fields. This class is an intensive introduction to the human skeleton, in which students learn how to identify both whole and fragmented bones, and isolated teeth. In lecture, we cover the anatomy of individual bones, with references to functional morphology, bone growth, individual variation, and the over-lying soft tissue components. In addition, students are briefly introduced to bioarchaeological issues, including the analysis of sex, age and health, the ethics and legality of human skeletal analysis, the identification of trauma and pathology, and the use of histological, isotopic, and genetic analysis of the human skeleton.

The class also includes a substantial laboratory component during which students are expected to apply the anatomical information from lectures and the textbook to their own examination of the skeleton. In addition, students will have a separate hour and fifty minute lab on Fridays to study the material. Lab attendance is required and occasionally new information may be presented during this time. If the student is present for all of the scheduled class meetings in the week (including the Friday lab) but feels that they need to spend additional time with the material, they may request extended access to the laboratory. The availability of this access may vary depending on the schedule of the instructor and the other classes using the room. **NO EXTENDED ACCESS WILL BE GRANTED TO STUDENTS WHO HAVE BEEN ABSENT OR LATE TO ANY CLASSES DURING THAT WEEK, UNLESS THERE IS A LEGITIMATE DOCUMENTED REASON FOR THEIR ABSENCE, AND THEY DISCUSS THIS WITH THE INSTRUCTOR IN ADVANCE.**

**NOTE: YOU MUST TELL ME YOU WANT EXTRA LAB TIME, AND WHEN YOU WANT THIS.** If you set up extra lab time and then don't show up, I will be less likely to accommodate you in the future.

## **STUDENT LEARNING OUTCOMES:**

By the end of the course, students are able to:

- Identify both whole and fragmentary human remains to skeletal element.
- Identify anatomical landmarks on bones and teeth.
- Understand bone microstructure.
- Explain the relationship between soft structures, such as muscles and blood vessels, and bone.
- Apply basic concepts of anatomical functional morphology, including anatomical lever systems.
- Understand basic bone biomechanics.

## **REQUIRED TEXTS:**

*Human Osteology*, **3rd edition**, by White, Black and Folkens (2011, Academic Press) is the required text. This book has undergone substantial revision, so I do not recommend earlier editions.

(Note – there are some errors in the muscle attachment origin/insertion figures. You will receive supplemental handouts for these)

## REQUIREMENTS / GRADING:

### GRADING SCALE:

Grades for assignments and tests are posted to Blackboard as soon as possible. It is your responsibility to track your progress and determine that grades have been entered correctly to Blackboard. If you find a discrepancy, contact me immediately.

Your total course grade will be determined based on the following scale.

90% and greater	A
80% to 89%	B
70% to 79%	C
60% to 69%	D
Less than 60%	F

\* A .5% is rounded to next higher grade.

You will be graded on multiple assignments and tests. These can be broken down into the categories detailed below. The value of each grade category is given as a percentage of the total grade. In addition to providing grades for individual assignments, I provide (via Blackboard) a summary grade for each of these categories (for example – “Quiz grade”). You can use these summaries to figure out how you are doing.

Requirement	% of Course Grade
Lab Notebooks	25%
Weekly Quizzes	35%
Midterm	20%
Final Exam	20%

### LAB NOTEBOOKS (25% of total grade):

Over the course of the semester, students compile a laboratory notebook in which they draw each element, complete with labeled features, include a brief narrative of useful identifying features, and record a few measurements specified by the instructor. These notes should be compiled in a **loose-leaf binder**, so that portions of the work can be handed in and graded during the semester. This binder must be separate from any notebook in which you are taking class notes.

Each drawing **MUST** include the following:

- the name of the drawn bone/tooth
- all required landmarks (given in handouts)
- the perspective (i.e., posterior, etc.)
- a rough scale
- a few sentences or brief notes on identification or siding

### WEEKLY QUIZZES (35% of total grade):

These occur at the beginning of the first class every week. With the exception of the first quiz (which will be in standard paper format), these will require the timed (usually about 1-2 minutes per specimen) physical identification of bones, bone fragments, landmarks, and qualities such as element side. This naturally requires a very high degree of familiarity with the bones. Traditionally, students who become *good* at bone identification, put in more time in the lab than is formally required by the syllabus, and take advantage of open lab availability. Students who wish to become *excellent* at bone identification, spend several hours a week in excess of course time in the lab. See the note about extra lab hours above, in the course description.

## **WEEKLY QUIZZES CONTINUED...**

If a student arrives late for a quiz, they will be put into the station sequence, but they will not be allowed to move to any missed station after rotation has ended.

Some stations will be tactile-only. That is, students will be expected to identify bones by touch, not sight. (If you encounter a closed box, DON'T OPEN IT. Look for the hole in the side.)

All quizzes are potentially cumulative. The two lowest grades (including any missed quizzes) are dropped automatically.

### **TESTS (20% for midterm, 20% for final):**

The midterm and final exam include both a practical identification and a written component. Practical identification is fully cumulative, the written component is less cumulative.

### **ATTENDANCE / PARTICIPATION:**

Attendance is voluntary, however, I will keep track of this and it may factor into any conversation we have about your performance in the class. Attendance also affects your access to on-line resources (i.e., lecture slides) and extra lab time. If your attendance falls below 80% (for all classes and labs combined), you will not have access to either of these resources.

### **RECOMMENDATION REQUESTS:**

If you plan to ask me for a recommendation for employment, graduate school, or any other endeavor upon completion of this course, note that I have the following minimum requirements:

- Grade of A or B (depending on the scholarly requirements of the recommendation).
- Excellent attendance and participation in both class and lab.

### **TEST & QUIZ DATES:**

DATE	Quiz / Exam
Tuesday, September 1 <sup>st</sup>	Quiz 1: Orientation, basic terminology
Tuesday, September 8 <sup>th</sup>	Quiz 2: Whole bones of the articulated skull & sutures
Tuesday, September 15 <sup>th</sup>	Quiz 3: Skull foramina & other landmarks
Tuesday, September 22 <sup>th</sup>	Quiz 4: Individual skull bones and fragments
Tuesday, September 29 <sup>th</sup>	Quiz 5: Dentition
Tuesday, October 6 <sup>th</sup>	Quiz 6: Vertebrae & hyoid, juvenile dentition
Tuesday, <b>October 13<sup>th</sup></b>	<b>Midterm Exam</b> – full class time
Tuesday, October 20 <sup>th</sup>	Quiz 7: Shoulder
Tuesday, October 27 <sup>th</sup>	Quiz 8: Humerus, Radius & Ulna
Tuesday, November 3 <sup>rd</sup>	Quiz 9: Hand
Tuesday, November 10 <sup>th</sup>	Quiz 10: Pelvis
Tuesday, November 17 <sup>th</sup>	Quiz 11: Femur & Patella
Tuesday, November 24 <sup>th</sup>	No quiz this week (or extra credit quiz)
Tuesday, December 1 <sup>st</sup>	Quiz 12: Lower leg
Tuesday, December 8 <sup>th</sup>	Quiz 13: Foot bones
<b>Tuesday, December 15<sup>th</sup></b>	<b>Final Exam 2:00 - 4:30 pm</b>

## COURSE TOPIC SCHEDULE: (Subject to revision).

Week / Dates:	Topic:	Text Chapter
<b>1 8/27</b>	Anatomical terminology and orientation Bone Biology <b>(no lab this week)</b>	<b>1, 2 3</b>
<b>2 9/1 &amp; 9/3</b>	General anatomy of the skull (whole bones & sutures) Biometric Measurements	<b>4.1-4.4 16.6</b>
<b>3 9/8 &amp; 9/10</b>	Detailed anatomy of the skull Basic Craniometrics & Sutural Aging	<b>4.5, 4.22 18.1 – 18.2, 18.3.3</b>
<b>4 9/15 &amp; 9/17</b>	Individual bones of the skull Basics of sex determination	<b>4.6 - 4.24, 18.4 – 18.4.3</b>
<b>5 9/22 &amp; 9/24</b>	Adult dentition	<b>5, Appendix 2,</b>
<b>6 9/29 &amp; 10/1</b>	Juvenile dentition The Axial Skeleton: hyoid & vertebrae	<b>18.3 – 18.3.2 6</b>
<b>7 10/6 &amp; 10/8</b>	Vertebrae continued Ribs & Sternum	<b>7</b>
<b>8 10/13 &amp; 10/15</b>	<b>Midterm &amp;</b> The Shoulder: clavicle & scapula	<b>8, 14.5</b>
<b>9 10/20 &amp; 10/22</b>	The Arm: humerus, radius & ulna	<b>9, 14.6 – 14.8</b>
<b>10 10/27 &amp; 10/29</b>	The Hand	<b>10</b>
<b>11 11/3 &amp; 11/5</b>	Pelvis	<b>11, 14.9, 18.3.6 – 18.3.8, 18.4.4</b>
<b>12 11/10 &amp; 11/12</b>	Femur & Patella Basic Biomechanics	<b>12.1 – 12.2, 14.1 – 14.3 14.10, 18.5,</b>
<b>13 11/17 &amp; 11/19</b>	Tibia & Fibula	<b>12.3 – 12.5, 14.11 – 14.12</b>
<b>14 11/24</b>	The Foot: Tarsals	<b>13</b>
<b>15 12/1 &amp; 12/3</b>	The Foot: Metatarsals and phalanges	<b>13</b>
<b>16 12/8</b>	Full Skeleton Review	

## COURSE POLICIES:

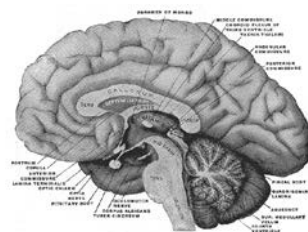
### 1. ACADEMIC INTEGRITY POLICY:

Make sure all your work is the product of YOUR BRAIN!

As a student of the University of Texas at Arlington, you are expected to maintain the highest standards of academic integrity. Any instance of academic dishonesty will have significant negative impact on your scholastic record, not to mention your grade in this class.

Discipline may include a failing grade for the class together with either suspension or expulsion from the University of Texas. Also, academic misconduct will be reported to the Office of Student Conduct.

The Board of Regents has defined academic dishonesty as follows: “Scholastic dishonesty includes but *is not limited to* cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.” (Regents’ Rules and Regulations, Series 50101, Section 2.2).



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All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

## **2. LATE WORK POLICY:**

Assignments are graded down 10% of their value per day after the due date.

## **3. MAKE-UP TEST POLICY:**

There are no make-up exams or quizzes, with the exception of the final exam. If emergency circumstances prevent a student from taking the mid-term, those points will be re-distributed to the final exam (**making the final worth 40% of the grade**). This situation should be avoided at all costs, as it will result in a stressful end to the semester. If a student fails to take the final exam, they should contact the instructor immediately. A make-up test will be offered only in exceptional circumstances, and ***no make-up test will be offered in the event that the student also failed to take the mid-term exam***. In the event that the instructor agrees to offer a make-up final exam, the student must agree to the schedule set by the instructor.

There are also no make-up quizzes. However, the two lowest quiz grades will automatically be dropped.

## **4. ATTENDANCE POLICY:**

Be there on time! Yes – I take attendance.

Attendance *and punctuality* are expected and monitored (see above). Walking in late is rude and distracting – don't do it! Students will be marked as absent if they enter the classroom after lecture has begun, or use a cell phone or any electronic communication device during class.

The Provost's Office would like me to add: "At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance."

## **5. ELECTRONIC COMMUNICATION POLICY:**

I expect you to check your UTA email daily during the week!

A note from the Provost on communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

To obtain your NetID or for logon assistance, visit: <https://webapps.uta.edu/oit/selfservice/>.

If you are unable to resolve your issue from the Self-Service website, contact the Helpdesk at [helpdesk@uta.edu](mailto:helpdesk@uta.edu).

## **6. BLACKBOARD POLICY:**

I use Blackboard for this course. Check it often for assignments, instructions, announcements, and to monitor your progress.

## **7. CLASSROOM ELECTRONIC DEVICE POLICY:**



From my perspective, when I lecture I am in a conversation with you. Granted, I tend to do much of the talking, but it's a conversation, nevertheless. When you start texting in the middle of lecture, it's exactly as if you were texting in the middle of a one-on-one conversation with me – which is both rude and really distracting. So don't even have your cell phone out in class. If you need to leave it on vibrate for emergency calls, discuss this with me before class.

I also do not allow laptops in lecture – *unless* you have a special waiver from the Office for Students with Disabilities. During labs, you may use a tablet or laptop to reference digital anatomical sources or to take notes, and you may use your phone to take photos (although generally, this isn't a good use of time). You may not use lab time to check email, facebook, text, etc. This is a waste of the time you paid for.

## **8. TITLE IX POLICY:**

As stated by the Provost's Office:

"The University of Texas at Arlington is committed to upholding U.S. Federal Law "Title IX" such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit [www.uta.edu/titleIX](http://www.uta.edu/titleIX)."

## **9. DROP POLICY:**

**The last day to drop a class is November 4<sup>th</sup>, by 4 pm.**

The Provost's Office states:

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period (through September 2<sup>nd</sup>). After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://web.uta.edu/aao/fao/>).

#### **10. AMERICANS WITH DISABILITIES ACT POLICY:**

**Contact me early in the semester if you need special accommodation.**

**All tests taken in the ARC need to be scheduled well in advance.**

Please inform me if you have a disability requiring special consideration for classes and exams, and provide me with the relevant paperwork during the first two weeks of class. If you need to take any tests or exams in the Office for Students with Disabilities (UH 102), please note that these must be scheduled with *both* the instructor and that office at least a week in advance. It is possible (and preferable) to set up this schedule near the beginning of the semester.

The University's policy as stated by the Provost is as follows:

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

#### **11. STUDENT FEEDBACK SURVEY**

Please fill out the feedback survey!!

The Provost adds: "At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>."

#### **12. FINAL REVIEW WEEK POLICY**

As stated by the Provost's Office: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

#### **13. EMERGENCY EXIT PROCEDURES:**

Know your exit routes! To reach the nearest stairwell, exit the room, turn right, go straight past the elevators, and turn left. Alternatively, there is another stairwell on the east end of the building (exit the room, turn left, continue to the end of the hall, turn right). When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.



**STUDENT SUPPORT SERVICES AVAILABLE:**

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to [resources@uta.edu](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).