

Human Osteology, Fall 2017

ANTH / BIOL 4406.001/.002 & ANTH 5406.001/.002

INSTRUCTOR: Dr. Naomi Cleghorn
Dept. of Sociology and Anthropology, Room 421
Email: Cleghorn@uta.edu
Faculty Profile: <https://mentis.uta.edu/explore/profile/naomi-cleghorn>
Office Hours: Mon/Weds/Fri 3 – 5pm, *or by appointment* (email me!)
Dept. of Sociology and Anthropology Phone: 817-272-2661

LECTURE/LABORATORY:	Monday/Wednesday	1:00 – 2:50 pm
LABORATORY QUIZ & REVIEW:	Friday	1:00 – 1:50 pm

CLASSROOM: All classes will be held in UH 468 – not in UH 13 as reported on MyMav.

OPTIONAL LAB HOURS – in addition to laboratory above (not to be used as a substitute)

SIGN-UP REQUIRED: Schedule to be discussed in class

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, but feels that they need to spend additional time with the material, they may sign-up for 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, endocranial, etc.)
- a rough scale or statement of scale (e.g., 1:1)
- a few sentences or brief notes on identification, siding, or any unique features of the specimen you are drawing.

WEEKLY QUIZZES (35% of total grade):

These occur at the beginning of class on Friday 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.

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. Note that exams draw heavily from lecture material.

ATTENDANCE / PARTICIPATION:

Attendance is voluntary, however, I will keep track of this (via sign in sheets) 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. Please look for the daily sign in sheet. If you stay for lecture but leave early, I will note this on the sheet.

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	Week	Quiz / Exam
Friday, August 25 th	0	No Quiz
Friday, September 1 st	1	Quiz 1: Orientation, basic terminology
Friday, September 8 th	2	Quiz 2: Whole bones of the articulated skull & sutures, craniometric points
Friday, September 15 th	3	Quiz 3: Skull foramina & other landmarks
Friday, September 22 nd	4	Quiz 4: Individual skull bones and fragments
Friday, September 29 th	5	Quiz 5: Dentition
Friday, October 6 th	6	Quiz 6: Thorax & juvenile dentition
Monday, October 13th	7	Midterm Exam – full class time
Friday, October 20 th	8	Quiz 7: Shoulder, Ribs, & Sternum
Friday, October 27 th	9	Quiz 8: Humerus, Radius & Ulna
Friday, November 3 rd	10	Quiz 9: Hand
Friday, November 10 th	11	Quiz 10: Pelvis & Thigh
Friday, November 17 th	12	Quiz 11: Knee & Lower Leg
Wednesday, November 22nd	13	Extra credit quiz - optional
Friday, December 1 st	14	Quiz 12: Ankle & Upper foot
Wednesday, December 6th	15	Quiz 13: Foot
Monday, December 11th		Final Exam 11:00 am - 1:30 pm

GRADUATE SECTION REQUIREMENTS:

Graduate students are required to produce an osteology research project **in lieu of** the notebook requirement (discussed above). This research project will comprise 25% of their overall grade. In addition, graduate students will be expected to know additional material for each practical quiz. Some questions that will be extra credit on an undergraduate quiz, will be required for graduate students.

COURSE TOPIC SCHEDULE: (Subject to revision).

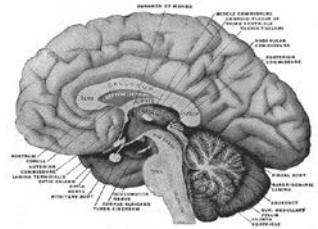
Week / Dates:	Topic:	Text Chapter
0 Aug. 25th	Anatomical terminology and orientation	1, 2
1 Aug. 28th – Sep 1st	Bone Biology General anatomy of the skull (whole bones & sutures)	3 4.1-4.4
2 Sept. 6th & 8th	Biometric Measurements Bioarchaeology of the skull	4.5 – 4.6 16.6 18.1 – 18.2, 18.3.3, 18.4 – 18.4.3
3 Sept. 11th - 15th	Detailed anatomy of the endocranium & basicranium	4.7 - 4.24,
4 Sept. 18th – 22nd	Individual bones of the skull Adult dentition	4 continued 19.12
5 Sept. 25th – 29th	Adult dentition	5, Appendix 2 18.3 – 18.3.2
6 Oct. 2nd – 6th	Juvenile dentition The Axial Skeleton: hyoid & vertebrae	6, 7
7 Oct. 9th - 13th	Midterm (Monday!) Ribs & Sternum	
8 Oct. 16th – 20th	Basic Biomechanics The Shoulder: clavicle & scapula	14.1 – 14.3 14.10, 18.5,
9 Oct. 23rd – 27th	The Arm: humerus, radius & ulna	8, 14.5 9, 14.6 – 14.8
10 Oct. 30th – Nov. 3rd	The Hand	10
11 Nov. 6th - 10th	Pelvis & Femur	11, 12.1 14.9-14.10 18.3.6 – 18.3.8, 18.4.4
12 Nov. 13th - 17th	Tibia & Fibula & Patella	12.2 – 12.5, 14.11 – 14.12
13 Nov. 20th – 22nd	The Foot: Tarsals	13.1
14 Nov. 27th – Dec. 1st	The Foot: Metatarsals and phalanges	13.2 – 13.4
15 Dec. 4th - 6th	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 a 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).

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.

From the Provost: “UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents’ Rule 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University. Additional information is available at <https://www.uta.edu/conduct/>.”

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. If you leave early, I will also note this – unless you clear it with me first.

The Provost's Office would like me to add: “At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator in student success. 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. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients “begin attendance in a course.” UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Blackboard. This date is reported to the Department of Education for federal financial aid recipients.”

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.

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. NON-DISCRIMINATION & TITLE IX POLICY:

As stated by the Provost's Office:

"The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos."

"The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. For information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu."

9. DROP POLICY:

The last day to drop a class is November 1st, 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 (**Late Registration Ends August 30th**). 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://www.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.

Note: This class format includes timed station quizzes. If you need special accommodation, we will need to work this out at the beginning of the semester as these quizzes must be taken in room 468.

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:

UT 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), The Americans with Disabilities Amendments Act (ADAAA), and Section 504 of the Rehabilitation Act. 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 disability. Students are

responsible for providing the instructor with official notification in the form of a letter certified by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

Counseling and Psychological Services (CAPS) www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

11. STUDENT FEEDBACK SURVEY

Please fill out the feedback survey!!

The Provost adds: “At the end of each term, students enrolled in face-to-face and online classes categorized as “lecture,” “seminar,” or “laboratory” are 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 via the SFS database is aggregated with that of other students enrolled in the course. Students’ anonymity will be protected to the extent that the law allows. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit <http://www.uta.edu/sfs>.”

12. FINAL REVIEW WEEK POLICY

As stated by the Provost’s Office: “for semester-long courses, 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 mobility-impaired individuals.

14. CAMPUS CARRY: From the Provost: “Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>”

COURSE SUPPORT SERVICES

(Get Help – Get a better grade!)



OFFICE HOURS

Come see me if you're having trouble with the class. If you can't come to my office hours, email me to make an appointment.

TUTORING

The IDEAS Center (2nd Floor of Central Library) offers free tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

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, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>.