

# ANTH 4406-001: *Human Osteology, Fall 2012*

**INSTRUCTOR:** Dr. Naomi Cleghorn  
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**TEACHING ASSISTANT:** Destiny Micklin, destiny.micklin@mavs.uta.edu

**LECTURE/LABORATORY:** Monday & Wednesday, 7:00 – 8:20, University Hall, room 468

**LABORATORY:** Friday, 3:00 – 4:50, UH 468

## **COURSE DESCRIPTION / STUDENT LEARNING OUTCOMES:**

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 analyses of the skeleton. Part of this independent study may occur during the Monday/Wednesday classes. In addition, students will have another hour and fifty minutes on Friday to study the material. 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, the TA, 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.

**NOTE: YOU MUST TELL US IF YOU WANT EXTRA LAB TIME, AND WHEN YOU WANT THIS. WE WILL NOT HAVE A SET TIME FOR OPEN LAB.** If you set up extra lab time and then don't show up, we 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 the relationship between soft structures, such as muscles and blood vessels, and bone.

## **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:

Requirement	% of Course Grade
Attendance/Participation	5%
Lab Notebooks	25%
Weekly Quizzes	30%
Midterm	20%
Final Exam	20%

### ATTENDANCE / PARTICIPATION:

Attendance and punctuality are required and expected in *both lecture and lab*. If you are either late or absent, you will be counted as absent for that day. You will be allowed two absences over the course of the semester without penalty to your attendance grade.

### LAB NOTEBOOKS:

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 will be compiled in a loose-leaf binder, so that portions of the work can be handed in and graded during the semester.

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:

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.

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:

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.

### FUTURE RECOMMENDATIONS:

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 minimal requirements:

- A 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
Monday, August 27 <sup>th</sup>	Quiz 1: Orientation, basic terminology
<b>Wednesday, September 5<sup>th</sup></b>	Quiz 2: Whole bones of the articulated skull & sutures
Monday, September 10 <sup>th</sup>	Quiz 3: Skull foramina & other landmarks
Monday, September 17 <sup>th</sup>	Quiz 4: Individual skull bones and fragments
Monday, September 24 <sup>th</sup>	Quiz 5: Dentition
Monday, October 1 <sup>st</sup>	Quiz 6: Vertebrae & hyoid, juvenile dentition
<b>Monday, October 8<sup>th</sup></b>	<b>Midterm Exam</b>
Monday, October 15 <sup>th</sup>	Quiz 7: Shoulder
Monday, October 22 <sup>nd</sup>	Quiz 8: Humerus, Radius & Ulna
Monday, October 29 <sup>th</sup>	Quiz 9: Hand
Monday, November 5 <sup>th</sup>	Quiz 10: Pelvis
Monday, November 12 <sup>th</sup>	Quiz 11: Femur & Patella
Monday, November 19 <sup>th</sup>	No quiz this week
Monday, November 26 <sup>th</sup>	Quiz 12: Lower leg
Monday, December 3 <sup>rd</sup>	Quiz 13: Foot bones
<b>Final Exam</b>	<b>December 12<sup>th</sup>, 8:15 – 10:30 am</b>

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

Week of:	Topic:	Text Chapter
<b>1 8/24</b>	Anatomical terminology and orientation	<b>1, 2</b>
	Bone Biology	<b>3</b>
	General anatomy of the skull (whole bones & sutures)	<b>4.1-4.4</b>
<b>2 8/27 – 8/31</b>	Biometric Measurements	<b>16.6</b>
	(no class Monday)	<b>4.5, 4.22</b>
	Detailed anatomy of the skull	<b>14.4</b>
<b>3 9/5 – 9/7</b>	Basic Craniometrics & Sutural Aging	<b>18.1 – 18.2, 18.3.3</b>
	Individual bones of the skull	<b>4.6 – 4.24,</b>
<b>4 9/10 – 9/14</b>	Basics of sex determination	<b>18.4 – 18.4.3</b>
<b>5 9/17 – 9/21</b>	Adult dentition	<b>5, Appendix 2,</b>
	Juvenile dentition	<b>18.3 – 18.3.2</b>
<b>6 9/24 – 9/28</b>	The Axial Skeleton: hyoid & vertebrae	<b>6</b>
	Vertebrae continued	<b>7</b>
<b>7 10/1 – 10/5</b>	Ribs & Sternum	<b>7</b>
	<b>Midterm &amp;</b>	<b>8, 14.5</b>
<b>8 10/8 – 10/12</b>	The Shoulder: clavicle & scapula	<b>9, 14.6 – 14.8</b>
<b>9 10/15 – 10/19</b>	The Arm: humerus, radius & ulna	<b>10</b>
<b>10 10/22 – 10/26</b>	The Hand	<b>11, 14.9,</b>
	Pelvis	<b>18.3.6 – 18.3.8,</b>
<b>11 10/29 – 11/2</b>		<b>18.4.4</b>
	Femur & Patella	<b>12.1 – 12.2,</b>
<b>12 11/5 – 11/9</b>	Basic Biomechanics	<b>14.1 – 14.3</b>
		<b>14.10, 18.5,</b>
	Tibia & Fibula	<b>12.3 – 12.5,</b>
<b>13 11/12 – 11/16</b>		<b>14.11 – 14.12</b>
<b>14 11/19 – 11/23</b>	The Foot: Tarsals	<b>13</b>
<b>15 11/26 – 11/30</b>	The Foot: Metatarsals and phalanges	<b>13</b>
<b>16 12/3 – 12/5</b>	Anatomy Review	

## COURSE POLICIES:

### MAKE-UP EXAM/QUIZ 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, 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.

### ATTENDANCE POLICY:

Attendance is required. (See above)

### LATE WORK POLICY:

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

## ADDITIONAL UTA POLICIES

(as provided by the Vice Provost for Academic Affairs):

### Academic Integrity:

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 together with either suspension or expulsion from the University of Texas. 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.*

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.

### Drop Policy:

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 August 29<sup>th</sup>, 2012**). 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. **The last day to drop a class is October 31<sup>st</sup>, 2012.** 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/ses/fao>).

#### **Americans with Disabilities Act:**

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 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.

#### **Electronic Communication: CHECK YOUR UTA EMAIL ADDRESS DAILY!**

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>.

#### **Student Support Services:**

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).

#### **Student Feedback Survey: NOW ON-LINE!**

At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a 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>.

#### **Final Review Week:**

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.