ANTH 5406: (graduate) *Human Osteology*, Fall 2010

INSTRUCTOR: Dr. Naomi Cleghorn

Dept. of Sociology and Anthropology, Room 421

Email: Cleghorn@uta.edu

Office Hours: Friday 10:00 – 12:00, or by appointment Dept. of Sociology and Anthropology Phone: 817-272-2661

TEACHING ASSISTANT: Lynette Dixon

LECTURE/LABORATORY: Monday & Wednesday, 1:00 – 2:30, University Hall, room 468

LABORATORY: Friday, 2:00 – 3:50, UH 468

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 analyses of the skeleton. Part of this independent study will occur during the Monday/Wednesday classes. In addition, students will have another hour and a half 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.

Each student is assigned a complete skeleton which forms the basis for their study. For some elements, particularly the individual bones of the skull and the individual teeth, students also have access to shared specimens of isolated bones and bone models. 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.

Graduate level research requires a highly detailed understanding of the relationship between soft tissue anatomy and skeletal elements, and students should be prepared for a close study of the anatomy. In addition, students will prepare an oral presentation (limited to 15-20 minutes, with slides) to be delivered to the class near the end of the semester (December 1st and 6th). The topic should be on morphological variation within a particular skeletal element, and the interpretation of this variation within published scientific literature. This topic can focus on modern humans, archaeological populations, or paleoanthropological specimens. Students should begin to look for a topic during the first week of class. By September 27th, they must hand in the first general description of their topic. A core bibliography is due by October 11th. Useful journals to consult include (these are just the most popular on the subject): *The American Journal of Physical Anthropology*, *Journal Of Human Evolution* (note that this is different from the publication "Human Evolution"), *Evolutionary Anthropology*, and *International Journal of Osteoarchaeology*.

REQUIREMENTS / GRADING:

Students will be evaluated on the basis of their individual notebooks (20%), practical and written examinations (including weekly quizzes (30%), a midterm (15%), and a final exam (15%), oral presentation (15%), and attendance/participation in lecture and lab (5%).

TEXTS:

<u>Human Osteology</u>, 2nd edition, by Tim White and Pieter Folkens (2000) Academic Press is the recommended text, and assigned readings are based on this book. If you would prefer to purchase a cheaper, more portable version, <u>The Human Bone Manual</u> by White and Folkens (2005) is also acceptable. However, the chapter order and some of the content varies slightly.

In addition, graduate students are encouraged to get a good atlas of human gross anatomy.

TEST DATES:

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DATE	Quiz / Exam		
Wednesday, September 1 st	Quiz: Orientation, basic terminology		
Wednesday, September 8 th	Quiz: Skull bones		
Monday, September 13	Quiz: skull landmarks, foramina, sutures, etc.		
Monday, September 20 th	Quiz: Individual skull bones and fragments		
Monday, September 27 th	Quiz: Dentition		
Monday, October 4 th	Quiz: Vertebrae		
Monday, October 11 th	Midterm Exam		
Monday, October 18 th	Quiz: Shoulder		
Monday, October 25 th	Quiz: Humerus, Radius & Ulna		
Monday, November 1 st	Quiz: Hand – carpals/metacarpals only		
Monday, November 8 th	Quiz: Hand phalanges, pelvis		
Monday, November 15 th	Quiz: Femur & Patella		
Monday, November 22 nd	Quiz: Lower leg		
Monday, November 29 th	Quiz: Foot phalanges		
Monday December 6 th	Quiz: Tarsals and metatarsals		
Final Exam	December 13 th , 11:00 am – 1:30 pm		

COURSE TOPIC SCHEDULE: (Subject to revision).

Week of:	Topic:	W & F Chapter
8/30 - 9/3	Anatomical terminology and orientation, the skull	1, 3, part 4
9/8 - 9/10	Detailed anatomy of the skull (no class on Monday)	4, 17.3.3
9/13 - 9/17	Individual bones of the Skull	5
9/20 - 9/24	Dentition	17.3, 17.3.1, 17.3.2
9/27 - 10/1	The Axial Skeleton / Hyoid & Vertebrae	6
10/4 - 10/8	Ribs & Sternum	7
10/11 - 10/15	Midterm + The Shoulder: clavicle, scapula	8
10/18 - 10/22	Humerus, Radius & Ulna	9
10/25 - 10/29	The hand	10
11/1 - 11/5	Pelvis	11, 17.3.6 - 17.3.8
11/8 - 11/12	Femur & Patella	12.1 - 12.2.4
11/15 - 11/19	Tibia & Fibula	12.3.1 - 12.5

11/22 - 11/24	The Foot (no lab Friday)	13
11/29 - 12/3	Graduate Student Presentations, Carpals & Tarsals	13
12/6 - 12/10	Graduate Student Presentations, Anatomy Review	

COURSE POLICIES:

MAKE-UP EXAM 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 results 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 no make-up quizzes. However, the two lowest quiz grades will automatically be dropped.

LATE WORK POLICY:

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

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. 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. Contact the Financial Aid Office for more information. The last day to officially drop a class from the fall 2010 semester is **November 5th**.

AMERICANS WITH DISABILITIES ACT POLICY:

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. 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 federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364."

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).

STUDENT SUPPORT SERVICES AVAILABLE:

There are several programs at UTA that help students succeed, including: learning assistance, developmental education, advising and mentor, admissions and transition, and federally funded programs. If you need help with personal, social, or academic issues, or would like more information about the programs described above, please contact the Office of Student Success Programs (817-272-6107).

Electronic Communication Policy: The University of Texas at Arlington has adopted the University "MavMail" address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All students are assigned a MavMail account. *Students are responsible for checking their MavMail regularly*. Information about activating and using MavMail is available at http://www.uta.edu/oit/email/. There is no additional charge to students for using this account, and it remains active even after they graduate from UT Arlington.

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.