Fall 2011 ANT 4525 Section 0798 Human Osteology and Osteometry

Instructor: Chin-hsin Liu

Class periods: MWF Period 4 (10:40-11:30 AM) Classroom and laboratory: 1208J Turlington Hall

Office hours and contact:

Chin-hsin Liu (Instructor) <u>inuit924@ufl.edu</u> M 11:30AM-2:30PM or by appointment

Kate Kolpan (TA) <u>kkolpan@ufl.edu</u> R 3:00-6:00PM

Allysha Winburn (TA) aip231@ufl.edu W 11:30AM-1:30PM & F 8:00-9:00AM

COURSE DESCRIPTION

This course introduces the concepts and methods used in the analysis of human skeletal remains from archaeological and forensic contexts. The understanding of human skeletal system and skills gained in this course will provide a basis for advanced studies in bioarchaeology, forensic anthropology, medicine, dentistry, paleopathology, and paleoanthropology. Although introductory in nature, this course is highly practical and requires intensive laboratory study time. Through class lectures (three hours per week) and independent laboratory study time, students are expected to gain skills on: 1) identifying whole and fragmentary human skeletal elements, 2) distinguishing human from non-human skeletal remains, 3) determining age, sex, stature and ancestry of an individual, 4) recognizing basic skeletal/dental pathologies, and 5) reconstruct biological life history of an individual based on skeletal remains. Being successful in this course usually requires 20 to 30 hours per week of independent laboratory study time to prepare for the lab practical quizzes and exam. Your performance on quizzes will reflect the amount of time you put into independent study. Please evaluate your schedule to decide if you can fully commit to this class and budget your time accordingly.

TEXTS

- **Required**-- *The Human Bone Manual*. By: Tim D. White & Pieter A. Folkens (2005) Academic Press.
- Alternative Edition-- Human Osteology. By: Tim White (1991) Academic Press.
- **Recommended**-- *Human Osteology: A Laboratory and Field Manual*. By: William Bass (1987) Special publication No. 2 of the Missouri Archaeological Society, Inc.

The instructor reserves the rights to post additional readings and handouts on E-Learning/Sakai (http://lss.at.ufl.edu).

COURSE REQUIREMENTS and ASSESSMENTS

You are expected to complete the reading assignments for each class period listed below before coming to class. There will be a laboratory copy of text books and materials available for reference purpose. However, you are required to bring your own textbooks during independent study time. There will be nine (9) cumulative practical guizzes and one (1) large final exam

administered for this course. The quizzes and exam involve mainly the identification of anatomical features and fragmentary skeletal remains. Short answer questions may also appear. The format of the quizzes and exam will be explained in detail during the first class. The lowest quiz score will be dropped at the end of the semester for final grade calculation. The final exam grade, however, may not be dropped. The grade of each quiz and exam will be uploaded to E-learning/Sakai course page. Grades cannot be communicated via email or phone.

GRADING

Point total will be calculated by adding up the raw scores of all quizzes (100 points each) and the final exam (200 points), for a total of 1000 points. No curve or any forms of grade adjustment will be used.

The following grading scale is followed:

A 93% - 100%	A- 90% - 92%	B+ 87% - 89%
B 83% - 86%	B- 80% - 82%	C+ 77% - 79%
C 73% - 76%	C- 70% - 72%	D+ 67% - 69%
D 63% - 66%	D- 60% - 62%	E 59% or less

GENERAL CLASSROOM POLICIES

- ♣ SILENCE OR TURN OFF CELL PHONES. Absolutely NO text messaging.
- Laptops, tablets, and all portable electronic devices are not permitted.
- ♣ The instructor and TAs will **NOT** distribute lecture notes/copies of the Power Points of in-class presentation under any circumstance.
- The lectures and quiz/exam questions may not be recorded in any form.
- Cheating or plagiarism in any form is subject to university policy as outlined by the Dean of Students (http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php). It is your responsibility to fully comprehend the extent and consequences of violating these policies.
- Only missed quizzes due to serious illness, family emergency, military duty, or official UF business may be accommodated. Documentation is required for excused absences.
- ♣ Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. Students should be proactive in obtaining the documentation and complete the registration process with the Dean of Students Office within two weeks after class starts.

THE FORENSIC RESEARCH & TRAINING LAB (1208J Turlington) Rules

- The room is to <u>remain secure at all times</u>. If you leave, even for a few minutes, **be sure the door is closed and locked**. Access to the lab is controlled by a key-pad entry lock; students in this course will be granted access via their UFID number (first 6 digits, then push the star button). Students not enrolled in this course are not permitted to enter the lab.
- ♣ No food or drinks allowed in the laboratory. Water bottles with caps are permitted but should be stored away from the tables and specimens.

- Permission for visitors to the laboratory must be received from the instructor or other Anthropology faculty member(s). NO EXCEPTIONS!
- ♣ All skeletal remains, laboratory equipment, and other teaching materials are to be treated with the utmost respect. Repetitive offending may result in point deduction.
- Students are restricted to specimens in the plastic boxes on the back wall of the room and to any additional materials provided by the instructor.
- ♣ The teaching laboratory is not a social center. Please be respectful of other students' study time and personal space.
- → Since you will have access to the laboratory beyond regular UF business hours, it is important to ensure your own safety and proper personal behavior is expected. In case of emergency, UFPD can be reached at 392-1111, or 911. Use Student Nighttime Auxiliary Patrol (SNAP, 392-7627) when necessary if you stay until late. If you feel you are being harassed or concerned with specific behavioral issues, report immediately to the instructor or the TAs.
- ♣ No specimens are to leave 1208J Turlington Hall. This also includes images and sketches of the specimens. Taking pictures/sketches of the bones for study purpose, social media, or personal collection is strictly prohibited. In fact, studying photographed/sketched images of the laboratory specimens constitutes cheating. Remember, it is a privilege to study human skeletal remains and it is a serious ethical violation to post pictures of human remains anywhere.

Any transgressions of these rules will lead to expellant from the laboratory, point loss, removal of access rights, and/or dismissal from the course.

ADDITIONAL RESOURCES

Throughout the semester, you may also be interested in consulting some of the references listed below.

- www.eskeletons.org (good online study guide for human osteology & comparative anatomy)
- http://www.meddean.luc.edu/lumen/meded/grossanatomy/learnem/bones/main_bon e.htm (test yourself!)
- Larsen, Clark Spender (1997). *Bioarchaeology: Interpreting Behavior from the Human Skeleton*. Cambridge, MA: Cambridge University Press.
- ¥ Katzenberg, M. Anne and Shelley R. Saunders (Eds.) (2000). *Biological Anthropology of the Human Skeleton*. New York: John Wiley and Sons.
- ♣ Baker, Brenda J., Tosha L. Dupras, and Matthew W. Tocheri (2005). *The Osteology of Infants and Children*. College Station, TX: Texas A&M University Press.
- → Donald J. Ortner (1981). *Identification of pathological conditions in human skeletal remains*. Washington: Smithsonian Institution Press.

COURSE SCHEDULE

The assigned readings are from White and Folkens (2005) *The Human Bone Manual*. If you plan to use the alternative edition (White, 1991), study its table of content and read accordingly. Or contact the instructor at the beginning of the semester. Please note the exact dates for lecture

topics are subject to change due to availability of potential guest speakers. However, no substantial changes will be made to quiz and exam dates.

DAY	DATE	LECTURE TOPIC	REQUIRED READINGS
М	Aug. 22	Course outline and expectations	Ch. 3
W	Aug. 4	Bone biology & development	Ch. 4
F	Aug. 26	Anatomical terms, joints, and muscles	Ch. 6
М	Aug. 29	Bones of the skull	Ch. 7
W	Aug. 31	Bones of the skull (cont.)	Ch. 7
F	Sep. 2	Skull – foramina and soft tissue	In class handouts
М	Sep. 5	NO CLASS- Labor Day	
W	Sep. 7	Dentition	Ch. 8; Ch. 19 (364-369)
F	Sep. 9	Quiz #1	
М	Sep. 12	Dentition (cont.)	Ch. 8; Ch. 19 (364-369)
W	Sep. 14	Skull – assessment of sex, age and ancestry	Ch. 19 (359-364, 369-371, 385-391, 400-404)
F	Sep. 16	Quiz #2	
М	Sep. 19	Skull – assessment of sex, age and ancestry (cont.)	Ch. 19 (359-364, 369-371, 385-391, 400-404)
W	Sep. 21	Vertebral column	Ch. 9; Ch. 14 (241-245)
F	Sep. 23	Quiz #3	
М	Sep. 26	Vertebral column (cont.)	Ch. 9; Ch. 14 (241-245)
W	Sep. 28	Ribs and sternum	Ch. 10
F	Sep. 30	Quiz #4	
М	Oct. 3	Clavicle and scapula	Ch. 11
W	Oct. 5	Human vs. nonhuman remains	
F	Oct. 7	Upper limb – humerus, radius, ulna	Ch. 12
М	Oct. 10	Upper limb – humerus, radius, ulna (cont.)	Ch. 12
W	Oct. 12	Hand – carpals, metacarpals, phalanges	Ch. 13
F	Oct. 14	Quiz #5	
М	Oct. 17	Hand – carpals, metacarpals, phalanges	Ch. 13
W	Oct. 19	Os Coxae	Ch. 14 (246-253); Ch. 19 (374-383, 387-398)
F	Oct. 21	Quiz #6	
М	Oct. 24	Os Coxae (cont.)	Ch. 14 (246-253); Ch. 19 (374-383, 387-398)
W	Oct. 26	Lower limb – femur, tibia, fibula, patella	Ch. 15
F	Oct. 28	Quiz #7	
М	Oct. 31	Lower limb – femur, tibia, fibula, patella (cont.)	Ch. 15
W	Nov. 2	Foot – tarsals, metatarsals, phalanges	Ch. 16
F	Nov. 4	NO CLASS- Homecoming	
М	Nov. 7	Foot – tarsals, metatarsals, phalanges (cont.)	Ch. 16
W	Nov. 9	Quiz # 8	
F	Nov. 11	NO CLASS- Veterans Day	
М	Nov. 14	Trauma	Ch. 17
W	Nov. 16	Paleopathology- Dental	Ch. 17
F	Nov. 18	Quiz #9	

M	Nov. 21	Paleopathology- Skeletal	Ch. 17
W	Nov. 23	Lab day	
F	Nov. 25	NO CLASS- Thanksgiving	
М	Nov. 28	Estimation of stature	Ch. 19 (398-400)
W	Nov. 30	Taphonomy	Ch. 5
F	Dec. 2	Open Lab	
M	Dec. 5	Open Lab	
W	Dec. 7	CUMULATIVE FINAL PRACTICAL EXAM	