OSTEOLOGY (ANTH 410)
Spring Semester 2010

Room and Time: 107 Carpenter
2:30-4:25 pm, Monday & Wednesday

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Purpose: This course introduces students to aspects of the human skeleton and dentition that are of anatomical, archaeological, forensic, and developmental significance. Topics include, but are not limited to, the identification of bones and teeth, as well as various anatomical structures; the distinction between normal and pathological bone; the estimation of age and sex from skeletons; bone metabolism; growth and development; and the functional aspects of musculoskeletal and dental systems.

Classes are structured around lectures and labs where students have an opportunity to handle bones and ask questions. In addition to time spent with bones in the class, students should work outside class studying skeletal anatomy as depicted and explained in the text and on various internet sites, as well as by examining plastic skeletons in the university library (4th floor Paterno).

Requirements: Course grades are determined through several tests, essays, and extra credit. Tests focus on the identification of skeletal remains and information from lectures and the textbook.

Attendance. Regular attendance is required to do well in this class. Students are expected to participate by asking questions, responding to questions, and discussing lecture topics. Attendance will not be taken; however, this is a "hands on" course so failure to attend regularly will negatively affect your performance on tests.

Tests. Three tests are given to evaluate your knowledge of the skeleton and comprehension of topics raised in class. Each test pertains to materials covered in that part of the class (roughly one-third of the semester apiece). The grading policy is designed to maximally benefit students, and it takes into account the possibility of poor performance attributable to a "bad" day. First, the grade distribution on each test is scaled according to the highest score in the class. That is, your performance is measured relative to that of other students who set the top score for that particular test. Second, a student's lowest test score is not weighted as heavily as other tests in determining the final course grade. Two tests represent 38% of the final grade apiece (together 76%); the lowest score makes up the remaining 18%.

Essays. Essays are assigned near the end of the semester to use your new-found knowledge to evaluate information widely disseminated to the public. They should be short, but also clear and thorough. Schedule permitting, they will be in-class assignments following film viewings. This component of the course represents 6% of the overall course grade.

Extra Credit. Contributions to class discussions (lecture only) are awarded extra credit. Extra credit can add up to five points to the total class score, so it is possible, but unlikely, for someone to acquire as many as 105 points. For example, if a student has earned a score of 89 (B+) on the basis of the three tests plus 3 extra credit points for class contributions, that individual's overall course grade is 92 (A). To earn extra credit, be aware that quality, not quantity, counts – questions and comments must move discussions forward, not simply fill time. So extra credit is only awarded for substantive contributions. Student participation scores are summed at the end of the semester, and extra credit, if earned, will be calculated relative to the highest performance total. In other words, you are ranked against your peers in terms of contributions to class.

Note that the grading policy is designed to maximally benefit students, and it takes into account the possibility of a poor showing on a test early in the semester. Students who want to raise their course grade can do so by performing well at the end of the semester on tests and essays, and by participating fully in class (thereby accruing extra credit). Points earned during the entire semester on the five tests and their course grade equivalents are as follows.

A	100-92	C+	79-78
A-	91-90	C	77-70
B+	89-88	D	69-60
B	87-82	F	59-0
B-	81-80		

Class materials: One textbook is required. Supporting materials are made available to students in labs or on the university's ANGEL system.

Textbook. Tim White, 2005, *The Human Bone Manual*, Elsevier Academic Press.

Supporting Materials. Various materials, most importantly lecture notes, are posted on ANGEL. You might want to print the PDF-format notes prior to class. They will show you what will be covered and the order in which that will be done. Familiarity with specialized terms and basic concepts will help you follow issues raised in class. You will, however, have to take your own notes because the Powerpoint lecture slides only cover basic points, often in outline format. That is, the PDF-format notes alone are not a substitute for attending class, listening to lectures, taking notes, asking questions, and benefiting from discussions involving fellow students. In short, there is no substitute for actively thinking about the class content as opposed to passively printing notes and expecting something good will come of it.

Academic Integrity: *Copying part, or all, of another student's test or essay will be rewarded with the grade it so richly deserves – failure in the course.* Cheating and plagiarism will be reported following established university procedures for handling issues of academic dishonesty. Students who are unsure about what is meant by cheating and plagiarism (think "theft") should consult the College of the Liberal Arts web site: http://www.la.psu.edu/CLA-LAUS/integrity/plagiarism.shtml.

Students with Disabilities: Penn State encourages qualified persons with disabilities to participate in its programs and activities. If special accommodation is needed in this course, or if you have questions about physical access, please contact the instructors immediately.

Course Schedule: The following schedule gives you a general idea about what is covered, and when that will be done. The schedule will be modified as necessary – that is, anticipate changes. Labs cannot be set up individually for students who miss them; so endeavor to attend or study the bones using skeletons available in the university's library. Changes in test dates will be announced in class and posted on ANGEL. Students are responsible for showing up on the correct day for tests. The last test will be held during Final Exam Week at the time scheduled by the university.

Week	Date	Topic
1	11-Jan	Introduction
1	13-Jan	Anatomical terms, skeletal function
2	18-Jan	Martin Luther King Day -- No Classes
2	20-Jan	*Pelvis, Femur*
3	25-Jan	*Tibia, Fibula, Foot*
3	27-Jan	*Lab*
4	1-Feb	Bone characteristics
4	3-Feb	Test
5	8-Feb	*Scapula, Clavicle, Humerus*
5	10-Feb	*Ulna, Radius, Hand*
6	15-Feb	*Lab*
6	17-Feb	*Ribs, sternum*
7	22-Feb	*Vertebrae*
7	24-Feb	*Lab*
8	1-Mar	Age
8	3-Mar	Trauma & cultural modifications
XX	8-Mar	SPRING BREAK
XX	10-Mar	SPRING BREAK
9	15-Mar	Test
9	17-Mar	*Cranium*
10	22-Mar	*Cranium*
10	24-Mar	*Cranium*
11	29-Mar	*Cranium*
11	31-Mar	Sex
12	5-Apr	*Lab*
12	7-Apr	*Lab*
13	12-Apr	*Film (Critique)*
13	14-Apr	*Film (Critique)*
14	19-Apr	Pathology
14	21-Apr	Growth & development
15	26-Apr	*Dentition & supporting structures*
15	28-Apr	Medical applications
		Test (Final Scheduled by University)