## ANTHROPOLOGY 469 - FORENSIC ANTHROPOLOGY APPLICATIONS

Department of Anthropology – Southern Illinois University Edwardsville Term Year

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## **COURSE DESCRIPTION:**

This is an intensive lab course focusing on the applications of human osteology to bioarchaeological and forensic contexts. Forensic anthropology deals with the identification of human remains and factors relating to cause and manner of death and events after death using biological anthropological methods. In this course we will apply analytical methods used in skeletal biology and biological anthropology, including methods for determining biological identity (stature, sex, age, ancestry) and pathology. Students will be expected to demonstrate advanced skills in skeletal element identification, including fragmentary remains. The course will introduce students to the basics of recognizing signs of disease and injury from skeletal material, and we will also discuss the use of other methods related to identification and criminal investigation of human remains. While forensic anthropology focuses on the application of skeletal biology in modern legal contexts, the applications of skeletal biology to prehistoric and historic remains will also be examined. Hands-on study of human skeletal remains and casts is a large component of the course.

### PREREQUISITE:

Students should have taken ANTH 369, or get permission of the instructor to enroll in the course.

#### **TEXTS:**

Byers SN. 2008. Introduction to Forensic Anthropology: A Textbook, 3rd ed. Allyn and Bacon. (BYERS)

Steele DG and Bramblett CA 1988. The Anatomy and Biology of the Human Skeleton. Texas A&M University Press. (SB)

# ACADEMIC INTEGRITY:

Cheating is not tolerated. It is not a victimless act—most of all it hurts the students that are earning their achievements honestly. Cheating includes all forms of plagiarism, submitting work that is not entirely your own and original, incorrect citations of others' works, fabrication of sources of information or observations, and use of materials not explicitly permitted during quizzes and exams. Cheating will result in a failing grade for the assignment, or for the course. Additional consequences may also be imposed, which can include suspension or expulsion from the university. Students are individually responsible for understanding what constitutes cheating and forms of plagiarism. Please talk to me if you have any questions.

Plagiarism includes either presenting someone else's words without quotation marks (even if you cite the source) or presenting someone else's ideas without citing that source. If you plagiarize, your instructor cannot evaluate your understanding of the topic. Paraphrasing is not simply a rewording of the original source content. University policy states that "Normally a student who plagiarizes shall receive a grade of F in the course in which the act occurs. The offense shall also be reported to the Provost." (http://www.siue.edu/POLICIES/1i6.html). The University policy discusses additional academic sanctions including suspension and expulsion from the University. For a full explanation see the Student Academic Code (document 3C2). Also visit the Writing Center's web site for links to helpful hints on avoiding plagiarism. The Writing Center's URL is: http://www.siue.edu/IS/WRITING/

### CELL PHONES, PAGERS, PDAs:

Please turn off all pagers, cell phones, and PDA devices. They are not to be used in class.

## OFFICE HOURS & CONTACTING ME:

I have office hours to help you. Please talk to me if you have questions or concerns about any course material. If you cannot make my office hours, I am happy to schedule appointments at other times. I check email frequently, but do not assume I have read or received your email until you have received a response from me. For emergencies, first telephone my office, and leave a voice-mail message if I am unavailable.

### SUPPORT SERVICES:

All students with disabilities will be accommodated through the Disability Support Services Office. Students with disabilities should contact the DSS Office (650-3726) to make any necessary arrangements for assignments, quizzes, exams, etc. Students are required to present an ID card from DSS when requesting arrangements for the class.

#### BLACKBOARD:

Blackboard is an internet-based, educational tool. It can be accessed directly from the SIUE homepage (http://bb.siue.edu/). Only enrolled students can access Blackboard for this course. Each student can login to Blackboard using their e-id and e-password (same as to access email). Blackboard will be used for several purposes in this course, including 1) posting copies of course-related documents like the syllabus and assignments; 2) providing links to relevant web sites; and 3) maintaining updated information on your individual grades. I do not post class notes on Blackboard. Blackboard is offered as a convenience, and is not intended to take the place of class attendance.

### SKELETAL MATERIAL:

Hands-on work with skeletal material is a large component of this class. You will be assigned a cast of a human skeleton on which to work throughout the course. Please be careful with the material and handle it gently. Bones, and even casts of bones, can be easily damaged by improper or rough handling, or if dropped. Remember that the skeletal material once was part of living humans; we are privileged to be able to learn from this material, and it should be treated with respect.

## **READING ASSIGNMENTS:**

You are responsible for all material in the reading assignments. Byers (2008) is the text on forensic anthropology and Steele and Bramblett (1988) is a required technical manual that should be brought to every class for use during labrelated work. Readings from other sources will be used to supplement the required text. There are copies of assigned readings on reserve at the library, and available through Blackboard (E-reserves link). You are expected to have completed each reading assignment before coming to class. Familiarity with the reading assignments is important to contributing to the class. Reading assignments may cover material not presented in class, which will be

included on exams.

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Exam 1	90 points (18%)
Exam 2	90 points (18%)
Exam 3	90 points (18%)
Annotated Bibliography	75 points (15%)
Presentation	50 ponts (10%)
Lab Report	75 points (15%)
Attendance & Participation	30 points (6%)
TOTAL	500 points

## **EXAMS**:

There will be 3 exams. Each exam will be worth **90 points**. Exams will include both practical questions (based on skeletal material or casts) as well as "traditional" written questions. Make-up exams will be given only when unavoidable circumstances necessitate a student absence at the scheduled test time. **A documented excuse is required in addition to approval by the instructor to take a make-up exam**. All effort must be made on your part to contact me as soon as the situation develops (that means before the scheduled exam if possible), and you are responsible for scheduling the make-up. The make-up exam or quiz will **not** be the same as the original test.

## **ANNOTATED BIBLIOGRAPHY & PRESENTATION**

You will complete an annotated bibliography of published material on a topic of your choice. The topic must be related in some way to forensic sciences, but you have freedom to follow your own interests. Topics must be approved. The bibliography will include six resources from peer-reviewed published literature (professional journals, books). The annotated bibliography is not a paper. A specific format for the bibliography will be provided to you separately. Late assignments are deducted 25% of the possible points for each calendar day an assignment is late.

You will also give an in-class, oral presentation based on your bibliography topic. The presentation will include visuals and text formatted in PowerPoint. The presentation is worth **50 points** toward your final grade. Additional details on the presentation format will be provided to you separately. Presentations must be performed on the assigned day.

## LAB REPORT:

Each student will collect data on an assigned skeletal cast to reconstruct the biological identity of the casted individual. This will primarily be based on work conducted during class over the course of the semester. You will turn in your original data, analyses, and a summary report of the biological identity of your assigned skeleton. The lab data will include the qualitative and quantitative analyses, including measurements and analyses of the skeleton to determine the individual's biological identity and make any other conclusions about the appearance of the individual. Components of the lab report will be submitted throughout the semester. More specific instructions will be provided to you separately. Late assignments are deducted 25% of the possible points for each calendar day an assignment is late.

## **ATTENDANCE AND PARTICIPATION:**

Attendance is critical to this course, as much of the material presented is not included in the course books, and hands-on work is critical for learning the material. You are responsible for all class material. If you miss a class, it is up to you to borrow someone's notes--I will not give out notes. In addition, a substantial part of class time may be allocated to your work on the lab report and data collection and analyses on the skeletons. Considerate and respectful behavior is expected toward everyone in the class (me and your fellow students). This includes being punctual, paying attention, and not talking to others outside of class discussions.

## **READING LIST**

- Banasr A, de la Grandmaison, GL, and Durigon M. 2003. Frequency of bone/cartilage lesions in stab and incised wounds fatalities. Forensic Science International 131: 131-133.
- Çöloglu AS, Iscan MY, Yavuz MF, and Sari H. 1998. Sex determination from the ribs of contemporary Turks. Journal of Forensic Sciences 43(2): 273-276.
- Frutos LR. 2005. Metric determination of sex from the humerus in a Guatemalan forensic sample. Forensic Science International 147: 153-157.
- Glencross B and Stuart-Macadam P. 2000. Childhood trauma in the archaeological record. International Journal of Osteoarchaeology 10: 198-209.
- Hauser R, Smolinski J, and Gos T. 2005. The estimation of stature on the basis of measurements of the femur. Forensic Science International 147: 185-190.
- Iscan MY. 2005. Forensic anthropology of sex and body size. Forensic Science International 147: 107-112.
- Rollo F, Ubaldi M, Ermini L, and Marota I. 2002. Ötzi's last meals: DNA analysis of the intestinal content of the Neolithic glacier mummy from the Alps. Proceedings of the National Academy of Sciences 99 (20): 12594-12599.
- Standen V and Arriaza B. 2000. Trauma in the preceramic coastal populations of northern Chile: Violence or occupational hazards? American Journal of Physical Anthropology 112: 239-249.