

## THE UNIVERSITY OF WESTERN ONTARIO DEPARTMENT OF ANTHROPOLOGY

# ANTHROPOLOGY 3338F-001: SKELETAL BIOLOGY

Fall 2016 Course Outline

Instructor: Dr. Andrew Wade

Email: awade5@uwo.ca

Class Location: SSC 2257

Class Time: Wednesdays 7 – 10 PM

Course value: 0.5 credit

Instructor Office Hours (in 2257):

Wednesdays 5:30 - 6:30 PM

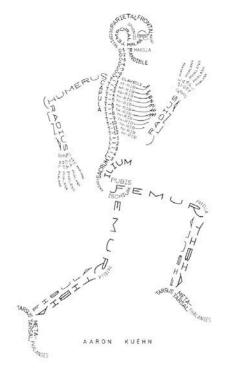
Teaching Assistant: TBA

TA Office Hours & Open Lab Time in 2257:

Thursdays 11:30 AM - 1:15 PM

**Required Texts:** 

- White TD & Folkens PA. 2005. The Human Bone Manual. Academic Press
- Buikstra J & Ubelacker D. 1994. Standards for Data Collection from Human Skeletal Remains. Arkansas Archaeological Survey



## Prerequisite: Anthropology 2226A/B and registration in Year 3 or 4 in any module.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

## Course Description:

This course is intended for students interested in the study of human skeletal remains in an archaeological context. The combined lecture and laboratory format will give students extensive laboratory training in human skeletal anatomy and practical experience with the methods used in the identification and analysis of skeletal remains (e.g., ancestry, age, sex).

This course will cover several topic areas, including bone and tooth biology; skeletal and dental growth and development; data collection techniques; assessments of osteobiographic characteristics (e.g. age, sex, stature, occupation); and an introduction to population-based skeletal analyses (e.g. disease, diet, demography).

## Learning Outcomes:

If I have done my part in this course, and you yours, you will come away able to:

- > identify the standard bones and teeth of the human skeleton and their key features
- > demonstrate an understanding of the structure and function of bones and joints
- > assess the limitations of human skeletal information
- evaluate skeletal & dental variation relative to the biological profile of the remains
  age, sex, ancestry, pathology, etc.
- construct an osteobiographical analysis report

## University Policies:

All students should familiarize themselves with Western's current academic policies regarding accessibility, plagiarism and scholastic offences, and medical accommodation. These policies are outlined (with links to the full policies) at:

http://anthropology.uwo.ca/undergraduate/course\_information/academic\_policies.html

## Missed and Late Work:

Make-up tests (bell ringers) and exams will only be offered under exceptional circumstances and on the recommendation of the Faculty of Social Science Academic Counselling Office.

<u>Late papers will be assessed a penalty of 5% for each day they are late</u>, unless appropriate documentation has been submitted to the Academic Counselling Office and they have recommended special accommodation.

## OWL Portal:

This course is supplemented by a Portal component that you can access, using your Western ID and password at: <u>https://owl.uwo.ca/portal</u>

Once at the course site you will see a home page with basic information about this class, as well as links that will connect you to course content such as this syllabus, lecture slides, announcements, interesting links, etc.

## Use of Electronic Devices (including laptops):

No electronic devices of any kind (including, but not limited to, cell phones, Blackberries, iPods, other MP3 players, voice recorders, etc.) will be allowed during examinations. Laptops and other data devices may only be used during class for note-taking or other course-related purposes. *Disruptive use of electronic devices during class time may result in a request that you leave the classroom.* 

## Correspondence:

I check my email regularly throughout the week, so you can expect a response within ~48 hours. Please put 3338 in the subject line of your email and include your name and student number at the end of all correspondence. All e-mail communication sent from students must originate from the student's own Western University e-mail account. This policy confirms the identity of the student and protects confidentiality. It is the student's responsibility to ensure that communication is sent from a Western account.

Marking Scheme:				
Bell Ringer 1 [10%]				
Bell Ringer 3 [10%]				
Osteobiography Report [40%]				

Bell Ringer 2 [10%] Bell Ringer 4 [10%] Final Exam [20%]

### Bell Ringers [10% each]

These will consist of 15 timed stations where you will be asked to identify and side skeletal elements, identify labeled features, and identify characteristics on bones used to determine age, sex, ancestry, etc. These quizzes are designed to test how well you are learning the skeletal material. There are **weekly open lab times** in SSC 2257 so you can review prior to each quiz. Bell ringers will begin at <u>7 PM SHARP</u> and will be followed by a lecture and lab.

Mastering skeletal and dental anatomy is key to your success in the course. Osteology is about developing a tactile art as much as it about memorising anatomical features. Attendance in open lab time and office hours is not mandatory, but it is highly recommended.

#### **Osteobiography Report** [40%]

This is a skeletal analysis and report assignment based on a skeleton in the department's collection. You are responsible for conducting a skeletal inventory and osteobiographical analysis of the skeleton you are assigned in lab, and for writing a report of at least 2500 words on those findings. The report should include a discussion of your methods and their applicability to this set of remains; data and results from the analysis; and conclusions based on multiple lines of evidence. You are required to use and cite additional library and reliable Internet resources to conduct your analyses. Owing to the limited number of human skeletons in the collection, you will be sharing a skeleton with another student in your lab section, as you do during lab, but you will be responsible for separate reports. A rubric outlining the required format and analyses is included on OWL. Because this is an essay-designated course, this paper must be submitted and receive a passing grade in order to pass this course.

#### Final Exam [20%]

The final exam will consist of a mix of short-answer and longer-format questions, covering material taught throughout the course. The exam will be held in the time and location assigned by the Registrar.

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check his/her Western email and course websites weekly during the term and to note any changes.

Date	Lecture	Bell Ringers	Labs & Assignments	Readings
Sept 14	Introduction to the Human Skeleton Bone Biology & Growth		Lab 1	Ch.1, 4
Sept 21	Skull		Lab 2	Ch. 7
Sept 28	Skull (cont'd) & Dentition		Lab 3	Ch. 8
Oct 5	Vertebral Column & Thoracic Cage	1	Lab 4	Ch. 9, 10
Oct 12	Pelvic Girdle Taphonomy		Lab 5	Ch. 14
Oct 19	Shoulder Girdle	2	Lab 6	Ch. 11
Oct 26	Arm & Hand		Lab 7	Ch. 12, 13
Nov 2	Leg & Foot	3	Lab 8	Ch. 15, 16
Nov 9	Osteobiography Introduction		-	-
Nov 16	Biological Profile (Age & Sex)	4	Lab 9	Ch. 19
Nov 23	Biological Profile (Ancestry & Pathology)		Lab 10	**Wade et al.
Nov 30	Other Skeletal Analyses		-	Ch. 18
Dec 7	Exam Review		Osteobiography Report Due	-
Dec 10-21	FINAL EXAM			

\*\* Wade AD, Garvin GJ, Hurnanen J, Williams LJ, Lawson B, Nelson AJ, Tampieri D. 2012. Scenes from the past: Multidetector CT of Egyptian mummies of the Redpath Museum. RSNA RadioGraphics 32(4): 1235-1250.