Western
UNIVERSITY · CANADA

COURSE OUTLINE

Anthropology 3338F-001

Human Skeletal Biology

Fall 2021

Lectures: Tuesdays 9:30-12:30
Classroom: SSC-2257

Instructor: Dr. Andrea Waters-Rist
Office: SSC-3427
Office hours: Please refer to the course site in OWL.
Email: awaters8@uwo.ca

Credit value: 0.5 credit
1 lecture hour and 2 laboratory hours.

Antirequisites: None.

Prerequisites: 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. The 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 Syllabus:

This course involves the in-depth study of human skeletal and dental remains. Human skeletal biology, or osteology, is essential for research in biological or forensic anthropology. This course will cover several topics including bone and tooth biology and histology, skeletal and dental growth and development, metrics and non-metric traits, estimation of core osteobiographical characteristics such as

age-at-death, sex, and stature, data collection techniques and written reporting, an introduction to paleodiet, paleodemography, taphonomy, and paleopathology, and ethical considerations. At the completion of this course students will be expected to have mastered techniques for conducting, interpreting, and reporting upon human osteological analyses. After week 1, each week's class will consist of approximately one hour of lecture and two hours of hands-on laboratory time.

A full course schedule including a week-by-week breakdown of topics and assigned readings will be available on the course's OWL site before the first day of class.

Learning Outcomes:

Upon successful completion of this course, students will be able to do the following.

- Identify all bones, teeth, and major morphological features, of the human skeleton, in complete and fragmented conditions.
- Identify common non-metric traits to build towards an understanding of the range of normal human skeletal variation.
- Describe the cellular properties and appearance of bone and teeth.
- Utilize measurement instruments and data recording forms and techniques.
- Distinguish non-adult from adult skeletal remains.
- Estimate non-adult and adult age-at-death using dental and skeletal methods.
- Estimate sex from adult cranial and post-cranial material.
- Estimate stature and body size using anthropometric measurements.
- Explain methods for the estimation of biological ancestry (population affiliation) and biodistance.
- Recognize commonly encountered pathological and traumatic lesions in bones and teeth as well as taphonomic conditions that can mimic pathological lesions.
- Describe basic paleodiet and paleodemography parameters and problems.
- Present an informed consideration of ethical dimensions of human bioarchaeology research.

Course Materials:

The following textbook is required: The Human Bone Manual by TD White and PA Folkens. 2005. Academic Press.

Other required readings will be will posted on OWL and accessible by the first day of class under the Course Readings feature.

Evaluation:

Your course grade will be based on six items. Note, make-up tests and assignment deadline extensions will only be offered if (a) you are using one of your self-reported absences allowed between September 2021 and April 2022 (this does not apply to final exams) or (b) when the Academic Counselling Office approves special accommodation. There will be no exception to this. The six evaluated items are as follows.

Bone Bell-Ringer Test number 1. This test is worth 20% of your final grade and will occur at the beginning of class on October 5th. Students who arrive late will not be permitted to make-up the stations they missed. This test will examine your knowledge of the skull, dentition, and histology. Bell-ringer tests consist of timed stations at which students are asked to identify any of the following: bones and teeth, in complete or incomplete (fragmented) states; landmarks on bones and teeth; anatomical region/side of the body from which they derive; bone or tooth cells or zones of cellular activity; other relevant aspects of the remains taught in lecture. Use of electronic devices will not be allowed. More information will be made available to students on the course OWL site.

Bone Bell-Ringer Test number 2. This test is worth 20% of your final grade and will occur at the beginning of class on October 26th. Students who arrive late will not be permitted to make-up the stations they missed. This test will examine your knowledge of the post-cranial skeleton. Bell-ringer tests consist of timed stations at which students are asked to identify any of the following: bones and teeth, in complete or incomplete (fragmented) states; landmarks on bones and teeth; anatomical region/side of the body from which they derive; bone or tooth cells or zones of cellular activity; other relevant aspects of the remains taught in lecture. Use of electronic devices will not be allowed. More information will be made available to students on the course OWL site.

Laboratory Report number 1. This laboratory report is worth 10% of your final grade and is due by 11:59pm on Friday October 15th. An electronic copy must be submitted via OWL with a hard copy to be submitted to either the Department's assignment mailbox prior to the next class or the Instructor at the beginning of the next class (Tues. Oct. 19th). This laboratory assignment involves examination of bone and tooth histology to understand their microscopic structure and how they function as living tissues during life. The report should be 1200-1500 words in length (5-6 double-spaced pages), not including tables, figures, or references cited. More information will be made available to students on the course OWL site.

Laboratory Report number 2. This laboratory report is worth 10% of your final grade and is due by 11:59pm on Friday November 19th. An electronic copy must be submitted via OWL with a hard copy to be submitted to either the Department's assignment mailbox prior to the next class or the Instructor at the beginning of the next class (Tues. Nov. 23rd). This laboratory assignment involves the estimation of the age-at-death and sex of two skeletons. The report should be 1200-1500 words in length (5-6 double-spaced pages), not including tables, figures, or references cited. More information will be made available to students on the course OWL site.

Laboratory Report number 3. This laboratory report is worth 10% of your final grade and is due by 11:59pm on Friday December 3rd. An electronic copy must be submitted via OWL with a hard copy to be submitted to either the Department's assignment mailbox prior to the next class or the Instructor at the beginning of the next class (Tues. Dec. 7th). This laboratory assignment involves the use of metrics for stature estimation and non-metrics for ancestry estimation. The report should be 1200-1500 words in length (5-6 double-spaced pages), not including tables, figures or references cited. More information will be made available to students on the course OWL site.

In order to pass this essay course, the student must exhibit a minimal level of competence in writing and the appropriate level of knowledge of the content of the course. All laboratory reports may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system.

Final Exam. The final exam is worth 30% of your final grade. The final exam will take place during the Registrar's designated three-hour exam period for this course. The content of the final exam will be derived from lectures and mandatory course readings. The format of the exam will consist of short and long answer essay questions. Use of electronic devices will not be allowed. More information will be made available to students on the course OWL site.

Course Specific Statements and Policies:

Statement on Seeking Special Accommodations:

No accommodations will be granted retroactively more than 5 days after an assignment's due date or a missed quiz or test. Please see your academic counsellor immediately if you will be seeking accommodations based on medical or compassionate grounds. If using one of the two self-reported absences allowed between September 2021 and April 2022 you are required to resume academic responsibilities within 48-hours from the time of the absence form's submission via the online portal (or at 8:30am the following morning if submitted after 4:30pm), and to contact your Instructor with 24-hours of resuming academic responsibilities to reschedule the missed assignment deadline or quiz/test.

Unless these accommodation procedures are followed, laboratory assignments submitted past the due date will be subjected to a 5% penalty of the assignment grade per 24-hour period (this includes weekends) and will no longer be graded after five late days (the assignment will receive an automatic grade of zero). If

these accommodation procedures are not followed the student will not be permitted to make-up the bone bell-ringer tests and will receive a grade of zero.

Statement on Plagiarism:

Students must write their assignments in their own words. Whenever students take an idea from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing. It is also a scholastic offence to submit the same work for credit in more than one course. Plagiarism is a major scholastic offence.

Policy on Laptops and Cellphones in Class:

Laptops are permitted for note-taking in class but if it is observed that students are on social networking sites, they will be asked to close the laptop and will not be permitted to use it for the remainder of the class. Be sure that all cellphones are turned off at the beginning of class.

Institutional Statements and 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 in Western's academic policies by clicking on this link: *Western's academic policies*.

Covid-19 Guidelines

Masking Guidelines

Students will be expected to wear triple layer, non-medical, paper masks at all times in the classroom as per University policy and public health directives. Students who are unable to wear a mask must seek formal accommodation through Western Accessible Education, and present medical documentation.

Students are not permitted to eat or drink while in class to ensure masks stay in place. Students will be able to eat and drink outside of the classroom during scheduled breaks.

Students unwilling to wear a mask as stipulated by Western policy and public health directives will be referred to the Dean, and such actions will be considered a violation of the student Code of Conduct.

Course Absences due to Daily COVID Screening Questionnaire

Missed assessments (e.g., presentations, essays, quizzes, tests, midterms, etc.) require formal academic considerations (typically self-reported absences and/or academic counselling). Methods for dealing with missed work and course content

are at the discretion of the instructor(s). Students should be aware that some learning outcomes cannot be easily made up and may need to be completed in a subsequent year. Your instructor will provide you with further information as to how this applies within this course.

Students who demonstrate a pattern of routinely missing coursework due to self-reported COVID symptoms, and therefore do not demonstrate mastery of the learning outcomes of the course, will not receive credit for the course.

Contingency plan for an in-person class pivoting to 100% online learning

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online as determined by the course instructor. In the event that online learning is required, a stable internet connection with working microphone and webcam will be required. As has been the case in the past, the decision to pivot to online learning will be made by Western, and not individual instructors or departments (excepting temporary online instruction in the event of instructor illness).

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