

**Department of Anthropology and Archaeology  
University of Calgary**

**ARCHAEOLOGY 555  
Human Osteology**

Fall 2020

Instructor: Emily Peschel  
e-mail: [emily.peschel@ucalgary.ca](mailto:emily.peschel@ucalgary.ca)  
Office hours: T/TR 11:30 – 12:30 via Zoom  
or by appointment  
Lectures: Online Asynchronous  
Lab: T or TR 11:00 – 12:45 ES 743

Teaching Assistant: Olivia Giacobbo  
e-mail:  
Office hours:

Prerequisite(s): Anthropology 309 or 350.  
Antirequisite(s): Archaeology 613.

**Course Description:**

Identification and interpretation of human skeletal and dental remains. Emphasis is on functional anatomy and reconstruction of prehistoric lifeways.

**Course Objectives:**

This course covers normal human skeletal and dental anatomy at the gross and microscopic levels and emphasizes the application of that knowledge to the analysis of human remains from both prehistoric and recent contexts. Such applications include estimation of sex, age at death, stature and population affiliation. Techniques for reconstructing populations, interpreting disease experience and examining microevolution will be covered. Historical aspects of human osteology and the integration of information obtained from the human skeleton with other archaeological evidence are also discussed. Additional topics include forensic anthropology, the reconstruction of prehistoric diet, migration and mobility in past populations, and the processes that alter bones after death to rediscovery in the archaeological record.

**Course learning outcomes**

Upon completion of this course, students should have acquired the following skills:

- Detailed knowledge of human skeletal anatomy
- Ability to estimate basic identifying features from skeletal remains, including sex, age at death, and stature
- Use of osteometric equipment
- An understanding of the contributions of skeletal analysis to studies of comparative anatomy and archaeological investigation

- Ability to prepare a laboratory report

## **Meeting Schedule**

Lectures are recorded and are available on the D2L course website.

Section	Meeting Time	Meeting Dates
LEC 01	N/A	None – all asynchronous
LAB 01-02	11:00 am – 12:45 PM	<ul style="list-style-type: none"> <li>- Tuesday OR Thursday</li> <li>- Labs begin the second week of class (the week of September 13) and continue through December 3.</li> </ul> <p>*No lecture or lab November 8-14*</p>

**Required Textbook and Lab Manual:** (available at U of Calgary bookstore; online version or e-book is also acceptable)

1. Human Osteology: **White**, T.D., Black, M.T. and Folkens, P.A.. Academic Press/ Elsevier 3rd edition.
2. Standards for data collection from human skeletal remains: edited by Jane E. **Buikstra** and Douglas H. Ubelaker, Arkansas Archaeological Survey Research Series No. 44, latest edition. ISBN 1-56349-075-7.
3. Juvenile Osteology: A Laboratory and Field Manual, **Schaefer**, M., Black, S. and L. Scheuer, Academic Press/Elsevier.

Suggested resources: The Skeleton System Pro (II or III) application for iPad (supplementary information on the human skeletal system)

## **Other required readings**

Readings (articles and book chapters) are available from a list provided separately on D2L. These can be accessed online from the Taylor Family Digital Library.

## **Learning Technologies and Requirements**

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology.

- A computer with a supported operating system, as well as the latest security and malware updates
- A current and updates web browser
- Webcam (built in or external)
- Microphone and speaker (built in or external) or headset with microphone

- Broadband internet connection

### **Grading:**

Bone Quizzes	20% (three quizzes total)
Laboratory reports	55% (one worth 10%, three worth 15%)
Final Exam	25%
(Date set by Registrar's Office)	

You need not pass all components to receive a passing grade in the course.

**Bone Quizzes:** Bone quizzes are bell-ringer quizzes that require identification of bones, features of bones, bone fragments, etc. They will take place in lab. Pens, pencils, and erasers are allowed in these quizzes. No other materials or devices are allowed, including course notes, e-texts, or online resources.

**Final Exam:** The final exam consists of short essay questions. The exam will be available on D2L. It will be available starting 24 hours before the end of the scheduled exam. That is, if the registrar schedules the exam from 1-4 PM, your exam will be available starting at 4 PM the previous day. While you will have a 24-hour window to take the exam, the timer for the exam starts as soon as you begin the exam. The final is designed to be completed in two hours, but an additional 50% is granted in order to account for any technical difficulties. Thus, the total time is three hours. The final exam is open book, but you must paraphrase and provide correct citation. Only one attempt is permitted.

### **Grading scale**

95 – 100	A+	90 – 94.9	A	85 – 89.9	A-
80 – 84.9	B+	75 – 79.9	B	71 – 74.9	B-
67 – 70.9	C+	63 – 66.9	C	59 – 62.9	C-
55 – 58.9	D+	50 – 54.9	D	<50	F

**Missed quizzes/late assignments:** It is important that students attend quizzes in their assigned lab section. Students who are unable to take a scheduled quiz must contact the instructor in advance of the scheduled quiz or within 24 hours to make necessary arrangements for the makeup quiz. Makeup quizzes will take place at a time that is convenient to the instructor or teaching assistant, normally within one week of the original quiz time. Make-up quizzes may be provided online. Deferred quizzes may be allowed only in the following circumstances: illness, domestic affliction, or religious conviction. Travel arrangements and misreading of the course outline are not valid reasons for missing quizzes, exams, or incomplete/late assignments. Late assignments have a penalty of 10% per day.

## Lecture and Lab Schedule

Date	Lecture	Lab
<u>Week 1:</u> September 8 September 10	Course introduction Application of Skeletal Studies  Structure, Function, and Composition of Bone	<i>No Lab</i>
<u>Week 2:</u> September 15 September 17	Bone histology, bone growth, development, and remodeling  Teeth: histology and development	Introduction to the lab  Lab 1 assigned: Histology
<u>Week 3</u> September 22 September 24	Normal anatomy: vertebrae, hyoid, ribs, and sternum, the arm	<b>Lab 1 due (10% of grade)</b>  Normal anatomy
<u>Week 4</u> September 29 October 1	Normal anatomy: wrist, hand, Pelvis, lower limb	<b>Bone Quiz 1</b>  Normal anatomy
<u>Week 5</u> October 6 October 8	Normal anatomy: the cranium	<b>Bone Quiz 2</b>  Normal Anatomy
<u>Week 6</u> October 13 October 15	Sub-adult age-at-death estimation and the bioarchaeology of children	<b>Bone Quiz 3</b>  Lab 2 assigned
<u>Week 7</u> October 20 October 22	Adult sex estimation  Adult age-at-death estimation	Lab 2
<u>Week 8</u> October 27 October 29	History of Biological Anthropology  Metric analysis	<b>Lab 2 due (15% of grade)</b>  Lab 3 assigned
<u>Week 9</u> November 3 November 5	Cranial nonmetric traits  Dental Anthropology	Lab 3
<b>November 8-14</b> <b>No Class:</b> <b>Reading week</b>	-----	-----
<u>Week 10</u> November 17 November 19	Paleodiet  Paleopathology	<b>Lab 3 Due (15% of grade)</b>  Lab report 4 assigned
<u>Week 11</u> November 24 November 26	Paleodemography  Migration studies	

<u>Week 12</u> December 1 December 3	Ancestry estimation  Taphonomy	<b>Lab 4 due (15% of grade)</b>
<u>Week 13</u> December 8	Forensic Anthropology	<i>No lab</i>

### **E-mail**

Students are encouraged to use office hours to ask questions. For after-hours questions, the use of e-mail is acceptable. While I will try to answer your emails as soon as possible, I will generally be unable to do so on weekends or holidays. I will try to answer emails within two business days.

### **In-Person Laboratory Protocol**

Due to the coronavirus pandemic, there are strict guidelines for access to the ES743. Do not come to class if you have symptoms of coronavirus. Students must wear masks and gloves at all times in ES743, no exceptions. Gloves will be provided by the University. Upon entering the lab, students must wash their hands and put on gloves. Students must adhere to physical distancing of two meters between students. There may be no more than 15 students in the classroom at one time. Consequently, students may not move their lab time to another time without explicit and advanced approval from the teaching assistant.

## **SUPPLEMENTAL INFORMATION**

### **Writing Across the Curriculum**

- Laboratory reports and essay examination questions must be clearly written and presented as prose (not in point form).

Writing skills are not exclusive to English courses and, in fact, should cross all disciplines. The University supports the belief that throughout their University careers, students should be taught how to write well so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a substantial amount of writing in their University courses and, where appropriate, instructors can and may use writing and the grading thereof as a factor in the evaluation of student work. The services provided by the Writing Centre in the Effective Writing Office can be utilized by all undergraduate and graduate students who feel they require further assistance.

### **Principles of Conduct**

The University Calendar includes a statement on the principles of conduct expected of all members of the university community (including students, faculty, administrators, any category of staff, practicum supervisors, and volunteers), whether on or off university property. This

statement applies in all situations where members of the university community are acting in their university capacities. All members of the university community have a responsibility to familiarize themselves with the principles of conduct statement, which is available at: [www.ucalgary.ca/pubs/calendar/current/k.html](http://www.ucalgary.ca/pubs/calendar/current/k.html).

### **Plagiarism, Cheating, and Student Misconduct**

The University of Calgary is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

Academic dishonesty is not an acceptable activity at the University of Calgary, and students are **strongly advised** to read the Student Misconduct section in the University Calendar at: [www.ucalgary.ca/pubs/calendar/current/k-3.html](http://www.ucalgary.ca/pubs/calendar/current/k-3.html). Often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are (1) presenting another student's work as your own, (2) presenting an author's work or ideas as your own without adequate citation, and (3) using work completed for another course. Such activities will not be tolerated in this course, and students suspected of academic misconduct will be dealt with according to the procedures outlined in the calendar at:

<https://ucalgary.ca/policies/files/policies/student-academic-misconduct-procedure.pdf>

For students wishing to know more about what constitutes plagiarism and how to properly cite the work of others, the Department of Anthropology and Archaeology recommends that they attend Academic Integrity workshops offered through the Student Success Centre: <https://www.ucalgary.ca/student-services/student-success/learning/academic-integrity>

### **Instructor Intellectual Property**

Information on Instructor Intellectual Property can be found at <https://www.ucalgary.ca/policies/files/policies/Intellectual%20Property%20Policy.pdf>

### **Freedom of Information and Protection of Privacy**

Freedom of Information and Protection of Privacy (FOIP) legislation in Alberta disallows the practice of having students retrieve assignments from a public place, such as outside an instructor's office, the department office, etc. Term assignments will be returned to students individually, during class or during the instructor's office hours; if students are unable to pick up their assignments from the instructor, they must provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

### **Guidelines for Zoom Sessions**

Zoom is a video conferencing program that will allow us to meet at specific times for a "live" video conference, so that we can have the opportunity to meet each other virtually and discuss relevant course topics as a learning community.

To help ensure Zoom sessions are private, do not share Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered

in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published with the instructor's permission.

The use of video conferencing programs relies on participants to act ethically, honestly and with integrity; and in accordance with the principles of fairness, good faith and respect (as per the Code of Conduct). When entering Zoom or other video conferencing sessions (such as MS Teams), you play a role in helping create an effective, safe and respectful learning environment. Please be mindful of how your behavior in these sessions may affect others. Participants are required to use names officially associated with their UCID (legal or preferred names listed in the Student Centre) when engaging in these activities. Instructors/moderators can remove those whose names do not appear on class rosters. Non-compliance may be investigated under relevant University of Calgary conduct policies (e.g. Student Non Academic Misconduct Policy). If participants have difficulties complying with this requirement, they should email the instructor of the class explaining why, so the instructor may consider whether to grant an exception, and on what terms. For more information on how to get the most out of your Zoom sessions visit: <https://elearn.ucalgary.ca/guidelines-for-zoom/>.

If you are unable to attend a Zoom session, please contact your instructor to arrange an alternative activity for the missed session (e.g., to review a recorded session). Please be prepared, as best as you are able, to join class in a quiet space that will allow you to be fully present and engaged in Zoom sessions. Students will be advised by their instructor when they are expected to turn on their webcam (for group work, presentations, etc.).

The instructor may record online Zoom class sessions for the purposes of supporting student learning in this class – such as making the recording available for review of the session or for students who miss a session. Students will be advised before the instructor initiates a recording of a Zoom session. These recordings will be used to support student learning only and will not be shared or used for any other purpose.

### **Posting of Grades and Picking-up of Assignments**

Graded assignments will be returned by the instructor or teaching assistant personally during scheduled lecture or laboratory periods, unless they are made available electronically through the course D2L webpage. Grades and assignments will not be available at the Department of Anthropology and Archaeology's main office.

### **Academic Accommodations**

It is the student's responsibility to request academic accommodations, according to the university policies and procedures listed in the University Calendar.

The student accommodation policy can be found at:

[https://www.ucalgary.ca/policies/files/policies/student-accommodation-policy\\_0.pdf](https://www.ucalgary.ca/policies/files/policies/student-accommodation-policy_0.pdf)

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: [www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf](http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf).

Students needing an accommodation based on a protected ground other than disability should communicate this need, preferably in writing to their instructor or the Department Head (email: [pcdawson@ucalgary.ca](mailto:pcdawson@ucalgary.ca)).

### **Copyright Legislation**

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright <https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf>

and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Act.

### **Wellness and Mental Health Resources**

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness, and academic success and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support, or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, <https://www.ucalgary.ca/wellnesscentre/services/mental-health-services>) and the Campus Mental Health Strategy website (<http://www.ucalgary.ca/mentalhealth/>).

Students requiring assistance are encouraged to email the Student at Risk line if they or others appear to need wellness assistance: [sar@ucalgary.ca](mailto:sar@ucalgary.ca). For more immediate response, please call: 403-210-9355 and select option #2.

### **Contact Information for Student and Faculty Representation**

- Student Union VP Academic 403-220-3911, [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca)
- Students Union Representatives for the Faculty of Arts – 403-220-3913, [arts1@su.ucalgary.ca](mailto:arts1@su.ucalgary.ca), [arts2@su.ucalgary.ca](mailto:arts2@su.ucalgary.ca), [arts3@su.ucalgary.ca](mailto:arts3@su.ucalgary.ca), [arts4@su.ucalgary.ca](mailto:arts4@su.ucalgary.ca)
- Student Ombuds Office information can be found at: [www.ucalgary.ca/ombuds/](http://www.ucalgary.ca/ombuds/)

### **Campus Safewalk**

Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day, to any location on Campus, including the LRT station, parking lots, bus zones, and university residences. Contact Campus Security at 220-5333 or use a help phone, and Safewalkers or a Campus Security officer will accompany you to your campus destination.