

ANTH 4219 W 24
Human Skeletal and Dental Biology

Professor: Dr. Deborah Merrett

Email: dcmerret@lakeheadu.ca

Location: BB-2002

Class time: T-Th 11:30 -1:00; Lab time: Tuesday 2:30-5:30

Office: TBA Phone: TBA

Office Hours: by appointment**

Email is the best way to reach me.

TA:

Jennah Stewart jestewa2@lakeheadu.ca

The **lab** will be open for student study outside of class time as per the schedule you will be provided with.

You are strongly advised to take advantage of the class and free study times because those unwilling to put in the time are highly unlikely to do well.

Your instructor, your TA, and the Anthropology Admin. Assistant (Mrs. Jen McKee) will be able to help you in accessing the lab and/or learning in the lab. Please adhere to the posted schedule as we share the lab with other classes and everyone has other duties besides this lab. Please email ahead of time if you can or if no one is in the lab, please go to the Anthro office to find if assistance is available – but ONLY according to the schedule of when the room is available – Please DO NOT interrupt other classes – and do not pester other faculty if they are obviously in a meeting.

AND Be respectful of people's time – if you have said you will be there and you won't be, let someone know or your privileges will be revoked!!!

We cannot guarantee that we will respond in a timely fashion if messages are left on voice mail rather than email and students should NOT expect less than 24 hour turnaround time to email messages – although we will do our best given the circumstances for the lab.

Please do not assume that your message has been received unless you receive an acknowledgement.

Lakehead's Accommodation & Confidentiality Statements:

Lakehead University is committed to achieving full accessibility for persons with disabilities/medical conditions. Part of this commitment includes arranging academic accommodations for students with disabilities/medical conditions to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability/medical condition and think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please email sas@lakeheadu.ca or visit

<https://www.lakeheadu.ca/faculty-and-staff/departments/services/sas>

Course Description:

This course provides students with a comprehensive study of human osteology and dental anatomy. The labs focus on both normal and variational anatomy.

Prerequisites: Anthropology 2110 and 3136 or 3150, or permission of the instructor

Required Textbook: (available at the University Bookstore- <https://bookstore.lakeheadu.ca/> - click Textbooks in the left hand menu then search in Distributed Learning

Required Text:

White TD and Folgens PA. 2005. *The Human Bone Manual*. London: Academic Press. ISBN-10: 0-12-102821-6

Recommended Text:

Platzer W. 2023. *Color Atlas of Human Anatomy. Vol. 1 Locomotor System. 8th Edition*. Stuttgart: Thieme. ISBN 978-3-13-242443-2

Readings may also occasionally be assigned to supplement the text and will be available on reserve in the library. Students will be informed of the availability with adequate time to read them before lecture.

Also see the course Desire2Learn (D2L) site (look in MyCourseLinks on the LU website) for additional resources.

– Keep in mind that **NOTHING** can entirely replace hands on studying in the lab with real specimens

Evaluation:

Your final grade will be based on:

Lab Quiz 1	10%	Tues, Jan 27
Midterm	20%	Tues, Feb 24
Lab Quiz 2	10%	Tues, Mar 3
Lab Quiz 3	10%	Tues, Mar 22
Lab Quiz 4	10%	Tues, Mar 31
Lab Assignments	10%	Due at end of each lab (Bring to lab printed sheet(s) to fill in)
Final Exam	30%	Final examination period Apr 10-19 (Contingency date is Apr 20)

Quizzes will be **bell ringer** style practical lab tests.

The **Midterm** will be written (short answer) format.

The **Final Exam** will consist of two parts: a bell ringer style practical component and a written (short answer) component.

Each quiz and the midterm exam will include content covered up to the end of the previous week.

Please note that **Fri, March 6, 2026** is the last date for withdrawal without academic penalty from this course.

Missed tests & assignment deadlines will not be made-up unless official documentation of a reasonable excuse is submitted (e.g. student or family illness, death of family member, car accident). Please note that that going off on holidays or leaving early at the end of term OR similar **do NOT** constitute reasonable excuses. Please contact me within **48 hrs.** of any missed due date or test for **ANY** reason. – *contact me ASAP.*

Students are strongly advised to speak with their instructor if they are anticipating having to submit a late assignment.

Assignment Deadlines / Late Penalties

A deduction of 5% will be made for every day that an assignment is late without prior approval of the instructor. No late assignments will be accepted past 1 week of the original deadline. So if you are late contact me ASAP so we can see if your reason for tardiness is reasonable.

Use of AI

Generative artificial intelligence (Generative AI or GenAI) is a category of AI systems capable of generating text, images, or other media in response to prompts. These systems include ChatGPT and its variant Bing (built by OpenAI) and Bard (built by Google) among several others. Other Generative AI models include artificial intelligence art systems such as Stable Diffusion, Midjourney, and DALL-E.

Any use of GenAI systems to produce assignments for this course is NOT permitted. All work submitted for evaluation in this course must be the student's original work. The submission of any work containing AI generated content will be considered a violation of academic integrity ("Use of Unauthorized Materials").

Students are strongly advised to familiarize themselves with the Student Code of Conduct (<http://policies.lakeheadu.ca/policy.php?pid=60>) with regard to both academic and non-academic misconduct. Non-compliance will NOT be tolerated in this course and the code will be adhered to in terms of disciplinary action.

Plagiarism definition from the Student Code of Conduct – Academic Integrity –

"Presenting another's ideas or phrasings as one's own without proper acknowledgement. Examples include: copying and pasting from the internet, a printed source or other resource without proper acknowledgement; copying from another student OR a test key, whether past or present; using direct quotations or large sections of paraphrased material in an assignment without proper acknowledgement; submitting the same piece of work in more than one course without the permission of the instructor(s)"

Keep in mind as you are planning your study that everyone has other classes, a job, a life, family, partner, social obligations, trips they would like to take etc. etc. So do not feel that you are the only one that has to plan ahead or put in the time/work.

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PRELIMINARY Tentative Class schedule:** any changes will be posted on the D2L discussion board so be sure to check regularly.

Week: Dates (Lect, Lab, Lect)	Topic	Text Chapter(s) (White et al. 2005)
1: Jan 6, 6, 8	Introduction: The skeleton, bone morphology, ethics	Chapters 1; 2; 3
2: Jan 13, 13, 15	Bone biology, growth and development, joints, taphonomy	Chapters 4; 5; 6
3: Jan 20, 20, 22	Axial skeleton A: pelvic girdle Infracranial age and sex estimation	Chapters 14; 19.1; 19.2; 19.3.4-19.3.12; 19.4.2
4: Jan 27, 27 , 29, Quiz 1: Jan 27	Axial skeleton B: Vertebrae, sternum, ribs, hyoid; shoulder Quiz 1 content: weeks 1-3. In lab time	Chapters 9;10; 11
5: Feb 3, 3, 5	The appendicular skeleton, limbs, hands, feet Bone Healing, Introduction to the skull	Chapters 12, 13; 15, 16
6: Feb 10, 10, 12	Cranial vault, and base	Chapters 7.1-7.10; 15; 16; 19.5
<u>Feb 16-20</u>	<u>No Class: Reading Week</u>	
<u>7: Midterm Feb 24</u> <u>Feb 24, 24, 26</u>	Midterm content: weeks 1-6. In lecture time. Facial skeleton	Chapter 7.11-7.20
8: <u>Quiz 2: Mar 3</u> Mar 3, 3 , 5	Age and sex estimation from the skull Quiz 2 content: weeks 5-7. In lab time	Chapters 7.11-7; 18; 7.20; 19.3.2; 19.3.3; 19.4.1
9: Mar 10, 10, 12	Dental biology, Tooth types, Tooth ID	Chapter 8, 19.3.1
10: Mar 17, 17, 20 Quiz 3: Mar 17	Adult and non-adult age estimation from the dentition Quiz 3 content: weeks 8-9. In lab time	Chapters 8; 19.3.1; 19.3.2
11: Mar 24, 24, 26	Laboratory reporting and analysis: skeletal biology of individuals and populations (So . . . what does it all mean?)	Chapters 18.1-18.6; 18.9-18.14; 19.6-19.7
12: Mar 31, 31, Apr 2 Quiz 4: Mar 31	Introduction to bioarchaeology Quiz 4 content: weeks 10, 11. In lab time	Chapters, 19.1; 19.2; 19.8-19.11; 18.6
13: Apr 7, 7	Introduction to palaeopathology Re0iew	Chapter 17
Exam Period: Apr 12 - 19	<u>April Exam. (3 Hours) Written short answers</u>	<u>All Text, Readings, and Lab Content</u>