Welcome to Geology of Human Origins

Have you ever looked at a monkey and tried to understand how you are related? Or how you are related to a squirrel? Are you curious about fossils? Do you want to know why only humans have chins? Would you like to better understand how important evolutionary events have shaped our current biology as a species? This course examines the origins and evolution of our species from geological, biological and cultural perspectives and explores these questions and more! We will trace human ancestry from our primate roots through time and changing environments, and explore controversies, frauds, and misconceptions surrounding human evolution and evolutionary theory.

Lectures:

Mondays 18:05 - 20:55 (6:05pm 8:55 pm) HP 2130

Learning Outcomes:

This class is an evolutionary survey of how changes to the environment have affected human biology, morphology, ecology, and culture. Students completing this class will gain an understanding of scientific knowledge about the origin and evolution of humans in light of the fossil record and geologic history of Earth.

By the end of this course, students should be able to:

- Objectively evaluate novel hypotheses and controversies about human origins, evolution, and general science;
- Recognize and describe misconceptions surrounding scientific theory and application;
- Demonstrate an understanding of their own evolutionary history and relationships with other organisms; and
- Describe how geological processes and time have influenced human evolution.

Teaching Team

Course Instructor:	Genevieve Ferguson, Ph.D.
Email: Office hours:	<u>genevieveferguson@cunet.carleton.ca</u> / <u>genevieve.ferguson@carleton.ca</u> Virtual and/or by appointment (NB 313A)
Your TA:	Dana Korneisel, M.S.
Email:	DanaKorneisel@cmail.carleton.ca

Email correspondence regarding the course must originate from a Carleton email address and have the course code in the subject line.

Course Materials

Mandatory Textbook:

<u>Human Evolution: A Very Short Introduction</u>, 2nd Edition, Bernard Wood, 2019 Oxford University Press Available from the Carleton Bookstore or on <u>Amazon</u> or <u>Indigo-Chapters</u> as paperback, e-book, or audio book

Brightspace Page:

The course schedule, weekly readings, lecture notes and videos will all be available on the course Brightspace page.

There are also web resources, links, and interesting things of note available to you on the Brightspace course page – please use it!

Land Acknowledgment

Carleton University acknowledges the location of its campus on the traditional, unceded territories of the Algonquin nation. In doing so, Carleton acknowledges it has a responsibility to the Algonquin people and a responsibility to adhere to Algonquin cultural protocols.

Course Assessment

Each week 1-2 major topics will be covered. Lecture slides and assigned reading will be posted on Brightspace before each tutorial. Students are expected to attend the weekly in-person tutorials to discuss key concepts from lectures and readings, interact with fossil replicas, and explore the main evolutionary theories.

Component	Description	
Participation/Lecture Attendance	• Throughout the semester student's will be presented with opportunities to work with specimen casts, human skulls, and in-person activities that will go towards a participation grade.	
Quizzes	5 quizzes spaced throughout the semester that will cover topics from the previous 1-2 lecture periods. Quizzes will be available on Brightspace and are worth 5% each.	
Written Assignments	There will be 3 written assignments throughout the semester that will cover a topic in more detail than what we examined during lecture. These assignments will consist of short-answers and longer written answers. Each assignment is worth 10%.	30%
UnEassay Project	The UnEssay project is an opportunity for students to explore a single topic of their choice in greater detail and present it to the class at the end of the semester. The projects can take on several media forms including (but not limited to) essays, PPT presentations, art work, games, needlework, etc. Several aspects of the project must be completed throughout the semester for full grades.	
Final Exam	The formal exam will cover material from the entire semester	

The final exam will take place during the final exam period. Please note that the final exam schedule is from December 10th – 22nd. The final due date will be announced closer to exam time.

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

Your Rights and Responsibilities

Academic Dishonesty

Plagiarism or any other form of academic dishonesty, such as cheating, will not be allowed. Plagiarism includes cases of lack of citations and sources of information and ideas as well as failure to paraphrase or acknowledge other people's work. If any cases of academic dishonesty are discovered, the responsible student/s will not receive any credits for the affected work. Repeated cases of academic dishonesty will be reported to the University administration. **Please see** <u>https://carleton.ca/registrar/academic-integrity/</u> for the university policy on academic integrity.

Rights and Responsibilities

The *Carleton University Undergraduate Calendar* details the rights and responsibilities of students registered at the University. It is the responsibility of each student to familiarize themselves with the Academic Regulations of the University

(https://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/).

Academic Accommodations

You may need special arrangements to meet your academic obligations during the term. Every effort will be made to provide accommodations in course, however the <u>student will be required to</u> <u>contact the instructor</u> to discuss any accommodations prior to their implementation. The processes for requesting an accommodation are outlined below:

Informal accommodation due to short-term incapacitation: [provide information on your requirements for short-term informal accommodations. If you require supporting documentation, you may only request the Self-Declaration for Academic Considerations form (<u>https://carleton.ca/registrar/wp-content/uploads/self-declaration.pdf</u>) which replaces medical notes.]

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For accommodation regarding a formally-scheduled final exam, you must complete the Pregnancy Accommodation Form (click here).

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details <u>click here</u>.

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for

a formal evaluation. If you are already registered with the PMC, please request your accommodations for this course through the <u>Ventus Student Portal</u> at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (*if applicable*). Requests made within two weeks will be reviewed on a case-by-case basis. For final exams, the deadlines to request accommodations are published in the <u>University Academic Calendars</u>. After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Survivors of Sexual Violence: As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: <u>https://carleton.ca/equity/sexual-assault-support-services</u> Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation will be provided to students who compete or perform at the national or international level. Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf

Freedom of Information and Protection of Privacy Act (FIPPA)

In accordance with the Freedom of Information and Protection of Privacy Act (FIPPA), all personal and academic information is considered confidential and will not be disclosed to a third party without the authorization of the person to whom the information pertains. Carleton University's FIPPA policy requires that information requests concerning academic or administrative issues will only be answered if the request originates from the student's University provided email account (cmail) or in person upon presentation of their Carleton Campus Card. Requests via phone or originating from other emails accounts, will not be answered.

For a complete list of Carleton University's Policies please visit: <u>https://carleton.ca/secretariat/policies/</u>

Course Copyright

My lectures and course materials (including all PowerPoint presentations, outlines, and similar materials) are protected by copyright. I am the exclusive owner of copyright and intellectual property of all course materials. You may take notes and make copies of course materials for your own educational use. You may not allow others to reproduce or distribute lecture notes and course materials publicly for commercial purposes without my express written consent.

Course Outline (Subject to change)

Week Of	Topics to Cover	Due Dates
11/09/2023	Introduction to ERTH3113	
	UnEssay Project	
	Lecture 1. Development of Evolutionary Theory	
18/09/2023	Lecture 2. Mechanisms of Evolution	
	Lecture 3. Fossilization and Geological Time	
	Scientific Nomenclature	
25/09/2023	Lecture 4. What are Primates	Quiz 1 Opens
	Lecture 5. Reconstructing Behaviour and Paleoecology	Written Assignment 1
	Referencing/Citations/Plagiarism	
02/10/2023	Lecture 6. Early Ape Evolution	UnEssay Topic Due
	Lecture 7. Trends in Hominin Evolution	
	Reading Scientific Papers	
09/10/2023	Holiday – University Closed – NO TUTORIAL	Quiz 2 Opens
16/10/2023	Lecture 8. Origins of Hominins	Written Assignment 2
	Lecture 9. Bipedalism	
	Science and Society	
23/10/2023	Fall Break—NO TUTORIAL	
30/10/2023	Lecture 10. The Australopithecines	Quiz 3 Opens
		UnEssay Annotated
		Bibliography Due
06/11/2023	Lecture 11. Origins of the Genus Homo	
	Lecture 12. Homo Erectus/Ergaster	
13/11/2023	Lecture 13. Pre-Modern Homo	Quiz 4 Opens
	Lecture 14. Homo Neanderthalensis	Written Assignment 3
20/11/2023	Lecture 15. Modern Humans	UnEssay Draft/Outline
		Due
27/11/2023	Lecture 16. Cultural Evolution	Quiz 5 Opens
	Lecture 17. What Makes Us Human	
04/12/2023	Exam Review	UnEssay Due
	UnEssay Presentations (last class is on the Friday- 08/12/2022)	Quizzes Close Dec 9