

# DEPARTMENT OF ANTHROPOLOGY AND ARCHAEOLOGY Faculty of Arts

## ANTH 309 Human Evolution

GFC Hours 3-1 Winter 2023

Instructor: Dr. Susanne Cote Lecture Location: ENA 101

Phone: 403-220-8190 Lecture Days/Time: MW 14:00-15:15

Email:scote@ucalgary.caLab Times:ThursdaysOffice:ES 750Lab Location:ES 614

Office Hours: Mondays 15:30-16:30

Teaching

Assistants: Allyson King Silvia Carboni Mélodie Oullette

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Prerequisite(s): ANTH 201 or ARKY 203

## **COURSE DESCRIPTION:**

What is the 'story' of human evolution? How did our species evolve? Who are our fossil ancestors? We will work chronologically and thematically through the last seven million years surveying the major phases of human evolution, with an emphasis on understanding how specific human adaptations evolved and why. In laboratories, students will learn how to identify fossils and how to reconstruct behavior from anatomical and paleontological evidence by studying fossil casts.

#### **LEARNING OUTCOMES:**

The Department of Anthropology and Archaeology is committed to student knowledge and skill development.

Upon completion of this course, students should be able to:

- Articulate the basic outline of human evolution over the past 7 million years, including major evolutionary developments and important fossil sites and specimens.
- Describe how paleoanthropologists identify and study new fossil finds.
- Use basic fossil morphology to interpret function and behavior of extinct hominin species.
- Assess the reliability of information from the fossil record, including how we know' what happened in the past, the limitations of the fossil record, and levels of inference in historical science.

#### **REQUIRED READINGS:**

- Readings from the scientific literature as indicated in the Schedule links provided on D2L.
- Several of the readings come from The Nature Education Knowledge Project, Biological Anthropology Section - <a href="http://www.nature.com/scitable/knowledge">http://www.nature.com/scitable/knowledge</a>

## **Recommended Reading:**

• Keep your textbook from ANTH 201. It will be a helpful reference!

## **REQUIRED TECHNOLOGY and EQUIPMENT:**

 You must have a working computer with a broadband internet connection that can access D2L and the library website.

#### **COURSE REQUIREMENTS AND ASSESSMENT:**

## Lab Assignments – 30% - in person weekly throughout the semester [see attached schedule]

- Each of the assignments is equally weighted and will be worth ~3% of your final grade (30%/8 labs = 3.75% each). The purpose of the labs is to give students the opportunity to examine fossils and fossil casts first-hand and learn how paleontologists study fossil remains. All work needed to successfully complete the lab assignment will be done in class.
- You can use your lecture notes during labs, but you cannot use cell phones or computers.

## Mid-term Examination - 25% - March 1st

- This is a 75-minute exam that will take place in class. It is closed book.
- This exam will cover lectures, laboratories, and readings assigned since the beginning of term through the end of Week 6 of class (inclusive).
- The format will include a mixture of short, medium, and long answer questions.

## Laboratory Examination – 15% - April 6<sup>th</sup> in your normal lab section

- The lab exam will take place during your last scheduled lab section. It is closed book.
- The lab exam will consist of a set of 'stations', each with a short question to be answered.
- Students will work individually for the lab exam, rotating around to all of the stations on the exam. Each station will be timed.
- Students who have attended all labs and made sure that they **understand what they are seeing in lab** should do well.

## Final Examination – 30% - Registrar scheduled (April 15<sup>th</sup> – 26<sup>th</sup>)

- This is a 2-hour exam scheduled by the Registrar. It is closed book.
- The final examination will cover ALL lectures, laboratories, and assigned readings for the term. The format will be similar to the midterm with a mixture of question types.

## Absence, Deferral, and Grading Policies:

• Exams may only be deferred in the case of serious illness or medical emergency, religious observance, or domestic affliction (see: <a href="https://www.ucalgary.ca/registrar/exams/deferred-final-exams">https://www.ucalgary.ca/registrar/exams/deferred-final-exams</a>). In the event of illness, the instructor must be notified BEFORE the exam if at all

possible. In all cases, the instructor **must be contacted within 48 hours of the missed exam**. Students who do not contact the instructor within this 48-hour period forfeit the right to a makeup exam. Once approved by the instructor, the makeup exam must be written within two weeks of the missed exam at a time scheduled by the instructor. Makeup exams in this course are in essay format.

- Students may choose to provide supporting documentation for an exemption/special request. Students are encouraged to submit documentation that will best support their situation. Falsification of any supporting documentation will be taken very seriously and may result in disciplinary action through the Academic Discipline regulations or the Student Non-Academic Misconduct policy.
- Deferral of the registrar-scheduled final exam requires Registrar approval. https://www.ucalgary.ca/registrar/exams/deferred-final-exams
- Grades will be posted on D2L as quickly as possible. Exams will not be returned to students. If you wish to see your exam, please come to office hours (in person).
- If you have questions about the grading of your exam or assignment, please approach Dr. Cote (exams) or your TA (labs) as soon as possible. After consultation with the teaching staff, you may dispute a grade by submitting a written statement within ten business days of receiving the grade, in keeping with the following university policies:

Reappraisal of Graded Term Work: <a href="http://www.ucalgary.ca/pubs/calendar/current/i-2.html">http://www.ucalgary.ca/pubs/calendar/current/i-2.html</a> Reappraisal of Final Grade: <a href="http://www.ucalgary.ca/pubs/calendar/current/i-3.html">http://www.ucalgary.ca/pubs/calendar/current/i-3.html</a>

## **Department of Anthropology and Archaeology Grading Scheme:**

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

\*\*Please note that no extra credit or 'make up' work is available in this class\*\*
You do not need to pass each course component to earn a passing grade in the class

## **Land Acknowledgement**

The Department of Anthropology and Archaeology acknowledges the traditional territories of the people of the Treaty 7 region in Southern Alberta, which includes the Blackfoot Confederacy (comprising the Siksika, Piikani, and Kainai First Nations), as well as the Tsuut'ina First Nation, and the Stoney Nakoda (including the Chiniki, Bearspaw, and Wesley First Nations). The City of Calgary is also home to Métis Nation of Alberta, Region 3.

## **Acknowledgment and Respect for Diversity**

The Department of Anthropology and Archaeology views diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought through respectful discussion and inclusion.

#### **COURSE POLICIES**

## Classroom behavior and attendance:

- The most important thing is to be respectful and supportive of other students.
- Please turn off your cell phone and any other electronic devices/background noises on your computers to avoid distracting other students.
- Lecture slides will be posted AFTER class, not before. You should come to lecture prepared to take notes. Please note that reading the lectures slides alone will NOT be sufficient to get a good grade in this class. All material from lectures is testable, and lecture slides will not have everything you need to know.

#### Labs:

- You must always attend your assigned lab section. You cannot attend a different section one
  week to suit your schedule.
- You should bring a copy of your class notes with you to lab each week.
- Students are encouraged to seek help and advice from the TA or other students as often as
  possible. You should not be trying to look answers up online! This is not a good way to be
  successful with the laboratory assignments.
- All work necessary to complete the lab exercises will be done in class. There will be no
  'homework' from labs and you will submit your lab exercises at the end of class on the day
  of that lab. Lab assignments will be returned the following week during your next lab.
- Labs are a required course component and may only be missed in the case of illness or personal emergency. You must contact your TA as soon as possible (preferably before class) if you need to miss a lab. The only opportunity to make-up missed laboratory exercises will be during official make-up sessions prior to the midterm and during Lab 9.

## **Communication Guidelines:**

- The best place to ask questions is IN CLASS or during office hours. Please take the opportunity to talk with the instructor and your TA whenever possible.
- Questions during lectures are welcome, so please just raise your hand. If something doesn't make sense to you, it probably didn't make sense to other students either!
- I always prefer to talk IN PERSON with students whenever possible. I will answer questions
  over email, however due to the volume of emails I receive I cannot commit to answering
  email questions immediately. It may take up to 2 business days (48 hours), so do not send
  questions last minute.
- I reserve the right to share questions and answers transmitted over email on D2L or in class if the answers are pertinent to everyone in the class. This saves time, and ensures that all students have access to the same information as they prepare for assignments and exams.
- Before emailing a question, please make sure that it hasn't already been addressed in the course outline, assignment handouts, or on D2L!

#### UNIVERSITY POLICIES

#### **ACADEMIC ACCOMMODATIONS**

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit <a href="https://live-ucalgary.ucalgary.ca/student-services/access">https://live-ucalgary.ucalgary.ca/student-services/access</a>. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor or the Department Head. The full policy on Student Accommodations is available at <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure">https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure</a>.

#### **ACADEMIC INTEGRITY POLICY**

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. 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: <a href="https://www.ucalgary.ca/pubs/calendar/current/k.html">www.ucalgary.ca/pubs/calendar/current/k.html</a>.

## **ACADEMIC 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: <a href="https://www.ucalgary.ca/pubs/calendar/current/k-3.html">www.ucalgary.ca/pubs/calendar/current/k-3.html</a>. 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: <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure">https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure</a>

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

## **INSTRUCTOR INTELLECTUAL PROPERTY**

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the

explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing. Information on Instructor Intellectual Property can be found at <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/intellectual-property-policy">https://www.ucalgary.ca/legal-services/university-policies-procedures/intellectual-property-policy</a>

## FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

#### COPYRIGHT LEGISLATION

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<a href="https://ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy">https://ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy</a>) and requirements of the copyright act (<a href="https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html">https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html</a>) to ensure they are aware of the consequences of unauthorized 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 Policy.

## SUPPORTS FOR STUDENT LEARNING, SUCCESS, AND SAFETY

Please visit the Registrar's website at: <a href="https://www.ucalgary.ca/registrar/registration/course-outlines">https://www.ucalgary.ca/registrar/registration/course-outlines</a> for additional important information on the following:

- Wellness and Mental Health Resources
- Student Success Centre
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk

## **IMPORTANT DATES**

M Jan 9	First day of Winter Term lectures	
R Jan 19	Last day to drop a class without a financial penalty	
F Jan 20	Last day to add or swap a course	
F Jan 27	Fee payment deadline for Winter Term full and half courses.	
Feb 20-24	Reading Break. No classes.	
F Apr 7	or 7 Good Friday, University closed. No classes.	
M Apr 10	Easter Monday, University closed. No classes.	
W Apr 12	Apr 12 Winter Term Lectures End.	
	Last day to withdraw with permission from Winter Term half courses.	
Apr 15-26	Winter Final Exam Period	

https://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html#fall2017

## **TENTATIVE CLASS SCHEDULE**

\*\*Lecture topics and readings may be adjusted throughout the term!

Date	Topic	Readings
	Week 1	
January 9	Course Introduction; Why Study Human Evolution?	
January 11	How do we know what we know about human evolution?	Peppe and Deino, 2013 (N.Ed)
January 12	NO LABS THIS WEEK	
	Week 2	
January 16	Last Common Ancestor – History and Expectations	Kivell and Schmidt 2009**
January 18	Bipedalism	
January 19	LAB 1: Basic Human Anatomy	
	Week 3	
January 23	Early hominins – Basic Info and Morphology	Su 2013 (N.Ed)
January 25	Early hominins – Interpretations	Gibbons 2009**
January 26	LAB 2: Earliest Hominins	
	Week 4	
January 30	Early Australopithecus – Basic Info and Morphology	Schrein 2016 (N. Ed); Ward and Hammond
		2016 (N.Ed)
February 1	Late Australopithecus	Berger et al 2010**
February 2	LAB 3: Lucy	
	Week 5	
February 6	Australopiths – Adaptations I	Smith and Alemseged 2013 (N.Ed)
February 8	Australopiths – Adaptations II	
February 9	LAB 4: Gracile Australopithecines	
	Week 6	
February 13	Paranthropus	
February 15	Australopiths – Wrap Up and MIDTERM REVIEW	Spoor 2015**
February 16	LAB 5: Robust Australopithecines (Paranthropus)	
	February 20 - 24 - READING BREAK – NO LECTURI	ES THIS WEEK

	Week 7			
February 27	Early Homo – the Habilines and Erectines			
March 1	MIDTERM EXAM			
March 2	NO LABS THIS WEEK			
	Week 8			
March 6	Early Homo – Variation in Erectines	Van Arsdale 2013 (N.Ed); Gibbons 2013**		
March 8	Early Homo – Diets and Migration	Pobiner 2013 (N.Ed)		
March 9	LAB 6: Homo - Habilines and Erectines			
	Week 9			
March 13	Muddle in the Middle – Middle Pleistocene Hominins	Bae 2013 (N.Ed)		
March 15	Early Homo – Recent Complications			
March 16	LAB 7: Homo – Erectines and Heidelbergs			
	Week 10			
March 20	Modern Humans and Neanderthals - Morphology			
March 22	Neanderthals – Behaviour and extinction	Havarti 2013 (N.Ed); Monnier 2012 (N.Ed)		
March 23	LAB 8: Neanderthals and modern humans			
	Week 11			
March 27	Genetics and Human Evolution			
March 29	Modern Humans	Tryon and Bailey 2013 (N.Ed); Wurz 2012 (N.Ed)		
March 30	LAB 9: Make up labs and review of lab materials			
	Week 12			
April 3	The Hobbit: Homo floresiensis	Aiello 2010**; Baab 2012 (N.Ed)		
April 5	Taking a Step Back – Paleoecology and Behaviour	Kovarovic 2012 (N.Ed)		
April 6	LAB EXAM			
	Week 13			
April 10	No Class – University Holiday			
April 12	Course Synthesis and FINAL EXAM REVIEW	McNulty 2016 (N.Ed)		
April 15-26 <sup>th</sup>	Final Exam (to be scheduled by the Registrar)			