

**DEPARTMENT OF ANTHROPOLOGY AND ARCHAEOLOGY**  
**ANTHROPOLOGY 412**  
**THE PRIMATE FOSSIL RECORD**  
**WINTER 2021**

**Lectures: Online via Zoom TTh 13:30 – 1:45pm** [synchronous online delivery]

**Instructor:** Dr. Susanne Cote

**Office:** ES 750

**Email:** scote@ucalgary.ca

**Office Hours:** Tuesdays 2 – 4pm

**TA:** Allyson King

**Email:** allyson.king@ucalgary.ca

**TA:** Pamela Narváez

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**COURSE DESCRIPTION:**

A review of the primates, from the origin of the clade to the Pleistocene. The course will cover the environmental and chronological context for primate evolution, extinct and extant species diversity, and current debates and problems in the field of primate evolution. Laboratories will focus on demonstrating the diversity of primate dietary, locomotor, and social adaptations, and how these are inferred in the fossil record.

**Prerequisites:** ANTH 309 Human Evolution and ANTH 311 Primate Ecology

**REQUIRED READINGS:**

- Fleagle, J. (2013). *Primate Adaptation and Evolution*. 3<sup>rd</sup> Edition. Elsevier.
- Additional readings from the scientific literature as indicated in the Schedule and on D2L – please note that additional readings will be added throughout the term!

**Optional Readings:**

- Whitehead, P. et al. (2004). *A Photographic Atlas for Physical Anthropology*. Morton Publishing Company.

**REQUIRED TECHNOLOGY and EQUIPMENT:**

- You must have a working computer with a broadband internet connection, an updated browser, webcam, and microphone to participate in lectures.
- You must have access to D2L, Word and PowerPoint for online examinations.

**COURSE OBJECTIVES:**

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

- Explain systematics of living primates, including the basic anatomical differences that distinguish species from both a functional and phylogenetic perspective.
- Outline broad scope of primate evolution – including the temporal and geographic setting, important species, and evolutionary adaptations.
- Understand the relationship between specific lineages of fossil and living primates.
- Understand how we reconstruct function, behavior and phylogenetic relationships among species from the fossil record.
- Research and write a scientifically oriented research paper (in the style of a literature review) in the field of biological anthropology.

## COVID-19 INFORMATION AND MODIFICATIONS TO COURSE NORMS:

- The plan for ANTH 412 is to run this course as close to its normal format as possible.
- Lectures will be online, delivered synchronously via Zoom. Links are available on D2L under “Communication → Zoom.”
- Dr. Cote will attempt to give her ‘normal’ lectures including demonstrations with fossils and incorporating some discussion and student question/answers. Both the lecture slides and a recording of the lecture will be made available after each class. [*Note: recordings will not be available for the classes during which we are working on group assignments (see below)*].
- This course normally has labs, but these were not approved for in person delivery. The normal labs will be replaced by six in-person group assignments that will take place every second week during our normal class time. You are required to attend these classes and work with your group to complete the assignment.
- The quiz, midterm and final examinations will be held online using the D2L Quizzes platform.
- All examinations will follow the policies for Winter 2021 courses outlined in the calendar: [www.ucalgary.ca/pubs/calendar/current/g.html](http://www.ucalgary.ca/pubs/calendar/current/g.html). That means that you will have a 24-hour window in which to write each exam, and you will receive 50% extra time on these exams to account for any technological issues.

## COURSE REQUIREMENTS AND GRADING:

Primate Taxonomy and Anatomy Quiz – 5%	Research Paper – 40%
In-class Assignments – 15%	- 5% Proposal
Midterm Exam – 15%	- 10% Peer Review
Final Exam – 25%	- 25% Final Paper

### ***Primate Taxonomy and Anatomy Quiz – 5% - January 25<sup>th</sup> (12:00 AM – 11:59PM)***

This quiz will be on the basics of primate taxonomy and anatomy. The purpose is to ensure that students know this material and can therefore successfully continue with the rest of the class. The quiz will take place online, using D2L. It will be short (length TBD), but you will have a 24-hour window in which to complete the quiz.

### ***In-class Assignments – 15%***

Six (6) **mandatory in-class** assignments throughout the semester (see Class Schedule). Each assignment will be worth 2.5% of your final grade. The purpose of the assignments will be to provide students with a formative assessment, engage with the literature, and think critically. All work needed to successfully complete the lab assignment will be done **in class**.

### ***Midterm Examination – 15% - March 9<sup>th</sup> on D2L (24-hour window)***

This exam will cover lectures, laboratories, and readings assigned since the beginning of term through March 4<sup>th</sup> (inclusive). The format will include a mixture of different types of written answer questions, including essays.

### ***Scientific Research Paper – 40%***

This is a four-part assignment in which you will write a scientific research paper on a topic of your choice. A detailed handout will be provided the second week of class. Proposals are due **February 25<sup>th</sup> (5%)**. A complete draft of your paper is due **April 6<sup>th</sup>**. I will assign your paper to another student in the class (anonymously) and give you another student's paper to review. Peer reviews are due **April 13<sup>th</sup> (10%)**. Final papers are due by **April 18<sup>th</sup> at midnight (25%)**. Drafts, peer reviews, and final papers will be graded according to a rubric that will be circulated ahead of time. Grammar, spelling, and proper referencing style will count towards your grade.

***Final Examination – 25% - Registrar scheduled (April 19<sup>th</sup> – 29<sup>th</sup> 2021)***

The final examination will cover ALL lectures, discussions, assignments, and assigned readings for the term. The format will be the same as the midterm examination and will include a mixture of different types written answer questions, including essays.

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

A+	95 – 100%	B	75 – 79.9%	C-	59 – 62.9%
A	90 – 94.9%	B-	71 – 74.9%	D+	55 – 58.9%
A-	85 – 89.9%	C+	67 – 70.9%	D	50 – 54.9%
B+	8.0– 84.9%	C	63 – 66.9%	F	< 50%

**\*\*Please note that no extra credit or 'make up' work is available in this class\*\***

**COURSE POLICIES:**

***Classroom behavior and attendance:***

- The most important thing is to be respectful and supportive of other students.
- Even though we will be online for lectures, your conduct matters. Please find a quiet space and turn off your cell phone and any other electronic devices/background noises on your computers to avoid distracting other students.
- Lecture slides and recordings of the lecture 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.

***In-Class Assignments:***

- Most importantly, you **must** attend all six sessions.
- You will need to **complete the reading(s) ahead of time** in order to properly participate. You should also have a set of up to date class notes, which will help with the assignment.
- You will work in a group to complete the assignment. Each group will submit a single assignment and all students in the group will receive the same grade.
- All work necessary to complete the lab exercises will be done **IN CLASS**. There will be no 'homework' and you will submit your assignment at the end of class using D2L.

- These assignments are **MANDATORY** and may only be missed in the case of illness or personal emergency. You must contact the TA as soon as possible (preferably before class) if you need to miss a group assignment.

***Exam and Grading Policies:***

- Missed exams automatically receive a score of zero. In the event of an emergency or illness, the instructor **MUST** be notified **BEFORE** the exam if at all possible.
- The instructor at their discretion may transfer the percentage weight for the test to the final examination or set another test, etc. Make up exams may be in any format (including oral examination); performance on make-up exams is often poorer. Please note that deferral of the final exam requires Registrar approval and cannot be approved by the instructor.
- All 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.
- If you have questions about the grading of your exam or assignment, please approach Dr. Cote (exams and papers) or the TA (assignments) as soon as possible. After consultation with the teaching staff, you may dispute a grade that you have received by submitting a written statement within two weeks of receiving the grade.

***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 AND INFORMATION:**

**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). Students should also familiarize themselves with University policies regarding non-academic misconduct: <https://www.ucalgary.ca/legal-services/university-policies-procedures/student-non-academic-misconduct-policy>

## **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://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure>

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>

Information on the acceptable use of electronic resources can be found here: <https://ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-electronic-resources-and-information-policy>

## **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 without 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, above). 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/>.

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.

### **Academic Accommodations**

It is the student's responsibility to request academic accommodations. Students may find information on accommodations at: <https://www.ucalgary.ca/pubs/calendar/current/b-6-1.html>. 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: <https://ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure>

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://ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy> 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 a 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, [suypaca@ucalgary.ca](mailto:suypaca@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.

### **Teaching Evaluations / USRIs (Universal Student Ratings of Instruction)**

At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. **Your responses make a difference, please participate!** Website: <http://www.ucalgary.ca/usri/>

**Emergency Evacuation Assembly Points:** In the event of an emergency that requires evacuation, please refer to the following link to become familiar with the assembly points for the class: <https://ucalgary.ca/risk/emergency-management/evac-drills-assembly-points/assembly-points>

**CLASS SCHEDULE:**

\*\*Please note that lecture topics and readings are subject to change\*\*

\*\*Additional readings from the scientific literature will be added throughout the term\*\*

<b>Date</b>	<b>Topics</b>	<b>Readings</b>
January 12	Course Introduction; The Fossil Record and Timing of Primate Evolution	Chapters 1 and 10
January 14	What is a Primate? Primate Relationships	Chapters 2 and 9 Kirk 2013, Gebo 2013
January 19	Primate Origins – Historical Perspectives	Chapter 11
January 21	Paleocene Primates	Silcox 2014
January 25	<b>QUIZ – Primate Anatomy and Taxonomy</b>	<b>24-hour window</b>
January 26	<b>Team Assignment #1: Plesiadapiformes</b>	Reading TBA
January 28	Adapoids	Chapter 12
February 2	Omomyoids	Chapter 12
February 4	<b>Team Assignment #2: Early Euprimates</b>	Reading TBA
February 9	Fossil Prosimians	Chapter 12
February 11	Subfossil Lemurs	Chapter 4
February 16	<b>Team Assignment #3: Lemur Extinctions</b>	
February 18	<b>NO CLASS – READING BREAK</b>	
February 23	<b>NO CLASS – READING BREAK</b>	
February 25	Early Anthropoids – Eocene <b>Term Paper Proposals Due (D2L Dropbox by 12:30pm)</b>	Chapter 13
March 2	Early Anthropoids – Oligocene	Chapter 13
March 4	Anthropoid Adaptations and Phylogeny	Chapter 13
March 9	<b>Midterm Examination (24-hour window)</b>	
March 11	Fossil Platyrrhines I	Chapter 14
March 16	Fossil Platyrrhines II	Chapter 14
March 18	<b>Team Assignment #4: Getting to the New World</b>	Reading TBA
March 23	Oligocene Catarrhines	Chapter 15
March 25	Early Miocene Catarrhines	MacLatchy et al., 2015
March 30	Middle Miocene Catarrhines	Chapter 15
April 1	<b>Team Assignment #5: Hominoid Biogeography</b>	Reading TBA
April 6	Late Miocene Apes and Rise of Cercopithecoidea <b>Term Paper Drafts Due (D2L Dropbox by 12:30pm)</b>	Chapter 16
April 8	<b>Team Assignment #6: Hominoid Declines</b>	Reading TBA
April 13	Plio-Pleistocene Cercopithecoidea <b>Peer Reviews Due (D2L Dropbox by 12:30pm)</b>	Chapter 16
April 15	Synthesis and Wrap-Up	Chapter 18
TBA	<b>Optional Lab Tutorials:</b> An opportunity to see fossils late in the semester, COVID permitting	
April 18	<b>Final Term Papers Due (Dropbox on D2L by midnight)</b>	
April 19-29	<b>Final Exam (to be scheduled by the Registrar; 24-hour)</b>	

\*Chapters 3, 5, 6, and 7 should be largely review from previous coursework, but may be helpful to students.