

DEPARTMENT OF ANTHROPOLOGY AND ARCHAEOLOGY
ANTHROPOLOGY 412
THE PRIMATE FOSSIL RECORD
WINTER 2018

Tuesdays and Thursdays 9:30 – 10:45am

Room #: ES 614

Instructor: Dr. Susanne Cote

Office: ES 750

Tel: 220-8190

Email: scote@ucalgary.ca

Office Hours: Tuesdays 1 – 3 pm

TA: Catherine Butts

Email: Catherine.butts@ucalgary.ca

Prerequisites: ANTH 309 Human Evolution

Note: ANTH 311 is strongly recommended.

COURSE DESCRIPTION:

A review of the primates, from the origin of the clade to the present day. 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.

REQUIRED READINGS:

- Fleagle, J. (2013). *Primate Adaptation and Evolution*. 3rd 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!

Recommended Readings:

- Whitehead, P. et al. (2004). *A Photographic Atlas for Physical Anthropology*. Morton Publishing Company. [*Can be hard to find. Check for used copies*]

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 scientific research paper (literature review) in the field of biological anthropology

COURSE REQUIREMENTS AND GRADING:

Six In-class Lab Assignments – 15%

Midterm Exam – 20%

Final Exam – 25%

Research Paper – 40%

- 5% Proposal

- 10% Peer Review

- 25% Final Paper

Lab Assignments – 15%

Six (6) **mandatory in-class** laboratory assignments throughout the semester (see Class Schedule). Each assignment will be worth 2.5% of your final grade. 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**.

Mid-term Examination – 20% - March 6th in class

This exam will cover lectures, laboratories, and readings assigned since the beginning of term through February 25th (inclusive). The format will include a mixture of different types of short answer questions, medium answer questions, and an essay.

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 27th in class (5%)**. A complete draft of your paper is due **March 27th**. 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 5th (10%)**. Final papers are due by **noon on April 16th (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 16 - 26th 2018)

The final examination will cover ALL lectures, laboratories, and assigned readings for the term. The format will be the same as the midterm examination and will include a mixture of different types of short answer questions, medium answer questions, and an essay.

Department of Anthropology and Archaeology Grading Scheme:

A+	100-94.9%	B	79.8-74.9%	C-	62.8-58.9%
A	94.8-89.9%	B-	74.8-70.9%	D+	58.8-54.9%
A-	89.8-84.9%	C+	70.8-66.9%	D	54.8-49.9%
B+	84.8-79.9%	C	66.8-62.9%	F	49.8% and less

COURSE POLICIES

Classroom behavior and attendance:

- The most important thing is to be respectful and supportive of other students. Please turn your cell phone and any other electronic devices. You may use a laptop to take notes, but please sit in the back or along the sides so as to not disturb other students. Please only use your laptops to take notes, and remember that instructors can often tell when you are watching videos, looking at Facebook etc.

- It is in your own best interest to attend all classes. You are responsible for taking your own notes, or for obtaining notes from a classmate if you have to miss a class for unavoidable reasons. You will not be successful in this class if you do not regularly attend lectures!
- Lecture slides will be posted AFTER class, not before. You should come to class 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:

- Most importantly, you must **DOWNLOAD AND PRINT EACH LAB ASSIGNMENT FROM D2L** and bring it with you to class. Otherwise you won't be able to complete the assignment!
- Students are encouraged to work in groups for the lab exercises and to seek help and advice from Dr. Cote and the TA as often as needed.
- 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.
- Labs are **MANDATORY** and may only be missed in the case of serious illness or personal emergency (same rules as for exams). You must contact the TA as soon as possible (preferably before class) if you need to miss lab.
- The only opportunity to make-up missed laboratory exercises will be at the end of term after the last day of classes.

Exam and Grading Policies:

- Missed exams automatically receive a score of zero. In the event of an emergency or illness, the Anthropology main office (403-220-6516) or the instructor **MUST** be notified BEFORE the exam, and documentation (e.g. signed Physician's Statement) must be provided. Make up exams may be in any format (including oral examination); performance on make-up exams is often poorer.
- Exams grades will be posted on D2L as quickly as possible. Midterms will be returned to students, but final exams will not. If you wish to see your final exam, please make an appointment.
- All assignments are due AT THE BEGINNING OF CLASS on the day indicated in this course outline. Late assignments are penalized 5% per day (calendar day, not business day), except for term paper drafts and peer reviews, which are penalized at 20% per day to ensure fairness to all students.
- If you have questions about the grading of your exam or assignment, please see Dr. Cote 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. This is a small class, so take advantage of that and speak with your instructor and TA in person!
- 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!

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****

Date	Topics	Readings
January 9	Course Introduction; The Fossil Record and Timing of Primate Evolution	Chapters 1 and 10
January 11	What is a Primate? Primate Relationships	Chapters 2 and 9 Kirk 2013, Gebo 2013
January 16	Primate Origins – Historical Perspectives	Chapter 11
January 18	Lab #1: Primate Taxonomy, Phylogeny, and Anatomy	
January 23	Paleocene Primates	Silcox 2014
January 25	Adapoids	Chapter 12
January 30	Omomyoids	
February 1	Lab #2: Early Fossil Primates	
February 6	Fossil Prosimians	Yoder 1997
February 8	Subfossil Lemurs	Chapter 4
February 13	Early Anthropoids - Eocene	Chapter 13
February 15	Lab #3: Early Fossil Primates II	
February 20	NO CLASS – READING BREAK	
February 22	NO CLASS – READING BREAK	
February 27	Early Anthropoids – Oligocene Term Paper Proposals Due	
March 1	Anthropoid Adaptations and Phylogeny	
March 6	Midterm Examination	
March 8	Lab #4: Fayum Anthropoids	
March 13	Fossil Platyrrhines	Chapter 14
March 15	Fossil Platyrrhines – Getting to the New World	Houle 1999
March 20	Oligocene and earliest Miocene Catarrhines	Chapter 15
March 22	Lab #5: Platyrrhines and Early Catarrhines	
March 27	Early Miocene Catarrhines Term Paper Drafts Due	MacLatchy et al., 2015
March 29	Middle Miocene Catarrhines	Begun et al., 2012
April 3	Late Miocene Apes and Monkeys	Chapter 16
April 5	Lab #6: Miocene Catarrhines and OWM Peer Reviews Due	
April 10	Plio-Pleistocene Cercopithecoidea	
April 12	Synthesis and Wrap-Up	Chapter 18
TBA	Lab Review: Self-directed review of lab materials; Make-Up Labs	
April 16	Final Term Papers Due (Noon. Yellow Box @ ES620)	
April 16-26	Final Exam (to be scheduled by the Registrar)	

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

PLAGIARISM AND CHEATING

Plagiarism: “to steal and pass off the ideas or words of another as one’s own” (Webster’s). Plagiarism will not be tolerated and will automatically result in a failing grade for the submission. Any student caught plagiarizing will also be subject to additional University sanctions. Students are expected to be familiar with the Department of Anthropology and Archaeology’s policy on intellectual honesty

DEFERRED EXAMS:

A student who is absent from a test for legitimate reasons must discuss an alternative course of action with the instructor. The instructor at their discretion may transfer the percentage weight for the test to the final examination, if there is a final examination in the course, set another test, etc. An instructor will normally make this decision on the basis of verbal information provided by the student. In the event that an instructor feels that they cannot judge the veracity of the information provided, Students must be aware that they are responsible for payment of any charge associated with the medical assessment and documentation as this service falls outside the realm of services provided by the Provincial Health Care Plan. Deferral of the registrar scheduled final exam requires Registrar approval.

ACADEMIC ACCOMMODATIONS

<http://www.ucalgary.ca/access/accommodations/policy>

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.

Students needing an Accommodation based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the instructor of this course.

ACADEMIC INTEGRITY

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Calgary is a strong signal of each student’s individual academic achievements. As a result, the University treats cases of cheating and plagiarism very seriously. Non-academic integrity also constitutes an important component of this program.

For detailed information on what constitutes academic and non-academic misconduct, please refer to the following link: <http://www.ucalgary.ca/pubs/calendar/current/k-2-1.html>

All suspected cases of academic and non-academic misconduct will be investigated following procedures outlined in the University Calendar. If you have questions or concerns about what constitutes appropriate academic behavior or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources.

Where there is a criminal act involved in plagiarism, cheating or other academic misconduct, e.g., theft (taking another student's paper from their possession, or from the possession of a faculty member without permission), breaking and entering (forcibly entering an office to gain access to papers, grades or records), forgery, personation and conspiracy (impersonating another student by agreement and writing their paper) and other such offences under the Criminal Code of Canada, the University may take legal advice on the appropriate response and, where appropriate, refer the matter to the police, in addition to or in substitution for any action taken under these regulations by the University

TEACHING EVALUATIONS / USRI (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/>

Writing Across the Curriculum

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, members of faculty can and should use writing and the grading thereof as a factor in the evaluation of student work. The services provided by the Writing Support, part of the Student Success Centre, can be utilized by all undergraduate and graduate students who feel they require further assistance

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: <http://www.ucalgary.ca/emergencyplan/assemblypoints>

Freedom of Information and Protection of Privacy Act

The University of Calgary is committed to protecting the privacy of individuals who work and study at the University or who otherwise interact with the University in accordance with the standards set out in the Freedom of Information and Protection of Privacy Act. Please refer to the following link for detailed information: <http://www.ucalgary.ca/legalservices/foip>

The Department of Anthropology and Archaeology's FOIP (Freedom of Information and Privacy) policy requires all reports/examinations to be returned to students during class time or the instructor's office hours. Any term work not picked up will be placed in the Anthropology and Archaeology Office (ES620) for distribution. Any student not wishing to have their work placed in the office must make alternative arrangements with the course instructor early in the term.

Safewalk Information: Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day to any location on Campus including the LRT, parking lots, bus zones and University residences. Contact Campus Security at (403) 220-5333 or use a help

phone, and Safewalkers or a Campus Security Officer will accompany you to your campus destination.

Faculty of Arts Program Advising and Student Information Resources: Have a question, but not sure where to start? Arts Students' Centre

The Faculty of Arts Students' Centre is the overall headquarters for undergraduate programs in the Faculty of Arts. The key objective of this office is to connect students with whatever academic assistance that they require.

In addition to housing the Associate Dean, Undergraduate Programs and Student Affairs and the Associate Dean for Teaching and Learning, the Arts Students' Centre is the specific home to:

- program advising
- the Faculty's Co-operative Education Program
- the Arts and Science Honours Academy
- the Faculty's Interdisciplinary Programs
- a Student Help Desk

Location: Social Sciences Room 102

Phone: 403.220.3580

Email: ascarts@ucalgary.ca

Website: arts.ucalgary.ca/undergraduate/

For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at (403) 210-ROCK [7625] or visit them at the MacKimmie Library Block.

Contacts for Students Union Representatives for the Faculty of Arts:

arts1@su.ucalgary.ca

arts2@su.ucalgary.ca

arts3@su.ucalgary.ca

arts4@su.ucalgary.ca

Ombudsman's office: <http://www.ucalgary.ca/ombuds/>