SYLLABUS - ANT 348K (31790)

EVOLUTIONARY ANATOMY OF THE HEAD AND NECK

Fall Semester 2018

PROFESSOR: Dr. Chris Kirk

Office: SAC 5.154

Email: eckirk@austin.utexas.edu Office hours: W 1:00 – 3:00 PM

LECTURES: Tuesday and Thursday, 12:30 – 2:00 PM SAC 5.172

COURSE DESCIPTION:

Evolutionary Anatomy of the Head and Neck is a course designed for upper division undergraduates in biological anthropology, vertebrate paleontology, biological sciences, human biology, and pre-medical majors. The objective of this course is to provide a detailed overview of the comparative and functional anatomy of the head and neck, with a special emphasis on the teeth and cranium. The taxonomic focus of this course is foremost on humans, followed by other primates, other mammals, and other vertebrates. In addition to the gross anatomy of the head and neck, an emphasis will be placed on understanding the functional and phylogenetic significance of macroevolutionary transformations of cephalic structures through time. The format of the course includes lecture, discussions, and in-class laboratory components.

READING ASSIGNMENTS AND PAPER DISCUSSIONS:

There is no textbook or course pack for this course. PDF files of lecture slides and course readings will be posted on Canvas at: http://canvas.utexas.edu

GRADING & EXAMS:

There will be three non-cumulative exams during the course of the semester. Exam questions will be taken from lectures and assigned readings. THERE IS NO FINAL EXAM.

DO NOT MISS AN EXAM. Make-up exams will be given only when medical or family emergencies can be documented. If you miss an exam due to an emergency, you must contact Prof. Kirk as soon as possible and provide documentation within 5 days of the exam. FYI: If you are sick on an exam day, don't ask the Student Health nurse who schedules your appointment for a note – get one from the physician or PA who sees you.

If you have any questions about your grade on an exam, Prof. Kirk will be happy to **re-grade** your whole exam *if it was completed in indelible ink*. Please write out a short statement explaining your specific concerns (e.g., incorrect addition of the number of wrong answers on a page, why you think that a question was graded incorrectly and what you think the correct answer should have been, etc.). Then give your (1) written explanation & request for a re-grade and (2) your original exam to Prof. Kirk. You have 1 week after the exams have been returned to you to notify Prof. Kirk of any errors or disagreements. After that, grades are final.

Your grade for the semester will be based on the following four components:

Exam 1	 35%
Exam 2	 35%
Exam 3	 30%

Final Grade Ranges:

$$A = 100-90$$
; $B = 89-80$; $C = 79-70$; $D = 69-60$; $F = 59$ and below

PLEASE NOTE THE FOLLOWING GRADING POLICIES:

- Final letter grades are assigned according to the integer ranges shown above. Pluses and minuses will not be assigned for final grades.
- All grades for the semester are final. <u>Students will not be provided with opportunities for "bonus work" to increase their final grade</u>.
- Documentation of excused absences from an exam will not be considered more than 1 week after the date of the exam

CHEATING POLICY:

During exams, students will not be permitted to use electronic devices of any kind (including, but not limited to, cell phones, mp3 players, headphones, and smart watches). Without exception, any student found cheating on an exam will receive a grade of zero for the exam and will be referred to the dean's office for further disciplinary action.

SPECIAL ACCOMMODATIONS:

If you require special accommodations for exams (e.g., a reduced-distraction environment or extra time), you must contact Dr. Kirk at least 7 days before an exam in order to discuss the necessary arrangements. There will be no exceptions to this rule. Proof of qualification for accommodations from the UT Services for Students with Disabilities (SSD) office must be provided. Each time a student wishes to use an approved accommodation for an exam, it is the student's responsibility to notify and make arrangements with Dr. Kirk.

A student is free *not* to use an approved accommodation. However, if a student opts out of an accommodation for one exam and then decides to use it for another exam, it is the responsibility of the student to make advance arrangements with Dr. Kirk.

OTHER CLASS POLICIES:

- 1. Cell phones must be kept silent and in your pocket, bag, purse or backpack for the duration of class. Please don't text in class. Please don't read from your cell phone in class. I'll remind everyone about this policy one time each day. If I see a cell phone after this reminder, you will be asked to leave the classroom.
- **2.** Feel free to take notes on a computer. <u>However, no one</u> is allowed to make audio or video recordings of lectures under any circumstances. Similarly, no one is allowed to photograph the Power Point slides during lecture.

Please note also that students who use their computers for anything other than taking notes may be asked to turn off their computer and/or to leave the classroom.

- **3.** If you want to send me a message, **please use my email address and** *not* **the message function in Canvas.** I generally do not see and therefore will not reply to messages sent in Canvas.
- **4.** GUNS: While I cannot legally ban concealed guns from my classroom, I can exercise my first amendment right to let you know that I would strongly prefer that you NOT bring them into my classroom. I CAN legally ban concealed guns from my faculty office. Thus, this (and my reading of this statement aloud in class) is my official notification that you may not bring any guns into my faculty office.

COURSE OUTLINE

30 Aug (Th) Introduction 4 Sep (Tu) Getting AHead - Characteristics of heads; chordate & mammalian taxonomy Hard Headed - Bones and features of the human cranium 6 Sep (Th) 11 Sep (Tu) Things I learned in Sküll - Cranium review, self guided in-class lab 13 Sep (Th) Hair, Nipples, and... Crania? - Evolution of the mammalian skull part 1 18 Sep (Tu) Milk, Whiskers, and... Crania? - Evolution of the mammalian skull part 2 20 Sep (Th) Chew on This! - Muscles of mastication & teeth 25 Sep (Tu) A TRIBute to Teeth - Tribosphenic molars 27 Sep (Th) Break it Down For Me Fellas! - Mammal vs. non-mammal dentitions; Evolution, occlusion, & function of tribosphenic molars EXAM 1 2 Oct (Tu) 4 Oct (Th) Nail Biter - Evolution of primate dentitions part 1; Dental terminology Food for Thought - Evolution of primate dentitions part 2 9 Oct (Tu) Chin Up! - Mandible and masticatory biomechanics 11 Oct (Th) 16 Oct (Tu) Head of the Class - Brain and cranial nerves 18 Oct (Th) **NO CLASS - SVP meetings** 23 Oct (Tu) Big Bodacious Baboon Brains - Primate brain evolution 25 Oct (Th) The Nose Knows - Nose and paranasal sinuses 30 Oct (Tu) The Eyes Have It - Eye and orbit Eve Can See Clearly Now... - Evolution of the primate orbit 1 Nov (Th) 6 Nov (Tu) EXAM 2 8 Nov (Th) A Touching Story / Skin Deep - Somatosensation of the face; Muscles of facial expression **TBD** 13 Nov (Tu) 15 Nov (Th) The Sound of Science - Anatomy of ear and temporal bone Can You Ear Me Yet? - Evolution of the middle ear part 1 20 Nov (Tu) **NO CLASS - Thanksgiving** 22 Nov (Th) 27 Nov (Tu) Can You Ear Me Now? - Evolution of the middle ear part 2 Hold Your Head up High - Nuchal musculature, cervical vertebrae, and the 29 Nov (Th) posterior cranial base 4 Dec (Tu) A Tasteful Last Lecture - Tongue and gustation 6 Dec (Th) EXAM 3