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### **ANTY 210N.01: Introduction to Physical Anthropology**

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# **COVID Mitigation Procedures**

The University has instituted several COVID mitigation procedures that will impact our class. I submit to them under protest, but we really have no choice other than to follow these procedures.

- 1. Everybody in the classroom must wear a mask. If you don't have a mask or aren't wearing it you must leave the classroom. If an unmasked person fails to leave the classroom I will have to cancel class for that day.
- 2. The university is very interested in who is sitting next to whom. This is so that if someone tests positive for COVID contact tracing can be used. If we know where everyone is seated then only those near the infected person need to be quarantined. Otherwise, the whole class will be quarantined. There are a couple of things we need to do to comply with this.
  - a. My TA will compile a seating chart of who is sitting where. Thus, she will have to move around during lecture asking each of you your name. If you want to be prepared, you can come with your name written on a piece of paper to hand to her.
  - b. You will need to sit in the same seat all semester. So, choose your seat carefully at the first class meeting.
  - c. If you arrive at class and someone is sitting in your seat, please let the instructor or the TA know so they can handle the issue.
- 3. I am hoping that I can talk loudly enough that you can all hear me with my mask on. I don't know whether there is a working microphone in the room. If so, I'll use it.
- 4. I plan to zoom each class meeting, to accommodate those who might be quarantined or who would rather watch from home. This may not always go smoothly, because despite my B.S. degree in computer science I'm not very good with techy techy crap like zoom. I will apologize ahead of time if something doesn't work right.
- 5. We are told not to hand out paper syllabi this year, but you can get it from Moodle.
- 6. All exams will be administered through Moodle this year. The exam access will be virtually the entire day for which the exam is scheduled (12:05am to 11:55pm). Although university excused absences (see the catalog) are allowed, I will not generally be willing to reschedule an exam for individual students.

I hope these procedures are not too nasty, and I apologize if they are.

## INTRO TO PHYSICAL ANTHROPOLOGY

### **ANTHROPOLOGY 210**

MWF 11:10-12:00 in SS 356

Dr. Randy Skelton
SS 226 Office Hours: MWF 8:00-8:50, TR 11:00-12:00
Email randall.skelton@umontana.edu

#### **GOALS AND OUTCOMES**

The focus of this class is the scientific study of human origins and variation. We will use many lines of evidence to form a holistic picture of human evolutionary biology. First, we will look at the process of evolution, and other background concepts. Second, we will examine our non-human primate relatives to see what they can tell us about ourselves. Finally, we will study the human fossil and archaeological records, and the spectrum of variation found in modern humanity.

**Learning Outcomes:** Students who successfully complete this class will have a basic understanding of the topics listed in the accompanying lecture schedule. This comprises a basic body of knowledge about humans as a living biological organism. This knowledge is part of the core curriculum of anthropology and will form a solid foundation in human biology that can be built upon in a variety of other classes. The Montana University System lists the following as learning outcomes.

- Demonstrate an understanding of basics of evolution, genetics, primatology, paleoanthropology, human variability;
- Demonstrate an understanding of the scientific method and of basic research methods in biological anthropology;
- Apply principles of evolution to evidence found in the fossil record and modern human and other primate adaptation;
- Critically examine contemporary issues in biological anthropology such as race, evolution, and human variation.

### **ADMINISTRIVIA**

**Required Text:** Readings in the lecture and reading schedule should be read before class. Shook, Beth et al. (eds), 2019. Explorations: An Open Invitation to Biological Anthropology. American Anthropological Association. ISBN 13: 9781931303620 (Ebook) or 9781931303637 (Print). You can download chapters at http://explorations.americananthro.org/.

**Moodle and Email:** The University provides a learning management system called Moodle. You need to be able to access Moodle. If you can't access Moodle contact Moodle help at umonline-help@umontana.edu or 406-243 4999. I can only be responsible for content on Moodle and not for technical or access issues. Outside of lecture hours I will communicate with the class via Moodle, which uses official University email addresses. So, you need to check your University email regularly.

**Lectures:** Class attendance is required, though I won't be taking attendance. More than 30 years of experience teaching convinces me that students who come to class do much better than those who don't. Lecture notes for this class will be posted on Moodle.

Student Conduct: Students are expected to be familiar with and abide by the current student conduct code.

**Disability Accommodations:** Students with disabilities are welcome. The anthropology department has limited ability to provide accommodation, so arrangements should be made for accommodation with Disability Services for Students. See http://life.umt.edu/dss/ for details.

**Exams and Grading:** Three non-cumulative regular exams will be held, one after each third of the course. In addition, there will be a comprehensive final examination on the designated final exam day. You must take at

least three of the four exams. If you take all four, the best three scores will be used to compute your grade. The three exams will each count for one third of your final score in the class. The grade you will receive depends on your overall cumulative percentage in the course, assigned using this system: 100%-90% = A, 89%-80 = B, 79-60% = C, 59-50% = D, 49-0% = F. I reserve the right to modify these basic grades with a + or - in special circumstances. This class may be taken CR/NCR grading, but if you do so you can't apply it toward any major, minor, or other requirements that require a letter grade.

#### PROVISIONAL\* LECTURE AND READING SCHEDULE

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DATE DAY LECTURE
                                                                                            READING FROM SHOOK ET AL.
Section 1: Genetic Background and Primates 8/30 M 1. Anthro and Physical Anthro 9/1 W 2. The history of evolutionary theory 9/3 F 3. Genes and Gene Expression
                                                                                            Ch. 1: Entire chapter
Ch. 2: Entire chapter
Ch. 3: Beginning thru "Special Topic: Genetic Regulation Of
                                                                                                        the Lactase (Lct) Gene".
9/6
9/8
                         !!! LABOR DAY HOLIDAY !!!
                                                                                            Ch. 3: Section on "Mendelian Genetics And Other Patterns Of Inheritance" thru end.
                   4. Inheritance
            W
                                                                                            Ch. 4: Beginning thru "Case Study #1: Neurofibromatosis Type 1 (NF1)".

Ch. 4: Section on "Genetic Drift" to end.
9/10
                   5. Mutation and genetic abnormalities
            F
9/13
9/15
                   6. The mechanisms of evolution
           W
                   7. Video: Go Ape

Ch. 5: Beginning thru "Locomotor Adaptations".
Ch. 5: Section on "PRIMATE DIVERSITY" to end.
Ch. 6: Beginning thru "Polyspecifc Associations"
Ch. 19: (Appendix C) Entire chapter.
Ch. 6: Section on "Dispersal: Who Goes, Who Stays, and Why?" to end.

    Primate Anatomy
    The Living Primates

9/17
9/20
            М
                   10. Primate Behavior and Ecology
11. The Evolution of Behavior
9/22
9/24
9/27
                   12. Primate Social Groups 1
                   13. Primate Social Groups 2
10/1
                   14. Primates in Peril
                                                                                            Ch. 18: (Appendix B) Entire chapter.
Section 2: Evolutionary Background 10/6 W 15. Fossils, Time, and Taphonomy 10/8 F 16. Intro to Evolutionary Analysis
                                                                                            Ch. 7: Entire chapter
                  17. Making & Reading Evolutionary Trees
18. Evolution Before Primates
19. The Early Evolution of Primates
20. Evolution of Monkeys & Apes
10/11
10/13
10/15
                                                                                            Ch. 8: Beginning thru "Amphipithecids".
Ch. 8: Section on "Platyrrhine Dispersal to South America"
10/18
10/20
                                                                                           Ch. 9: Beginning thru "Dental Trends in Early Hominins".
Ch. 9: Section on "THE GENUS AUSTRALOPITHECUS" to end.
Ch 12: Section on "THE CHAIN REACTION OF AGRICULTURE" thru
Section on "Cultural Effects of Agriculture".
Ch. 10: Beginning thru "Stone Tool Use and the Diet of
Early Homo"
Ch. 10: Section on "HOMO ERECTUS: BIOLOGICAL AND CULTURAL
INNOVATIONS" to end.
                   21. Video: Walking with Cavemen
                   22. The First Hominins
23. The Australopithecines
10/22
10/25
10/27
                   24. World Prehistory
10/29 F
                   25. Homo habilis
11/1
                   26. Homo erectus
           М
11/4
                      *** EXAM 2 ***
Section 3: The Emergence and Present-Day Condition of Modern Humans 11/5 F 27. Homo heidelbergensis Ch. 11: Beginni
                                                                                            Ch. 11: Beginning thru "DEFINING CHARACTERISTICS OF ARCHAIC
                                                                                            HOMO SAPIENS"
Ch. 11: Section on "NEANDERTHALS" thru section on "DENISOVANS"
                   28. Neanderthals
11/8
                                                                                            Ch. 11: Section on "MODELS OF MODERN HUMAN DISTRIBUTION" to
11/10 W
                   29. Other lineages and Interbreeding
                                                                                                         end.
                   30. The First Modern Humans
                                                                                            Ch. 12: Beginning thru section on "Summary of Early Modern
11/12 F
                                                                                            H. sapiens in Africa"
Ch. 12: Section on "Expansion into the Middle East and
11/15 M
                   31. Ancient Migrations
                                                                                                         Asia" to section on "Summary of Modern H. sapiens in the Americas"
                   32. Human Variation and "Race"
33. Anthropology of DNA Ancestry Tests
34. Human Adaptability
                                                                                            Ch. 13. Entire chapter.
11/19
                                                                                            Ch. 14. Beginning thru section on "Adaptation: Shape and Size Variations".
11/24-26 WF
                      !!! THANKSGIVING HOLIDAY !!!
                                                                                           Ch. 14. Section on "Adaptation: Infectious Disease" to end. Ch. 15. Beginning thru section on "Why Calculate MNI?" Ch. 17. (Appendix A) Entire chapter.
Ch. 15. Section on "INITIAL SKELETAL ANALYSIS" to end. Ch. 16. Entire Chapter.
Ch. 12. Section on "The Future of Humanity".
                   35. Biological adaptation to Disease
                   36. Bioarch, Forensic Anth, & Skeleton
                   37. Interpreting the Skeleton
38. Bioanthropology of Modern Life
39. The future of human evolution
12/6
12/8
           W
12/10
                       *** EXAM 3 ***
                      *** FINAL EXAM ***
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\*This schedule is tentative and provisional and may change. It is unlikely that anything about the exams will change. The latest version will always be on Moodle.