

BIOLOGICAL ANTHROPOLOGY

Ant 2230 TH 3:30-5pm

404 Sanford Hall

Instructor: Gwen Robbins
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Office hrs: 11-12:30; 2-3:30; 10-11 Fri by email; by appointment, or anytime my door is open
Course Information and materials: <http://www.appstate.edu/~Robbinsgm>

Course Overview

This course is a comprehensive introduction to one of the four sub-disciplines of Anthropology: biological anthropology. In brief, biological (or physical) anthropology is the study of primate biology (from bush babies to humans) within the framework of evolutionary theory. There are three main pieces to understanding biological anthropology as a discipline and the term will be divided into three sections. We will focus first on developing a solid foundation in the scientific method, evolutionary theory, genetics, and human variation (weeks 1-4). In the second part of this class, we will apply our understanding of evolutionary theory toward an examination of the taxonomic Order Primates (weeks 5-8). We will situate primates within the larger context of the Class Mammalia, look at primate evolution as a set of trends, and discover how extant primates can be used to understand fossil taxa. For roughly the last half of the term (weeks 9-15), we will bring our knowledge of evolution and primates in general to bear specifically on the fossil record for hominin evolution (the origin and evolution of humans and our ancestors apart from other apes). We will discuss methods for determining chronology and paleoclimate and the ecological context of hominin evolution. We will examine evolutionary trends within the hominin line, derived and unique anatomical traits in each of the fossil taxa, and the evidence concerning selective pressures for each taxon. Within all of this topical coverage, we will include discussion of controversies and debates, which abound in biological anthropology (particularly in hominin evolution). Finally, we will examine the significance of human adaptability and investigate the various ways in which the human species has adapted -- and is continuing to adapt -- to habitats around the world. After participating in this course, students will have an appreciation of key theoretical and methodological issues in biological anthropology and they will be better prepared for an in-depth understanding of this, or other aspects, of anthropology. Students will also gain practical skills in critical thinking, basic research skills, basic laboratory analysis of bones and teeth, writing and presentation skills.

Specific Goals of the Course

In this class, students should have practical experiences and develop skills that enable them to:

- (1) Articulate the process of the scientific method, understand how it address questions about the natural world, how hypotheses and predictions are developed and tested.
- (2) Solve word problems using knowledge of evolutionary theory and genetics, including the ability to identify misconceptions of evolution and to predict outcomes in population genetics
- (3) Understand phenotype versus genotype, populations versus species, micro- versus macro-evolution, intra-versus inter-sexual selection, and other points of potential confusion
- (4) Debate/discuss human variation, development and fallacies of typological concepts such as "race"
- (5) Identify trends in primate evolution, associate those trends with branching events in a cladistic framework, and recognize these traits in bones and teeth examined in the lab
- (6) Write effective arguments on topics such as the historical context in which Darwin developed his ideas on Natural Selection, misconceptions of evolutionary theory, primate behavioral ecology, and theoretical frameworks for interpreting hominin adaptations
- (7) Conduct independent research on a hominin taxa, identifying primary and secondary publications, filtering information and distilling 5-8 sources into a concise description of the most relevant morphological features and interpretations

Required Text

Larsen, Clark. 2008. *Our Origins*. W.W. Norton. ISBN: 978-0-393-97737-0

Grading

During this semester there will be a total of three non-cumulative examinations. Exams will be based on assigned reading and lecture materials. The exams will be multiple choice and will take about 70 minutes. The blog entries will require demonstration of knowledge, critical thinking, and understanding the week's topic.

Your Final Grade will be calculated using the following percentages:

- Exam I: 50 points
- Exam II: 50 points
- Exam III: 50 points
- Blog assignments: 100 points (10 points each)

Grades in the course are assigned to the following scales, based on percentages:

A	93 - 100%
A-	90 - 92%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%
C	70 - 79%
D	60 - 69%
F	< 60%

Make-up Exam Policy

Make up exams will be given in the case of a severe illness, injury, or family emergency, in which case you are required to notify me by telephone, by email, or in person prior to the scheduled time. An acceptable excuse is a signed statement from a physician or some evidence of a personal or family crisis. If for some legitimate reason you are unable to take an exam, all make-up exams will be given in essay format.

Office Hours

I have 6 office hours per week and you are welcome to come by my office. If my regular office hours are not compatible with your schedule, please make an appointment. I encourage students to meet with me. I feel that professor-student contact and communication are very important and allow for more detailed discussion. Please come see me to talk about any questions you might have about reading or lecture material, to discuss plans/questions you might have about becoming an anthropology major/graduate student, or to evaluate ideas you might have about research in biological anthropology.

Academic Integrity Code

Appalachian State University's Academic Integrity Code is designed to create an atmosphere of trust, respect, fairness, honesty, and responsibility. The Academic Integrity Code outlines "user-friendly" procedures and mechanisms for resolving alleged violations of academic integrity. The Academic Integrity Code is the result of cooperation among Appalachian's faculty, students, and administrators, and promotes a campus dialogue about academic integrity. All members of the Appalachian State University community are responsible for promoting an ethical learning environment.

When applying for admission to Appalachian State University, students agree to abide by the following Code:

- Students will not lie, cheat, or steal to gain academic advantage.
- Students will oppose every instance of academic dishonesty.

Disability Services

Appalachian State University is committed to making reasonable accommodations for individuals with documented qualifying disabilities in accordance with the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. If you have a disability and may need reasonable accommodations in order to have equal access to the University's courses, programs and activities, please contact the Office of Disability Services (828.262.3056 or www.ods.appstate.edu). Once registration is complete, individuals will meet with ODS staff to discuss eligibility and appropriate accommodations."

Attendance Policy

5.5.1.1 It is the policy of Appalachian State University that class attendance is an important part of a student's educational experience. Students are expected to attend every meeting of their classes and are responsible for class attendance. Since attendance policies vary from professor to professor, students should refer to the course syllabus for detailed information. Regardless of what reasons there may be for absence, students are accountable for all academic activities, and faculty may require special work or tests to make up for the missed class or classes.

In addition, faculty members are required to make reasonable accommodations for students requesting to miss class due to the observance of religious holidays. All ASU students are allowed a minimum of two absences per year for religious observances. Up to two absences for such observances will be excused, without penalty to the student, provided that the student has informed the instructor in the manner specified in the syllabus. Notice must be given by the student to the instructor before the absence occurs and no later than three weeks after the start of the semester in which the absence(s) will occur. Arrangements will be made to make up work missed by these religious observances, without penalty to the student. For the purposes of this policy, ASU defines the term "religious observance" to include religious holidays, holy days, or similar observances associated with a student's faith that require absence from class.

Faculty, at their discretion, may include class attendance as a criterion in determining a student's final grade in the course. On the first day of class, faculty must inform students of their class attendance policy and the effect of that policy on their final grade; both policies must be clearly stated in the class syllabus. In this course, attendance is not recorded. If you do not come to class, you cannot do well in the course but I will not be including attendance as part of your final grade.

Statement on Student Engagement with Courses

In its mission statement, Appalachian State University aims at "providing undergraduate students a rigorous liberal education that emphasizes transferable skills and preparation for professional careers" as well as "maintaining a faculty whose members serve as excellent teachers and scholarly mentors for their students." Such rigor means that the foremost activity of Appalachian students is an intense engagement with their courses. In practical terms, students should **expect to spend two to three hours of studying for every hour of class time**. Hence, a fifteen hour academic load might reasonably require between 30 and 45 hours per week of out-of-class work.

Please see website for course schedule.

http://www.appalachianbioanth.org/syllabi_fall.html