

BIOLOGICAL ANTHROPOLOGY

(ANTH 201)

Bellevue Community College - Winter, 2007

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Welcome to Biological Anthropology! I really love working in the field of anthropology and hope some of my enthusiasm will be passed on to you in this online course. We have a lot of interesting stuff to cover and I hope you are ready to get right down to work. My assumption is that you already have the basics of computer and Internet use; it's enough of a task just learning to use this learning program. I will not be on the BCC campus--I presently live in California--but you can always reach me through the Mail tool within Vista. But, for the class to work, you will need to check into the Biological Anthropology web site frequently and stay in touch with the class via the Discussions.

Human biology is the central topic of Biological Anthropology--a field of study that is also known as Physical Anthropology. The main focus is on the fossil record as the basis for a scientific understanding of how the human species evolved. The course also deals with the history of evolutionary theory over the last 200 years, what we can learn about humans from primate studies, and the genetics of human variation.

The online lecture notes and reading material are organized into ten parts (or modules) as indicated below. The content of the course is in the lecture notes and in the readings. You will need to study BOTH the online lecture notes and the texts to do well in the course. In preparing questions for the quizzes and exams I will draw from both sources.

The books are Michael Alan Park's *Biological Anthropology (Fifth Ed.)*, and the same author's *An Introductory Reader (Fourth Ed.)*. I will refer to the first book as the Text and the second book as the Reader. Do be sure you have the *fifth* edition of the Text and the *fourth* edition of the Reader. The publisher of the Text has online resources available. Just click on <http://www.mhhe.com/parkba5> and once there go to the "Student Edition" and you will find study aids (including multiple-choice questions and glossary) for each of Text chapters. Use the site to study and test yourself. It should be very helpful.

The lectures are organized to parallel the outline followed by the Text, but the lectures and readings supplement rather than duplicate one another. And, in addition there is material on linked sites, which you will need to study. If you have been reading the newspaper or watching science news on TV, you are aware that there have been significant recent developments in terms of hominid fossil discoveries, primate studies, and in the knowledge of the human genome. It is virtually impossible for a textbook to remain completely current in the face of this rapid growth of knowledge. So I will present some of the updated information in the lectures and through links (that you can click on) for the different sections of the course. My lecture notes will attempt to present you with a consensus of what is known currently in physical anthropology. If there is a diversity of opinion among scientists, I will try to present the range of views. If Park deviates from the consensus of the field or presents only one of several possible interpretations, I will present the other views and place Park's view in context. There is a great deal of truly

interesting material covered in biological anthropology and an academic quarter is a relatively short time, so rather than trying to get everything by yourself, it will be very helpful to work on the major concepts with other students and with me through the Discussions.

Your final grade will be based on: two exams, six quizzes, plus your class participation. The two exams will be multiple-choice and essay tests which will be posted mid-quarter and at the end of the course. Each exam will cover one-half of the course (see the schedule below for the dates when they are due). You will have two hours to complete each of these two exams. The quizzes will be available at six points during the quarter (see below for completion dates). You will have a window of two days when you can take each of the quizzes and exams.

Class participation refers to your contribution to the online discussions on topics in physical anthropology. Forums for discussion of different topics are found in each of the ten modules. The Participation grade is relative to the class as a whole, so there is no absolute number of contributions for calculating a grade. It is a qualitative as well as quantitative evaluation of contributions to the discussion forums. I look at: 1. How many contributions have been made? 2. How well do they cover the full range of topics (forums) included in the course? 3. Do they meaningfully advance the class discussion? 4. How well thought out and developed are they? 5. Are they substantive and on topic? 6. Do they reflect that you have been studying and learning from the course material?

The exams will count 25% each; the quizzes will count 8% each (40% of your final grade for your five best out of six); and class participation will account for 10% of your grade. Your final grade will be calculated as a total percentage then converted to a letter grade as follows: 90% and above is in the A range; 80-89% is in the B range; 70-79% is in the C range; and 58% or above will be necessary for passing the course. For general Social Science Division policies and rules regarding such matters as grading, withdrawals, and incompletes click on <http://www.bcc.ctc.edu/socsci/> and then on "Student Info and Policies." I should add that this is a course in which YOU WILL GET OUT WHAT YOU PUT IN. If you are self-motivated and put in a good effort EACH WEEK, you will learn a lot and end up with a good grade. It will be necessary to put in a steady effort. Stay on schedule. I do not accept late work. If you have any problems regarding the course please feel free to contact me via Vista's Mail.

AN IMPORTANT NOTE ON PLAGIARISM: It is strictly against BCC rules for a student to borrow from another source without crediting this source. Because it is so easy to get material from the Internet, those of us who teach online have found that students sometimes think they can incorporate online material, or "borrow" from one another without proper citation. This is called plagiarism. Bellevue Community College has rules regarding plagiarism that make it grounds for failure in a class and ultimately expulsion from the school. Remember, if a student's essay answer is basically identical to that of another student (from this or a previous quarter), there are only two possible reasons: either the answer was copied from the one student by the other or they both copied it from the same source. In both cases this is plagiarism. If you copy you must use quote marks and a citation. For the purposes of the quizzes and exams in this course, don't be worried about the exact form for citations. I'm only concerned that you give credit where it is due. But even if you are taking material from the lectures or from assigned reading you do need to be clear that is what you are doing. You might say, for instance, "According to the lecture...." or, "Park says..." And if it is a direct quote be sure to use quote marks.

COURSE OUTCOMES – I hope that by the end of the quarter you will be able to:

1. Demonstrate an understanding of what is meant by the "scientific method" and discuss how modern biological science developed;
2. Explain the contributions to biological thought of Darwin and Mendel and the nature of the Modern Synthesis and Molecular Genetics;
3. Explain how science views the relationship between humankind and other life forms on earth, with attention given to the characteristics of the primates;
4. Describe some of the major hominid fossil discoveries in terms of who made them, when and where they were found, and what significance they have;
5. Demonstrate knowledge of current interpretations of the phylogeny of humanity;
6. Explain how modern biology understands human physical diversity and why it is that scientists see the "race" concept as of questionable value in understanding human biological diversity;
7. Articulate what it means to taking a "biocultural approach."

Each week you will need to do the following:

- 1. Read and study the assigned Text and Reader material;**
- 2. Study the online lecture slides and the lecture notes--to do well in the course you will need to print out the Text version of lecture notes and selected slides from the graphic version;**
- 3. Go over the handouts and links;**
- 4. Be involved in class-related conversations with your fellow students through the Discussions.**

The boxed material that follows is the basic outline and structure of the quarter's work. New lectures will be posted as we move through the course modules. The Quizzes will be available for you to take over a two day period; you will find completion dates for each of the six quizzes below. The Quizzes are time-limited and primarily multiple-choice. They cover particular material, but since some of the material is cumulative in nature the expectation is that you will be able to show that you know more and more as the quarter proceeds. Finally, note that there will be a two-hour Mid-term and Final Exam, each of which will cover one-half of the material for the course and include both multiple-choice and essay questions.

Module Topics:	Reading and Exams:
<p>PART ONE: The Scope of Anthropology</p> <p>What is <i>anthropology</i>? What is the nature of biological anthropology? <i>Culture</i> is key concept in anthropology--how did this idea develop? How do anthropologists define culture today?</p>	<p>Read: Text Chapter 1 and Reader articles 3 and 5.</p>
<p>PART TWO: The Darwinian Revolution</p> <p>What was the view of life on earth prior to the contribution of Darwin? Who was Charles Darwin and how did he come to write <i>On the Origin of Species</i>? What is the nature of his theory of evolution? What was it that Darwin was unable to figure out?</p>	<p>Read: Text Chap. 2 and Reader articles 8, 9, 10, 11, and 12</p> <p>QUIZ ONE (Covering Lecture 1 and 2, Text chapters 1 and 2, and associated Reader articles and Links) - Available Friday, January 12. Complete by midnight, the end of <u>Saturday, January 13.</u></p>
<p>PART THREE: The Origin and Development of Genetics</p> <p>Who was Gregor Mendel? What did he contribute to hereditary processes? What was the nature of the Modern Synthesis and how does it offer a comprehensive explanation of the process of evolution? What is Molecular Genetics and does the operation of DNA relate to evolution?</p>	<p>Read: Text Chaps. 3, 4, and 5 and Reader article 33.</p> <p>QUIZ TWO (Covering Lecture Three, Text chapters 3, 4, and 5, associated Reader article, and Links) - Available Sunday, January 21. Complete by midnight, the end of <u>Monday, January 22.</u></p>
<p>PART FOUR: The Primatological Context</p> <p>What are the taxonomic terms that specifically locate humans in the Animal Kingdom? What is the Primate Pattern? What kinds of primates are there in the world today? What are the basic characteristics of primate social behavior?</p>	<p>Read: Text Chaps. 6,7,and 8 and Reader articles 16, 17, 18, 19, and 20.</p> <p>QUIZ THREE (Covering Lecture Four, Text chapters 6, 7, and 8, and associated Reader articles and Links) - Available Tuesday, January 30. Complete by midnight, the end of <u>Wednesday, January 31.</u></p>
<p>PART FIVE: The Anatomical and Geological Background for studying Fossils</p> <p>What are some of the important characteristics which distinguish humans from other primates? What are the geological phases in which primate evolution occurred? What do we know about early primate evolution?</p>	<p>Read: Text Chap. 9</p> <p>Mid-Term Exam: (Covering the first half of the course) Available Wednesday, February 7. Complete by midnight, the end of Thursday, February 8.</p>

<p>PART SIX: The Early Hominins</p> <p>How, when, and by whom were the first hominin fossils discovered in South Africa? What fossils were discovered in the East African Rift Valley and how did they transform our understanding of human evolution? Who is "Lucy" and what is the importance of this discovery?</p>	<p>Read; Text Chap. 10 and Reader article 1.</p> <p>Quiz 4 (Covering Lecture Six, Text chapter 10, Reader article 1, and associated Link) - Available Thursday, February 15. Complete by midnight, the end of <u>Friday, February 16.</u></p>
<p>PART SEVEN: Evolution of Genus Homo</p> <p>What is the history of the first Homo erectus discoveries? What are the major diagnostic characteristics of Homo erectus? Who were the Neandertals? When did anatomically modern humans first arise?</p>	<p>Read: Text Chap. 11 and Reader articles 22 and 23.</p> <p>Quiz 5 (Covering Lecture Seven, Text chapter 11, and associated Reader articles and Links) - Available Friday, February 23. Complete by midnight, the end of <u>Saturday, February 24.</u></p>
<p>PART EIGHT: Interpretations of the Human Revolution</p> <p>What are some of the current interpretations of the process whereby we became human? Why did we first become bipedal? Why did the brain grow? What is the origin of language? Also...the ongoing debate on origins of modern Homo sapiens.</p>	<p>Read: Text Chap. 12 and Reader article 24.</p>
<p>PART NINE: Studying Human Variation</p> <p>How might we apply the principles of population genetics to understanding human variation? What can we learn about biological adaptation by looking at living populations?</p>	<p>Read Text Chap. 13 and Reader article 13, 14, and 26.</p> <p>Quiz 6 (Covering Lectures Eight and Nine, Text chapters 12 and 13, and associated Reader articles) - Available Wednesday, March 7. Complete midnight, the end of <u>Thursday, March 8.</u></p>
<p>PART TEN: The Anthropological view of Race and Gender</p> <p>How do anthropologists deal with the question of racial taxonomy? Why is racial determinism invalid? What is the current anthropological view on the nature of sex differences?</p>	<p>Read: Text Chaps 14 and 15 and Reader articles 25, 30, 34, and 35.</p>
<p>SOME CONCLUSIONS -</p> <p>The Biocultural Perspective</p>	<p>Final Exam: (Covering the second half of the course) - Available Friday, March 16. Complete by midnight, the end of <u>Saturday March 17.</u></p>