Introduction to Physical Anthropology

ANTH1, Section 40278    Professor: Debbie Klein
Spring 2011            Office hours: via email, dklein@gavilan.edu
Course address:         login info.:  
http://ilearn.gavilan.edu/   http://gavilan.edu/disted/index_tour/tutorial_moodle_02.html

Online Details
This course is completely online. You will need to purchase 2 text books for the course:
Additionally, an important part of the course includes 3 documentary films that you will need to view in order to pass the course! All of the textbooks and films are available at:
the reserve desk of the Gavilan library; various textbook selling sites; and at the Gavilan bookstore. Also, you can buy an electronic version of Park at coursesmart.com. The videos are available at your local and online video stores and on youtube.com. Please make sure you view these films before the assignments based on them are due. They are all from the 2001 PBS series called Evolution. The 3 films required for this course are: 1) Darwin’s Dangerous Idea; 2) The Evolutionary Arms Race; and 3) Great Transformations.

For more information about online classes, as well as tips for success, see Gavilan's Distance Education webpage. The Gavilan Library will offer several orientations to online courses during the first two weeks of the semester. If you have never taken an online course, this orientation will provide critical information to help you be successful in this class. If you are unable to attend an orientation on campus, an online tutorial will be available. Visit the Library Homepage for more details and a schedule of orientations.

Course Description
What does it mean to be human? How did we become human? We will explore these core questions through our introduction to physical anthropology, a branch of anthropology that seeks to understand, from a biological point of view, what it means to be a human being. More specifically, biological anthropology examines these questions:

- What biological characteristics define the human species?
- How do our genes code for these characteristics?
- What role does the environment play in shaping our traits?
- How does evolution work and how does it apply to us?
- What is the physical record of our evolution?
- How does the biological variation we see in our species today evolve and what do the variable traits mean?
• What can we learn about ourselves by studying the genes, bodies, and behavior of our closest living relatives, the nonhuman primates (prosimians, monkeys, and apes)?
• How can our understanding of human biology help us to resolve current social and political problems, such as the unequal treatment of groups of people based on assumptions about biological difference?

In addition to reading our text book, we will spend the first half of our course reading an ethnography (a book written by an anthropologist based on on-site field research) written by biocultural anthropologist Katherine Dettwyler about her fieldwork among malnourished children in Mali, West Africa. Reading an ethnography will offer us the opportunity to experience what an anthropologist actually does in the field. We will discuss the challenges of conducting research in another culture and how such challenges become part of anthropological methodology and knowledge.

**Course Learning Outcomes**

• Demonstrate what science is by explaining how scientific theory is developed
• Describe the place of *Homo sapiens* in the animal kingdom
• Examine how evolution works in terms of the four forces of evolution
• Describe the general physical features of modern humans and compare them with the fossil hominids and non-human primates
• Identify important theories, concepts and data that demonstrate an understanding of human evolution from the fields of genetics, archaeology, geology, and anatomy
• Apply the concepts of ethnocentrism and cultural relativism to the study of human evolution
• Each of the above outcomes will be measured by: quizzes, response papers, exams, discussion participation, and a final research project.

**Course Organization**

This course is divided into 3 parts, following your text book:

1. We start with a survey of the principles of evolution and biological inheritance, so that we can understand how the idea of human evolution has taken shape. Because the evolutionary processes that have produced modern humans are the same processes that have produced every single species that has ever inhabited this planet, evolution and its application to the human species is a central theme of biological anthropology.

2. The second part of the course looks at the anatomy, behavior and evolution of our nearest relatives, the non-human primates. Although we often think of ourselves as quite different from other animals, we can learn much about ourselves by studying the genes, bodies and behavior of our closest living relatives, and apply this knowledge to help answer questions about the origins and development of early human behavior.

3. The third part of the course examines the human fossil and archaeological record, which is made up of the physical remains of our ancestors and the traces of their
behavior. We will look at evidence revealing:

- When and where our human ancestors first stood erect and when they began to “act human”
- Where, when, and why tools were invented
- What we know about the origins of language, art, and the many other social and cultural practices we consider so “human” today
- The biological and cultural evolution from the earliest direct human ancestors down to today, and perhaps in the future!
- The biological and adaptational reasons underlying today’s human diversity

**Texts**

All of the textbooks and films are available at: the reserve desk of the Gavilan library; various textbook selling sites; and at the Gavilan bookstore. Also, you can buy an electronic version of Park at [coursesmart.com](http://coursesmart.com). The videos are available at your local and online video stores and on [youtube.com](http://youtube.com).

**Required:**

Park, Michael. 2010. *Biological Anthropology*.


**Course Requirements**

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<tr>
<th>Assignments</th>
<th>90 points</th>
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<tr>
<td>Quizzes &amp; Response Papers</td>
<td>100 points</td>
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<tr>
<td>2 Midterms</td>
<td>200 points total (100 points each)</td>
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<tr>
<td>Final Exam</td>
<td>150 points</td>
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<tr>
<td>Research Presentation</td>
<td>60 points</td>
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**Assignments (90 points)**

COMPLETION OF ALL CLASS ASSIGNMENTS AND QUIZZES, INCLUDING DISCUSSIONS, IS REQUIRED. IF YOU MISS 4 ASSIGNMENTS AND/OR QUIZZES, YOU WILL BE DROPPED FROM THE COURSE. Although I will make an effort to send you a courtesy email if you have missed 4 assignments and/or quizzes, it is your responsibility to contact me regarding missed assignments. It is my policy to drop any student who has missed 4 assignments and/or quizzes. Be prepared to read about 40 to 60 pages a week! Please read critically and take notes, making sure you understand the authors’ main points. Also, I encourage you to keep a personal reading journal in which you write down your reflections and questions for discussion.

Please note that your reading and written assignments are usually due every Thursday of the course, so pace yourself accordingly. There are a few exceptions, however. I suggest that you access this course site at least 4-5 times a week to keep up with regular announcements & to become a part of our course “culture.”

**Quizzes & Response Papers (100 points total)**

If you miss 4 quizzes and/or assignments, you will be dropped from the course. Several multiple choice and short answer quizzes based on course readings and lectures will be
given throughout the semester. Response papers based on specific readings or films will be assigned in advance. Please note that your quizzes take place on Mondays and Fridays.

A response paper is 280-560 words (1-2 pages). While it is a relatively open format, your response paper should deal with one or a few of the main points made by the author or film. I am interested in your critical thinking here: tell me what you think about the piece. While some summary is fine, I do not want a summary paper. Each response paper should refer to at least 3 specific examples from the text or film.

When getting started, you might consider these questions: Given what the author or film was trying to convey, do you agree or disagree? Why or why not? Do you have lingering questions about the material presented? Did you appreciate the piece? Why or why not?

Exams (350 points total: 200 for midterms and 150 for final)
The 2 Midterm and Final Exams will consist of multiple choice and short answer questions. Questions will be based on assigned readings, topics covered in lectures, and videos.

Research Presentation (60 points)
Use your curiosity, creativity and research skills to come up with an exciting project addressing any topic in biological anthropology. The more specific your topic, the better. After doing your research, choose three articles and/or book chapters to read thoroughly. Make sure all three of your sources are "peer-reviewed" (scholarly). First, type a 1-2 page reading response to one of your peer-reviewed sources. Second, put together a PowerPoint presentation about your topic.

PowerPoint presentation details:

- Your presentation should be between 15 and 20 slides.
- Your slides should contain graphics, text (your own words) and links (where appropriate).
- Include your name on the first slide.
- Write 1-2 paragraphs explaining the main point/thesis/argument of your presentation. Include these paragraphs at the beginning of your presentation.
- Your last slide should be your bibliography in APA or MLA citation style.
- Upload your 1-2 page reading response to one of your peer-reviewed sources.
- Upload your PowerPoint presentation within the assignment and the discussion forum.

I have made several Scientific American articles available at http://hhh.gavilan.edu/dklein/scientific_american_links.html. For ideas, please check these out. You will need your Gavilan library card number to access the articles.
Zoo Extra Credit (25 points maximum)
If you would like to earn extra credit, you can take a trip to the San Francisco Zoo to observe and document the behavior of nonhuman primates. Please wait until we reach the second part of the course, and be sure to download and print an observation packet upon which to record your data.

Supplemental Books or Videos Extra Credit (20 points maximum)
You can also write a 2 page response paper to an article, book, or video that is relevant to our course content. Throughout our syllabus, I recommend several videos to supplement this course. They are all excellent and will undoubtedly enhance your understanding of the course content. You can earn up to 10 points for each response. You can submit up to 2 response papers for extra credit for a total of 20 points.

Semester Grade
YOU MUST COMPLETE ALL OF THE ABOVE IN ORDER TO PASS THE COURSE. Your semester grade is based upon the total number of points you accumulate (assignments + quizzes & response papers + exams + research presentation + extra credit):
Total Possible Points = 600 points (minus extra credit)
537 + points = A, 477-536 = B, 417-476 = C, 416-356 = D, below 360 = No Pass

Important Notes
If you require special services or arrangements because of hearing, visual, or other disabilities, please contact your instructor and the Disability Resource Center (DRC) at 848-4865.

You are expected to exercise academic honesty and integrity. Violations such as cheating and plagiarism will result in disciplinary action which may include recommendation for dismissal.

Course Organization  Weekly Topics, Assigned Readings, and Writing Assignments

Week 1  WHERE DO HUMANS COME FROM?

FRI Feb 4  Welcome!
Reading Due:
Lecture: Origin Stories: Where Do We Come From?

Assignments Due:
Post your introduction to the class
Where Do Humans Come From?
### Week 2
**WHAT IS BIOLOGICAL ANTHROPOLOGY?**

**TH Feb 10**
- Reading Due:
  - Park, Ch. 1
  - Dettwyler, Chs. 1 & 2
- Lecture: What is Biological Anthropology?

Assignment Due: What is Biological Anthropology? & Dettwyler, Chs. 1 & 2

### Week 3
**THE EVOLUTION OF EVOLUTION**

**TH Feb 17**
- Reading Due:
  - Park, Ch. 2
  - Dettwyler, Chs. 3 & 4
- Lecture: Evolution of Evolution

Assignment Due:
The Evolution of Evolution & Dettwyler, Chs. 3 & 4

### Week 4
**EVOLUTIONARY GENETICS**

**TH Feb 24**
- Reading Due:
  - Park, Ch. 3
  - Dettwyler, Chs. 5 & 6
- Lectures: Darwin and Wallace & Mendelian Genetics

Helpful Websites:
- [NY Times DNA Interactive Program](https://www.nytimes.com/guides/interactive/dna-evolutionary-genetics)
- [DNA from the Beginning](https://www.biologycollection.org/dna-from-the-beginning)

Assignments due:
- Quiz: Evolutionary Genetics
- Quiz: Response to *Darwin’s Dangerous Idea* (required video)

### Week 5
**THE PROCESSES OF EVOLUTION**

**MON Feb 28**
- Timed Quiz 1: Park, Chs. 1-3
  - Opens @ 8am, Closes @ 11:45pm (1 hour)

**TH Mar 3**
- Reading Due:
  - Park, Ch. 4
  - Dettwyler, Chs. 7 & 8
- Lecture: Processes of Evolution
Assignment Due:
The Processes of Evolution & Dettwyler, Chs. 5-8

**Week 6**

**THE ORIGIN OF SPECIES**

**TH Mar 10**

Reading Due:
Park, Chs. 5 & 6
Dettwyler, Chs. 9 & 10
Lecture: Origin of Species

Recommended Video:
*Accidents of Creation*

Assignments Due:
Response to *The Evolutionary Arms Race* OR *Great Transformations* (required videos)
Assignment: Dettwyler, Chs. 9 & 10 and Midterm 1 Review

**FRI Mar 11**

Timed Quiz 2: Park, Chs. 5 & 6 and Dettwyler, Chs. 5-10
Opens @ 8am, Closes @ 11:45pm (1 hour)

**Week 7**

**MIDTERM 1**

**TH Mar 17 & FRI Mar 18**

**MIDTERM 1**

Opens Mar 17 @ 8am, Closes Mar 18 @ 11:45pm (3 hours)

**Week 8**

**THE PRIMATES**

**TH Mar 24**

Reading Due:
Park, Ch. 7
Dettwyler, Chs. 11 – 12
Lecture: The Primates

Recommended Videos:
*Life in the Trees* & *The New Chimpanzees*

Assignments due:
The Primates & Dettwyler, Chs. 11 & 12

**Week 9**

**PRIMATE BEHAVIOR AND HUMAN EVOLUTION**

**TH Mar 31**

Reading Due:
Park, Ch. 8
Dettwyler, Chs. 13 & 14
Lectures: Nonhuman Primate Behavior & Primate Social Behavior
Assignments Due:
Quiz: Dettwyler reading response
Primate Behavior and Human Evolution

**Week 10**  
*Spring Break!*

**Week 11**  
**STUDYING THE HUMAN PAST**

**TH April 14**  
Reading Due:
Park, Ch. 9
Lecture: Fossils and Comparative Anatomy

Assignments Due:
Studying the Human Past and Midterm 2 Review

**Week 12**  
**MIDTERM 2**

**TH April 21 & FRI April 22**  
MIDTERM 2  
Opens April 21 @ 8am, Closes April 22 @ 11:45pm (3 hours)

**Week 13**  
**EVOLUTION OF THE HOMINIDS**

**TH April 28**  
Reading Due:
Park, Ch. 10
Lectures: Primate Evolution & Genus Australopithecus & Paranthropus  
Hominid Evolution handout

Assignment Due:
Evolution of the Hominids

**Week 14**  
**THE EVOLUTION OF GENUS HOMO**

**TH May 5**  
Reading Due:
Park, Ch. 11
Lecture: Human Evolution: Genus Homo

Assignment Due:
The Evolution of Genus Homo

Recommended Videos:
*Mysteries of Mankind & Neanderthals on Trial*
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<th>HUMAN BIOLOGICAL DIVERSITY</th>
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<tr>
<td><strong>MON May 9</strong></td>
<td>Timed Quiz 3: Park, Chs. 10 &amp; 11</td>
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<td><strong>TH May 12</strong></td>
<td>Reading Due:</td>
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<td>Park, Chs. 14 &amp; 15</td>
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<td>Lecture: Race</td>
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<td>Recommended Video:</td>
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<td><em>The Difference Between Us</em>, part one of series <em>Race: The Power of an Illusion</em></td>
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<td>Human Biological Diversity</td>
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<th>Week 16</th>
<th>YOUR RESEARCH</th>
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<td><strong>TH May 19</strong></td>
<td>Assignment Due:</td>
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<td>Response to 1 peer-reviewed source</td>
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<td>Your PowerPoint Research Project</td>
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<td>Responses to two classmates’ presentations</td>
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<th>Week 17</th>
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<td><strong>MON May 23 &amp;</strong></td>
<td><strong>FINAL</strong></td>
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<td><strong>TUES May 24</strong></td>
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