Introduction to Physical Anthropology Spring 2013 Anth 2032 El Camino College

Anthropology 1

Instructor: John McDermott **Phone**: (562) 965-0951

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Class Webpage: Class Team Site in MyECC

Class: M-W 1:00 – 2:25 -Art and Behavioral Science RM 354

Student Academic Support:

http://www.elcamino.edu/welcome/currentstudents/academicstudentsupport.asp

Text:

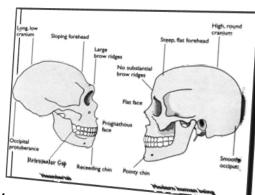
Core Concepts in Biological Anthropology - Agustin Fuentes

3 units; 3 hours lecture Recommended Preparation: Eligibility for English 1A Credit, degree applicable Transfer CSU, UC;

This course explores and emphasizes the evolution and physical diversity of the human species. Topics include genetics, mechanisms of evolutionary change, human variation, and the reconstruction of human evolutionary history through examination of the fossil record and comparative studies of the living non-human primates

Course Objectives:

- 1. Demonstrate an understanding of the concept of the scientific method and its significance to science.
- 2. Describe and evaluate the major ideas that preceded and led to the development of evolutionary theory and analyze modern theories of Darwinian evolution through natural selection.
- 3. Identify and describe the processes by which genetic information is transmitted from one generation to the next.
- 4. Identify and discuss the various components of the DNA molecule and the process of protein synthesis.
- 5. Explain and assess the mechanisms of evolutionary change and explain how each one contributes to the evolutionary process.
- 6. Contrast point and chromosomal mutations and discuss the significance of point mutations to evolution.
- 7. List the major anatomical characteristics of primates associated with movement and the senses, and explain how they evolved as adaptations to an arboreal environment.
- 8. Contrast the major forms of primate social structure and describe their relationship to the primate species' ecology.
- 9. Explain the differences between relative and chronometric dating and provide an example of chronometric dating using a radiometric technique.
- 10. Evaluate the benefits of bipedalism in reference to the particular environment in which most hominid evolution occurred.
- 11. Compare and contrast the skull characteristics of Australopithecus africanus, Australopithecus (or Paranthropus) boisei, and Homo habilis in relation to the particular diet of each.



- 12. Contrast the anatomical characteristics of Homo habilis and Homo erectus, and analyze those contrasts in reference to their respective environments and subsistence strategies.
- 13. Analyze the characteristics of Homo neanderthalensis in reference to the environment in which this hominid lived.
- 14. Evaluate the models that account for the origin of Homo sapiens, outlining the major criteria and evidence supporting each.
- 15. Outline the cultural stages in the evolution of the genus Homo, making reference to the particular Homo species, tool industry, and environmental context associated with each stage.
- 16. Explain the difference between physiological adjustments and adaptations and explain skin color and body build as adaptations to particular environments.

Student Learning Outcomes:

- In a written assignment, students will explain how natural selection is related to environmental factors by using an example that identifies key processes of natural selection and illustrates how selective pressures can change.
- 2 Primate Arboreal Adaptation: In an in-class assignment or objective exam question, students will demonstrate an understanding of primate adaptation by describing the major anatomical characteristics of primates associated with movement and the senses, and identifying how they evolved as adaptations to arboreal environments.

ADA Statement: El Camino College is committed to providing educational accommodations for students with disabilities upon the timely request by the student to the instructor. A student with a disability, who would like to request an academic accommodation, is responsible for identifying herself/himself to the instructor and to the Special Resource Center. To make arrangements for academic accommodations, contact the Special Resource Center.

Student Code of Conduct

http://www.elcamino.edu/administration/board/boarddocs/5500%20%20Academic%20Honesty.pdf

Student Rights and Grievances Procedure 5530 http://www.elcamino.edu/administration/board/policies.asp

Class is composed of: Lecture, PowerPoint, Films, Discussion, Assignments; Chapter papers, article papers, Exams (scantron 882) and a Term paper

Article papers: There are three articles online (25 points each). Read each one (SEE SYLLABUS SCHEDULE FOR DUE DATE) I want you to demonstrate you understand the author's perspective, main topics and the point of the article. Using a holistic perspective and relativism describe how the articles are relevant in our world today

Introduction: Explain what you going to write about. Introduce me to what I am about to read. The Body: Will be an analysis demonstrating to me you fully understand the ideas the author is presenting; main points, perspective, use examples. I do not want to read your ideas, in this section; I want you to show me how completely you understand the author's ideas from a holistic perspective and how it is relevant today.

Conclusion: Here is where I would like your opinion; if you, agree/disagree; why? I would like to read the thought processes that the article provoked within you and how is the information relevant within our culture today. Remember this class an the assignment are a

part of a holistic and relativistic discipline that studies, what it mean to be human, biologically, socially and psychologically, through time/.

These articles are about getting you to think about the information in this class as relevant in our culture and applicable to the world around you

Term Paper: (100 points): (minimum: 5 pages and 5 references) Research and write about: The paper will be at least 5 pages and 5 references (wikipedia cannot be used as one of the 5 references, but can be used for a jumping point and to obtain information and if so must be cited). **Citations need an author and a year of publication**. The library on campus has a database of journals. Your textbook can be used for one reference. Again, at least 5 of the references need and author and a year of publication. See the library for our online Journal Database **Please do not use dictionaries or encyclopedias for references or sources**

Research and write about the following areas of Biological Anthropology:

- What is Physical (Biological) Anthropology
- What areas of the human species does Physical Anthropology cover
- The holistic aspect of Physical Anthropology
- The methods of gathering information
- How does the knowledge gained from Physical Anthropology effect our perception and view of the world around us and ourselves.

The paper: 12 font, double spaced, page numbers, name, class and title of paper

Introduction: Start the paper with a discussion of your <u>each</u> of your five references; where you found them, why you chose them and how you will use them in your paper (*this is your methodology*). While discussing your references or immediately after briefly explain what your paper will contain; the parameters.

Body: Discuss the subject matter outlined above using your references to cite the information you present to answer the five questions

Conclusion: Tell what you discovered doing your research and go into some detail about your feelings on the subject ie...its implications, its applications, value and validity. This demonstrates your personal understanding of the material.

References need and author and a year of publication. For the in text citations, use the authors last name and year of publication = **(Smith, 2007)**.

Bibliography cite as follows:

Books: Author, Title, Publisher and Address, Date

Internet (must have author and date): Author Title, URL, Date

Magazines and Journals: Author, Title, Magazine or Journal title, vol., page, Date

Films: Director, Title, production Company, year of release

Example: Smith, John, Why is There Air?, Thomson Wadsworth, 2007

For web pages replace the publisher with the URL, and you will still need the year the URL was published and an author.

No Wikipedia, Dictionary or Encyclopedia sources... all sources need an Author and year of publication

Term paper grading policy:
Methodology..............20 points
Research and citations.. 20 points
Clarity and Content........60 points
TOTAL 100 points

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Quiz: (25 points) Student Learning Outcome Assessment Quiz

Exams: (100 points) Scantron 882E will be needed the exams are true false and multiple

choice.

Final: (100 points) Multiple Choice and true false. Scantron 882E

<u>Academic Honesty</u>: Academic honesty is expected. Academic dishonesty will be dealt with harshly and may result in a failing grade for the course at the discretion of the instructor. Academic dishonesty not only includes plagiarism and cheating on exams and/or assignments, but also includes turning in work that is not your own (make sure to clearly cite ALL sources). See term paper prompt...

Grading policy Point Break down

2 – Midterm	100	Α	400-360
1 - Final	100	В	359-320
3 - Articles	75	С	219-280
1 - Quiz	25	D	279-240
1 - Term paper	100	F	239 and lower
Total	400		

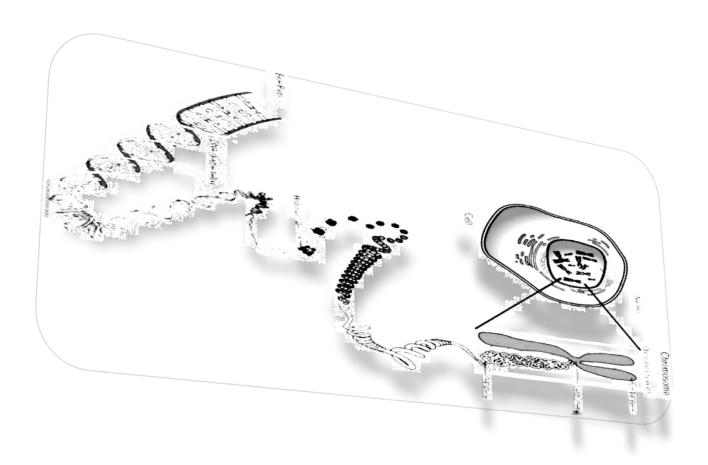
"The diversity of our campus student population provides us with a unique opportunity to experience the differences among us. At times we may disagree on a particular point; however, our discussions will always remain respectful of these differences. We will treat others with dignity and respect in the classroom"

These precepts apply out side the classroom as well, as we meet the needs of our diverse global community, which will become more prominent in your lives than ever before in the history of life on this planet.

My Personal Statement: I would like to demonstrate the continuum of life on the planet, the connectedness; physiologically and Psychologically of life on earth. Present how Homo sapiens have developed our perception of existence itself, as well as, our developing understanding of the elements and processes operating around us and within us.

My goal is to examine the bio-cultural interaction within human evolution.

I would like us to discuss and begin to consider our human ability to understand, project and affect the evolutionary processes, not just for ourselves, but for all life on the planet. I would like us to discuss and consider how applying this understanding would manifest in our reality; physically, emotionally, psychologically and spiritually through bio-cultural development in our future. Do we have responsibilities that come with our abilities? The very ideas of benevolent and malevolent are products of human perception. How can we learn from our past to structure our goals in what we will create in the future? Because you are the future and humans create the world we live in both physically and psychologically.



I suggest study groups to discuss the power points and the information they highlight from the text. The lecture bring more inclusive information the power point presentation and films give scientific discovery to the big screen, highlighting the information on yet another level.

Combining these learning modalities is intended allow retention of the material presented for the exam and onward.

Spring 2013 Class schedule for Anth 1 subject to change

Spring 2	Spring 2013 Class schedule for Anth 1 subject to change			
	Chapters we will work on each week,	Assignments Will be due on Wednesday		
<u>Week</u>	Refer to this calendar each week to be	*Schedule subject to change*		
	<u>prepared</u>			
2/11	Go over syllabus;			
2/13	Film: Journey of Man			
2/18	Holiday: See You Next Class			
2/20	Introduction: How old is the earth?			
	evolution in context of environment			
2/25	Chapter 1- Introduction to Evolutionary Fact			
2/27	and Theory			
	Film: Great Transformations			
3/4	Chapter 2- Introduction to Genetics and			
3/6	Genomics			
	Film: Why Sex			
<u>3/11</u>	Chapters 3- Basics in Human Biology			
<u>3/13</u>	Film: The Evolutionary Arms race			
3/18	Chapter 4 Modern Evolutionary Theory			
3/20	Film: Extinctions	Article 1 is due: Choice of articles		
3/25	Exam One: Scantron 882E Chapters:			
3/27	1, 2, 3, 4			
	Film: Ape Genius and discussion			
4/1	Chapter 5 – Primate behavioral Ecology	Article 2 is Due: Intelligence, Coalition		
4/3	Film: Monkey in the Mirror	Killing and the Antecedence of War		
4/8	Spring Break, Have a good recess			
4/10	See you Next Week			
4/15	Chapter 6 Early primate Evolution			
4/17	Film: The New Chimpanzee			
4/22	Chapter 7 Early Hominin Evolution			
5/24	Film: Becoming Human: Part 1			
4/29	Chapter 8 Plio-Pleistocene Hominins and			
5/1	the Genus Homo			
F/C	Becoming Human part 2			
5/6	Exam Two Scantron 882E			
5/8	Chapters: 5, 6, 7, 8 Film: Guns Germs and Steel			
5/13	Chapter 9 The Rise of Modern Humans	TERM PAPER DUE		
5/13	Film: Becoming Human part 3 and	ILINII FAFLIN DUL		
3/13	discussion			
5/20	Chapter 10 Human Biology Diversity in	Article 3 is Due: Culture Not Race Explains		
5/22	Film: Race the Power of an Illusion 3	Human Diversity		
5/27	Holiday: See you next class	Traman Divorony		
5/29	Chapter 11 Modernity and Human Biology			
June 3	Discussion Film			
June 5	SLO QUIZ Final EXAM Chapter 9 10 11			
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