AN222: Biological Anthropology (Lecture) Spring 2011, University of Guam

Instructor: Dr. Stephen Acabado Office: HSS 120A Office Hours: Mondays, 12-2pm;Tuesdays and Thursdays, 11am-1pm Email: <u>s.acabado@uguam.uog.edu</u> Phone: 671-735-2809

CLASS MEETINGS

Mondays, 9:00-11:40am HSS 110

COURSE DESCRIPTION

Description from the Course Catalog

This course surveys the field of modern Biological (Physical) Anthropology, with a focus on the study and interpretation of human and non-human primate evolution, contemporary human biological diversity, and the biocultural, ecological and historical dynamics of selective factors, including diseases that have impacted – and continue to impact – on the human condition.

Course Objectives

This course introduces students to the multi-faceted discipline of Biological (or Physical) Anthropology – the study of human evolutionary history, adaptation, and variation. By completing this class, students will:

- 1. Understand the principles of evolutionary theory and how they have been applied to improve our understanding of the human condition;
- Be exposed to the principles of evolutionary genetics, and learn how molecular genetics plays a fundamental role in the evolutionary processes that act on humans;
- 3. Be introduced to our closest living relatives, the nonhuman primates, and learn what insights into the human condition have been obtained from studying these animals;
- 4. Be exposed to the primate fossil record that spans more than 50 million years and has given rise to modern humans and the other living primates, as well as many extinct lineages; and,
- 5. Be introduced to the bewildering variation that exists both within and between modern human populations.

Student Learning Goals

Students completing this course will achieve a fuller understanding of (a) how to think scientifically, (b) how evolution works, (c) humans as primates, (d) human evolutionary history, and (e) human variation.

Required Text:

A course packet that includes readings and lab exercises is required for this course.

Required or Expected Skills and Background:

Prerequisite: Anthropology (AN) 101, Introduction to Anthropology

Course Requirements:

Your grade in this course will be based on two long examinations, 10 laboratory exercises, and 2 long laboratory practical examinations. In addition, there will be an opportunity to earn up to 10 extra credit points (or an additional 3% towards your final course grade) by visiting the Guam Zoological Park and observing the non-human primates exhibits. A two- to three-page paper is required.

Grading:

Two long examinations (based on the	
lecture component) (100 points each x 2)	200 points
Video and reading responses (10 points each x 10)	100
Laboratory Exercises (10 points each x 10)	100 points
Two practical examinations (based on the	
laboratory component (100 points each x 2)	200 points

TOTAL

600 points

Standard grade	Grade	Final Score (out of 600)
90+	А	540+
80-89	В	480-534
70-79	С	420-474
60-69	D	360-414
<59	F	<354

Class Etiquette: Please **deactivate** all pagers, cell phones, and other electronic devices during class. The use of electronic devices, unless specifically approved by the instructor, during class and exams is prohibited. **Be punctual!**

Spring 2011 Biological Anthropology Course Schedule The following schedule is provided as a general guideline. Minor changes are expected throughout the course.

Week	Date	Торіс	Reading Assignments and
			Web Resources
1	1/19	Course Overview and	WHAT IS ANTHROPOLOGY?
		Introduction to Anthropology	EARLY THEORIES OF
		Lab Introduction	EVOLUTION
			1. Understanding Ourselves:
			C.P. Kottak, 2010. New York
2	1/24	What is Physical	2. What is Physical
		Anthropology?	Anthropology? Chapter 1, C.S
		1 05	Larsen
		Video: The talking Skull:	3. K.A Dettwyler and M.
		Forensic Anthropology (VT	Browning, Bad Breath.
		88.00.02)	Gangrene, and God's Angels.
		· · · · · ,	
		Video: Challenging the	4. W.R Maples . Examining the
		Human Evolution Model (VT	Bones of the "Elephant Man".
		88.06.07)	How Evolution Gave Us the
			Human Edge
3 & 4	1/31	The Development of	5. Jurmain et al. The
		Evolutionary Thought	Development of Evolutionary
	&	What is Evolution	Thought
		The Scientific Method	6. S.J Gould, Sex, Drugs, and
	2/7		the Extinction of Dinosaurs
		Video: Understanding	
		Evolution (VT 88 05 21)	7 M A Park Palmistry
			Science or Hand-Jive
			8 S. I Gould Evolution as Fact
			and Theory
			8 1 Between Darwin and God
			between Barwin and Cod
			9 R S Root-Bernstein
			Darwin's Rib
5 & 6	2/14	The Biological Basis of Life	10 Lewis et al. Heredity and
500	2/14		Evolution
	<i>R</i> .	DNA Structure	11 I.G. Mendel The Laws of
	a	DNA Replication	Inheritance
	2/21	Protein Synthesis	12 IB de Lamarck The
	2121	What is a Gene?	Inheritance of Acquired
		Modern Human Variation	Characteristics
1	1		1

		Video: The Cosmic Link (VT 85 03 11)	
			13. Lewis et al. Modern Human
		Video: Genetic Roots of the	Variation
		Human Family Tree (VT	
7	2/28	Non-Human Primates	14 C.S. Larsen, Biology in the
	2/20	Fundamentals of Primate	Present: Other Living Primates
		Behavior	15. Jurmain et al.
			Fundamentals of Primate
		Video: The Aquatic Ape (VT	Behavior
		88.18.05)	16. K.B. Strier. Menu for a
		,	Monkey
		Video: The Ape: So Human!	17. C. Zimmer. Tooling through
		(VT 88.18.04)	the Trees
			Non-Human Primates
8	3/7	Process of Macroevolution:	18. Jurmain et al. Processes of
		Mammalian/Primate	Macroevolution
		Evolutionary History	<u>19. S.J. Gould. What is a</u>
			Species?
		Video: Microevolution (VT	
		85.00.09)	
0	2/14	(85.00.10)	
9	3/14	The Heminide	20 Dias and Malanay, Chapter
10 &	5/21	Ardinithoginos	<u>20. Rice and Moloney. Chapter</u>
	8	Aughthecines	4. What is a Horninia
	a	Australophiliecilles	21 M Lemonick and A
	3/28	Video [.] The Ape Man [.] The	Dorfman Up from the Apes
	0,20	Human Puzzle (VT 88.05.11)	Early Hominid Evolution
			PBS: Human Evolution
12	4/4	Neanderthals and other	22. Rice and Maloney. Chapter
		Archaic Homo sapiens	5. The Genus Homo
		Modern Homo sapiens	23. K.L. Feder. Dawson's
			Dawn Man: The Hoax at
		Video: Out of Asia (VI	Plitdown
40			24. Jurmain et al. Neandertals
13	4/11	Continuity (Multireciped)	25. Jurmain et al. Homo
			sapiens
	1	riyphothesis)	

		Replacement (Out-of-Africa)	
		Microevolution in Modern	
		Human populations	<u>26. Jurmain et al.</u>
			Microevolution
		Video: Ape Man: Giant	
		Strides (VT 88.05.12)	
14	4/25	Human variation and	27. Jurmain et al. Human
		Adaptation	variation
		The Legacies of Human	28. B. Boggin. The Tall and
		Evolutionary History	Short of it.
			29. J. Diamond. Curse and
		Video: Race	Blessing of the Ghetto
		Video: Divided We Stand (VT	30. Jurmain et al. Legacies of
		85.03.05)	Human Evolutionary History
15	4/25	2 nd Long Examination	
16	5/2	Course wrap up	