

**RIO HONDO COLLEGE – DIVISION OF BEHAVIORAL & SOCIAL SCIENCES**  
**Anthropology 101 Introduction to Physical Anthropology**  
Fall 2012 – 16 Week Track / M–W / 8:05 AM–9:30 AM / Science 334 / CRN–70002

**COURSE SYLLABUS**

(Updated 8/20/2012)

**INSTRUCTOR INFORMATION** Santiago Andres Garcia, MA / [sgarcia@riohondo.edu](mailto:sgarcia@riohondo.edu) / Office Hours: M–W 1:00 PM–2:00 PM, Room: Administration 200A / [www.santiagoandresgarcia.com](http://www.santiagoandresgarcia.com)

**COURSE DESCRIPTION (3.0 UNIT)** This lecture course, is intended for students interested in expanding their knowledge of physical anthropology as a discipline. Students follow a lesson plan that introduces the methods, techniques, and procedures used in physical anthropology research, by way of lecture, presentations, classroom assignments, some laboratory activities, and one visit to the primate exhibit at the Los Angeles Zoo. Theoretically based classroom lectures cover the topics of evolutionary change and the forces that cause them, the study of primate behavior, the assessment of human variation, and the identification and classification of the skeletal features of humans, non-human primates, and human ancestors. Also included will be an exploration of Mendelian, molecular, and population genetics.

**STUDENT LEARNING OUTCOMES** The objective of the class aims to give students a comprehensive view of the evolution of the human species through the overview of theory, the fulfillment of assignments, the completion of lab exercises, and the examination of fossil replicas. By the end of this course, students that have attended regularly shall be able to (1) explain the evolution of the human species, and the effects of the natural environment on human diversity, (2) identify the structural components of the skeletal system, and (3) explain the importance of cells, and the genetic information they carry (DNA).

**EXAM MAKE-UP POLICY AND SYLLABUS LAW** Quiz taking adheres to a strict exam schedule. In the case of an absence whereby a student misses a quiz, a student may turn in the one extra credit assignment allowed, to make up for the missing quiz points. In the case of the final poster presentation, only students who miss the last day due to documented illness, car accident, or death in the family, are entitled to reschedule the presentation. With regard to the syllabus, the instructor reserves the right to change the lesson plan at anytime, and changes as the course moves occur commonly.

**STUDENT LOGIN** To view the syllabus online and download any required class readings visit the following website <http://www.santiagoandresgarcia.com> and click on the "Student Page" link.

**ATTENDANCE & PARTICIPATION** In order to comprehend the course topics students must attend EVERY class meeting and participate in all classroom discussions and activities. Roll **WILL** be taken daily, and attending class does amount to earning 100 possible points, 20% of one's' final grade.

**REQUIRED TEXTBOOK** *Introduction to Physical Anthropology*, 2011-12 Edition, by Robert Jurmain, Lynn Kilgore, Wenda Trevathan, & Russell L. Ciochon, CENGAGE Learning, USA, ISBN 9781111297930

**CHEATING, PLAGIARISM, & SEXUAL HARASSMENT** See Rio Hondo College catalog.

**COURSE SCHEDULE & TOPICS**

**WEEK # 1** Chapter 1 Introduction to Physical Anthropology

8/20/2012 Monday

- Introduction to course, syllabus, and classroom introductions
- Key terms in anthropology
- Introduction to Anthropology: The Four-field approach

8/22/2012 Wednesday (Summary #1 Due)

- Applied Anthropology
- Physical Anthropology
- The Scientific Method

## HEREDITY AND EVOLUTION

### WEEK #2 Chapter 2 The Development of Evolutionary Theory

8/27/2012 Monday

- Charles Darwin and Natural Selection
- The Scientific Revolution
- Precursors to the Theory of Evolution (*Linnaeus, Buffon, Lamarck, Lyell, Malthus, and Cuvier*)

8/29/2012 Wednesday (Summary #2 Due)

- The Discovery of Natural Selection
- How Natural Selection Works
- Alfred Russel Wallace
- Opposition to evolution today

### WEEK #3 Chapter 3 The Biological Basis of Life

9/3/2012 Monday

- Cells
- The Structure of DNA
- DNA Replication and Protein Synthesis

9/5/2012 Wednesday (Summary #3 Due)

- What is a Gene?
- Chromosomes
- Cell Division (meiosis and mitosis)

### WEEK #4 Chapter 4 Heredity and Evolution

9/10/2012 Monday (Quiz #1 on Chapters 1, 2, and 3)

- Gregor Mendel (Principle of Segregation & Principle of Independent Assortment)
- Mendelian Inheritance in Humans
- Patterns in Mendelian Inheritance

9/12/2012 Wednesday (Summary #4 Due)

- Modern Evolutionary Theory
- Factors that Produce and Redistribute Variation
- Natural Selection is Directional and Acts on Variation

### WEEK #5 Chapter 5 Macroevolution: Processes of Vertebrate and Mammalian Evolution

9/17/2012 Monday

- The Human Place in the Organic World
- Principles of Classification
- Definition of Species
- What Are Fossils and How Do They Form?

9/19/2012 Wednesday (Summary #5 Due)

- Vertebrate Evolutionary History: A Brief Summary
- Mammalian Evolution
- The Emergence of Major Mammalian Groups

## **PRIMATES**

### **WEEK #6** Chapter 6 Survey of the Living Primates

9/24/2012 Monday

- Prime Characteristics
- Prime Adaptations
- Geographic Distribution and Habitats

9/26/2012 Wednesday (Summary #6 Due)

- Primate Classification
- A Survey of the Living Primates
- Endangered Primates

### **WEEK #7** Chapter 7 Primate Behaviors

10/1/2012 Monday (Quiz #2 on Chapters 4, 5, and 6)

- Primate Field Studies
- The Evolution of Behavior
- Sympatric Species

10/3/2012 Wednesday (Summary #7 Due)

- Primate Social Behavior
- Reproduction and Reproductive Behavior
- Mothers, Fathers, and Infants

### **WEEK #8** Chapter 8 Primate Models for the Evolution of Human Behavior

10/8/2012 Monday

- Human Origins and Behavior
- Brain and Body Size
- Language

10/10/2012 Wednesday (Summary #8 Due)

- The Evolution of Language
- Primate Cultural Behavior and Aggression
- Pro-social Behaviors: Affiliation, Altruism, and Cooperation

### **WEEK #9** Chapter 9 Overview of the Fossil Primates

10/15/2012 Monday

- Background to Primate Evolution: Late Mesozoic
- Primate Origins
- Made to Order: Archaic Primates

10/17/2012 Wednesday (Summary #9 Due)

- Eocene Primates
- Oligocene Primates
- Miocene Primates

## HOMININ EVOLUTION

### WEEK #10 Chapter 10 Paleoanthropology: Reconstructing Early Hominin Behavior and Ecology

10/22/2012 Monday (Quiz #3 on Chapters 7, 8, and 9)

- What is a Hominin?
- The Strategy of Paleoanthropology
- Paleoanthropology in Olduvai Gorge
- Dating Methods

10/24/2012 Wednesday (Summary #10 Due)

- Excavations at Olduvai
- Experimental Archaeology
- Reconstruction of Early Hominin Environments and Behavior

### WEEK #11 Chapter 11 Hominin Origins in Africa

10/29/2011 Monday

- The Bipedal Adaption
- Early Hominins from Africa

10/31/2012 Wednesday (Summary #11 Due)

- Early Hominins from Africa Cont.
- Interpretations: What Does It All Mean?
- Seeing the Big Picture: Adaptive Patterns of Early African Hominins

### WEEK #12 Chapter 12 The First Dispersal of the Genus *Homo*: *Homo erectus* and Contemporaries

11/5/2012 Monday

- A New Kind of Hominin
- The Morphology of *Homo erectus*
- The First *Homo erectus*: *Homo erectus* from Africa
- Who Were the First Earliest African Emigrants?

11/7/2012 Wednesday (Summary #12 Due)

- *Homo erectus* from Indonesia
- *Homo erectus* from China
- Asian and African *Homo erectus*: A Comparison
- Technological Trends in *Homo erectus*

### WEEK #13 Chapter 13 Pre-modern Humans

11/12/2012 Monday

- No School
- No School
- No School

11/14/2012 Wednesday (Summary #13 Due, and Quiz #4 on Chapters 10, 11, and 12)

- When, Where, and What?
- Pre-modern Humans of the Middle Pleistocene
- Neandertals: Pre-modern Humans of the Late Pleistocene
- Culture of Neandertals

**WEEK #14** Chapter 14 The Origin and Dispersal of Modern Humans

11/19/2012 Monday

- Approaches to Understanding Modern Human Origins
- The Earliest Discoveries of Modern Humans
- Something New and Different: The “Little People.”

11/21/2012 Wednesday (Summary #14 Due)

- Something New and Different: The “Little People” Cont.
- Technology and Art in the Upper Paleolithic
- Summary of Upper Paleolithic Culture

**CONTEMPORARY HUMAN EVOLUTION**

**WEEK #15** Chapter 15 Modern Human Biology: Patterns of Variation, Chapter 16 Modern Human Biology: Patterns of Adaptation, and Chapter 17 The Human Life Course.

11/26/2012 Monday

- The Concept of Race
- The Adaptive Significance of Human Variation
- Infectious Diseases

11/28/2012 Wednesday (Summary #15 Due)

- Fundamentals of Human Growth and Development
- Nutritional Effects on Growth, Development, and Later-Life Health
- Other Factors Affecting Growth and Development: Genes, Environment, and Hormones

**WEEK #16** Finals Week!

12/3/2012 Monday (Quiz #5 on Chapters 13, 14, 15, 16, 17)

- Poster Presentations

12/5/2012 Wednesday

- Poster Presentations Cont.

**COURSE GRADING SCALE & POINTS BREAKDOWN**

<b>Academic Tasks</b>		<b>Possible Points</b>
Chapter Summaries (15)	x10	150
Quiz's (5)	x25	125
Poster Presentation		100
Classroom Participation		100
<b>Total Class Points</b>		<b>475</b>

**EXTRA CREDIT** 3-4 page, double-spaced, informative paper on the anatomical differences between apes and australopithecines, or any of the different species of the human line. A minimum of two must be written about in order to compare and contrast. 25 points possible, **extra credit is due November 21, 2012, no exceptions!**

## CLASSROOM ETIQUETTE

1. Engage your classmates through dialogue and intellectual conversations; though be respectful and mindful of people's social identities, gender, age, and physical disabilities.
2. Please have all of your electronic devices turned off. It is also recommended that you keep your valuable (expensive) gadgets out of public view. Theft does occur.
3. **ABSOLUTELY NO TEXTING DURING CLASS.** You will be asked to put your phones away during class if this behavior is observed. Please do this during breaks only.
4. When asking a question raise your hand. No shouting or talking out loud. Refer to the instructor as "Instructor Garcia," "Mr. Garcia," "Professor Garcia," or "*Profe*," is fine also.
5. When emailing ANY instructor, myself included, be professional and clear in your message. "Hey what's up professor?" will not get you a timely response.
6. For this class, laptops for taking notes will not be allowed. THEY ARE a distraction for everyone, including the instructor. As an alternative, lectures can be voice recorded.
7. Assert yourself politely in class. Greet your classmates with "Good morning, how are you?" Give yourself time throughout the day to eat healthy, complete homework, and prepare for class.
8. Practice good hygiene; remember that the classroom is a *shared* space of learning. Arriving to class under the influence of drugs or alcohol is prohibited; **REMAIN** home, for your own safety and the safety of others.

**What do you as a student receive in return?** A passionate instructor knowledgeable in the disciplines of Mexican culture and history, Mexican-American history, and the four-fields of Anthropology. You will learn in my class, you will be challenged to think beyond the norm, and you will do so with new material. My goal is to aid your learning, teach you, bring out the best in you, and prepare you for what is a long but rewarding educational experience. **See my Teaching Philosophy.**