

Basic Course Information

Semester:	Summer 2023	Instructor Name:	Dr. Arturo Marquez Jr.
Course Title & #:	Physical Anthropology 100	Email:	arturo.marquezjr@imperial.edu
CRN #:	30115	Webpage (optional):	n/a
Classroom:	Online	Office #:	2735
Class Dates:	06/19 – July/27	Office Hours:	By appointment
Class Days:	Online	Office Phone #:	760-355-6282
Class Times:	Online	Emergency Contact:	760-355-6144
Units:	3	Class Format:	Online

Course Description

Physical anthropology is the study of humans as biological beings subject to the forces of both evolution and culture. Physical anthropology studies humans in a biological context and explains our relationship to other primates and the rest of the natural world. Throughout the course we will examine anatomical, behavioral, and genetic similarities and differences among the living primates, and by illustrating the scientific method, learn the basic mechanism of the evolutionary processes and trace a pathway of human evolution in relation to environmental adaptation as reconstructed from the fossil record. (CSU/UC)

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

- 1) Define the main goals and aims of physical anthropology.
- 2) Explain how Darwin's theory of natural selection results in evolution, adaptation, and design, and how evolution affects our daily lives.
- 3) Explain the basic pattern of hominid evolution over the last seven million years including dating methods, scientific methods, and the origin of Homo sapiens in Africa including global biological diversity.

Course Objectives

Upon satisfactory completion of the course, students will be able to:

- 1) Define anthropology and describe its four major subfields, stating the major areas of research within physical anthropology.
- 2) Recall the development of evolutionary theory and individuals that contributed to its development.
- 3) Explain the basic principles of Mendelian, molecular and population genetics.
- 4) Formulate an argument for the importance of genetic variations and demonstrate how natural selection works with variation, including variation in skin color.
- 5) List an overview of dating techniques and recreate the geologic time scale in regards to vertebrae and mammalian evolution as it pertains to the human fossil record.
- 6) Use comparative primate taxonomy of commonly known primates in terms of physical characteristics, primate social behaviors and geographical locations, including the differences between the traditional and the cladistic taxonomic classification.
- 7) Recognize the major groups of hominin fossils and describe alternate phylogenies for human evolution. Identify the biological and cultural factors responsible for human variation.



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Textbooks & Other Resources or Links

Explorations: An Open Invitation to Biological Anthropology. 2019. Beth Shook, Katie Nelson, Kelsie Aguilera, and Lara Braff, editors. American Anthropological Association. Creative Commons (non-commercial) License

Available for download here: <https://explorations.americananthro.org/>

Course Requirements and Instructional Methods

The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. Because this is a three-credit course, students should expect to invest a minimum of nine hours per week.

Students are assessed based on the following weekly assignments:

- **Discussion Posts 1.1, 2.1, 3.1, 4.1, 5.1 and 6.1** (36 points): there is an initial 150-word discussion post in each module that explores key ideas in physical anthropology. Each post is worth 6 points based on the rubric available on Canvas. It is important to draw clear connections to the readings by providing the page numbers to the section in the textbook where students found key terms, concepts, and examples for their discussion post. Discussion posts are due by Thursday at 11:59pm.
- **Comments 1.2, 2.2, 3.2, 4.2, 5.2 and 6.2** (24 points total): after publishing the discussion post, students are expected to read through all posts and provide a constructive 50-word comment to at least two colleagues. Comments are worth 4 points each and need to be posted by Sunday at 11:59pm.
- **Projects 1.3, 2.3, 3.3, 4.3, 5.3 and 6.3** (60 points): there is a project at the end of each module that consolidates key ideas in the readings. Projects require time and attention; it is important to initiate these projects soon after completing the discussion post and comments. Projects are worth 10 points each and are due on Sunday at 11:59pm.
- **Quizzes 1.4, 2.4, 3.4, 4.4 and 5.4** (50 points): there is a quiz at the end of each module based on the readings. Quizzes are timed; students must complete the quiz within 1 ½ hours after they have begun. If you experience any difficulty accessing a quiz, please contact the instructor as soon as possible. Quizzes are worth 10 points each.
- **Final Exam 6.4** (30 points): a cumulative final exam will be available at the end of the last week. This is a timed exam on Canvas that closes on Sunday July 30th.

Course Grading Based on Course Objectives

There is a total of 200 points possible in this course. The correspondence between points earned and final letter grade is the following:

Points Earned	Letter Grade
200-186	A
185-171	B
170-156	C
155-141	D
141-0	F

Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.



Course Policies

Consistent participation in the discussion board and projects is crucial. If you experience any difficulty that keeps you from actively participating in this course, please inform the instructor as soon as possible.

Late work is accepted *only if* the instructor is informed with a detailed justification. If you experience any difficulty that impedes your ability to submit work by a due date, please inform the instructor as soon as possible. Meeting with the instructor (via Zoom) is ideal to address these situations. Make-up quizzes may be allowed at the instructor's discretion.

In order to achieve our course objectives, it is important to foster an engaged learning environment that is respectful and welcoming of everyone in class. Please refrain from behavior that might stifle or hinder others' learning and participation in this course. It is important to be respectful to others when commenting on their opinions and perspective, keeping in mind the aim is to actively learn about the evolution of human biology and diversity. Offensive language will not be tolerated. Please contact the instructor with any questions or concerns.

Plagiarism is a serious offense and will result in adverse consequences. Plagiarism is presenting someone else's work as one's own without citing the original source. It is crucial students understand the seriousness of plagiarism. Please do not copy and paste work from online sources or our textbook. Students are encouraged to reference their sources but always in a way that highlights their original ideas and clearly cites their sources. If you are unsure about IVC's plagiarism policy, please contact the instructor or refer to IVC's student services.

Other Course Information

The instructor may modify the syllabus as necessary to ensure the learning objectives are met. If there are any modifications to the syllabus, students will be notified via email within 24 hours.

Office hours are available via Zoom. Please email the instructor to discuss a day and time to meet. Office hours are additional resource in your professional trajectory at IVC. The instructor is *always* open to dialogue and is committed to your success. Use office hours to receive one-to-one guidance on discussion posts, projects, quizzes, or final exam. Moreover, use office hours to discuss the many merits of anthropology as a major, or to discuss ways anthropology can contribute to your professional development beyond IVC.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

Date or Week	Topic/Required Readings	Due Dates/Tests
Week 1 June 19 – 22	<p style="text-align: center;">The Scientific Method in Physical Anthropology</p> Chapter 1 – Introduction to Biological Anthropology (2-22) Chapter 13 – Race and Human Variation (489 - 508)	Discussion post 1.1 (The Scientific Method) Comments 1.2 Project 1.3 (Race as a Social Construct) Quiz 1.4
Week 2 June 26 – 29	<p style="text-align: center;">Genetics and Evolution</p> Chapter 2 – Evolution (29 – 51) Chapter 3 – Molecular Biology and Genetics (58 – 95) Chapter 4 – Forces of Evolution (109 – 136)	Discussion post 2.1 (Personal Genomics) Comments 2.2 Project 2.3 (Evolution by Natural Selection) Quiz 2.4
Week 3 July 3 – 6	<p style="text-align: center;">Primateology</p> Chapter 5 – Meet the Living Primates (148 – 180) Chapter 6 – Primate Ecology and Behavior (190 – 222)	Discussion post 3.1 (Human Nature) Comments 3.2 Project 3.3 (The Great Apes) Quiz 3.4
Week 4 July 10 – 13	<p style="text-align: center;">Fossils and Early Hominins</p> Chapter 7 – Understanding the Fossil Context (233 – 261) Chapter 8 – Primate Evolution (274 – 303) Chapter 9 – Early Hominins (319 – 359)	Discussion post 4.1 (The Fossil Record) Comments 4.2 Project 4.3 (In Search of Human Ancestors) Quiz 4.4
Week 5 July 17 – 20	<p style="text-align: center;">Emergence of Genus Homo</p> Chapter 10 – Early Members of the Genus Homo (374 – 397) Chapter 11 – Archaic Homo (403 – 435) Chapter 12 – Modern Homo sapiens (444 – 476)	Discussion post 5.1 (The Last of Us) Comments 5.2 Project 5.3 (Generalist-Specialist) Quiz 5.4
Week 6 July 24 – 27	<p style="text-align: center;">The Future of Human Evolution</p> Chapter 14 – Human Variation: An Adaptive Significance Approach (516 – 540) Chapter 16 – Contemporary Topics: Human Biology and Health (580-621)	Discussion post 6.1 (Hunter-Gatherers v. Agriculturalist: Who Has it Best?) Comments 6.2 Project 6.3 (Human Evolution) Final Exam 6.4

Subject to change without prior notice