

### Basic Course Information

Semester	<b>Spring 2019</b>	Instructor's Name	<b>Manfred Knaak</b>
Course Title & #	<b>Physical Anthropology 100</b>	Email	<b>manfred.knaak@imperial.edu</b>
CRN #	<b>20541</b>	Webpage (optional)	<b>none</b>
Room	<b>2735</b>	Office	<b>Room 2735</b>
Class Dates	<b>11 February to 7 June, 2019</b>	Office Hours	<b>Monday 5 PM to 6 PM; Tue &amp; Thu: 4:30 to 5:30 PM; Friday: Noon-1PM</b>
Class Days	<b>Friday</b>	Office Phone #	<b>760-355-6282</b>
Class Times	<b>08:00 AM to 11:10 AM</b>	Office contact if student will be out or emergency	<b>Department Secretary 760-355-6144</b>
Units	<b>3</b>		

### 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 of physical anthropology. (ILO 2)**
- 2 Explain how Darwin's theory provided the mechanism of evolution by natural selection, and how Mendel's theory of inheritance showed how traits are passed on systematically and predictably, and the combination of these two theories resulted in an evolutionary synthesis. (ILO 2, ILO 5)**
- 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. (ILO 2, ILO 5)**

**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 and the scientific method.
- 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.
- 8 Identify the biological and cultural factors responsible for human variation.

**Textbooks & Other Resources or Links**

1. **Our Origins, Discovering Physical Anthropology**, 4th *edition*, 2017, by Clark Spencer Larsen, ISBN 9780393284904

**Course Requirements and Instructional Methods**

Students will be tested on assigned reading material, class room discussion, and from the multi-media presentations viewed in classroom sessions. Student participation is also part of the assessment. The scheduled exams may consist of true-false and multiple choice. Homework assignments may be from our textbook and classroom sessions, as well as from the Internet, and will require additional research and writing. Students must take the final exam to receive a final grade.

**Course Grading Based on Course Objectives**

Three exams, which include the final exam, will be given during the semester. The semester grade will be based on an accumulation of points:

Exams: Total 150 points (3 exams at 50 points each)

Homework: 50 points

Total points: 200 points

Points:                      Letter Grade

200-180      A

179-160      B

159-140      C

139-120      D

119- 0            F

**Make-up Exam:** A Make-up Exam may be given with the instructor’s discretion and may consist of essays only. The Make-up Exam will be given at the end of the semester during Finals Week. **No more than one Make-up Exam is allowed during the semester.**

### Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student’s status will be the same as that of any other student who desires to add a class. It is the student’s responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as ‘excused’ absences.

### Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor. The use of laptop computers requires prior approval by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Disrespectful or disruptive behavior toward the instructor or fellow students will not be tolerated.
- **Tardiness is disruptive, and if necessary, the instructor shall institute a tardiness penalty of three points for each late arrival in the classroom. Penalty points are cumulative and will reduce the overall point accumulation and may result in a lower grade.**
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

### Academic Honesty

- Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another’s work and recognize the importance of acknowledging and safeguarding intellectual property.
- There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- **Plagiarism** is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to 'cite a source' correctly, you must ask for help.
- **Cheating** is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

### **Additional Student Services**

- Imperial Valley College offers various services in support of student success. The following are some of the services available to students. Please speak to your instructor about additional services which may be available.
- **CANVAS LMS.** Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: [Canvas Student Login](#). The [Canvas Student Guides Site](#) provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- **Learning Services.** There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your [Campus Map](#) for the [Math Lab](#); [Reading, Writing & Language Labs](#); and the [Study Skills Center](#).
- **Library Services.** There is more to our library than just books. You have access to tutors in the [Study Skills Center](#), study rooms for small groups, and online access to a wealth of resources

### **Disabled Student Programs and Services (DSPS)**

Any student with a documented disability who may need educational accommodations should notify the instructor or the [Disabled Student Programs and Services \(DSP&S\)](#) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

### **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

**.Student Health Center.** A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District and El Centro Regional Center provide basic health services for students, such as first aid and care for minor illnesses. Contact the [IVC Student Health Center](#) at 760-355-6310 in Room 2109 for more information.

**.Mental Health Counseling Services.** Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the [IVC Mental Health Counseling Services](#) at 760-355-6196 in Room 2109 for more information.

### **Veteran's Center**

The mission of the [IVC Military and Veteran Success Center](#) is to provide a holistic approach to serving military/veteran students on three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie; to serve as a central hub that connects military/veteran students, as well as their families, to campus and community resources. Their goal is to ensure a seamless transition from military to civilian life. The Center is located in Building 600 (Office 624), telephone 760-355-6141.

### **Extended Opportunity Program and Services (EOPS)**

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, personal/academic counseling, tutoring, book vouchers, and community referrals to qualifying low-income students. EOPS is composed of a group of professionals ready to assist you with the resolution of both academic and personal issues. Our staff is set up to understand the problems of our culturally diverse population and strives to meet student needs that are as diverse as our student population.

Also under the umbrella of EOPS our CARE (Cooperative Agency Resources for Education) Program for single parents is specifically designed to provide support services and assist with the resolution of issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid assistance may qualify for our CARE program, for additional information on CARE please contact Lourdes Mercado, 760-355- 6448, [lourdes.mercado@imperial.edu](mailto:lourdes.mercado@imperial.edu).

EOPS provides additional support and services that may identify with one of the following experiences:

- Current and former foster youth students that were in the foster care system at any point in their lives
- Students experiencing homelessness
- Formerly incarcerated students

To apply for EOPS and for additional information on EOPS services, please contact Alexis Ayala, 760-355-5713, [alexis.ayala@imperial.edu](mailto:alexis.ayala@imperial.edu).

### **Student Equity Program**

- The Student Equity Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies

strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. Student Equity addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, Veterans, foster youth, homelessness, and formerly incarcerated students. The Student Equity Program provides direct supportive services to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC students' access to education, degree and certificate completion, successful completion of developmental math and English courses, and the ability to transfer to a university. Contact: 760.355.5736 or 760.355.5733 Building 100.

- The Student Equity Program also houses IVC's Homeless Liaison, who provides direct services, campus, and community referrals to students experiencing homelessness as defined by the McKinney-Vento Act. Contact: 760.355.5736 Building 100.

### Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities, please refer to the IVC General Catalog.

### Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC Library Department provides numerous Information Literacy Tutorials to assist students in this endeavor.

### Anticipated Class Schedule / Calendar

Week & Date	Assignment and Topic	Reading Assignment Pages
Week 1 February 22	Chapter 1, What is Physical Anthropology. What do physical anthropologists do? Six big events in human evolution.	pp. 3 - 22
Week 2 March 01	Chapter 2, Evolution: Constructing a Fundamental Scientific Theory. Natural Selection; Evolutionary synthesis.	pp. 23 - 53
Week 3 March 08	Chapter 3, Genetics: Reproducing Live and Producing Variation. Biology of the cell; DNA, RNA; chromosomes.	pp. 54 - 87
Week 4 March 15	<i>Chapter 3 continued</i> : protein synthesis, mitosis, meiosis, what is a gene, epigenetics.	pp. 54 - 87

Imperial Valley College Course Syllabus – Course Title and number

Week 5 March 22	Chapter 4, Genes and Their Evolution: Population Genetics. The four forces of evolution; Hardy-Weinberg formula.	pp. 88 - 123
Week 6 March 29	Chapter 5, Biology in the Present: Living People. Human variation; geographic clines; adaptations to different environs .	pp. 124 - 165
Week 7 April 05	Chapter 6, Biology in the Present: The Other Living Primates. What is a primate? primate adaptations; taxonomy.	pp. 166 - 205
Week 8 April 12	Chapter 8. Fossils and Their place in Nature. What is a fossil? Taphonomy and fossilization; geologic time scale; dating methods -relative age and numerical age—.	pp. 231 - 271
Week 9 April 19	Chapter 9. Primate Origins and Evolution. Why did primate emerge? Euprimates; Miocene epoch and ape migration	pp. 272 - 307
Week 10 April 22 to 27	Spring Recess. Campus Closed.	
Week 11 May 03	Chapter 10. Early Hominin Origins and Evolution. What is a hominin? Bipedal locomotion; why did hominids emerge?	pp. 308 - 351
Week 12 May 10	Chapter 11. The Origins and Evolution of Early Homo. Homo erectus and migration out-of Africa; Asia and Europe.	pp. 352 - 389
Week 13 May 17	Chapter 12. The Origins, Evolution, and Dispersal of Modern People. Early and Late Archaic Homo sapiens; Out-of-Africa theory; multi-regional continuity theory; assimilation model.	pp. 390 - 443
Week 14 May 24	Chapter 12. —continued— Early Modern Homo sapiens; modern humans migration into Asia, Europe, the Americas.	pp. 390 - 443
Week 15 May 31	Chapter 13. The Past 10,000 Years: Agriculture, Population, and Biology; bioarchaeo-chemistry; how agriculture may have changed biology of humanity	pp. 444 - 480
Week 16 June 03 to 07	Final Exams	