# BIOLOGY 495: Special Topics (1 unit) Culture, Genes, and the Origin of the Human Distinctive

# Syllabus, Spring, 2018

When I look at your heavens, the work of your fingers, the moon and the stars that you have established; what are human beings that you are mindful of them, mortals that you care for them? Yet you have made them a little lower than God, and crowned them with glory and honor. You have given them dominion over the works of your hands; you have put all things under their feet... Psalm 18:3-6 (NRSV)

**Instructor:** Dr. Darrel Falk

**Professor Emeritus of Biology** 

Rohr Science 101, 619-787-7260 (feel free to text)

dfalk@pointloma.edu

*Office Hours:* 3:30-5:30 on day of class. Please don't ever hesitate to contact me if you'd like to talk. We can meet over coffee, lunch, or in my office and can set it up by email or text.

**Textbooks:** 1. Darwin's Unfinished Symphony: How Culture Made the Human Mind. Kevin Laland.

Princeton University Press, 2017.

2. The Creative Spark: How Imagination Made Humans Exceptional. Agustin Fuentes.

Dutton, Penguin Random House, 2017.

**Perspective:** There is one thing all biologists can agree on, regardless of religious perspective, and that is that our species, *Homo sapiens*, is remarkably unique. How are we different from other animals and how do biologists and anthropologists say that this uniqueness developed over the past several hundred thousands to millions of years? More specifically what were the most powerful biological and cultural influences that catalyzed the development of our unique qualities as a species and what are some of the theological ramifications of the knowledge that has been emerging?

**Format:** This is a Spring Semester class that will meet on select Tuesdays (see below) from 5:30-6:30 p.m. There will also be four required pre-course meetings in Fall Quad II for a total of 12 meetings altogether. All 12 sessions will be in a discussion format with a student giving a five-minute summary and written outline of the reading. This will be followed by discussion moderated by professor and student leader. The student leader and professor will have communicated several days prior to class to coordinate the moderation of class discussion. We will discuss one chapter from each of the two books (with two different student-led discussions) in each class session.

#### **Class Schedule:**

Oct. 24	5:30 to 6:30. General Introductory Discussion (LA 102)
Nov. 7	<ul><li>5:30 Fuentes Chap. 1. Creative Primates(24 p.)</li><li>6:05 LaLand Chap. 1. Darwin's Unfinished Symphony (30 p.) (LA2)</li></ul>
Nov. 21	5:30 L. Chap. 2. Ubiquitous Copying (20 p) 6:05 F. Chap. 2. The Last Hominin Standing (25 p) ( <b>LA 102</b> )
Dec. 5	5:30 F. Chap. 3. Let's Make a Knife (18 p.) 6:05 L. Chap. 3 Why Copy? (27 p.) ( <b>LA 102</b> )
Jan. 9	5:30 L Chap. 4. A Tale of Two Fishes (22 p.)

	6:05 F. Chap. 4. Killing and Eating, etc. (16 p.) <b>Room TBA</b>
Jan. 16	5:30 F. Chap. 5. The Beauty of Standing in Line (16 p.) 6:05 L. Chap. 5. The Roots of Creativity (22 p.) <b>Room TBA</b>
Jan. 30	5:30 L. Chap. 6. The Evolution of Intelligence (27 p.) 6:05 F. Chap. 6. Food Security Accomplished (24 p.) <b>Room TBA</b>
Feb. 27	5:30 F. Chap. 7. Creating War and Peace (36 p.) 6:05 L. Chap. 7. High Fidelity(25 p.) <b>Room TBA</b>
Mar. 13	5:30 L. Chap. 8. Why We Alone Have Language (33 p.) 6:05 F. Chap. 8. Creative Sex (28 p.) <b>Room TBA</b>
Mar. 27	5:30 F. Chap. 9. Religious Foundations (27 p.) 6:05 L. Chap. 9. Gene Culture Co-evolution (26 p.) <b>Room TBA</b>
Apr 10	5:30 L. Chap. 10. The Dawn of Civilization (30 p.) 6:05 F. Chap. 10. Artistic Flights (26 p.) <b>Room TBA</b>
Apr. 17	5:30 F. Chap. 11. Scientific Architecture (26 p.) 6:05 L. Chap. 11. Foundations of Cooperation (19p.) <b>Room TBA</b>

### **PLNU Mission:** To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

*Course Description:* Exploring the interplay between genes and culture in the origin of our species, *Homo sapiens*.

### Course Learning Outcomes: Students will be able to

- 1. Identify many of the genetic factors that have influenced the origin of human uniqueness
- 2. Identify many of the cultural factors that have influenced the origin of human uniqueness
- 3. Identify the way in which genes and culture interact in the ongoing human evolution
- **4.** Gain an increased understanding of the compatibility of the Christian faith with the science of human origins

**Attendance:** Because of the discussion nature of this class, attendance is essential for all twelve meetings. If a health emergency arises, please seek approval from professor in advance and scan in documentation from doctor within a week. Otherwise students will lose 1/12 off of their total point score for each absence.

**Academic Accommodations:** If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at <a href="mailto:DRC@pointloma.edu">DRC@pointloma.edu</a>. See <a href="mailto:Disability Resource">Disability Resource</a> Center for additional information.

**Academic Honesty:** Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic <u>dishonesty</u> is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may

assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See <u>Academic Policies</u> for definitions of kinds of academic dishonesty and for further policy information.

**PLNU Copyright Policy:** Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education.

*Evaluation:* Brief weekly quizzes on the reading (110 points), presentation (110 points), and discussion (110 points). Note on any given week, you may choose to submit a 200 word reflection piece on the discussion (not the reading, *per se*, but the discussion itself). If so, you may submit that by email within 48 hours of the class session and that will count towards your discussion points for that session. There will be no final exam.

Grade: >85% A; 75-84% B; 60-74% C; 50-59% D; <50% F