EVOLUTION THE EVOLUTION OF THE HUMAN MIND (SPHR 1000.10)

Monday & Wednesday: 12:45 - 2:00 PM

Instructor: Prof. Francys Subiaul, Ph.D.

Course Room: DUQUEZ 251

Office Hours: M/W 2-3pm or by appointment

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Required Texts: Evolutionary Psychology (EP), The Tangled Wing 2nd Ed. (TW)

Specialized Readings (PDF)

Course Description. This course will explore what makes the human mind 'human' and how such a mind might have evolved in the animal kingdom. Such a complex question, however, cannot be answered by a single discipline. It can only be addressed through interdisciplinary collaboration. To that end, this course will introduce students to a variety of disciplines and research programs interested in the question of human cognitive origins, including: contemporary evolutionary theory, theories of mind and human development, as well as comparative and evolutionary psychology. Lectures and discussion will cover topics that range from how the modern human mind is like and unlike the mind of other primates to how Darwin's theory of evolution may explain faith and human frailty.

Course Objectives. In order to understand the evolution of the human mind and appreciate the significance of comparative cognitive studies, this course aims, through a combination of lecture, discussion and out-of-class activities, to (1) provide students with an overview of evolutionary theory, (2) evaluate how modern evolutionary thought has been used to understand human cognition, (3) summarize research from the comparative and developmental cognitive sciences exploring human and non-human primate cognition, (4) coordinate class discussion with activities in local Smithsonian Institutions in order to get a wider understanding of the different variables contributing to human cognitive uniqueness.

Course Requirements:

Quizzes (60 points). Six quizzes, totaling 60% of your final grade, will be administered at the beginning of the specified lecture (*). Quizzes will be worth 10 points each and will be of a mixed format including multiple choice, true and false, fill in the blank and short answer questions. Quizzes will most assess factual knowledge but also your ability to apply this faculty knowledge and critically evaluate, synthesize and digest complex themes and concepts. This will be particularly true for PDF readings. Questions will be generated from lectures and readings. Quizzes will *not* be cumulative and will only cover the lectures specified in the schedule below.

Assignments (40 points). Two out-of-class activities and two in-class activities are also required and will comprise 40% of your final grade. All assignments are due at the start of class (or upon request) on the date specified in the schedule below. Please note: late assignments will not be accepted without a doctor's or Dean's notice—**no exceptions** (so don't ask). All assignments must be turned in by you in person during class or by a proxy (i.e., another student). NO EMAILING OF ASSIGNMENT.

- 1. National Museum of Natural History, Exploring the lives of an ancestor (10 pts). Must identify ONE human ancestor (e.g., Neanderthal) and answer the following questions: (i) What were their specific morphological features (use the museum and outside readings as a guide describe stature, cranial, dental, facial features), (ii) Identify specific physical/morphological adaptation (e.g., tree-climbing, walking, cold/hot weather, etc.), (iii) identify specific behavioral/cultural adapations (e.g., shelter, fire, navigation, art, diet).
- 2. <u>Babies</u> Movie Report (1 PAGE MAX): Identify the THREE main characters in the movie (name, location) and answer the following questions: (i) How are the three babies alike? Be sure to identify behaviors and their development. (ii) How are the three babies different? Are these differences primarily behavioral or are they more cultural? (iii) What is the "take home" message?
- 3. <u>Project NIM</u> Movie Report (1 PAGE MAX): Identify at least THREE main characters. What were their contributions to and/or role in the project? Address the following questions: (i) What were the goal of project NIM? (ii) What motivated these goals (i.e., theoretical/philosophical motivations for the project), (iii) What was the outcome/results? (iv) What is the "take home" message?
- 4. National Zoo, Primate & Ape House: Exploring Great Ape Behavior (10 pts). Visit the great ape house and the Think Tank. Attend a 1:30 great ape talk on primate cognition/behavior and answer the following (i) If a great ape was tested or used in a demonstration, identify the ape by name, the objective of the demonstration, what was demonstrated and the result of the demonstration (i.e., describe how the ape performed), (ii) If a great ape was not tested please identify who was conducting the demonstration, and at least THREE facts about the Think Tank, its goals, and/or primate behavior, cognition or conservation.

Grading: (1) Quizzes: 60%, (2) Assignments: 40%.

The following point distribution will be used to assign final grades:

A 100–94	B 86–84	C 76–74	D 66–64
A- 93-90	B- 83–80	C- 73–70	D- 63–60
B+ 89-87	C+ 79 – 77	D+ 69 - 67	F <60

I. EVOLUTION: AN INTRODUCTION

Monday (1/14): Introduction to Evolutionary Concepts

Wednesday (1/16): *Darwin's Five Theories of Evolution* (EP 1, PDF [Mayr]: Ch. 12)

Monday (1/21): NO CLASS. Martin Luther King Day

Wednesday (1/23): Mechanisms of Cognitive Evolution (PDF [Heyes, 2003])

II. EVOLUTIONARY PSYCHOLOGY & THE ADAPTED MIND

*Monday (1/28): Explaining Human Nature (TW: 1)

QUIZ I (1/28: Covering lecture 1/14 – 1/23)

Wednesday (1/30): From Hominin to Human (TW: 3)

*Monday (2/04): Evolutionary Psychology (EP: 2)

ASSIGNMENT 1 DUE (2/04)

Wednesday (2/06): The Survival Problems (EP: 3)

III. THE EVOLUTION OF HUMAN FRAILTY

*Monday (2/11): Emotions (TW 7)

QUIZ II (2/06: Covering lectures from 1/28 – 2/06)

Wednesday (2/13): Rage (TW: 9)

Monday (2/18): NO CLASS. Presidents Day

Wednesday (2/20): Joy (TW: 11)

Monday (2/25): Grief (TW: 14)

Wednesday (2/27): Faith (PDF)

IV. THE EVOLUTION OF SOCIALITY

*Monday (3/04): Female Sexual Strategies (EP: 4)

QUIZ III (3/04: Covering lectures from 2/11 to 2/27)

Wednesday (3/06): Male & Female Sexual Strategies (EP: 5)

Monday (3/11) & Wednesday (3/13): NO CLASSES. Spring Break

Monday (3/18): CLASS CANCELLED: SNOW DAY

Wednesday (3/20): Parenting & Kinship (EP: 7, 8)

*Monday (3/25): IN CLASS MOVIE: Babies

Wednesday (3/27): Cooperation & Aggression (EP: 10, TW: 9)

ASSIGNMENT 2 DUE (3/27)

Monday (4/01): Reputation & Status (EP: 12)

V. COMPARATIVE COGNITION

*Wednesday (4/03): Social Intelligence (PDF [Boyd & Silk]: Ch. 9, [Herrmann et al])

QUIZ IV (4/03: Covering lectures 3/04 – 4/01)

Monday (4/08): Physical Intelligence (PDF [Boyd & Silk]: Ch. 9; [Herrmann et al])

Wednesday (4/10): Theories of Primate Cognition (PDF [Tomasello & Call]: Ch. 12)

*Monday (4/15): Precursors to Language

Wednesday (4/17): IN CLASS MOVIE: Project NIM

*Monday (4/22): Language Evolution & Origins (PDF [Cheney & Seyfarth], Ch.11, Pinker, Ch. 1)

ASSIGNMENT 3 DUE (4/22)

*Wednesday (4/24): Imitation (PDF [Subiaul, 2007])

QUIZ V (4/24): Covering lectures from 4/03 - 4/22).

Monday (4/29): Traditions in Human & Non-Human Animals (PDF [Whiten & vanShaik])

Tuesday (4/30): The Evolution of Culture & Human Instincts (PDF [Henrich & McElreath], PDF [Bjorklund & Pelligrini]: Ch. 11)

VI. THE ORIGINS OF OUR DESTINY

*Wednesday (5/01): The Future of Our Species (TW: 18)

QUIZ VI (5/01: Covering lectures from 4/24 – 4/30).

ASSIGNMENT 4 DUE (5/01)

Academic Integrity

Academic integrity is defined as the pursuit of scholarly activity in an open, honest, and responsible manner and is a basic guiding principle for all academic activity at The George Washington University. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of academic dishonesty by others, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Penalties for academic dishonesty are outlined in the *Code of Academic Integrity* (www2.gwu.edu/~ntegrity/code.html) and may lead to disciplinary sanctions including a failing grade for the course.

Accommodations for Students with Disabilities

It is the University's policy to provide reasonable accommodations to students who have disabilities that may affect their ability to participate in class activities and assignments. Students with disabilities should contact Disability Support Services (994-8250) to obtain assistance with arranging the necessary accommodations and must notify the instructor of the course by first week of class if accommodations are required. No special accommodations are possible without DSS approval.