

Evolutionary Psychology: Course Syllabus Psychology 3000 Section C

Instructor: Dr. Doug P. VanderLaan, Ph.D.

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Office: C883

Office Hours: Tuesday and Thursday 4:30pm to 5:00pm

Class Time: Tuesday and Thursday 3:05pm to 4:20pm

Classroom: W731

Prerequisites: Psychology 2700 (Animal Behaviour) and one additional 2000 level Psychology course

Course Description:

Evolutionary theory provides a powerful framework for understanding the incredible biological diversity we observe in nature. Over the past three decades or so, a growing number of researchers have begun to appreciate that the evolutionary forces that acted on our ancestors have sculpted the human brain, and the psychological and behavioural phenomena it produces. The use of evolutionary theory to guide behavioural, and especially psychological, research in humans is commonly referred to as *Evolutionary Psychology*.

This course provides an introduction to the field of Evolutionary Psychology. Specifically, it covers fundamental aspects of evolutionary theory and its application to understanding human psychology and behaviour through a variety of methods, including experimental, survey, cross-cultural, and comparative research. This course will also cover topics that have been central to the field of Evolutionary Psychology such as mating, parenting, altruism, and cooperation. In addition, a number of topics will be explored to illustrate unique areas of research that have emerged from the field of Evolutionary Psychology. The impact of Evolutionary Psychology on certain traditional areas of Psychology, including the study of development, cognition, mental illness, personality, and culture, will also be considered. The overall aim of this course is to demonstrate the scientific approaches that can be used to discover how evolutionary processes influence human psychology and behaviour.

Required Readings:

The full list of readings and the dates they are assigned are listed below along with the list of lecture topics in the “Course Schedule” section. Many of the readings can be accessed as pdf files using the course’s Moodle page. If a reading is not available on the course’s Moodle page, then it can be found on reserve at the university library. These readings are academic articles and book chapters carefully chosen to complement the content of lectures. Readings are intended to provide a more comprehensive understanding of the field of Evolutionary Psychology. In general, the readings are more conceptual, as opposed to empirical and data-rich, in scope. Empirical and data-rich studies will be introduced in lectures, however, and will enable me to present them in such a way as to aid in the interpretation of research findings. I will not necessarily cover

the content of readings during lecture, and a great deal of the lecture material will not be contained in the readings. Again, lectures and readings are intended to be complementary as opposed to overlapping. In addition, I have assigned a film that you may watch online on your own, outside of class time (for details see “Course Schedule” below). Knowledge and understanding of the content of lectures, the readings, and the film will be tested on the midterms and final exam.

Grading:

The following ranges will be employed in assigning grades in this course:

A+ > 89.5	C+ 66.5-69.4
A 84.5-89.4	C 63.5-66.4
A- 79.5-84.4	C- 59.5-63.4
B+ 76.5-79.4	D+ 55.5-59.4
B 73.5-76.4	D 50-55.4
B- 69.5-73.4	F <49.9

In accordance with the University of Lethbridge Calendar,

- A = Excellent
- B = Good
- C = Satisfactory
- D = Poor
- F = Fail

Evaluation:

Evaluation will be based on assignments (25%), midterms (50%), and a final exam (25%). There will be three assignments. There will be an in-class assignment based on a video of a lecture by the influential evolutionist Stephen J. Gould, which will be handed in to the instructor by the end of class on the day the video is shown (worth 10%). The two other assignments (one worth 5% and the other worth 10%), along with the instructions for completing the assignment, will be handed out during class and due at the beginning of class, in hard-copy (no electronic submission), approximately two weeks after the assignment is handed out. There will be no exceptions without due justification (see point 4 under “Other information about the course” below).

There will be two midterms, each worth 25%. The final exam will be worth 25%. The structure of the midterms and final exam will be a combination of multiple choice and short answer questions, and each will be out of a total of 50 marks. Midterms and the final exam will not be cumulative. The time allotted to complete the midterms and the final exam will be 75 minutes.

The dates concerning assignments, midterms, and the final exam are listed below in the Course Schedule. Assignments that are handed in late without justification will not be graded.

Other information about the course:

(1) If you are disrespectful to the instructor or other members of the class, you will be asked to leave.

- (2) Additional work will not be assigned for those who wish to improve their grades.
- (3) Please turn off your cell phones during the lectures.
- (4) Students can write missed tests if they provide appropriate documentation from a doctor stating that they were ill and that their test performance would have been seriously affected on the day of their illness. The documentation must have the doctor's name, address, and phone number. Non-medical reasons for missed exams (e.g., a death in the family) must also be supported with appropriate documentation. Students may also hand in an assignment late if they provide documentation stating that they would not have been able to hand in the assignment on the day that it was due.

Participation in Department of Psychology Research (maximum 2% bonus marks):

After your final grade has been calculated, you can have an additional 2% added onto your final grade if you have participated in some research in the Department of Psychology. This will give you an opportunity to experience how psychological research is conducted. A list of potential projects in which you can participate will be listed on the course's Moodle page approximately two weeks after the start of the course. Because research projects start up throughout the term, additional projects may be listed during the course of the term.

The choice to participate in research is entirely up to you. If you participate, I will not know which research project you participated in or anything about the information you provide in the course of participating in research. Also, please remember that if you do choose to be a research participant, you are under no obligation to complete the participation and may extricate yourself from participating at any time without having to provide a reason for doing so.

Course Schedule:

Lecture 1: *Introduction to the course*
Jan. 10

Fundamental Concepts:

Reading: Tooby, J. & Cosmides, L. (2005). Conceptual foundations of evolutionary psychology. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 5-67). Hoboken, NJ: Wiley.

Lecture 2: *The modern synthesis of evolutionary theory*
Jan. 12

Lecture 3: *The 4 levels of explanation and research approaches in evolutionary psychology*
Jan. 17
ASSIGNMENT 1 HANDED OUT.

Lecture 4: IN-CLASS ASSIGNMENT: Gould, S. J. (1995). Darwin's Revolution in Thought: An illustrated lecture for the classroom. Into the Classroom Video: Northampton, MA. (Video)
Jan. 19

Lecture 5: *The environment of evolutionary adaptedness*
Jan. 24

Human Mating:

Readings: Schmitt, D. P. (2005). Fundamentals of human mating strategies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 258-291). Hoboken, NJ: Wiley.

Sugiyama, L. S. (2005). Physical attractiveness in adaptationist perspective. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 292-343). Hoboken, NJ: Wiley.

Lecture 6: *Sexual selection and parental investment theory*
Jan. 26

Lecture 7: *Sexual selection and intrasexual selection*
Jan. 31 ASSIGNMENT 1 DUE AT BEGINNING OF CLASS.

Lecture 8: *Sexual selection and intersexual selection*
Feb. 2

Lecture 9: *Mate Choice*
Feb. 7

Lecture 10: MIDTERM 1
Feb. 9

Altruism, Conflict, and Cooperation:

Readings: Kurland, J. A. & Gualin, S. J. C. (2005). Cooperation and conflict among kin. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 447-482). Hoboken, NJ: Wiley.

Barclay, P. (2009). Reputational benefits of altruistic behaviour. *Advances in Psychology Research*, 66.

Film: Dawkins, R. (1986). Nice guys finish first. *BBC Horizon Television Series*. (The film is approximately 45 minutes in duration. It can be accessed online on YouTube by searching the title, or on google videos: <http://video.google.com/videoplay?docid=-3494530275568693212#>)

Lecture 11: *Group Selection and Hamilton's Rule*
Feb. 14

Lecture 12: *Evolution and kinship*
Feb. 16 ASSIGNMENT 2 HANDED OUT

Lecture 13: *Discriminative Parental Solicitude*
Feb. 28

Lecture 14: *Parent-offspring conflict and sibling rivalry*
Mar. 1

Lecture 15: *Reciprocal altruism and cooperation*
Mar. 6 ASSIGNMENT 2 DUE AT BEGINNING OF CLASS.

Life History and the Evolution of Different Social and Reproductive Strategies:

Readings: Kaplan, H. S. & Gangestad, S. W. (2005). Life history theory and evolutionary psychology. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 68-95). Hoboken, NJ: Wiley.

Todd, P. M. & Gigerenzer, G. (2007). Mechanisms of ecological rationality: heuristics and environments that make us smart. In R. I. M. Dunbar & L. Barrett (Eds.), *The Oxford handbook of evolutionary psychology* (pp. 197-210). Oxford: Oxford University Press.

Buss, D. M. (2009). How can evolutionary psychology successfully explain personality and individual differences? *Perspectives on Psychological Science*, 4, 359-366.

Lecture 16: *Life history theory*
Mar. 8

Lecture 17: *Adaptive decision making*
Mar. 13

Lecture 18: *Conditional strategies and frequency dependent selection*
Mar. 15

Lecture 19: *The evolution of personalities*
Mar. 20

Lecture 20: MIDTERM 2
Mar. 22

Special Topics: Readings listed according to topic

Lecture 21: *Beyond adaptation*

Mar. 27

READING: Buss et al. (1998). Adaptations, exaptations, and spandrels. *American Psychologist*, 53, 533-548.

Lecture 22: *Motivation, emotion, and mood disorders*

Mar. 29

READING: Neese, R. M. (2005). Evolutionary psychology and mental health. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 903-927). Hoboken, NJ: Wiley.

Lecture 23: *Evolutionary perspectives toward perception and spatial abilities*

April 3

Lecture 24: *Niche construction*

April 5

READING: Laland, K. N. (2007). Niche construction, human behavioural psychology and evolutionary psychology. In R. I. M. Dunbar & L. Barrett (Eds.), *The Oxford handbook of evolutionary psychology* (pp. 35-47). Oxford: Oxford University Press.

Lecture 25: *The evolution of male homosexuality*

April 10

Lecture 26: *The evolution of culture*

April 12

READING: Henrich, J. & McElreath, R. (2003). The evolution of cultural evolution. *Evolutionary Anthropology*, 12, 123-135.

Final Exam Tuesday April 17 in W731 from 3:05pm to 4:20pm (Regular Classroom and Class Time)