

PSYC*3100, Course Outline: Fall 2018

General Information

Course Title: PSYC3100 Evolutionary Psychology

Course Description: Evolutionary Psychology makes use of the principles of adaptation and selection to generate and test hypotheses about behaviour and the function of psychological mechanisms. In this way, we can predict the design features of the mind: the decision rules that are the products of millions of years of reproductive competition among alternative phenotypes. Evolutionary theory applies to all facets of behaviour. Hence, we will cover in this course a wide variety of topics, including: natural selection; cooperation; kinship, mating; parenting; conflict; individuality; and culture.

Credit Weight: 0.5 credits

Academic Department (or campus): Psychology

Semester Offering: Fall 2018

Class Schedule and Location: Tuesdays & Thursdays 2:30-3:50, Rozanski Hall 103

Instructor Information

Instructor Name: Pat Barclay

Instructor Email: barclayp@uoguelph.ca

Office location and drop-in office hours: Mack 3009, Wed 10-11, Thurs 1-2, + other times available by appointment

GTA Information

GTA Name: Laura Frielingsdorf, Evan Mitton, Irene Zhang, Jesse Windsor

GTA Email: lfrielin@uoguelph.ca, emitton@uoguelph.ca, izhang@uoguelph.ca, jesse_windsor5@hotmail.com

GTA office location and office hours: By appointment

Course Content

Specific Learning Outcomes:

- Critical & Creative Thinking: Depth & Breadth of Understanding (Reinforce)
- Critical & Creative Thinking: Inquiry & Analysis (Reinforce)
- Critical & Creative Thinking: Creativity (Reinforce)
- Literacy: Information Literacy (Reinforce)

- Global Understanding: Global & Cultural Understanding (Reinforce)
- Communication: Written Communication (Introduce)
- Communication: Reading Comprehension (Master)
- Professional & Ethical Behaviour: Personal Organization/ Time Management (Introduce)

These objectives will be accomplished by helping you to:

- Understand evolutionary theory as it relates to behaviour
- Integrate existing findings from psychology with their evolved functions and evolutionary biological underpinnings
- Apply evolutionary theory to everyday life
- Comprehend primary & secondary scientific literature about the evolution of behaviour
- Understand both the diversity and universality of human behaviour across the globe, especially as it compares to non-human behaviour
- Understand the importance of good theory and use empirical findings to support theory
- Generate novel predictions about human behaviour based on evolutionary principles
- Explain all of the above in written format on evaluations

Lecture Content:

This schedule is tentative and is subject to change (but quiz dates will NOT change.) I have listed the required readings for each class (see list of readings under “Other Resources”).

Th. Sept 6th Introduction & How to Do Well

Tu. Sept 11th Evolution & Natural Selection (Gregory, 2009)

Th. Sept 13th Genes & Development (Pinker, 2004)

Tu. Sept 18th Levels of Analysis (Holekamp & Sherman, 1989)

Th. Sept 20th Adaptations Part 1 (Cosmides & Tooby, 1997; Haselton & Nettle, 2006)

Tu. Sept 25th Adaptations Part 2 + Kinship (Barclay, 2013; Gaulin & McBurney, 2004; *or* Cartwright, 2000)

Th. Sept 27th Quiz 1 + Kinship (continued) (same readings as above)

Tu. Oct 2nd Kin Recognition (DeBruine et al., 2008; Lieberman et al) [Optional: Krupp et al]

Th. Oct 4th [Non-Kin Cooperation 1](http://ncase.me/trust/) (website: <http://ncase.me/trust/>; Barclay & Van Vugt, 2015)
[Optional readings: Dawkins Ch 10 & 12; Ridley Ch 2-4; West et al 2006; Crespi 2006]

Tu. Oct 9th: FALL BREAK, NO CLASS

Th. Oct 11th Quiz 2 + Non-Kin Cooperation 2 (Barclay 2010 “book” Ch. 4 & Ch. 6)
[Optional readings: Ridley Ch 5-6]

Tu. Oct 16th Non-Kin Cooperation 3 (Stevens & Hauser, 2004) [Optional reading: Ridley Ch 7]

Th. Oct 18th Mating 1 – The Basics (Buss, 1994) [alternative: Buss & Schmitt, 1993]
[Optional reading: Salmon & Symons, 2001]

Tu. Oct 23rd Mating 2 – Attractiveness (Miller & Todd, 1998; Sugiyama, 2005)
[Optional: Salmon & Symons, 2001; Miller, 2000 Ch. 8]

Th. Oct 25th Quiz 3 + Mating 3 – Mating Differences (Puts et al 2007; BBC 2015)

Tu. Oct 30th Mating 4 – Types of Marriages (Marlowe, 2003)

Th. Nov 1st Parenting 1 – Human Families (Gaulin & McBurney Ch. 13)
[Optional: Homicide Ch 3-4 (for all parenting lectures)]

Tu. Nov 6th Parenting 2 – Discriminative Care (Daly & Wilson “Truth About Cinderella”)

Th. Nov 8th Quiz 4 + Parenting 3 – Family Conflict (same readings as above)

Tu. Nov 13th Video: The New Chimpanzees (required “reading”: Sapolsky 2009 video)

Note: this video is National Geographic, 1996 and is on reserve at the library

There are different videos online with same name – make sure to watch the right video!

Th. Nov 15th Personality & Individual Differences (Buss & Greiling, 1999)

Tu. Nov 20th Within-Sex Conflict (Daly & Wilson, 1999 “Machismo” article; Chagnon, 1988)

[Optional: Homicide Ch 6-8; Ridley Ch 8-9]

Th. Nov 22nd Quiz 5 + Between-Sex Conflict (Wilson & Daly, 1992) [Optional: Homicide Ch. 9]

Tu. Nov 27th Culture & Cultural Differences (Dawkins Ch. 11; Dennett TED talk)

Th. Nov 29th Wrap-up & review

Labs: None

Seminars: None

Course Assignments and Tests:

Name	Date	Location	Percent
Quiz 1	Thurs. Sept. 27 th 2:30PM	In class	Best 4 of 5 quizzes: worth a combined 40% of final grade
Quiz 2	Thurs. Oct. 11 th 2:30PM	In class	Best 4 of 5 quizzes: worth a combined 40% of final grade
Quiz 3	Thurs. Oct 25 th 2:30M	In class	Best 4 of 5 quizzes: worth a combined 40% of final grade
Quiz 4	Thurs. Nov. 8 th 2:30PM	In class	Best 4 of 5 quizzes: worth a combined 40% of final grade
Quiz 5	Thurs. Nov. 22 nd 2:30PM	In class	Best 4 of 5 quizzes: worth a combined 40% of final grade
Final Exam	Tues Dec 4 th 7PM-9PM	TBA	60%

Additional Notes: For the quizzes, you can drop your lowest of the five, i.e. I will take your best four out of five, and those four will be worth 10% each (i.e. quizzes worth a total of 40% of final grade).

Please note that the 40th class day (last day to drop without penalty) is Friday Nov 2 2018

Final examination date and time: tentatively Tuesday Dec 4th 7PM-9PM (location TBA)

Final exam weighting: 60%. *The final exam will be cumulative.* Information from both the readings and the class lectures are considered "fair game" for inclusion on the exam. Come to class and participate: you'll be better prepared.

Course Resources

Required Texts:

There is no textbook. Instead, you will read book chapters and journal articles, including reviews and primary literature. See list below. Pdfs (or links) are posted on CourseLink. In addition, the following short book is required:

Daly, M., & Wilson, M. (1999). *The Truth About Cinderella: A Darwinian View of Parental Love*. New Haven, CT: Yale University Press.

Recommended Texts:

The following book is strongly recommended, especially if you have no biology background. It will help you to fully appreciate the theoretical perspective, and is best read sooner rather than later. It will be on reserve at the library, or you can choose to purchase it.

Dawkins, R. (1976/2006). *The Selfish Gene*. Oxford University Press.

The following is also highly recommended to help you understand how nature and nurture interact and *must* interact to produce a phenotype. It helps to show why “nature *versus* nurture” is a false dichotomy, and how “nature *via* nurture” is a better description:

Ridley, M. (2003). *The Agile Gene*. Toronto: HarperCollins.

The following readings supplement the required material by going further into detail on some topics. The first two are popular books intended for an intelligent lay audience, and the third is a classic in evolutionary approaches to human behaviour. These readings are encouraged because they can help increase your interest & understanding, but they are entirely optional. I will indicate which chapters roughly correspond to which lectures.

The three optional supplementary readings are:

1. Ridley, M. (1996). *The Origins of Virtue: Human Instincts and the Evolution of Cooperation*. London: Penguin.
2. Salmon, C., & Symons, D. (2001). *Warrior Lovers: Erotic Fiction, Evolution, and Female Sexuality*. New Haven, CT: Yale University Press
3. Daly, M., & Wilson, M. (1988). *Homicide*. Hawthorne, NY: Aldine de Gruyter.

Lab Manual: Not applicable

Other Resources:

The following required readings are available on the CourseLink page for this course. The schedule of topics (above) indicates what reading goes with what topic:

- 1) Gregory, T. R. (2009). Understanding natural selection: essential concepts and common misunderstandings. *Evolution: Education and Outreach*, 2, 156-175.
- 2) Pinker, S. (2004). Why nature & nurture won't go away. *Daedalus*, Fall 2004, 5-17.
- 3) Holekamp, K. E., & Sherman, P. W. (1989). Why male ground squirrels disperse: a multilevel analysis explains why only males leave home. *American Scientist*, 77(3), 232-239.

- 4) Cosmides, L., & Tooby, J. (1997). Evolutionary Psychology: A Primer. Available from the Center for Evolutionary Psychology (UC Santa Barbara) at this link: [Ev Psych Primer](http://www.psych.ucsb.edu/research/cep/primer.html) (If you printed the syllabus, address is: <http://www.psych.ucsb.edu/research/cep/primer.html>)
- 5) Haselton, M. G., & Nettle, D. (2006). The paranoid optimist: an integrative model of cognitive biases. *Personality and Social Psychology Review*, 10(1), 47-66.
- 6) Barclay, P. (2013). Pathways to Abnormal Revenge and Forgiveness. *Behavioral and Brain Sciences*, 36(1), 17-18.
- 7) Gaulin, S.J.C., & McBurney, D.H. (2004). Pp. 290-296 of *Evolutionary Psychology 2nd Edition*. Upper Saddle River, NJ: Prentice Hall.
- 8) Cartwright, J. (2000). Pp. 74-82 of *Evolution and Human Behavior*. MIT Press.
- 9) DeBruine, L.M., Jones, B.C., Little, A.C., & Perrett, D.I. (2008). Social perception of facial resemblance in humans. *Archives in Sexual Behavior*, 37, 64-77.
- 10) Lieberman et al. (2007). The architecture of human kin detection. *Nature*, 445 (Feb 15), 727-31.
- 11) Website: <http://ncase.me/trust/> Play around with the parameters in the simulation
- 12) Barclay, P., & Van Vugt, M. (2015). The evolutionary psychology of human prosociality: adaptations, mistakes, and byproducts. In D. Schroeder & W. Graziano (Eds.) *Oxford Handbook of Prosocial Behavior*, pp. 37-60. Oxford, UK: Oxford University Press.
- 13) Barclay, P. (2010). *Reputation and the Evolution of Generous Behaviour*. Hauppauge, NY: Nova Science. **(Note: you're only required to read Ch. 4, and the parts in Chapter 6 on costly signalling theory.** The whole "book" is ~50p of text, so you may want to read other sections too.)
- 14) Stevens, J., & Hauser, M. (2004) Why be nice? Psychological constraints on the evolution of cooperation. *Trends in Cognitive Science*, 8(2), 60-65.
- 15) Buss, D.M. (1994). The strategies of human mating. *Scientific American*, 82, 238-249.
- 16) Miller, G., & Todd, P.M. (1998). Mate choice turns cognitive. *Trends in Cognitive Sciences*, 2(5), 190-198.
- 17) Sugiyama, L. (2005). Physical attractiveness in adaptationist perspective. In Buss (Ed.) *Handbook of Evolutionary Psychology*, pp. 292-343. Hoboken, NJ: Wiley.
- 18) Puts, D. A., Jordan, C. L., & Breedlove, M. (2007). O brother where art thou? The fraternal birth-order effect on male sexual orientation. *PNAS*, 103(28), 10531-10532.
- 19) BBC (Melissa Hogenboom), 2015. Are there any homosexual animals?
- 20) Marlowe, F. (2003). The mating system of foragers in the Standard Cross-Cultural Sample. *Cross-Cultural Research*, 37(3), 282-306.
- 21) Gaulin, S. J. C., & McBurney, D. (2001) Ch. 13 "Families and Development" of *Evolutionary Psychology*, pp. 290-322. Don Mills, ON: Prentice Hall.
- 22) Read book: Daly, M., & Wilson, M. (1999). *The Truth About Cinderella: A Darwinian View of Parental Love*. New Haven, CT: Yale University Press. (available at bookstore or reserve)
- 23) Sapolsky, R. (2009). TED talk on the Uniqueness of Humans. Video available at this link: [Robert Sapolsky TED talk](http://www.ted.com/talks/lang/eng/robert_sapolsky_the_uniqueness_of_humans.html) (If you printed the syllabus, this is the address spelled out: http://www.ted.com/talks/lang/eng/robert_sapolsky_the_uniqueness_of_humans.html)
- 24) Buss, D.M., & Greiling, H. (1999). Adaptive individual differences. *Journal of Personality*, 67, 209-243.

- 25) Daly, M., & Wilson, M. (1999). Darwinism and the roots of machismo. *Scientific American Presents*, 10(2), 8-14.
- 26) Chagnon, N. (1988). Life histories, blood revenge, and warfare in a tribal population. *Science*, 239(4383), 985-992.
- 27) Wilson, M., & Daly, M. (1992). The man who mistook his wife for a chattel. In Barkow et al. (Eds.) *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*, pp. 289-322. New York: Oxford University Press.
- 28) Dawkins, R. (1976/2006) *The Selfish Gene*, Ch. 11 (Memes: The New Replicators)
- 29) Dennett, D. (2002). TED talk on dangerous memes (15:30 min). Available online at this link: [Dan Dennett on Dangerous Memes](http://www.ted.com/talks/dan_dennett_on_dangerous_memes.html) (If you printed the syllabus, this is the address: http://www.ted.com/talks/dan_dennett_on_dangerous_memes.html)

Optional “readings”

- o1. Krupp, D. B., DeBruine, L. M., & Jones, B. C. (in press). Cooperation and conflict in the light of kin recognition systems. Pp. 345-362
- o2. Dawkins, R. (1986). *Nice Guys Finish First*. BBC Horizon television series (46 min). Find it on YouTube here: [Dawkins video: Nice Guys Finish First](https://www.youtube.com/watch?v=l71mjZefg8g) (For printed syllabus, here’s the address spelled out: <https://www.youtube.com/watch?v=l71mjZefg8g>)
- o3. West, S.A. et al. (2006). Cooperation and the scale of competition in humans. *Current Biology*, 16, 1103-1106.
- o4. Crespi, B. (2006). Cooperation: close friends and common enemies. *Current Biology*, 16, R414-416.
- o5. Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: an evolutionary perspective on human mating. *Psychological Review*, 100(2), 204-232.
- o6. Miller, G. (2000) *The Mating Mind*, Ch. 8 (Arts of Seduction).

Field Trips: None

Additional Costs: None

Course Policies

Grading Policies

There will be no make-up quizzes. If you miss a quiz without a valid excuse, then the missed quiz will simply become your “dropped” quiz (because you get to drop your lowest of the five quizzes). If you miss a quiz because of a planned event, illness, or compassionate reasons, please e-mail me as soon as possible (before the quiz if planned, within two days of the quiz if ill or compassionate), tell me the reason, and I will take that into account. If you miss more than one quiz, you must bring acceptable documentation for at least one of them.

Re-grades:

We are happy to offer re-grades for any quiz or final exam if you feel that you have been misinterpreted or graded unfairly. After all, graders are human too and can make errors. All requests for a re-grade MUST be submitted in writing along with a rationale justifying why you

deserve a higher grade (except for addition errors). We will not entertain verbal requests, only written requests accompanied by the original test. This takes the emotion out of the process and makes it so that you are evaluated based on what is written on the paper. The instructor (Pat Barclay) will re-grade the *entire* quiz (or final exam, if applicable), not just one particular question, and the new *total* grade will stand whether it is higher or lower than the original grade for the quiz/exam. **This means that your quiz grade could go up or down after a regrade attempt, depending on whether the instructor's assessment of the whole quiz is more or less favourable than the TA's assessment.** As such, I would advise against using this option to “dig” for extra points unless you legitimately feel that you have been misinterpreted or unjustly graded. I am open to the possibility of a mistake having been made - we are all human - but we must all accept the possibility that the net sum of mistakes could have worked against you or in your favour. If you **do** legitimately feel that you have been misinterpreted or that we missed your point or graded it too harshly, then by all means submit your rationale for a re-grade. Addition errors do not require a written justification... simply point those out to us.

Course Policy on Group Work:

All quizzes and final exams must be written individually. Studying together is strongly encouraged: it's a good idea to practice explaining things to other students and getting them to criticize your explanations. Generate applications, predictions, and new studies together.

Course Policy regarding use of electronic devices and recording of lectures:

Because we want students to feel free to ask questions and voice their opinions, electronic recording of classes is expressly forbidden without written consent of the instructor (e.g., requests from Student Accessibility Services). Such recordings, where allowed, are permitted for the sole use of the authorized student **only** and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

University Policies

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:

[Academic Consideration, Appeals and Petitions](#)

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

[Academic Misconduct Policy](#)

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Accessibility Services (SAS) as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email accessibility@uoguelph.ca or see the website: [Student Accessibility Services Website](#)

Course Evaluation Information

Please refer to the [Course and Instructor Evaluation Website](#) .

Drop date

The last date to drop one-semester courses, without academic penalty, is Friday Nov 2, 2018. For regulations and procedures for Dropping Courses, see the Academic Calendar: [Current Undergraduate Calendar](#)