

PSYCHOLOGY 3850 (A)
PRIMATE SOCIAL EVOLUTION AND COGNITION

Spring 2010



Course description

The discipline of psychology owes its existence to the fact that humans are cognitively both complex and opaque. This suggests that an improved understanding of ourselves will not be gained by any single route and will require, instead, the integration of a variety of approaches. One such approach is to ask how human capacities have emerged or come to be. The attempt to answer this question underpins both developmental and evolutionary approaches to human psychology. In this course, we pick up on the latter to see what understanding can be gained from asking about the selection pressures that have imposed themselves at various points in our evolutionary past. To do so, we will begin by going back to Darwin, both to refresh our understanding of natural selection and its implications and to understand how to undertake such an 'archeology of the mind'. At the heart of this is the question: What has it meant to have had a primate heritage? This is the central issue that we will consider. Consequently, we go on to describe the characteristics of primates and to review what is known of human evolution. We then describe the evolution of primate brains and assess the relationship between these brains and cognition. From here we address the reasons for brain expansion in the primates and then conclude by asking what it means to be a human primate.

Instructor: *Peter Henzi*

Room: C878

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Lecture Times: Monday, Wednesday, Friday - 11:00-11:50

Venue: PE264

Teaching Assistant: Petra McDougall (petra.mcdougall@uleth.ca)

Textbook: There is NO textbook for the course. Where I think that you should have a more formal engagement with the primary literature, I will place appropriate readings on WebCT. I will also provide PDFs of the lecture material as we go along.

Course Evaluation: There will be two midterm tests (25% each) and one final exam (50%) based on material from lectures and the course readings. The mid-terms, depending on the route you take, will be either multiple-choice questions or essays. The final exam will be both cumulative and – once again – offer you either multiple-choice questions or an essay. Note that the MCQ midterms and exam will be run on WebCT. We will set dates for the two midterms in class. The final exam will provisionally take place in the week of the 26th April.

Note: Those wishing to write essays will have to agree to do weekly two-page essays, each of which will deal with the material covered that week. This will probably be painful for everyone, including me, but there is a need to get to know how to write an academic, problem-oriented essay. In return, essay writers will also be allowed to do the MCQs. They will then be given the better of the two marks.

Grading: Final letter grades for the course will be determined using the following scheme:

A+	90-100	C+	67-69
A	83-89	C	63-66
A-	80-82	C-	60-63
B+	77-79	D+	56-59
B	73-76	D	50-55
B-	70-72	F	<50

Syllabus

Focus of a Darwinian psychology: Darwin's Conjecture.
Evolution, natural selection and behaviour.
Speciation and the comparative method
Primate evolution and characteristics
Hominid evolution and characteristics
Brain evolution and structure in primates
Brains and cognition – what brains do; costs and benefits
Brains, development and the acquisition of knowledge
Conceptualization and characteristics of primate cognition
Primate sociality I: Causes and consequences
Primate sociality 2: Tactical solutions to local problems
Hominid sociality and cognitive extensions
Becoming human: language and culture
The Social Brain (and Darwin's conjecture revisited)