PSYC 3370a
Animal and Human Minds
Fall 2012
Monday, Wednesday and Friday
11.00-11.50 in AH118

Course description:

This course will consider the evolution of cognition and behaviour from an 'embodied, embedded, ecological' perspective. Drawing on the fields of animal behaviour, comparative psychology, neuroscience, cognitive science, robotics, artificial life and developmental psychology, we will consider the following four interlinked themes:

1. The issues of animism and anthropomorphism, where we will explore the psychological attributes that cause us to (a) attribute life to inanimate objects and (b) attribute human motivations and feelings to other animals. What is the basis for such attributions? Are they justified on evolutionary grounds?

2. The evolution of brains: what are they good for? What is the real job that the brain does?

3. The psychological, physiological and bodily mechanisms that can explain why animals do the things they do. This will be used to illustrate that just because an animal looks as if it's thinking about the world in a human-like way, this need not be the case, nor does it make animals any less interesting as a consequence.

4. An examination of the underlying philosophies that influence how we think about cognitive processes. In particular, the contrast between a Cartesian stance on the mind and cognitive processes and a more Pragmatic "Embodied and Extended" stance. Or, more simply, why brains aren't the whole story, and why cognitive systems aren't all in the head.

5. Whether we humans also 'anthropomorphize' our own behaviour, and can be mistaken about our minds, and what we use them for.

Instructor: Louise Barrett, D858 (317-5039), louise.barrett@uleth.ca.

Office Hours: Monday & Wednesday 2-4 pm, or by appointment.

Teaching Assistant: Miranda Lucas, B830, miranda.lucas@uleth.ca

Textbook: The text we will be using is a book that I have written specifically to accompany the course (Barrett, L. (2011) *Beyond the Brain: How Body and Environment Shape Animal and Human Minds*. Princeton University Press, New Jersey). You can pick this up at the University book shop, and it is also available on-line as an e-book. Additional readings from the primary literature may also be assigned periodically; these will form the basis of class discussion/lectures on Friday. When such papers are assigned, you will be expected to read the paper before class and to arrive prepared (that means having read said paper...).

Coursework and Assessment:

The course will be assessed by two written assignments (worth 25% and 35%) and one exam (40%).

A NOTE ON FORMATTING:

I **DO NOT** expect your papers to conform to any specific format (e.g., APA). I ask only that they are printed double-spaced in a sensible, legible font; that your name is clearly shown on the front page; that any sources and references used are fully referenced at the end of your essay, using the following format:

Other, A.N. (date) Title of article. Journal Title Vol. No: Page numbers.

Other, A.N. (date) Title of book. Publisher, Publisher Location.

Other, A.N. (date) Title of book chapter. (Title of book, Editors), Publisher, Location.

Please use in-text citations in your essay (Author, Date) and note that Wikipedia and most websites do not constitute suitable sources for assignments of this nature.

Assignment #1: Reading closely, critically and constructively
Critique of research article (1000 words, ~ 3 pages) (25%):

The aim here is to get you to work within tight constraints and put together a cogent but concise, critical yet constructive assessment of a paper from the primary literature. During the first few weeks of the course, we will discuss several possible approaches to the study of animal psychology, and examine a number of papers to assess their strengths and weaknesses. Your first task will be to perform a similar analysis on EITHER an article of your own choosing (please check with me first so that I can assess whether the paper is appropriate) OR using one of several papers selected for the purpose that I will post on Moodle. In this assignment you will attempt the following (a) identify the approach used (which will be covered in class) (b) assess the strengths and weaknesses of the study's design and analysis with respect to the question addressed and (c) assess whether the conclusions are well justified or whether alternative interpretations are possible and, if so, what these might be. By sharpening the skills involved in reading published articles closely, identifying their assumptions (both explicit and hidden), spotting any potential flaws in logic and understanding what constitutes good science, you will be in a strong position to complete the second assignment.

As the explicit aim here is to help you develop your skills at producing clear, well thought out arguments, you will have the chance to re-write your assignment, using the comments I provide, in order to improve them. Any re-written work will be remarked and if you do better, you will be awarded this as your final grade for this component. If you end up doing worse, you will receive your best mark as your final grade for this component. Re-writing is therefore a no-cost exercise for you: you can only do better, you cannot do worse.

In order to ensure this remains manageable, given class size (and more importantly, the fact, the time-management skills of the average undergraduate are, in my experience, utterly woeful), we will run this as follows:
1. You will hand in a draft of your report on **FRIDAY OCTOBER 5th**. This will be marked and receive a grade. If you are happy with this grade, then you do not need to rewrite the report and the mark will be entered as your mark for this component of the course. You can, of course, hand your report in earlier if you wish, and give yourself more re-writing time if needed.
2. If you are not happy with your mark, and wish to improve, then you can re-write your report, and hand it back to me by **MONDAY OCTOBER 22nd**.

You can, of course, come and speak to me at any time about any aspect of your assignment either during office, by making an appointment, or popping by my office (if you catch me in there, and I'm not busy with something/someone else, you can talk to me.)

IMPORTANT: you should note that merely 'cosmetic' revisions (i.e., improvements to spelling and grammar alone, with no attempt to revise the content of the essay, are unlikely to receive a higher mark).

Assignment #2: Exploring your own interests
a term-paper (3500 words, ~10 pages) (35%):

This paper will be on a subject of your choice, provided that it relates in some way to course content.You are not limited to writing a paper if you have another kind of project that you would like to pursue. In 2008, two people performed a study of self-organizing behaviour in WalMart; in 2009, someone built a robot, replicating one of those we'll be discussing in the course; in 2010, someone made a podcast incoporating sound and video images to illustrate the contrast between conventional and ecological theories of perception. So, use your imagination and feel free to come up with your own suggestions. The only thing to bear in mind is that doing something different is **NOT** the easy option: if you're going to do it, you'll have to do it well. Probably better than if you wrote an essay. Don't assume that mere novelty alone is enough to get you a good grade. Also, bear in mind that writing well is a valuable skill that will benefit you no matter what you end up doing in life, and the more practice you have, the better you'll be.
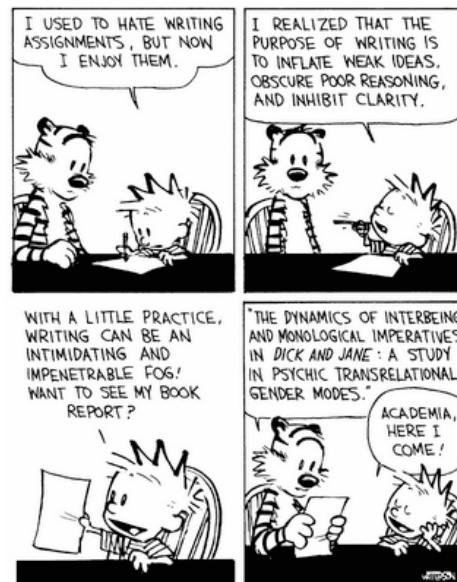
The aim of this assignment is that you should research and take a clear position on a certain topic area linked to the course (and to your own interests), and to write this up in an appropriate fashion, using the best possible evidence to support your points, and presenting a convincing case for your position (so, you don't have to agree with me, and I don't have to agree with you, but you must make a good argument).

As with Assignment #1, you will have the option to rewrite the assignment. Here, the comments provided will be designed to help you improve by offering suggestions for further avenues to explore, where you need to improve the logic of your argument, and where your evidence needs to be more convincing or appropriate. You will need to follow-up on these suggestions seriously in order to improve.

We will organize this as follows:

1. You will hand in a draft of your report on **FRIDAY NOVEMBER 9th**. This will be marked and receive a grade. If you are happy with this grade, then you do not need to rewrite the report and the mark will be entered as your mark for this component of the course. You can, of course, hand your report in earlier if you wish, and give yourself more re-writing time if needed (this is a hint...).

2. f you are not happy with your mark, and wish to improve, then you can re-write your report, and hand it back to me by **FRIDAY NOVEMBER 30th.** Again, merely cosmetic revisions to improve grammar, spelling or overall presentation are unlikely to receive a higher mark.

As with assignment #1, feel free to discuss any aspect of your essay with me, or ask for help at any point.

Final Exam, which will cover all the course material (40%):

You will have a choice of answering **EITHER** a series of multiple-choice questions **OR** one from a choice of five essay-based questions .

Grading:

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

A+	91-100	C+	67-69
A	85-90	C	63-66
A-	81-84	C-	60-62
B+	77-80	D+	56-59
B	73-76	D	50-55
B-	70-72	F	<50

Basis of Grading for Assignments 1& 2:

To get an A-grade your assignment should have:
• a clear topic and clear organization
• provide adequate support and reasoning for its claims
• be interesting and meaningful
• show logical transitions within and between paragraphs that contribute to a fluent style of writing.
• make a cogent and logical argument
• have few, if any, mechanical, grammatical, spelling, or diction errors.
• demonstrate a command of language in a clear and direct manner.
• uses sources and examples intelligently, correctly, and fairly.

A B-grade assignment shares most characteristics of the above but:
• may have some minor lapses in organization and the development of its argument.
• may lack appropriate or adequate evidence for some of its claims.
• may contain some sentence structures that are awkward or ineffective.
• may have minor mechanical, grammatical, or diction problems.
• may be less distinguished in its use of language.
• may make some good points but not really provide any significant insights.

C-grade assignments will show the following, compared to a B-grade as-signment :
• may have a weaker thesis and less effective development of ideas and examples.
• may contain some lapses in organization.
• may contain shifts in voice that make the essay harder to follow.
• may have poor or awkward transitions within or between paragraphs.
• may have less varied sentence structures that tend toward monotony.
• may have more mechanical, grammatical, and diction problems.
• is likely to be less distinguished in its handling of the topic.
• may use sources in ways that are inappropriate or awkward.

D-grade or Failed assignments are seriously flawed. They are likely to:
• have no clear thesis or central topic.
• display random organization.
• lack adequate support or specific development.
• include irrelevant details.
• fail to fulfill the assignment or be unfairly brief.
• contain major and repeated errors in diction, syntax, grammar, punctuation, or spelling.
• plagiarize.

Of course, if you decide on a different kind of project for assignment #2, many of the above will not apply. In such cases, I will draw up a list of expectations that are appropri-ate to your proposed assignment.

Syllabus:

Week beginning	Topic	Reading
3rd Sept	Intro to the Course	
10th Sept	Removing Ourselves From the Picture	Ch. 1 Beyond the Brain
17 Sept	Studying Animal Minds	Assigned readings & Notes on webCT
24th Sept	The Anthropomorphic Animal	Ch. 2 Beyond the Brain
1st Oct	Small Brains, Smart Behaviour	Ch. 3 Beyond the Brain
8th Oct	The Implausible Nature of *Portia*	Ch. 4 Beyond the Brain
15th Oct	When Do You Need a Big Brain?	Ch. 5 Beyond the Brain
22nd Oct	The Ecology of Psychology	Ch. 6 Beyond the Brain
29th Oct	Metaphorical Mind-fields	Ch. 7 Beyond the Brain
5th Nov	Stuff will happen here....	Not sure what yet....
12th Nov	There is No Such Thing as a Naked Brain	Ch. 8 Beyond the Brain
19th Nov	World in Action	Ch. 9 Beyond the Brain
26th Nov	Babies and Bodies	Ch. 10 Beyond the Brain
3rd Dec	Wider than the Sky	Ch. 11 Beyond the Brain