Psychology 2700 Introduction to Animal Behaviour Spring 2009

Lecture Time: Tuesday/Thursday 1:40-2:55 p.m.

Location: PE275

Instructor: Shannon M. Digweed C883 329-2436 shannon.digweed@uleth.ca **Teaching Assistant:** April Takahashi april.tytula2@uleth.ca

**Pre-requisites:** Psyc 1000 (Introduction to Psychology) or Bio 1020 (Diversity of Life). **Textbook:** Dugatkin 2009. *Principles of Animal Behaviour, Second Edition*. W.W. Norton & Company, New York.

#### **Course Objectives and Description:**

The introductory course in Animal Behaviour will provide students with both a biological, via concepts in natural selection and adaptation, and psychological, via concepts in learning and cultural transmission, approaches to the general questions of "how and why animals behave as they do?"

Essential to the students understanding of animal behaviour is the biological process of natural selection. The process of natural selection will be the ongoing theme throughout the lectures. Learning and the cultural transmission of behaviours will be integrated into the biological theme with a variety of examples from the text readings and other sources.

This course in Animal Behaviour makes heavy use of the hypothetico-deductive methods of modern scientific study. In order to teach the scientific method, students need to be presented with practical examples. To that end, this course focuses on active learning and the use of topical examples from familiar phenomena. The use of familiar examples is especially important in encouraging students to take phenomena they observe, apply the hypothetico-deductive method and create testable hypotheses, thereby extending their learning experience beyond the classroom experience.

#### **Course Requirements:**

Mid-term #1	30%	February (week of the 9 <sup>th</sup> )
Mid-term #2	30%	March (week of the 16 <sup>th</sup> )
Final Exam	40%	Registrar scheduled (April 2009)
Potential Credit 2%		Students can receive a MAXIMUM of 2% credit for participation in
		experimental trials in the Psychology Department.*

- ···			
A+	>95	C+	69-72
А	90-95	С	64-68
A-	85-89	C-	60-63
B+	81-84	D+	55-59
В	77-80	D	50-54
B-	73-76	F	<50

Grading: Final letter grades for the course are determined as follows:

# **Outline of Course Topics:**

### A. Processes That Shape Animal Behaviour:

- 1. The Biological Processes
  - Proximate vs. Ultimate Explanations for Behaviour: CH. 1&3
  - Natural Selection and Heritability: CH. 2
- 2. The Psychological Processes
  - Learning and Cultural Transmission: CH. 4-5

### **B.** How Animals Survive:

- 1. Foraging and Feeding
  - Diet Choice, Optimal Foraging, Grouping Behaviour: CH. 10
- 2. Habitat Selection
  - Habitat Choice, Territoriality, Migration CH. 13
- 3. Predators and Prey
  - Predator and Prey Evolutionary Race: CH. 11

# C. Passing On Genes:

- 1. Mating Systems and Sexual Selection
  - Mating Systems and Reproductive Physiology: CH. 7
  - Mating Strategies and Choices: CH. 6
- 2. Kinship and Parenting
  - Kinship Theory, Kin Recognition, Parent Offspring Conflicts: CH. 8

# **D.** Interacting With Others:

- 1. Cooperation
  - Types of Cooperation, Coalitions: CH. 9
- 2. Communication
  - Honest Signals and Information: CH. 12
  - Signaler and Perceiver Perspectives: CH. 12
- 3. Aggression
  - Why Fight, Models of Aggression: CH. 14
- 4. Behavioural Syndromes
  - Personalities in Animals (Examples and Relevance): CH. 17

\*Students will have the opportunity to participate in experimental trials conducted within the Department of Psychology. These trials will be posted in the announcement section of the WebCt page for Psych 2700. Students may only obtain a MAXIMUM of 2% credit in this course.