

**PSYC 2700 A– Evolution and Behaviour  
Summer- 2018**

Instructor: Dr. Chinthaka (Taka) Kaluthota

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Department: Psychology

Office: C885, Lab: B836

Lectures: Monday, Wednesday 09.00-11.50am (May 7-June 18)

Room: TH 204

Office hours: Wednesday 1.00-3.00pm (C885)

Recommended Textbook: Dugatkin, L.A. 2014. Principles of Animal Behaviour, 3<sup>rd</sup> edition.

**Course description**

This course provides an introduction to a scientific framework to investigate and understand the diversity of behaviour in animals and humans. We will examine a core set of natural processes that can influence behaviour. We will then learn, how these processes shape a range of functionally organised behaviours that solve basic life problems such as finding food, avoiding predators, attracting mates, raising young, and living in social groups.

**Moodle**

Lecture notes, readings, exams and other course materials will be posted on Moodle.

**Coursework**

Four exams (total 100%) and three quizzes (Bonus points) based on material from lectures.

**Exams**

Exam 1 (25%)- approx. May 18<sup>th</sup> -19<sup>th</sup>

Exam 2 (25%)- approx. Jun 1<sup>st</sup> -2<sup>nd</sup>

Exam 3 (25%)- approx. Jun 8<sup>th</sup>-9<sup>th</sup>

Exam 4 (25%)– approx. Jun 19<sup>th</sup>-20<sup>th</sup>

**Grading**

Final letter grades will be determined using the following scheme.

A+	>95	C+	67-69.9
A	90-94.9	C	63-66.9
A-	85-89.9	C-	60-62.9
B+	80-84.9	D+	55-59.9
B	75-79.9	D	50-54.9
B-	70-74.9	F	<50

### **Extra Credits for Research Participation:**

This course provides students with an opportunity to get involved as a participant in ongoing research projects. If you volunteer to be a participant, each project usually requires about one hour of your time. In recognition of the value of your data, and in recognition that you are learning something about the discipline of scientific psychology, beyond that of the typical classroom environment, an extra credit of 1 to 2% for each study (variable) in which you participate will be added to your final course percentage. MAXIMUM EXTRA CREDIT = 2%. These extra credits are added after all grade cutoffs have been established for course work, such that students who choose not to participate are not disadvantaged.

### Directions for Participation:

You will receive an email to your U of L account with your Login name and password. Please go to <http://psychleth.sona-systems.com> and sign in as soon as you receive notification to do so. There will be NO transfer of credits between courses. If you are registered in another course that offers credits, a second email will be sent to you with a different email and password. Sign up in the course to which you want your credits to be assigned. Further studies and timeslots will be added throughout the semester, please keep checking, but remember that participation is on a first-come basis. Note that not all students may not be able to achieve the maximum credit. Questions regarding research participation should be directed to Leanne at [wehlage@uleth.ca](mailto:wehlage@uleth.ca).

Dates: May 14<sup>th</sup> – June 18<sup>th</sup>

## Course outline

	<b>Processes that shape behaviour</b>
Class 1	Proximate and ultimate causes of behaviour and levels of analysis
Class 2	Natural selection and adaptation
Class 3	Learning and culture
<b>Exam 1</b>	
	<b>Ecological problems</b>
Class 4	Foraging 1: Plant-animal dynamics, diet choice, body size, energy and metabolism
Class 5	Foraging 2: optimal foraging, territoriality
Class 6	Predation, predator-prey dynamics
<b>Exam 2</b>	
	<b>Social problems</b>
Class 7	Cooperation, kinship, reciprocity
Class 8	Parental investment, competition among kin
Class 9	Communication - Signaller-receiver dynamics
<b>Exam 3</b>	
	<b>Reproduction problems</b>
Class 10	Sex, life history, mating systems
Class 11	Sexual selection and mate choice 1
Class 12	Sexual selection and mate choice 2
<b>Exam 4</b>	