ORIGINAL COURSE IMPLEMENTATION DATE:	September 2011
REVISED COURSE IMPLEMENTATION DATE:	January 2018
COURSE TO BE REVIEWED: (six years after UEC approval)	June 2023

Course outline form version: 09/15/14

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: BIO 390	**Number of Credits:** 4 Course credit policy (105)
Course Full Title: Animal Behaviour **Course Short Title (if title exceeds 30 characters):**	
Faculty: Faculty of Science	**Department (or program if no department):** Biology

Calendar Description:

An introduction to the relationship between the behaviour of animals and their survival and reproduction in natural environments. This course surveys the theory and principles used in ecological and evolutionary analyses of animal behaviour.

Note: Students with credit for BIO 420T cannot take this course for further credit.

Prerequisites (or NONE):	BIO 210.
Corequisites (if applicable, or NONE):	
Pre/corequisites (if applicable, or NONE):	

Equivalent Courses (cannot be taken for additional credit)

Former course code/number:

Cross-listed with:

Equivalent course(s): **BIO 420T**

Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.

Transfer Credit

Transfer credit already exists: ☐ Yes ☒ No

Transfer credit requested (OReg to submit to BCCAT):
☐ Yes ☒ No (if yes, fill in transfer credit form)

Resubmit revised outline for articulation: ☐ Yes ☒ No

To find out how this course transfers, see **bctransferguide.ca.**

Total Hours: 90

Typical structure of instructional hours:

Lecture hours	45
Seminars/tutorials/workshops	
Laboratory hours	45
Field experience hours	
Experiential (practicum, internship, etc.)	
Online learning activities	
Other contact hours:	
Total	**90**

Special Topics

Will the course be offered with different topics?
☐ Yes ☒ No

If yes, different lettered courses may be taken for credit:
☐ No ☐ Yes, repeat(s) ☐ Yes, no limit

Note: The specific topic will be recorded when offered.

Maximum enrolment (for information only): 24

Expected frequency of course offerings (every semester, annually, every other year, etc.): 2 of every 3 years

Department / Program Head or Director: Allan Arndt	**Date approved:**	February 2017
Faculty Council approval	**Date approved:**	March 3, 2017
Campus-Wide Consultation (CWC)	**Date of posting:**	n/a
Dean/Associate VP: Lucy Lee	**Date approved:**	March 3, 2017
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	June 16, 2017

Learning Outcomes

Upon successful completion of this course, students will be able to:

- explain current theoretical and empirical approaches to studying animal behavior
- identify the basic ecological and evolutionary processes that shape animal behavior
- evaluate animal behaviour at both proximate and ultimate levels of causation
- review and critically analyze primary literature in animal behavior
- describe behaviour objectively using operational definitions
- explain and utilize common animal behavior field observational methods
- use basic statistical analyses to analyze behavioural data
- utilize the scientific method to design and complete a field observational project
- communicate with an oral scientific research presentation and a written scientific research proposal

Prior Learning Assessment and Recognition (PLAR)

☒ Yes ☐ No, PLAR cannot be awarded for this course because

Typical Instructional Methods (guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion)

Lecture, demonstration, small group discussion, audio-visual presentation, field observation, laboratory exercises, electronic databases.

Grading system: Letter Grades: ☒ Credit/No Credit: ☐ Labs to be scheduled independent of lecture hours: Yes ☐ No ☐

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials (if more space is required, download Supplemental Texts and Resource Materials form)

	Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1.	Alcock	Animal Behavior: An Evolutionary Approach	☒	Sinauer	2013
2.			☐		

Typical Evaluation Methods and Weighting

Final exam:	30%	Assignments:	%	Midterm exam:	20%	Practicum:	%
Quizzes/tests:	%	Lab work:	10%	Field experience:	%	Shop work:	%
Research project & oral presentation:	15%	Written research proposal:	20%	Paper discussions:	5%	Total:	100%

Details (if necessary):

Typical Course Content and Topics

- Introduction to course
- Introduction to evolutionary and ecological approaches
- Introduction to mechanistic (genetic) explanations
- The genetics of behaviour
- Environmental influences on the development of behaviour
- Hormonal influences
- Evolutionary adaptation
- Anti-predator behaviour
- Feeding
- Habitat selection
- Evolution of communication
- Reproductive behaviour
- Sexual selection
- Mating systems
- Parental care
- Social behaviour
- Evolution of human behaviour

Labs:

- Survey of methods of animal observation
- Use of event-recording software to record and analyze behavioural data
- Field exercise on the description and quantification of animal behaviour
- Constructing ethograms
- Crickets and territory defense
- Optimal foraging behavior lab
- Game theory lab
- Courtship and mate attraction studymate selection studystudent research projects