

# BIOL 321

## Animal Behaviour

Winter Term (2014-15)

### CALENDAR DESCRIPTION

An evolutionary approach to the study of animal behaviour. This course explores processes and patterns in behaviour, with an emphasis on communication, foraging, spacing, reproduction and social behaviour. An independent project helps students explore methods of studying and analyzing behaviour in a system of their choice.

LEARNING HOURS 120 (36L;12T;6G;6O;60P)

RECOMMENDATION BIOL 202/3.0.

COREQUISITE 6.0 units in BIOL at the 200-level.

### SCHEDULE

**Lectures: Mon 1430, Tues 1630, Thurs 1530 in BIOSCI 1102**

**Labs: Tues 1000, 1130; Weds 1430, 1600; Fri 1000, 1130 in BIOSCI 1341**

<b>Instructor</b>	<b>Dr. L. Nagel</b>
<b>Instructor Contact</b>	nagell@queensu.ca
<b>Office Hours</b>	TBA
<b>TA:</b>	TBA
<b>TA Contact Information</b>	TBA
<b>Office Hours</b>	TBA

### Learning Objectives

Animal Behaviour will introduce students to an evolutionary approach to the study of animal behaviour. The lectures will emphasize testing hypotheses about how natural selection shapes the behaviour of animals. Material ranges from sensory perception and physiological mechanisms underlying behaviour to foraging, spacing and movement, predator-prey interactions, reproduction, communication, and cooperation. The lectures will serve as an introduction to active and exciting research in ecology, psychology, physiology, genetics, applied conservation and animal welfare. Independent research projects will promote the development of research skills, including the design of a study, the collection, analysis and interpretation of behavioural data, and the written communication of results.

### Learning Hours

<i>Teaching method</i>		<i>Average hours per week</i>	<i>Number of weeks</i>	<i>Total hours</i>
In-	Lecture	3	14	42
	Seminar			

	Laboratory			
	Tutorial			
	Practicum			
	Group learning			
	Individual instruction	1		14
Other	Online activity	1		14
	Off-campus activity	2		28
	Private study	3		28
Total hours on task				126

### **Course Outline**

Natural Selection and Evolution  
 Learning and Cultural Transmission  
 Sexual Selection  
 Cooperation  
 Communication  
 Aggression  
 Play  
 Intelligence and Personality

### **Textbooks/Readings**

Animal Behavior 3rd edition (L.A. Dugatkin)

### **Grading Scheme**

<b>Component</b>	<b>Weight (%)</b>
In-class tests (7)	60%
Research project proposal	5%
Research project	35%

### **Grading Method**

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale.

When letter grades are employed, the following scale will be employed for purposes of calculating your course average:

**Arts & Science Letter Grade Input Scheme**

Assignment mark	Numerical value for calculation of final mark
A+	93
A	87
A-	82
B+	78
B	75
B-	72
C+	68
C	65
C-	62
D+	58
D	55
D-	52
F48 (F+)	48
F24 (F)	24
F0 (0)	0

Your course average will then be converted to a final letter grade according to Queen's Official Grade Conversion Scale:

**Queen's Official Grade Conversion Scale**

Grade	Numerical Course Average (Range)
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

**Academic Integrity and Queen's Code of Conduct**

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments and conduct conform to the principles of academic integrity. Information is available in the Arts and Science Calendar (see Academic Regulation 1 - <http://www.queensu.ca/artsci/academic-calendars/regulations/academic-regulations>, on the Arts and Science website (see <http://www.queensu.ca/artsci/academics/undergraduate/academic-integrity>), and at Biology's website (<http://www.queensu.ca/biology/undergrad/integrity.html>) and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's.

Given the seriousness of these matters, actions which contravene the regulations on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

### **Accommodation Policy, Exam Conflicts, and Other Conflicts**

Students who feel they need accommodations for disabilities or extenuating circumstances, or have a conflict between exams or other commitments should consult the Biology Department's website for details about how to proceed (<http://www.queensu.ca/biology/undergrad/integrity.html>). In general, the earlier a course coordinator is apprised of an extenuating circumstance, the more likely an accommodation can be made. Students are encouraged to be proactive in anticipating difficulties, when it is possible to do so.

Students may apply to write a make-up or deferred exam if they have an exam conflict as defined in the Academic Regulations of the Faculty (See Arts and Science Calendar Regulation 8 - <http://www.queensu.ca/artsci/academic-calendars/regulations/academic-regulations>). In this case, the student should report to the Exams Office first to verify that there is a genuine exam conflict. Biology professors will not consider your situation to be a conflict unless it meets the criteria set out by the Faculty of Arts and Sciences.

Students may request a make-up or deferred exam if they have an exam conflict with off-campus travel associated with a field course (e.g BIOL-307/3.0 or 407/3.0) that is held during the fall or winter terms.

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### **Accommodation of Disabilities**

*Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact the Disability Services Office (DSO) and register as early as possible. For more information, including important deadlines, please visit the DSO website at: <http://www.queensu.ca/hcds/ds/>*