

BIOL 321

Animal Behaviour

Winter Term (2019)

CALENDAR DESCRIPTION

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

RECOMMENDATION BIOL 202/3.0.

COREQUISITE 6.0 UNITS from BIOL201, 202, 205 or 206.

SCHEDULE

Lectures: 50-min; Tues 12:30pm, Thurs 11:30am, Fri 1:30pm; Kingston Hall 201

Tutorials: 1.5 hours; Tues 2:30 and 4:00pm; Wed 8:30am, 10:00am, 2:30pm, and 4:00pm;
Thurs 2:30 and 4:00pm; Biosci1341

Instructor	Dr. Fran Bonier
Instructor Contact	bonierf@queensu.ca ; Office: Biosci 3523
Office Hours	TBA
TA Information	See BIOL 321 OnQ site

Learning Objectives

Biology 321 provides a detailed overview of the study of animal behaviour from an evolutionary perspective. The course will integrate mechanistic (neural, hormonal, developmental) and evolutionary approaches to understanding animal behaviour. Students will be introduced to research examples that illustrate diverse ways that biologists answer questions in this field.

Tutorial sessions are aimed at helping students develop research skills by carrying out an independent project, including hypothesis development, study design, data collection and analysis, and presentation of results.

Learning Hours

<i>Teaching method</i>		<i>Average hours per week</i>	<i>Number of weeks</i>	<i>Total hours</i>
In-class hours	Lecture	3	12	36
	Seminar			
	Laboratory			
	Tutorial	1.5	10	15
	Practicum			
	Group learning			
	Individual instruction			
Other	Online activity	1.5	8	12
	Off-campus activity	2	12	24
	Private study	3	12	36
Total hours on task				123

Course Outline

Topics include:

- The scientific method and integrative approaches to the study of animal behaviour
- Developmental and genetic basis of behaviour
- Neural basis of behaviour
- Physiological basis of behaviour
- Foraging strategies
- Movement
- Communication
- Mating systems
- Parental care
- Social systems

Textbooks/Readings

Required Text: Animal Behavior 11th Edition, 2019. Oxford University Press. This new edition is quite different from earlier editions, so students are strongly advised to use this version.

See 321 OnQ site for other readings.

Grading Scheme

Weighting for all assignments is tentative and subject to change

Component	Weight
Tutorial Assignments	5%
OnQ Reading Quizzes	14%
Independent Project	42%
Lecture Quizzes	35%
Tutorial Participation	2%
Lecture Participation	2%

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.

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>), on the Biology Department website

(<http://biology.queensu.ca/academics/undergraduate/prepare-yourself/>), 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 that 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 should consult the University Student Accessibility Services (<http://www.queensu.ca/studentwellness/accessibility-services>). Students with a conflict between exams, lectures, or other course requirements should consult the Biology Department's website for details about how to proceed (<http://biology.queensu.ca/academics/undergraduate/prepare->

[yourself/](#)). In general, the earlier the instructor 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 request a deferred assignment deadline or pro-rated quiz if they have a conflict with off-campus travel associated with a field course (e.g. BIOL-307/3.0) that is held during the same term.

Make-up quizzes will not be offered, but students who have made **PRIOR** arrangements using the **Queen's University Academic Consideration Request system** (<https://webapp.queensu.ca/artsci/acrp/>) can have missed quizzes or assignments pro-rated. Note, the self-declaration of absence due to extenuating circumstances can be used for absences up to 48 hours and are automatically approved. Accommodation for longer absences can be requested through the same system, but will require supporting documentation. **All requests for any adjustment of deadlines or pro-rating of marks must be submitted via the above-linked system prior to missing the deadline or quiz.**

Assignments must be submitted by the posted deadlines, barring any **PRIOR** arrangements made with the instructor, following submission of a declaration via the university Academic Consideration Request system (link above). Absent such arrangements, late work will not be accepted.

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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 Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the QSAS website at:

<http://www.queensu.ca/studentwellness/accessibility-services/how-register/current-returning-students>