

PSYCHOLOGY 3760
ANIMAL COMMUNICATION
Spring 2014

Course description: This course focuses on systems of animal communication, as examples of complex behavioral traits. It will survey the diversity of systems of communication found in animals, including humans, and how they are tailored to the variety of social and ecological challenges facing different species. The overarching goal will be to distill from this variety some common design principles from which we can begin to understand how communication systems function, how they evolve, and how they are organized mechanistically.

Instructor:

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Lectures: T,TH 10:50-12:05, UHall C756

Prerequisites: PSY2700 (Behaviour and Evolution) and at least one other 2nd year course in Psychology.

Textbook: There is no traditional style textbook for this course. Instead, textbook-type material will involve weekly readings drawn from the scientific literature. These readings will involve a mix of classic papers, recent empirical studies, and popular articles that collectively address core conceptual issues, provide detailed examples of specific phenomena in animal communication, or address broader popular implications arising. Readings will be posted on Moodle course website.

Coursework: Graded coursework will involve a diversity of assignments:

1. Quizzes: 8 @ 5% each = 40%
2. Practical lab exercises: 2 @ 15% each = 30%
3. Essays: 2 @ 15% each = 30%

Total: 100%

Optional Bonus Assignments: 5 @ 2% = 10%

Additional details of each type of assignment are provided below.

Participation in Psychology Experiments: Students are encouraged to participate in experiments being conducted by investigators in the Psychology Department during the course of the term. They will earn course credit for their participation to a total of 3% of the course grade. See detailed explanation of such participation opportunities below.

Grading: Final letter grades for the course will be determined using the following scheme:

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

Classroom Conduct Guidelines and Expectations:

Classroom periods will involve a combination of formal lecture from the Professor and more open format question-and-discussion periods, where students will be expected to actively engage the material with the professor and their student colleagues. Students will be free to use a laptop computer (or ipad/facsimile) in the classroom but only to take notes. Students may not use their laptops, ipads, cellphones, or other personal electronic devices to web-surf, text message, talk or otherwise engage in activities peripheral to the content and activity of the class. Such activities typically prove distracting to fellow students and/or the Professor. Students violating this standard ‘code of classroom conduct’ will be asked once to stop the distracting activity and next to leave. Neither course of action should be interpreted as punitive, but rather only an attempt to maintain a classroom atmosphere that respects the rights of students and Professor alike and their joint efforts to concentrate, teach and learn.

Lecture Slides:

Lecture slides will be posted on Moodle shortly before class for those who want to supplement the slides used in class with their own detailed lecture notes. Note that lecture slides are skeletal in form – i.e., they typically contain mostly only photos of some type of communication behavior to illustrate the phenomenon, or data in the form of tables or graphs that are relevant to some specific study of communication. The slides are meant to complement material presented in lecture, they are not meant as a summary of the lecture or a substitute for it. As a result, the lecture slides by themselves typically convey only a fraction of the substance of any particular lecture.

Missed Lectures:

The Professor will not be able to provide summaries or recaps of the content of lectures to individual students who miss class. Lecture slides will be available on Moodle, and these can provide a starting point for remediating missed lectures. However, as noted immediately above, lecture slides, by themselves, provide a very incomplete picture of the substance of lectures. Students who miss lecture are, of course, free to solicit notes from fellow students in the event that these can help to complement the lecture slides; and other students are free to oblige such requests or not. However, the course mailing list will NOT be the forum for this exchange because that risks clogging everyone’s email inbox with unwanted messages. Instead, you may use the course discussion board on Moodle, thereby limiting such requests to only those who choose to log-on and use that discussion forum.

Note carefully that each student is responsible for their own lecture notes, just as they are, as adults (over 18), responsible for all other aspects of their behavior (e.g., voting, driving, etc.). Lectures are provided to everyone as an opportunity to learn. However, if students miss lecture and forego this opportunity, then it is their responsibility (and theirs only) to remediate what they miss. The Professor will not mark attendance, nor ask students why they might miss lectures. He respects the students' adulthood, the multiple demands on time that adulthood entails, and students' freedom then to make choices about how they allocate their time, including attending lectures or not. The corollary is that each student is responsible for remediating missed material.

Missed Assignments:

All assignments will have flexible formats and extended deadlines: in most cases, assignments will be open for completion for at least a week (and often longer) and they can be completed remotely (i.e., off campus). Hence, the scope for missing assignments is negligible.

Coursework Details.

1. Quizzes. Quizzes will be conducted regularly during the term, approximately one per week. They will focus on material presented and discussed in lecture periods as well as material covered in weekly readings. Quiz questions will involve a mix of multiple-choice and other short-answer style questions that address core theoretical concepts or specific examples of communication behavior considered in lecture or reading. They may often involve interpreting data in the form of tables or graphs that are germane to specific topics covered in lectures or readings. Quizzes will be conducted through Moodle and can be completed remotely.

2. Practical lab exercises. Two practical lab exercises will be conducted during the term. Both will involve 'collecting' your own data concerning a specific form of communication behaviour, either de novo or using a common behavioral database provided to you. Each assignment will involve generating original data, tabulating the data in an appropriate way, performing simple statistical calculations on the tabulated data, and interpreting the results in the context of some general concept or hypothesis germane to the specific communication example. Additional specific details and instructions will be provided with each assignment.

3. Essays. Two essay-style exams will be conducted during the term. Concrete deadlines will be fixed as dictated by the flow of topics but will involve considerable lead-time. You can anticipate that the first essay will be due roughly mid-way through the term (after reading week) and the second towards the end of term (see detailed schedule below). Both essays will be short (maximum 1,500 words). However, they will require considerable additional (i.e., out of classroom) background reading and research leading to an incisive analysis and interpretation of some form of communication behavior ultimately leading to enlightened synthesis or conclusions regarding an important broad conceptual theme covered in the course. More specific instructions will be provided with each assignment.

Opportunities to Participate in Research Experiments in the Department of Psychology:

This course provides students with an opportunity to participate in active research programs of faculty members and students in the Department of Psychology. Calls for volunteers to assist in these studies will be made during the semester. Each study normally requires one hour or less of your time. **If you choose to participate, an extra 1% for each study will be added to your total grade at the end of the semester, up to a maximum of 3%,** in recognition of your time and the fact that you are learning something about the discipline of Psychology beyond what you would learn in the routine classroom environment. Note that there is no guarantee that all students will be able to achieve the maximum bonus. It depends on the availability of experiments. Note also that your professor for a given course (like me for Psych 3760) will not know which particular studies you participated in, only the number of studies you participated in and the relevant credit to be allocated for their course. Please check with the researcher coordinating a particular study to ensure that you have not completed that study previously.

Course Topics and Schedule

WEEK	COURSE TOPICS	DATES
WEEK 1	<i>Introduction to communication</i>	JAN 13-17
WEEK 2	<i>What exactly is communication?</i>	JAN 20-24
WEEK 3	<i>The origins and evolution of communication</i>	JAN 27-31
WEEK 4	<i>Communication about food</i>	FEB 3-7
WEEK5	<i>Communication about predators</i>	FEB 10-14
	READING WEEK	FEB 17-21
WEEK 6	<i>Communication TO predators!</i> Essay 1 Due	FEB 24-28
WEEK 7	<i>Social Communication I.</i>	MAR 3-7
WEEK 8	<i>Social Communication II.</i>	MAR 10-14
WEEK 9	<i>Mating Communication I.</i>	MAR 17-21
WEEK 10	<i>Mating Communication II.</i>	MAR 24-28
WEEK 11	<i>General Principles & Models of Communication I</i>	MAR 31-APR 4
WEEK 12	<i>General Principles & Models of Communication II</i> Essay 2 Due	APR 7-11