

3YY3 - Evolution in Communication
Psychology, Neuroscience & Behaviour 3YY3
Evolution Of Communication

Time: Mon, Wed, Thu 13:30-14:20

LS/B130E = Life Sciences Building, Lobby Level Room B130E

Instructor: David Feinberg

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Course website: <http://www.voiceresearch.org/students/3YY3.html>

Communication is a fundamental adaptation for individuals within and between species to socially interact. Topics will include how and why different animal species have evolved different communication systems, honest and dishonest signaling, sexual signaling, deception, and a special focus on the evolution of human speech and language.

Course description and objectives: This 3rd year 3YY3 lecture course will focus on the adaptive design of communication. In this course we will explore selection pressures that lead to different communication systems across the animal kingdom. We will examine communication in systems from genetics to language in order to gain an appreciation for the complexities of the evolutionary design of animal communication systems. While there will be a special emphasis on primate communication (including *Homo sapiens*), we will also study communication systems among a variety of species including certain bees, bats, and birds.

Registrants are expected to be familiar with the basic principals underlying evolutionary biology. The course will be lecture based with three in-class exams and one officiated final exam.

Communication Policy

E-mail communications must originate from your designated McMaster e-mail account (i.e. mcmaster.ca account). Should we need to communicate with you about individual matters, the e-mail will be sent to your mcmaster.ca account. You should monitor this account regularly. E-mail sent from third-party providers (yahoo, hotmail, cogeco, sympatico, etc.) will not be received. We have this policy for three reasons: 1. reduce the amount of incoming spam to our accounts; 2. ensure that we know with whom we are communicating; 3. teach the professional use of e-mail. Please note that instructors cannot return long distance telephone calls.

The professor reserves the right to change any and all course requirements if the need should arise. Any change in the course requirements will be posted on the webpage and the details will

be announced in class. Any concerns about announced changes should be addressed with the professor as soon as the changes are announced. Problems with the final exam schedule must be addressed to the Office of the Registrar.

Grading Policy

The instructors reserve the right to adjust final marks up or down, on an individual basis, in the light of special circumstances and/or the individual's total performance in the course. Students will be assigned a grade from the McMaster University Grading Scale between 0 and 12 based on an overall assessment by the professor on the work submitted. It is expected that to pass the course, the student will achieve a passing grade on both the Final Exam and other tests and exams.

Final grades are based upon the three in class tests (each worth 20%, totaling 60% of your grade) and the final exam (worth 40%). In-class exams will occur on Oct 14, Nov 4, and Nov 25. Grades will be computed out of 100 points and converted to a letter grade as follows:

90-100 = A+; 85-89 = A; 80-84 = A-; 77-79 = B+; 73-76 = B; 70-72 = B-; 67-69 = C+; 63-66 = C; 60-62 = C-; 57-59 = D+; 53-56 = D; 50-52 = D; < 50 = F

Missed Work Policy

All excuses for missed exams must be submitted through the office of the Associate Dean of your faculty/programme within one week of the original due date of the missed work. After that time, students must appeal to have an exemption. It is also your responsibility to speak with your professor as soon as possible. Senate regulations for petitions for special consideration have always required that: "The student shall make a prompt and timely request for special consideration." No requests for exemption will be accepted after one month. In the case of a missed midterm, a make-up date will be determined for each student. The format of the make-up exam will be determined by the professor depending on the number of students affected. The professor reserves the right to forgo makeup tests and calculate your grade based on the weighted average of the other exams. If you have been granted an accommodation from the Centre for Student Development, please make proper arrangements with the instructor before any tests or exams.

Required readings

Readings will be assigned in-class and will be posted on the course website. Readings are designed to provide in-depth examples of topics presented in class. We will provide you with full references for papers available at the McMaster libraries. You will be expected to obtain these papers from the library or library website and read them before the next class. These readings are materials that supplement what you learn in class, they are not a replacement for materials presented in class. You will be tested on materials from the readings and class presentations. As per the communication policy, any changes in readings will be posted on the course website and announced in class.

Academic Integrity:

Attention is drawn to [Statement on Academic Ethics and the Senate Resolutions on Academic Dishonesty](#) as found in the Senate Policy Statements distributed at registration and available in

the Senate Office. Any student who infringes one of these resolutions will be treated according to the published policy. Any instance of Plagiarism will be dealt with in the most severe terms allowable by the Senate Policy on such matters. Basically, don't cheat on the tests.

Course Schedule (Subject to change at instructor's discretion)

Week #	Lecture #	Day	Date	Month	Lecture Topic
1	1	Thu	10	Sept	An adaptationist account of communication
2	2	Mon	14	Sept	What is the difference between a cue and a signal?
2	3	Wed	16	Sept	Cues in the animal kingdom
2	4	Thu	17	Sept	Signals in the animal kingdom
3	5	Mon	21	Sept	Hunting
3	6	Wed	23	Sept	Predator avoidance
3	7	Thu	24	Sept	Foraging behaviour
4	No Class	Mon	28	Sept	
4	8	Wed	30	Sept	Sexual Displays
4	9	Thu	1	Oct	Dominance
5	10	Mon	5	Oct	Human Sexual Communication
5	11	Wed	7	Oct	Parent-Offspring Communication
5	Test 1 Review	Thu	8	Oct	Test 1 Review
6	No Class	Mon	12	Oct	
6	Test 1	Wed	14	Oct	Test 1
6	Review test 1	Thu	15	Oct	Review Test 1
7	12	Mon	19	Oct	Is language special?
7	13	Wed	21	Oct	Animal semantics
7	14	Thu	22	Oct	Animal grammar
8	15	Mon	26	Oct	Ape sign language
8	16	Wed	28	Oct	Speech
8	17	Thu	29	Oct	Halloween Lecture
9	Test 2 Review	Mon	2	Nov	Test 2 Review
9	Test 2	Wed	4	Nov	Test 2
9	Review test 2	Thu	5	Nov	Review Test 2
10	18	Mon	9	Nov	Theory of mind
10	19	Wed	11	Nov	Cooperation and deception
10	20	Thu	12	Nov	Mirror Neurons
11	21	Mon	16	Nov	Is music special?
11	22	Wed	18	Nov	Vocal imitation
11	23	Thu	19	Nov	Electricity, Echolocation, and Sonar
12	Test 3 Review	Mon	23	Nov	Test 3 Review
12	Test 3 Review	Wed	25	Nov	Test 3
12		Thu	26	Nov	
13	Review Test 3	Mon	30	Nov	Review Test 3
13	24	Wed	2	Dec	Extraterrestrial Communication
13	Exam Review	Thu	3	Dec	Exam Review